



Intel® Open Source HD Graphics and Intel Iris™ Plus Graphics

Programmer's Reference Manual

For the 2016 - 2017 Intel Core™ Processors, Celeron™ Processors,
and Pentium™ Processors based on the "Kaby Lake" Platform

Volume 10: HEVC Codec Pipeline (HCP)

January 2017, Revision 1.0



Creative Commons License

You are free to Share - to copy, distribute, display, and perform the work under the following conditions:

- **Attribution.** You must attribute the work in the manner specified by the author or licensor (but not in any way that suggests that they endorse you or your use of the work).
- **No Derivative Works.** You may not alter, transform, or build upon this work.

Notices and Disclaimers

INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH INTEL® PRODUCTS. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT. EXCEPT AS PROVIDED IN INTEL'S TERMS AND CONDITIONS OF SALE FOR SUCH PRODUCTS, INTEL ASSUMES NO LIABILITY WHATSOEVER AND INTEL DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF INTEL PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

A "Mission Critical Application" is any application in which failure of the Intel Product could result, directly or indirectly, in personal injury or death. SHOULD YOU PURCHASE OR USE INTEL'S PRODUCTS FOR ANY SUCH MISSION CRITICAL APPLICATION, YOU SHALL INDEMNIFY AND HOLD INTEL AND ITS SUBSIDIARIES, SUBCONTRACTORS AND AFFILIATES, AND THE DIRECTORS, OFFICERS, AND EMPLOYEES OF EACH, HARMLESS AGAINST ALL CLAIMS COSTS, DAMAGES, AND EXPENSES AND REASONABLE ATTORNEYS' FEES ARISING OUT OF, DIRECTLY OR INDIRECTLY, ANY CLAIM OF PRODUCT LIABILITY, PERSONAL INJURY, OR DEATH ARISING IN ANY WAY OUT OF SUCH MISSION CRITICAL APPLICATION, WHETHER OR NOT INTEL OR ITS SUBCONTRACTOR WAS NEGLIGENT IN THE DESIGN, MANUFACTURE, OR WARNING OF THE INTEL PRODUCT OR ANY OF ITS PARTS.

Intel may make changes to specifications and product descriptions at any time, without notice. Designers must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined". Intel reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them. The information here is subject to change without notice. Do not finalize a design with this information.

The products described in this document may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request.

Implementations of the I2C bus/protocol may require licenses from various entities, including Philips Electronics N.V. and North American Philips Corporation.

Intel and the Intel logo are trademarks of Intel Corporation in the U.S. and other countries.

* Other names and brands may be claimed as the property of others.

Copyright © 2017, Intel Corporation. All rights reserved.

Table of Contents

High Efficiency Video Coding (HEVC) Introduction	1
Scope	1
Summary of Features	1
HCP Hardware Pipeline Features	1
HEVC Decoder Features	2
HEVC Encoder Features	2
Architecture Overview	5
VP9 Decoder	5
HCP Command Summary	5
Workload Command Model	5
HCP Command Sequence Examples.....	Error! Bookmark not defined.
HCP Decoder Command Sequence.....	7
HCP Encoder Command Sequence	8
Memory Address Attributes.....	10
HCP Pipe Common Commands	10
Buffer Size Requirements.....	11
VP9 Common Commands	13
HCP Common Commands.....	13
VP9 Commands	14
Tile Size and CU Stream-out Records	14
Stream-in Probability Table.....	1
Stream-in formats for creating compressed header	1
Probability Statistics Counters Table	2
VP9 PAK Quant Lookup Tables	1
SB, CU/PU and TU Sizes – Encoder Only.....	15
Definition of the VP9 CU Record Structure - Encoder Only	16
Allowed SB Size Encoder Only	21
HCP Commands.....	21
Multipass flow during BRC and SAO	22
CU and Slice level stat streamOut.....	23
Definition of the CU Record Structure for Ext Interface – Encoder Only.....	24



LCU, CU, TU, and PU Sizes – Encoder Only	28
Allowed LCU Size – Encoder Only.....	32
HEVC Error Concealment	33
VP9 Register Definitions	35
Register Attributes Description	35
VP9 Register Map.....	35
VP9 Encoder Register Descriptions.....	35
HEVC Register Definitions	35
Register Attributes Description	36
HCP Decoder Register Map	36
HCP Decoder Register Descriptions	36
HCP Encoder Register Map	36
HCP Encoder Register Descriptions.....	36
HUC Status Register Descriptions	37
Acronyms and Applicable Standards	37
Acronyms and Abbreviations	37

High Efficiency Video Coding (HEVC) Introduction

The HEVC Codec Pipeline (HCP) is a fixed function hardware video codec responsible for decoding and encoding HEVC (High Efficiency Video Coding) video streams.

Scope

The primary scope of the HCP BSpec document is to provide a description of the HCP commands processed by the Video Command Streamer (VCS). The secondary scope is to provide a description of the status registers on the Message Channel Interface to support encoding and decoding of the HEVC video format.

The BSpec sections include:

- Summary of Features
- Architecture Overview
- Commands
- Register Definitions
- Acronyms and Applicable Standards

Summary of Features

The following sections define the HEVC Decoder and Encoder general features and the features specific to HEVC decoding and encoding, respectively.

HCP Hardware Pipeline Features

- Supports both decoder and encoder functions, setup on a per picture basis:
 - Hardware acceleration provides Ctb/CU level decode and encode.
 - No context switch is supported within a frame process.
- Supports Video Command Streamer (VCS):
 - Shared with MFX HW pipeline, and at any one time, only one pipeline (MFX or HCP) and one operation (decoding or encoding) can be active.
- Supports Message Channel Interface:

Feature
Supports Tile-YS and Tile-YF.
Supports Tile-Y Legacy.

- Supports NV12 video buffer plane:
 - Supports 4:2:0, 8-bit per pixel component (Y, Cb and Cr) video.
- Supports 8Kx8K frame size.

HEVC Decoder Features

- Supports full-featured HEVC Main Profile standard, up to Level 6.2.
- Supports the long format HW decoding interface:
 - All headers (SPS, PPS, Slice Header) are parsed and decoded outside the HCP HW pipeline. They are then fed to the HW through a set of HCP state commands.
- Supports inner-loop decode with hardware entry points for Encoder.
- Error detection/resiliency down to the Ctb/CU level.

HEVC Encoder Features

- Supports ENC-PAK architecture
- Supports multiple pass BRC rate control operation flow
- Supports the HEVC Main Profile standard, with certain restrictions on the feature set and coding parameters, listed in the following table:

HEVC Encoder Features and Restrictions

Note that there is a difference between what PAK supported and what ENC supported. A feature/function that is supported in the PAK, does not necessarily being supported by ENC and MediaSDK and the like.

Coding Tool	Gen9 Support	Gen9 Restriction	Comments
LCU Size	Yes (spec)		Support all 3 sizes: 16x16, 32x32, 64x64.
CU Size	Yes (spec)		Support 8x8, 16x16, 32x32, 64x64. Max 64 CU per LCU; min. CU size intel supported is 8x8 for all LCU size.
PU Partition	Yes (spec)		Support all inter symmetric (square) and asymmetric (non-square) PU partitioning, according to HEVC spec. PU Size for inter : Smallest allowed is 4x8 and 8x4, and they cannot be bidirectional. Inter 4x4 PU is not allowed in Main Profile.
TU QuadTree		Partial (intel) max depth is set to 3	Max depth is 3 (64x64 CU with 4x4 TU). Decoder supports this depth, but probably no need to search this for encode. Better to just split CU. HM common conditions set the max to 2 for both inter and intra. Intel Encoder only supports 2 levels of quad-tree. That is, max_transform_hierarchy_depth_inter/intra <= 2. Max num of TUs per CU is 16.
AMP	Yes (spec)		Asymmetric Motion Partition (rectangular PU partitioning - 2NxN, 2NxN, nLx2N or nRx2N). Available only for 64x64 to 16x16 CU.
AMVP	Yes (spec)		Adaptive/Advanced Motion Vector Prediction : spatial and PU-based temporal co-located MV candidates with scaling. Logic available from decoder. HW PAK is supporting temporal MV candidates.

Coding Tool	Gen9 Support	Gen9 Restriction	Comments
Merge	Yes (spec)		Merge Skip and Regular Merge. Max. 5 MV Merge candidates (4 spatial + 1 temporal co-located) with scaling. Logic available from decoder. [merge_flag, merge_index, skip_flag]
Parallel Motion Merge		No (intel)	Tool for parallel decode of MVs. Since this isn't constrained by Main Profile, the decoder has to meet performance targets in the worst case anyway.
MC Interpolation Filter	Yes (spec)		¼-pel Luma MV precision, 1/8-pel Chroma MV precision. 8-tap Luma filtering for both ½-pel and ¼-pel locations (1-pass). 4-tap Chroma filtering. Use separable (first horizontal then vertical 1-D filtering) filter coefficients. Not all filter kernels are symmetrical and can map into simple arithmetic. It is a DCT-IF based filter. All operations are within 16-bit data.
Weighted Prediction	Yes (spec)		Free for PAK since decoder already has it. Cross fade and fade-in/out detection required by VME. VME must supply weights, implicit weighted prediction is not supported in HEVC. Only explicit weight is supported. They are both unidirectional and bidirectional.
Combined Reference Frame List		No (intel)	Combine List0 and List1 into a single list to remove uni-prediction signaling overhead.
Intra modes	Yes (spec)		33 directions and DC/Planar modes, with adaptive pre-filtering on reference pixels and boundary smoothing. Intel ENC-VME Mode search reduction for large CUs (64x64 and 32x32) for performance speed up with minimal loss.
IPCM (intra)		No (intel)	Can be disabled completely by SPS, or only allowed at certain CU sizes. No bit maximum on CUs in any profile/level (yet), so as of today there's no mandate to support this for encode. Gen9 PAK does not support IPCM, so ENC cannot generate IPCM mode.
Constrained Intra		No (intel)	Allow only intra neighboring blocks for current block intra-prediction. Enabling this is a coding loss and does not result in a performance improvement in HW designs.
2D DCT Transform	Yes (spec)		Square shape only; 32x32, 16x16, 8x8 and 4x4.
Transform Skip Evaluation		No (intel) ENC will estimate the use of transform skip	Significant coding gains for screen content (PowerPoint etc.). This tool is disabled in the common conditions but isn't explicitly disallowed by Main Profile. FQ is not bypass.
Sign bit hiding		No (intel)	Coding gain by removing one bypass bin per TU. Requires some smarts in the PAK.
Trellis		No (intel)	Trellis Quantization
SAO		No (intel)	Difficult to implement in single pass, performance impact in 2-pass or with previous frame search. Needs investigation. Decoder will support it.

Coding Tool	Gen9 Support	Gen9 Restriction	Comments
Loop Filter across tiles/slices boundary		No (intel)	Can be disabled for tiles and or slices in SPS, so that filter across all tiles and slices boundaries. Main profile doesn't constrain.
Scaling List	Yes (spec)		This uses the default (or custom) qp adjustment on a per-frequency basis within a TU. Good coding improvement over flat scaling.
dQP		Partial (intel) Yes for LCU; No for CU	Being able to change QP per LCU or even up to once per 8x8 CU can lead to significant coding gains. Not sure how easy it is for VME to decide qp values though.
Chroma QP offset		No (intel)	No ROI.
Dependent slices		No (intel)	It is now part of Main Profile, but Intel will not support it. SW can perform the slice repackaging without re-encoding.
Tiles		No (intel)	Although in Main Profile, it results in coding loss and doesn't improve performance on HW. SW parallel processing (multithreaded) tool
Wavefront (aka WPP)		No (intel)	Latest Main Profile spec has included Wavefront. We got a feedback that this feature is highly desirable to support high performance multithreading HEVC decoder.
Lossless coding		No (intel)	Note: this is not the same as IPCM. Also details of this are in flux.
Interlaced Video		No (intel)	Only progressive video encoding is supported.
LM mode	No (spec)		Chroma-from-luma intra prediction (Linear Mode) is not allowed in Main Profile (yet).
NSQT	No (spec)		Non square transform is not allowed in the Main Profile
ALF	No (spec)		Expensive and not in Main Profile currently. If decoder is going to support it, may consider for encoder as well.
Entropy slices	No (spec)		Not allowed in Main Profile, it is a SW parallel processing (multithreaded) tool.
Slice granularity != 0	No (spec)		Not allowed by Main Profile, and highly likely to be removed from the standard completely.

Architecture Overview

This section discusses HEVC features as follows:

Name
VP9 Decoder

VP9 Decoder

The HCP Decoder, following diagram, is a hardware based pipeline that accelerates the stream decode for an external Host Processor. The Host Processor is defined as a system processor external to the HCP that is responsible for high level parsing of the elementary stream and workload creation.

HCP Command Summary

The HCP is configured for encoding or decoding through a set of batch commands defined in the following sections. The software driver builds a frame level workload using these commands and stores these workloads in graphics memory where they are fetched by the Video Command Streamer (VCS) and presented to the HCP for processing. The commands are processed by the Workload Parser within the HCP and the hardware is configured by the Workload Parser prior to each frame level encode or decode. A workload is defined as a set of commands necessary to encode or decode one frame.

The software driver is required to read the HCP disable fuse to determine if the HCP is enabled. If it is disabled, then the software driver must not enable HCP batch commands to be sent to the HCP or a hang event may occur. Only when the HCP is enabled through the fuse, should the batch commands be sent to the HCP.

Workload Command Model

DWord0 of each command is defined in HCP DWord0 Command Definition. The HCP is selected with the **Media Instruction Opcode “7h”** for all HCP Commands.

HCP DWord0 Command Definition

DWord	Bits	Description
0	31:29	Command Type = PARALLEL_VIDEO_PIPE = 3h
	28:27	Pipeline Type = 2h
	26:23	Media Instruction Opcode = Codec/Engine Name = HCP = 7h
	22:16	Media Instruction Command = <see Workload Command Model >
	15:12	Reserved: MBZ

DWord	Bits	Description
	11:0	Dword Length (Excludes Dwords 0, 1) = <command length>

Each HCP command has assigned a media instruction command as defined in HCP Media Instruction Commands (Opcode=7h).

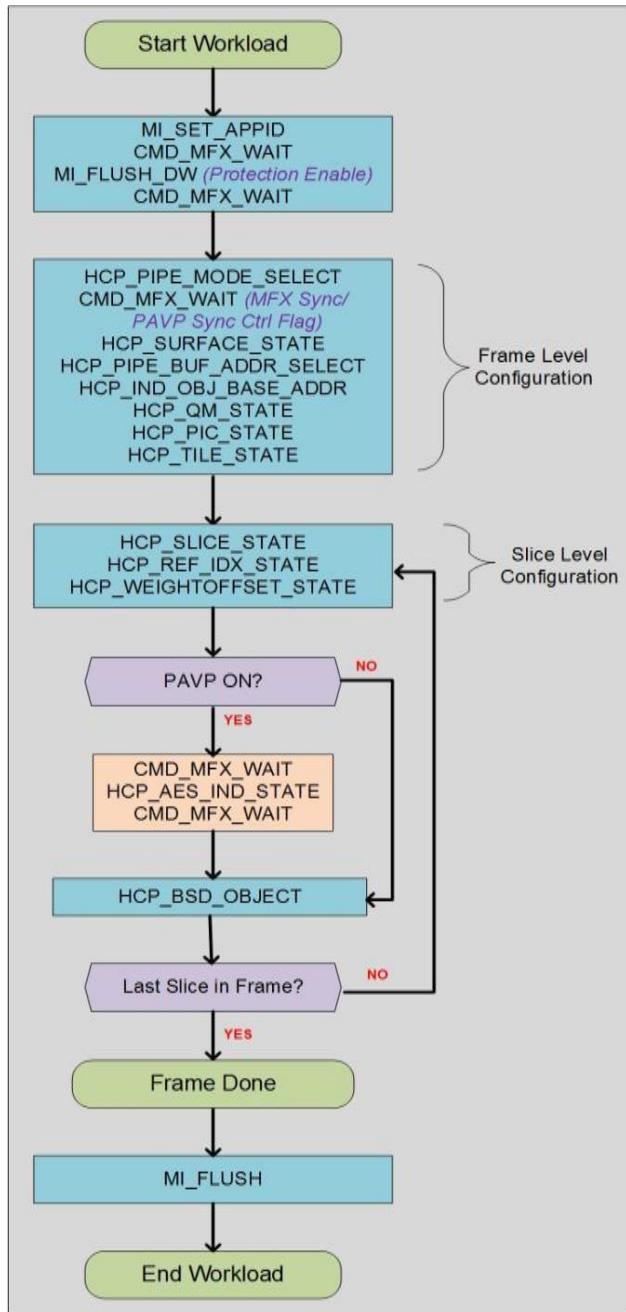
HCP Media Instruction Commands (Opcode=7h)

Media Instruction Command	Command DWord0 [22:16]	Gen9 Mode	Scope
HCP_PIPE_MODE_SELECT	0h	Enc/Dec	Picture
HCP_SURFACE_STATE	1h	Enc/Dec	Picture
HCP_PIPE_BUF_ADDR_STATE	2h	Enc/Dec	Picture
HCP_IND_OBJ_BASE_ADDR_STATE	3h	Enc/Dec	Picture
HCP_QM_STATE	4h	Enc/Dec	Picture
HCP_FQM_STATE (encoder only)	5h	Enc	Picture
Reserved	8h-Fh		
HCP_PIC_STATE	10h	Enc/Dec	Picture
HCP_TILE_STATE	11h	Dec	Picture
HCP_REF_IDX_STATE	12h	Enc/Dec	Slice
HCP_WEIGHTOFFSET	13h	Enc/Dec	Slice
HCP_SLICE_STATE	14h	Enc/Dec	Slice
Reserved	15h-1Fh		
HCP_BSD_OBJECT_STATE (decoder only)	20h	Dec	Slice
HCP_PAK_OBJECT (encoder only)	21h	Enc	LCU
HCP_INSERT_PAK_OBJECT (encoder only)	22h	Enc	Bitstream

HCP Decoder Command Sequence

The long format workload for the HCP is based upon a single frame decode. There are no states saved between frame decodes in the HCP. Once the bit stream DMA is configured with the HCP_BSD_OBJECT command, and the bit stream is presented to the HCP, the frame decode will begin.

HCP Long Format Decode Workload Flowchart



HCP Encoder Command Sequence

For a single frame encoding process (w/o multiple slices per frame), the command sequence is listed below. There are no states saved between frame encoded in the HCP. There should be no other commands or context switch within a group of PAK OBJECT Commands, representing a complete slice. HCP and MFX share the same VCS, but there is no common encoding and decoding command that can be executed in both pipes mi_flush and MMIO commands.

----- Per Frame Level Commands

HCP_PIPE_MODE_SELECT

HCP_SURFACE_STATE

HCP_PIPE_BUF_ADDR_STATE

HCP_IND_OBJ_BASE_ADDR_STATE

HCP_FQM_STATE – issue n number of times

HCP_QM_STATE – issue n number of times

HCP_PIC_STATE

----- Per Slice Level Commands (2 cases)

----- A Frame with only 1 Slice:

HCP_REF_IDX_STATE – set to provide L0 list for a P or B-Slice

HCP_REF_IDX_STATE – set to provide L1 list for a B-Slice

HCP_WEIGHTOFFSET_STATE Command – set to provide for L0 of a P or B-Slice

HCP_WEIGHTOFFSET_STATE Command - set to provide for L1 of a B-Slice

HCP_SLICE_STATE

HCP_PAK_INSERT_OBJECT – if header present at 1st slice start

----- A group of LCUs Per Slice

HCP_PAK_OBJECT

...

HCP_PAK_INSERT_OBJECT – if tail present at frame end

MI_FLUSH – when the frame is done

----- A Frame with Multiple Slices:

HCP_REF_IDX_STATE – set to provide L0 list for a P or B-Slice

HCP_REF_IDX_STATE – set to provide L1 list for a B-Slice

HCP_WEIGHTOFFSET_STATE Command – set to provide for L0 of a P or B-Slice

HCP_WEIGHTOFFSET_STATE Command - set to provide for L1 of a B-Slice

HCP_SLICE_STATE

HCP_PAK_INSERT_OBJECT – if header present at 1st slice start of a frame

HCP_PAK_OBJECT - a group of LCUs for a slice or a frame

...

HCP_PAK_INSERT_OBJECT – if tail present at slice or frame end

HCP_REF_IDX_STATE – set to provide L0 list for a P or B-Slice

HCP_REF_IDX_STATE – set to provide L1 list for a B-Slice

HCP_WEIGHTOFFSET_STATE Command – set to provide for L0 of a P or B-Slice

HCP_WEIGHTOFFSET_STATE Command - set to provide for L1 of a B-Slice

HCP_SLICE_STATE

HCP_PAK_INSERT_OBJECT – if header present at slice start

HCP_PAK_OBJECT - a group of LCUs for a slice or a frame

...

HCP_PAK_INSERT_OBJECT – if tail present at last slice end (frame end)

MI_FLUSH – when the frame is done

MFX_STITCH_OBJECT – a generic bitstream stitching command from MFX pipe

MI_FLUSH

MI_FLUSH is not allowed between Slices. HEVC CABAC has simplified its operation from AVC. There is no longer a BSP_BUF_BASE_ADDR_STATE Command, as only a small local internal buffer is needed for BSP/BSE row store. THE HCP_PAK_INSERT_OBJECT has been designed to support both inline and indirectly payload. Nevertheless, the MFX_STITCH_OBJECT command can still be used to stitch HEVC bitstreams together, and is run in the MFX pipe. No HEVC specific STITCH command is implemented. The SURFACE_STATE command for HEVC is redesigned and much simplified from that of MFX pipe.

Memory Address Attributes

This section defines the memory address attributes for the third DWord of the HCP command buffer address.

NOTE: The first DWord defines the lower address range and the second Dword defines the upper address range in the HCP command buffer address.

MemoryAddressAttributes

HCP Pipe Common Commands

The HCP Pipe Common Commands specify the HEVC Decoder pipeline level configuration.

Commands
HCP_PIPE_MODE_SELECT (VideoCS)
HCP_SURFACE_STATE (VideoCS)
HCP_PIPE_BUF_ADDR_STATE (VideoCS)

Buffer Name	Minimum Size in CLs	Notes
Deblocking Filter Line Buffer	$((\text{picture_width_in_pixels} + 31) \& (-32)) \gg 3$	Eq. ensures multiple of 4
Deblocking Filter Tile Line Buffer	$((\text{picture_width_in_pixels} + 31) \& (-32)) \gg 3$	Eq. ensures multiple of 4
Deblocking Filter Tile Column Buffer	$((\text{picture_height_in_pixels} + 6 * \text{pic_height_in_ctb} + 31) \& (-32)) \gg 3$	Eq. ensures multiple of 4
Metadata Line Buffer (all intra slices)	$(\text{picture_width_in_pixels} + \text{pic_width_in_lcu} * 8 + 1023) \gg 9$	Eq. ensures multiple of 2
Metadata Tile Line Buffer (all intra slices)	$(\text{picture_width_in_pixels} + \text{pic_width_in_lcu} * 16 + 1023) \gg 9$	Eq. ensures multiple of 2
Metadata Tile Column Buffer (all intra slices)	$(\text{picture_height_in_pixels} + \text{picture_height_in_pixels} * 8 + 1023) \gg 9$	Eq. ensures multiple of 2
Metadata Line Buffer (some inter slices)	$((\text{picture_width_in_pixels} + 15) \gg 4) * 188 + \text{pic_width_in_lcu} * 9 + 1023 \gg 9$	Eq. ensures multiple of 2
Metadata Tile Line Buffer (some inter slices)	$((\text{picture_width_in_pixels} + 15) \gg 4) * 172 + \text{pic_width_in_lcu} * 9 + 1023 \gg 9$	Eq. ensures multiple of 2
Metadata Tile Column Buffer (some inter slices)	$((\text{picture_height_in_pixels} + 15) \gg 4) * 176 + \text{picture_height_in_lcu} * 89 + 1023 \gg 9$	Eq. ensures multiple of 2
SAO Line Buffer	$((\text{picture_width_in_pixels} \gg 1) + \text{pic_width_in_ctb} * 3 + 15) \& (-16) \gg 3$	Eq. ensures multiple of 2
SAO Tile Line Buffer	$((\text{picture_width_in_pixels} \gg 1) + \text{picture_width_in_ctb} * 6 + 15) \& (-16) \gg 3$	Eq. ensures multiple of 2
SAO Tile Column Buffer	$((\text{picture_height_in_pixels} \gg 1) + \text{pic_height_in_ctb} * 6 + 15) \& (-16) \gg 3$	Eq. ensures multiple of 2

Buffer Name	Minimum Size in CLs	Notes
Current and Collocated Motion Vector Temporal Buffer (lcu=16x16)	$((\text{picture_width_in_pixels} + 63) \gg 6) * ((\text{picture_height_in_pixels} + 15) \gg 4)$	Eq. ensures multiple of 2
Current and Collocated Motion Vector Temporal Buffer (lcu>16x16)	$((\text{picture_width_in_pixels} + 31) \gg 5) * ((\text{picture_height_in_pixels} + 31) \gg 5)$	Eq. ensures multiple of 2

Internal Media Rowstore Table

If the internal Media Rowstore exists, driver should use the storage as the following table indicates.

HEVC Pipeline	Frame Width	DAT	DF	SAO	DAT Addr	DF Addr	SAO Addr
HEVC	<= 2048	Y	Y	Y	0	64	320
	2048 < x <= 4096	Y	Y	N	0	128	N/A
	4096 < x <= 8196	Y	N	N	0	N/A	N/A

Commands

HCP_IND_OBJ_BASE_ADDR_STATE (VideoCS)

HCP_QM_STATE (VideoCS)

HCP_FQM_STATE VideoCS

Buffer Size Requirements

HEVC Buffer Size Requirements (8 bit)

Buffer Name	Minimum Size in CLs	Notes
Deblocking Filter Line Buffer	$((\text{picture_width_in_pixels} + 31) \& (-32)) \gg 3$	Eq. ensures multiple of 4
Deblocking Filter Tile Line Buffer	$((\text{picture_width_in_pixels} + 31) \& (-32)) \gg 3$	Eq. ensures multiple of 4
Deblocking Filter Tile Column Buffer	$((\text{picture_height_in_pixels} + 6 * \text{pic_height_in_ctb} + 31) \& (-32)) \gg 3$	Eq. ensures multiple of 4
Metadata Line Buffer (all intra slices)	$(\text{picture_width_in_pixels} + \text{pic_width_in_lcu} * 8 + 1023) \gg 9$	Eq. ensures multiple of 2
Metadata Tile Line Buffer (all intra slices)	$(\text{picture_width_in_pixels} + \text{pic_width_in_lcu} * 8 + 1023) \gg 9$	Eq. ensures multiple of 2
Metadata Tile Column Buffer (all intra slices)	$(\text{picture_height_in_pixels} + \text{picture_height_in_lcu} * 16 + 1023) \gg 9$	Eq. ensures multiple of 2
Metadata Line Buffer (some inter slices)	$((\text{picture_width_in_pixels} + 15) \gg 4) * 188 + \text{pic_width_in_lcu} * 9 + 1023 \gg 9$	Eq. ensures multiple of 2
Metadata Tile Line Buffer (some inter slices)	$((\text{picture_width_in_pixels} + 15) \gg 4) * 172 + \text{pic_width_in_lcu} * 9 + 1023 \gg 9$	Eq. ensures multiple of 2

Buffer Name	Minimum Size in CLs	Notes
Metadata Tile Column Buffer (some inter slices)	Equation: $((((\text{picture_height_in_pixels} + 15) \gg 4) * 176 + \text{picture_height_in_lcu} * 89 + 1023) \gg 9$	Eq. ensures multiple of 2
SAO Line Buffer	$((\text{picture_width_in_pixels} \gg 1) + \text{pic_width_in_ctb} * 3) + 15 \& (-16) \gg 3$	Eq. ensures multiple of 2
SAO Tile Line Buffer	$((\text{picture_width_in_pixels} \gg 1) + \text{picture_width_in_ctb} * 6) + 15 \& (-16) \gg 3$	Eq. ensures multiple of 2
SAO Tile Column Buffer	$((\text{picture_height_in_pixels} \gg 1) + \text{pic_height_in_ctb} * 6) + 15 \& (-16) \gg 3$	Eq. ensures multiple of 2
Current and Collocated Motion Vector Temporal Buffer (lcu=16x16)	$((\text{picture_width_in_pixels} + 63) \gg 6) * ((\text{picture_height_in_pixels} + 15) \gg 4)$	Eq. ensures multiple of 2
Current and Collocated Motion Vector Temporal Buffer (lcu>16x16)	$((\text{picture_width_in_pixels} + 31) \gg 5) * ((\text{picture_height_in_pixels} + 31) \gg 5)$	Eq. ensures multiple of 2
SSE Line Buffer	$(\text{Picture_width_in_lcu} + 2) \gg 4$	

HEVC 10 bit Buffer Size Requirements

Buffer Name	Minimum Size in CLs	Notes
Deblocking Filter Line Buffer	$((\text{picture_width_in_pixels} + 31) \& (-32)) \gg 2$	Eq. ensures multiple of 4
Deblocking Filter Tile Line Buffer	$((\text{picture_width_in_pixels} + 31) \& (-32)) \gg 2$	Eq. ensures multiple of 4
Deblocking Filter Tile Column Buffer	$((\text{picture_height_in_pixels} + 6 * \text{pic_height_in_ctb} + 31) \& (-32)) \gg 2$	Eq. ensures multiple of 4
Metadata Line Buffer (all intra slices)	$(\text{picture_width_in_pixels} + \text{pic_width_in_lcu} * 8 + 1023) \gg 9$	Eq. ensures multiple of 2
Metadata Tile Line Buffer (all intra slices)	$(\text{picture_width_in_pixels} + \text{pic_width_in_lcu} * 8 + 1023) \gg 9$	Eq. ensures multiple of 2
Metadata Tile Column Buffer (all intra slices)	$(\text{picture_height_in_pixels} + \text{picture_height_in_lcu} * 16 + 1023) \gg 9$	Eq. ensures multiple of 2
Metadata Line Buffer (some inter slices)	$((\text{picture_width_in_pixels} + 15) \gg 4) * 188 + \text{pic_width_in_lcu} * 9 + 1023 \gg 9$	Eq. ensures multiple of 2
Metadata Tile Line Buffer (some inter slices)	$((\text{picture_width_in_pixels} + 15) \gg 4) * 172 + \text{pic_width_in_lcu} * 9 + 1023 \gg 9$	Eq. ensures multiple of 2
Metadata Tile Column Buffer (some inter slices)	$((\text{picture_height_in_pixels} + 15) \gg 4) * 176 + \text{picture_height_in_lcu} * 89 + 1023 \gg 9$	Eq. ensures multiple of 2
SAO Line Buffer	$((\text{picture_width_in_pixels} \gg 1) + \text{pic_width_in_ctb} * 3) + 15 \& (-16) \gg 2$	Eq. ensures multiple of 2

Buffer Name	Minimum Size in CLs	Notes
SAO Tile Line Buffer	$((\text{picture_width_in_pixels} \gg 1) + \text{picture_width_in_ctb} * 6) + 15 \& (-16) \gg 2$	Eq. ensures multiple of 2
SAO Tile Column Buffer	$((\text{picture_height_in_pixels} \gg 1) + \text{pic_height_in_ctb} * 6) + 15 \& (-16) \gg 2$	Eq. ensures multiple of 2
Current and Collocated Motion Vector Temporal Buffer (lcu=16x16)	$((\text{picture_width_in_pixels} + 63) \gg 6) * ((\text{picture_height_in_pixels} + 15) \gg 4)$	Eq. ensures multiple of 2
Current and Collocated Motion Vector Temporal Buffer (lcu>16x16)	$((\text{picture_width_in_pixels} + 31) \gg 5) * ((\text{picture_height_in_pixels} + 31) \gg 5)$	Eq. ensures multiple of 2
SSE Line Buffer	$(\text{Picture_width_in_lcu} + 2) \ll 4$	

Internal Media Rowstore Table

If the internal Media Rowstore exists, driver should use the storage as the following table indicates.

HEVC Pipeline	Frame Width	DAT	DF	SAO	DAT Addr	DF Addr	SAO Addr
HEVC	≤ 2048	Y	Y	Y	0	64	320
	$2048 < x \leq 4096$	Y	Y	N	0	128	N/A
	$4096 < x \leq 8196$	Y	N	N	0	N/A	N/A

VP9 Common Commands

Commands
HCP_PIPE_MODE_SELECT
HCP_SURFACE_STATE
HCP_PIPE_BUF_ADDR_STATE
HCP_IND_OBJ_BASE_ADDR_STATE
HCP_VP9_SEGMENT_STATE
HCP_VP9_PIC_STATE

HCP Common Commands

- HCP_PIC_STATE (VideoCS)
- HCP_TILE_STATE (VideoCS)
- HCP_REF_IDX_STATE (VideoCS)
- HCP_WEIGHTOFFSET_STATE (VideoCS)
- HCP_SLICE_STATE (VideoCS)
- HEVC_VP9_RDOQ_STATE

VP9 Commands

HCP_BSD_OBJECT (triggers HW start)

HCP_VP9_PAK_OBJECT

Tile Size and CU Stream-out Records

CU statistics record (individual PUs per record down to 8x8 only) (Note: For Advanced BRC but not supported in HW yet)

Fields	Bits	
Skip	3:0	Indicates Skip flag Group 4 4x4s -> 4 bits
InterMode	11:4	InterMode: 0 NEARESTMV, 1 NEARMV, 2 ZEROMV, 3NEWMV Group 4 4x4s total 8 bits
Reserved	15:12	
NZ coeff count	28:16	Number of non-zero coeffs; sum of YUV, 13bits
Reserved	31:29	
NumBitsforCoeffs	47:32	Number of Bits for coefficients per block, 16bits
NumBitsforBlock	63:48	Number of Bits in block

Stream-in Probability Table

In Encoder mode, two sets of this table will be streamed out: one for the current frame probability update and one for future frame.

Alignm ent	Ne w Offs et	# Byt es	Description	Keyfra me defaul ts	Inter frame defaults				Capture At DV_CNT				State count er EBB Addr ess	Coefficient counter EBB Address							
					4x 4 (K F)	4x4 (INTE R)	8x 8 (K F)	8x8 (INTE R)	16x 16 (KF)	16x1 6 (INTE R)	32x 32 (KF)	32x3 2 (INTE R)									
CL aligned	0	1	tx_probs_8x8 [0] [0..0]	100	10 0	0	0	0	0	MODE COUNTERS (counts tx)	0-17										
	1	1	tx_probs_8x8 [1] [0..0]	66	66	0	1	1													
	2	2	tx_probs_16x16 [0] [0..1]	20, 152	20, 15 2	0	2	2													
	4	2	tx_probs_16x16 [1] [0..1]	15, 101	15, 10 1	0	4	4													
	6	3	tx_probs_32x32 [0] [0..2]	3, 136, 37	3, 13 6, 37	0	6	6													
	9	3	tx_probs_32x32 [1] [0..2]	5, 52, 13	5, 52, 13	0	9	9													
	12	52	DUMMY	0, 0, 0, 0	0, 0, 0, 0	52	12														
CL aligned	64	3	coef_probs_4x4 [0] [0] [0] [0]	195, 29, 183	19 5,	0	12		8	COEFF COUNTERS (coeff_count_mod)		0- 28									



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT			State count er EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTE R)	8x8 (KF)	8x8 (INTE R)	16x16 (KF)	16x16 (INTE R)		32x32 (KF)	32x32 (INTE R)	32x32 (KF)	32x32 (INTE R)	32x32 (KF)	32x32 (INTE R)		
			[0..2]		29, 18 3						el_coeff)		7						
	67	3	coef_probs_4x4 [0] [0] [0] [1] [0..2]	84, 49, 136	84, 49, 13 6	0	15												
	70	3	coef_probs_4x4 [0] [0] [0] [2] [0..2]	8, 42, 71	8, 42, 71	0	18												
	73	3	coef_probs_4x4 [0] [0] [1] [0] [0..2]	31, 107, 169	31, 10 7, 16 9	0	21												
	76	3	coef_probs_4x4 [0] [0] [1] [1] [0..2]	35, 99, 159	35, 99, 15 9	0	24												
	79	3	coef_probs_4x4 [0] [0] [1] [2] [0..2]	17, 82, 140	17, 82, 14 0	0	27												
	82	3	coef_probs_4x4 [0] [0] [1] [3] [0..2]	8, 66, 114	8, 66, 11	0	30												



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
					4											
	85	3	coef_probs_4x4 [0] [0] [1] [4] [0..2]	2, 44, 76	2, 44, 76	0	33									
	88	3	coef_probs_4x4 [0] [0] [1] [5] [0..2]	1, 19, 32	1, 19, 32	0	36									
	91	3	coef_probs_4x4 [0] [0] [2] [0] [0..2]	40, 132, 201	40, 132, 201	0	39									
	94	3	coef_probs_4x4 [0] [0] [2] [1] [0..2]	29, 114, 187	29, 114, 187	0	42									
	97	3	coef_probs_4x4 [0] [0] [2] [2] [0..2]	13, 91, 157	13, 91, 157	0	45									
	100	3	coef_probs_4x4 [0] [0] [2] [3] [0..2]	7, 75, 127	7, 75, 127	0	48									
	103	3	coef_probs_4x4	3, 58,	3,	0	51									



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTE R)			8x8 (KF)	8x8 (INTE R)	16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)		
			[0] [0] [2] [4] [0..2]	95	58, 95											
	106	3	coef_probs_4x4 [0] [0] [2] [5] [0..2]	1, 28, 47	1, 28, 47	0	54									
	109	3	coef_probs_4x4 [0] [0] [3] [0] [0..2]	69, 142, 221	69, 14 2, 22 1	0	57									
	112	3	coef_probs_4x4 [0] [0] [3] [1] [0..2]	42, 122, 201	42, 12 2, 20 1	0	60									
	115	3	coef_probs_4x4 [0] [0] [3] [2] [0..2]	15, 91, 159	15, 91, 15 9	0	63									
	118	3	coef_probs_4x4 [0] [0] [3] [3] [0..2]	6, 67, 121	6, 67, 12 1	0	66									
	121	3	coef_probs_4x4 [0] [0] [3] [4] [0..2]	1, 42, 77	1, 42, 77	0	69									



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT			State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)					8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)			
	124	3	coef_probs_4x4 [0] [0] [3] [5] [0..2]	1, 17, 31	1, 17, 31	0	72												
	127	3	coef_probs_4x4 [0] [0] [4] [0] [0..2]	102, 148, 228	10, 2, 14, 8, 22, 8	0	75												
	130	3	coef_probs_4x4 [0] [0] [4] [1] [0..2]	67, 117, 204	67, 117, 204	0	78												
	133	3	coef_probs_4x4 [0] [0] [4] [2] [0..2]	17, 82, 154	17, 82, 154	0	81												
	136	3	coef_probs_4x4 [0] [0] [4] [3] [0..2]	6, 59, 114	6, 59, 114	0	84												
	139	3	coef_probs_4x4 [0] [0] [4] [4] [0..2]	2, 39, 75	2, 39, 75	0	87												
	142	3	coef_probs_4x4	1, 15,	1,	0	90												



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State count er EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTE R)			8x8 (KF)	8x8 (INTE R)	16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)		
			[0] [0] [4] [5] [0..2]	29	15, 29											
	145	3	coef_probs_4x4 [0] [0] [5] [0] [0..2]	156, 57, 233	15 6, 57, 23 3	0 93										
	148	3	coef_probs_4x4 [0] [0] [5] [1] [0..2]	119, 57, 212	11 9, 57, 21 2	0 96										
	151	3	coef_probs_4x4 [0] [0] [5] [2] [0..2]	58, 48, 163	58, 48, 16 3	0 99										
	154	3	coef_probs_4x4 [0] [0] [5] [3] [0..2]	29, 40, 124	29, 40, 12 4	0 10 2										
	157	3	coef_probs_4x4 [0] [0] [5] [4] [0..2]	12, 30, 81	12, 30, 81	0 10 5										
	160	3	coef_probs_4x4 [0] [0] [5] [5] [0..2]	3, 12, 31	3, 12, 31	0 10 8										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT		State counter EBB Address	Coefficient counter EBB Address					
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)	8x8 (INTEGR)		16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
	163	3	coef_probs_4x4 [0] [1] [0] [0] [0..2]	191, 107, 226	19, 0, 11, 1										
	166	3	coef_probs_4x4 [0] [1] [0] [1] [0..2]	124, 117, 204	12, 0, 11, 4										
	169	3	coef_probs_4x4 [0] [1] [0] [2] [0..2]	25, 99, 155	25, 0, 11, 7										
	172	3	coef_probs_4x4 [0] [1] [1] [0] [0..2]	29, 148, 210	29, 0, 12, 0										
	175	3	coef_probs_4x4 [0] [1] [1] [1] [0..2]	37, 126, 194	37, 0, 12, 3										
	178	3	coef_probs_4x4	8, 93,	8, 0, 12										



Alignm ent	Ne w Offs et	# Byt es	Description	Keyfra me defaul ts	Inter frame defaults		Capture At DV_CNT		State count er EBB Addr ess	Coefficient counter EBB Address							
					4x 4 (K F)	4x4 (INTE R)	8x 8 (K F)	8x8 (INTE R)		16x 16 (K F)	16x1 6 (INTE R)	32x 32 (K F)	32x3 2 (INTE R)				
			[0] [1] [1] [2] [0..2]	157	93, 15 7		6										
	181	3	coef_probs_4x4 [0] [1] [1] [3] [0..2]	2, 68, 118	2, 68, 11 8	0	12 9										
	184	3	coef_probs_4x4 [0] [1] [1] [4] [0..2]	1, 39, 69	1, 39, 69	0	13 2										
	187	3	coef_probs_4x4 [0] [1] [1] [5] [0..2]	1, 17, 33	1, 17, 33	0	13 5										
	190	3	coef_probs_4x4 [0] [1] [2] [0] [0..2]	41, 151, 213	41, 15 1, 21 3	0	13 8										
	193	3	coef_probs_4x4 [0] [1] [2] [1] [0..2]	27, 123, 193	27, 12 3, 19 3	0	14 1										
	196	3	coef_probs_4x4 [0] [1] [2] [2] [0..2]	3, 82, 144	3, 82, 14	0	14 4										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4	4x4 (INTE R)			8	8x8 (INTE R)	16x16 (INTE R)	16x16 (KF)	32x32 (INTE R)	32x32 (KF)		
					4											
	199	3	coef_probs_4x4 [0] [1] [2] [3] [0..2]	1, 58, 105	1, 58, 105	0	14	7								
	202	3	coef_probs_4x4 [0] [1] [2] [4] [0..2]	1, 32, 60	1, 32, 60	0	15	0								
	205	3	coef_probs_4x4 [0] [1] [2] [5] [0..2]	1, 13, 26	1, 13, 26	0	15	3								
	208	3	coef_probs_4x4 [0] [1] [3] [0] [0..2]	59, 159, 220	59, 159, 220	0	15	6								
	211	3	coef_probs_4x4 [0] [1] [3] [1] [0..2]	23, 126, 198	23, 126, 198	0	15	9								
	214	3	coef_probs_4x4 [0] [1] [3] [2] [0..2]	4, 88, 151	4, 88, 151	0	16	2								
	217	3	coef_probs_4x4	1, 66,	1,	0	16									

Alignm ent	Ne w Offs et	# Byt es	Description	Keyfra me defaul ts	Inter frame defaults		Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address							
					4x 4 (K F)	4x4 (INTE R)			8x 8 (K F)	8x8 (INTE R)	16x 16 (K F)	16x1 6 (INTE R)	32x 32 (K F)	32x3 2 (INTE R)		
			[0] [1] [3] [3] [0..2]	114	66, 11 4	5										
	220	3	coef_probs_4x4 [0] [1] [3] [4] [0..2]	1, 38, 71	1, 38, 71	0	16 8									
	223	3	coef_probs_4x4 [0] [1] [3] [5] [0..2]	1, 18, 34	1, 18, 34	0	17 1									
	226	3	coef_probs_4x4 [0] [1] [4] [0] [0..2]	114, 136, 232	11 4, 13 6, 23 2	0	17 4									
	229	3	coef_probs_4x4 [0] [1] [4] [1] [0..2]	51, 114, 207	51, 11 4, 20 7	0	17 7									
	232	3	coef_probs_4x4 [0] [1] [4] [2] [0..2]	11, 83, 155	11, 83, 15 5	0	18 0									
	235	3	coef_probs_4x4 [0] [1] [4] [3]	3, 56, 105	3, 56,	0	18 3									



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
			[0..2]		105											
	238	3	coef_probs_4x4 [0] [1] [4] [4] [0..2]	1, 33, 65	1, 33, 65	0 186										
	241	3	coef_probs_4x4 [0] [1] [4] [5] [0..2]	1, 17, 34	1, 17, 34	0 189										
	244	3	coef_probs_4x4 [0] [1] [5] [0] [0..2]	149, 65, 234	149, 65, 234	0 192										
	247	3	coef_probs_4x4 [0] [1] [5] [1] [0..2]	121, 57, 215	121, 57, 215	0 195										
	250	3	coef_probs_4x4 [0] [1] [5] [2] [0..2]	61, 49, 166	61, 49, 166	0 198										
	253	3	coef_probs_4x4 [0] [1] [5] [3] [0..2]	28, 36, 114	28, 36, 114	0 201										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT		State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)	8x8 (INTEGR)		16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)				
	256	3	coef_probs_4x4 [0] [1] [5] [4] [0..2]	12, 25, 76	12, 25, 76	0	204										
	259	3	coef_probs_4x4 [0] [1] [5] [5] [0..2]	3, 16, 42	3, 16, 42	0	207										
	262	3	coef_probs_4x4 [1] [0] [0] [0] [0..2]	214, 49, 220	214, 49, 220	0	210					0-287					
	265	3	coef_probs_4x4 [1] [0] [0] [1] [0..2]	132, 63, 188	132, 63, 188	0	213										
	268	3	coef_probs_4x4 [1] [0] [0] [2] [0..2]	42, 65, 137	42, 65, 137	0	216										
	271	3	coef_probs_4x4 [1] [0] [1] [0] [0..2]	85, 137, 221	85, 137, 221	0	219										
	274	3	coef_probs_4x4	104,	10	0	22										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT		State counter EBB Address	Coefficient counter EBB Address						
					4, 13, 1, 21, 6	2				4x4 (KF)	4x4 (INTEGR)	8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)
			[1] [0] [1] [1] [0..2]	131, 216	4, 13, 1, 21, 6	2										
	277	3	coef_probs_4x4 [1] [0] [1] [2] [0..2]	49, 111, 192	49, 11, 1, 19, 2	0	22	5								
	280	3	coef_probs_4x4 [1] [0] [1] [3] [0..2]	21, 87, 155	21, 87, 15, 5	0	22	8								
	283	3	coef_probs_4x4 [1] [0] [1] [4] [0..2]	2, 49, 87	2, 49, 87	0	23	1								
	286	3	coef_probs_4x4 [1] [0] [1] [5] [0..2]	1, 16, 28	1, 16, 28	0	23	4								
	289	3	coef_probs_4x4 [1] [0] [2] [0] [0..2]	89, 163, 230	89, 16, 3, 23, 0	0	23	7								
	292	3	coef_probs_4x4	90,	90,	0	24									

Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address						
					4x4 (KF)	4x4 (INTEGR)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)	
			[1] [0] [2] [1] [0..2]	137, 220	13, 7, 22 0	0									
	295	3	coef_probs_4x4 [1] [0] [2] [2] [0..2]	29, 100, 183	29, 10 0, 18 3	0	24 3								
	298	3	coef_probs_4x4 [1] [0] [2] [3] [0..2]	10, 70, 135	10, 70, 13 5	0	24 6								
	301	3	coef_probs_4x4 [1] [0] [2] [4] [0..2]	2, 42, 81	2, 42, 81	0	24 9								
	304	3	coef_probs_4x4 [1] [0] [2] [5] [0..2]	1, 17, 33	1, 17, 33	0	25 2								
	307	3	coef_probs_4x4 [1] [0] [3] [0] [0..2]	108, 167, 237	10, 8, 16 7, 23 7	0	25 5								
	310	3	coef_probs_4x4	55,	55,	0	25								



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address						
					4x4 (KF)	4x4 (INTEGR)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)	
			[1] [0] [3] [1] [0..2]	133, 222	13 3, 22 2	8									
	313	3	coef_probs_4x4 [1] [0] [3] [2] [0..2]	15, 97, 179	15, 97, 17 9	0	26 1								
	316	3	coef_probs_4x4 [1] [0] [3] [3] [0..2]	4, 72, 135	4, 72, 13 5	0	26 4								
	319	3	coef_probs_4x4 [1] [0] [3] [4] [0..2]	1, 45, 85	1, 45, 85	0	26 7								
	322	3	coef_probs_4x4 [1] [0] [3] [5] [0..2]	1, 19, 38	1, 19, 38	0	27 0								
	325	3	coef_probs_4x4 [1] [0] [4] [0] [0..2]	124, 146, 240	12 4, 14 6, 24 0	0	27 3								
	328	3	coef_probs_4x4 [1] [0] [4] [1]	66, 124,	66, 12	0	27 6								

Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address						
					4x4 (KF)	4x4 (INTEGR)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)	
			[0..2]	224	4, 22 4										
	331	3	coef_probs_4x4 [1] [0] [4] [2] [0..2]	17, 88, 175	17, 88, 17 5	0	27 9								
	334	3	coef_probs_4x4 [1] [0] [4] [3] [0..2]	4, 58, 122	4, 58, 12 2	0	28 2								
	337	3	coef_probs_4x4 [1] [0] [4] [4] [0..2]	1, 36, 75	1, 36, 75	0	28 5								
	340	3	coef_probs_4x4 [1] [0] [4] [5] [0..2]	1, 18, 37	1, 18, 37	0	28 8								
	343	3	coef_probs_4x4 [1] [0] [5] [0] [0..2]	141, 79, 241	14 1, 79, 24 1	0	29 1								
	346	3	coef_probs_4x4 [1] [0] [5] [1] [0..2]	126, 70, 227	12 6, 70, 22	0	29 4								



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address						
					4x4 (KF)	4x4 (INTEGR)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)	
					7										
	349	3	coef_probs_4x4 [1] [0] [5] [2] [0..2]	66, 58, 182	66, 58, 182	0 29 7									
	352	3	coef_probs_4x4 [1] [0] [5] [3] [0..2]	30, 44, 136	30, 44, 136	0 30 0									
	355	3	coef_probs_4x4 [1] [0] [5] [4] [0..2]	12, 34, 96	12, 34, 96	0 30 3									
	358	3	coef_probs_4x4 [1] [0] [5] [5] [0..2]	2, 20, 47	2, 20, 47	0 30 6									
	361	3	coef_probs_4x4 [1] [1] [0] [0] [0..2]	229, 99, 249	229, 99, 249	0 30 9									
	364	3	coef_probs_4x4 [1] [1] [0] [1] [0..2]	143, 111, 235	143, 111, 235	0 31 2									

Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address						
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)			8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
	367	3	coef_probs_4x4 [1] [1] [0] [2] [0..2]	46, 109, 192	46, 109, 192	0	315									
	370	3	coef_probs_4x4 [1] [1] [1] [0] [0..2]	82, 158, 236	82, 158, 236	0	318									
	373	3	coef_probs_4x4 [1] [1] [1] [1] [0..2]	94, 146, 224	94, 146, 224	0	321									
	376	3	coef_probs_4x4 [1] [1] [1] [2] [0..2]	25, 117, 191	25, 117, 191	0	324									
	379	3	coef_probs_4x4 [1] [1] [1] [3] [0..2]	9, 87, 149	9, 87, 149	0	327									
	382	3	coef_probs_4x4 [1] [1] [1] [4] [0..2]	3, 56, 99	3, 56, 99	0	330									



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults				Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address						
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)	8x8 (INTEGR)			16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)			
	385	3	coef_probs_4x4 [1] [1] [1] [5] [0..2]	1, 33, 57	1, 33, 57	0	33 3										
	388	3	coef_probs_4x4 [1] [1] [2] [0] [0..2]	83, 167, 237	83, 167, 237	0	33 6										
	391	3	coef_probs_4x4 [1] [1] [2] [1] [0..2]	68, 145, 222	68, 145, 222	0	33 9										
	394	3	coef_probs_4x4 [1] [1] [2] [2] [0..2]	10, 103, 177	10, 103, 177	0	34 2										
	397	3	coef_probs_4x4 [1] [1] [2] [3] [0..2]	2, 72, 131	2, 72, 131	0	34 5										
	400	3	coef_probs_4x4 [1] [1] [2] [4] [0..2]	1, 41, 79	1, 41, 79	0	34 8										
	403	3	coef_probs_4x4	1, 20,	1,	0	35										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address						
					4x4 (KF)	4x4 (INTE R)			8x8 (KF)	8x8 (INTE R)	16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)	
			[1] [1] [2] [5] [0..2]	39	20, 39	1									
	406	3	coef_probs_4x4 [1] [1] [3] [0] [0..2]	99, 167, 239	99, 16 7, 23 9	0	35 4								
	409	3	coef_probs_4x4 [1] [1] [3] [1] [0..2]	47, 141, 224	47, 14 1, 22 4	0	35 7								
	412	3	coef_probs_4x4 [1] [1] [3] [2] [0..2]	10, 104, 178	10, 10 4, 17 8	0	36 0								
	415	3	coef_probs_4x4 [1] [1] [3] [3] [0..2]	2, 73, 133	2, 73, 13 3	0	36 3								
	418	3	coef_probs_4x4 [1] [1] [3] [4] [0..2]	1, 44, 85	1, 44, 85	0	36 6								
	421	3	coef_probs_4x4 [1] [1] [3] [5]	1, 22, 47	1, 22,	0	36 9								



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address						
					4x4 (KF)	4x4 (INTEGR)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)	
			[0..2]		47	0									
	424	3	coef_probs_4x4 [1] [1] [4] [0] [0..2]	127, 145, 243	12, 7, 14, 5, 24, 3	0	37, 2								
	427	3	coef_probs_4x4 [1] [1] [4] [1] [0..2]	71, 129, 228	71, 12, 9, 22, 8	0	37, 5								
	430	3	coef_probs_4x4 [1] [1] [4] [2] [0..2]	17, 93, 177	17, 93, 17, 7	0	37, 8								
	433	3	coef_probs_4x4 [1] [1] [4] [3] [0..2]	3, 61, 124	3, 61, 12, 4	0	38, 1								
	436	3	coef_probs_4x4 [1] [1] [4] [4] [0..2]	1, 41, 84	1, 41, 84	0	38, 4								
	439	3	coef_probs_4x4 [1] [1] [4] [5] [0..2]	1, 21, 52	1, 21, 52	0	38, 7								



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT			State counter EBB Address	Coefficient counter EBB Address						
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)					8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
	442	3	coef_probs_4x4 [1] [1] [5] [0] [0..2]	157, 78, 244	157, 78, 244	0	390											
	445	3	coef_probs_4x4 [1] [1] [5] [1] [0..2]	140, 72, 231	140, 72, 231	0	393											
	448	3	coef_probs_4x4 [1] [1] [5] [2] [0..2]	69, 58, 184	69, 58, 184	0	396											
	451	3	coef_probs_4x4 [1] [1] [5] [3] [0..2]	31, 44, 137	31, 44, 137	0	399											
	454	3	coef_probs_4x4 [1] [1] [5] [4] [0..2]	14, 38, 105	14, 38, 105	0	402											
	457	3	coef_probs_4x4 [1] [1] [5] [5] [0..2]	8, 23, 61	8, 23, 61	0	405											
	460	3	coef_probs_8x8	125,	12	0	40		57.			0-						



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT		State counter EBB Address	Coefficient counter EBB Address						
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)	8x8 (INTEGR)		16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)			
			[0] [0] [0] [0] [0..2]	34, 187	5, 34, 18 7	8		5		28 7						
	463	3	coef_probs_8x8 [0] [0] [0] [1] [0..2]	52, 41, 133	52, 41, 13 3	0 1	41									
	466	3	coef_probs_8x8 [0] [0] [0] [2] [0..2]	6, 31, 56	6, 31, 56	0 4	41 4									
	469	3	coef_probs_8x8 [0] [0] [1] [0] [0..2]	37, 109, 153	37, 10 9, 15 3	0 7	41 7									
	472	3	coef_probs_8x8 [0] [0] [1] [1] [0..2]	51, 102, 147	51, 10 2, 14 7	0 0	42 0									
	475	3	coef_probs_8x8 [0] [0] [1] [2] [0..2]	23, 87, 128	23, 87, 12 8	0 3	42 3									
	478	3	coef_probs_8x8	8, 67,	8, 0	0 42										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTE R)			8x8 (KF)	8x8 (INTE R)	16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)		
			[0] [0] [1] [3] [0..2]	101	67, 10 1	6										
481	3	coef_probs_8x8 [0] [0] [1] [4] [0..2]	1, 41, 63	1, 41, 63	0	42 9										
484	3	coef_probs_8x8 [0] [0] [1] [5] [0..2]	1, 19, 29	1, 19, 29	0	43 2										
487	3	coef_probs_8x8 [0] [0] [2] [0] [0..2]	31, 154, 185	31, 15 4, 18 5	0	43 5										
490	3	coef_probs_8x8 [0] [0] [2] [1] [0..2]	17, 127, 175	17, 12 7, 17 5	0	43 8										
493	3	coef_probs_8x8 [0] [0] [2] [2] [0..2]	6, 96, 145	6, 96, 14 5	0	44 1										
496	3	coef_probs_8x8 [0] [0] [2] [3] [0..2]	2, 73, 114	2, 73, 11	0	44 4										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address						
					4x4 (KF)	4x4 (INTEGR)	8x8 (K)			8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
					4											
499	3	coef_probs_8x8 [0] [0] [2] [4] [0..2]	1, 51, 82	1, 51, 82	0	447										
502	3	coef_probs_8x8 [0] [0] [2] [5] [0..2]	1, 28, 45	1, 28, 45	0	450										
505	3	coef_probs_8x8 [0] [0] [3] [0] [0..2]	23, 163, 200	23, 163, 200	0	453										
508	3	coef_probs_8x8 [0] [0] [3] [1] [0..2]	10, 131, 185	10, 131, 185	0	456										
511	3	coef_probs_8x8 [0] [0] [3] [2] [0..2]	2, 93, 148	2, 93, 148	0	459										
514	3	coef_probs_8x8 [0] [0] [3] [3] [0..2]	1, 67, 111	1, 67, 111	0	462										
517	3	coef_probs_8x8	1, 41,	1,	0	46										

Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address						
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)			8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
			[0] [0] [3] [4] [0..2]	69	41, 69	5										
	520	3	coef_probs_8x8 [0] [0] [3] [5] [0..2]	1, 14, 24	1, 14, 24	0	46 8									
	523	3	coef_probs_8x8 [0] [0] [4] [0] [0..2]	29, 176, 217	29, 17 6, 21 7	0	47 1									
	526	3	coef_probs_8x8 [0] [0] [4] [1] [0..2]	12, 145, 201	12, 14 5, 20 1	0	47 4									
	529	3	coef_probs_8x8 [0] [0] [4] [2] [0..2]	3, 101, 156	3, 10 1, 15 6	0	47 7									
	532	3	coef_probs_8x8 [0] [0] [4] [3] [0..2]	1, 69, 111	1, 69, 11 1	0	48 0									
	535	3	coef_probs_8x8 [0] [0] [4] [4]	1, 39, 63	1, 39,	0	48 3									



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address					
					4x4 (KF)	4x4 (INTEGR)	8x8 (K)			8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)	
			[0..2]		63	0	48								
	538	3	coef_probs_8x8 [0] [0] [4] [5] [0..2]	1, 14, 23	1, 14, 23	0	486								
	541	3	coef_probs_8x8 [0] [0] [5] [0] [0..2]	57, 192, 233	57, 192, 233	0	489								
	544	3	coef_probs_8x8 [0] [0] [5] [1] [0..2]	25, 154, 215	25, 154, 215	0	492								
	547	3	coef_probs_8x8 [0] [0] [5] [2] [0..2]	6, 109, 167	6, 109, 167	0	495								
	550	3	coef_probs_8x8 [0] [0] [5] [3] [0..2]	3, 78, 118	3, 78, 118	0	498								
	553	3	coef_probs_8x8 [0] [0] [5] [4] [0..2]	1, 48, 69	1, 48, 69	0	501								



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address					
					4x4 (KF)	4x4 (INTE R)	8x8 (KF)			8x8 (INTE R)	16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)	
	556	3	coef_probs_8x8 [0] [0] [5] [5] [0..2]	1, 21, 29	1, 21, 29	0	504								
	559	3	coef_probs_8x8 [0] [1] [0] [0] [0..2]	202, 105, 245	202, 105, 245	0	507								
	562	3	coef_probs_8x8 [0] [1] [0] [1] [0..2]	108, 106, 216	108, 106, 216	0	510								
	565	3	coef_probs_8x8 [0] [1] [0] [2] [0..2]	18, 90, 144	18, 90, 144	0	513								
	568	3	coef_probs_8x8 [0] [1] [1] [0] [0..2]	33, 172, 219	33, 172, 219	0	516								
	571	3	coef_probs_8x8 [0] [1] [1] [1] [0..2]	64, 149, 206	64, 149, 206	0	519								



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address						
					4x4 (KF)	4x4 (INTEGR)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)	
					206										
	574	3	coef_probs_8x8 [0] [1] [1] [2] [0..2]	14, 117, 177	14, 117, 7, 177	0 522									
	577	3	coef_probs_8x8 [0] [1] [1] [3] [0..2]	5, 90, 141	5, 90, 141	0 525									
	580	3	coef_probs_8x8 [0] [1] [1] [4] [0..2]	2, 61, 95	2, 61, 95	0 528									
	583	3	coef_probs_8x8 [0] [1] [1] [5] [0..2]	1, 37, 57	1, 37, 57	0 531									
	586	3	coef_probs_8x8 [0] [1] [2] [0] [0..2]	33, 179, 220	33, 179, 220	0 534									
	589	3	coef_probs_8x8 [0] [1] [2] [1] [0..2]	11, 140, 198	11, 140, 198	0 537									



HEVC

Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address						
					4x4 (KF)	4x4 (INTE R)	8x8 (KF)			8x8 (INTE R)	16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)		
					8											
	592	3	coef_probs_8x8 [0] [1] [2] [2] [0..2]	1, 89, 148	1, 89, 148	0 54 0										
	595	3	coef_probs_8x8 [0] [1] [2] [3] [0..2]	1, 60, 104	1, 60, 104	0 54 3										
	598	3	coef_probs_8x8 [0] [1] [2] [4] [0..2]	1, 33, 57	1, 33, 57	0 54 6										
	601	3	coef_probs_8x8 [0] [1] [2] [5] [0..2]	1, 12, 21	1, 12, 21	0 54 9										
	604	3	coef_probs_8x8 [0] [1] [3] [0] [0..2]	30, 181, 221	30, 181, 221	0 55 2										
	607	3	coef_probs_8x8 [0] [1] [3] [1] [0..2]	8, 141, 198	8, 141, 198	0 55 5										
	610	3	coef_probs_8x8	1, 87,	1, 87,	0 55										



Alignm ent	Ne w Offs et	# Byt es	Description	Keyfra me defaul ts	Inter frame defaults			Capture At DV_CNT			State count er EBB Addr ess	Coefficient counter EBB Address						
					4x 4 (K F)	4x4 (INTE R)	8x 8 (K F)					8x8 (INTE R)	16x 16 (K F)	16x1 6 (INTE R)	32x 32 (K F)	32x3 2 (INTE R)		
			[0] [1] [3] [2] [0..2]	145	87, 14 5	8												
613	3	coef_probs_8x8 [0] [1] [3] [3] [0..2]	1, 58, 100	1, 58, 10 0	1, 0	56 1												
616	3	coef_probs_8x8 [0] [1] [3] [4] [0..2]	1, 31, 55	1, 31, 55	0	56 4												
619	3	coef_probs_8x8 [0] [1] [3] [5] [0..2]	1, 12, 20	1, 12, 20	0	56 7												
622	3	coef_probs_8x8 [0] [1] [4] [0] [0..2]	32, 186, 224	32, 18 6, 22 4	0	57 0												
625	3	coef_probs_8x8 [0] [1] [4] [1] [0..2]	7, 142, 198	7, 14 2, 19 8	0	57 3												
628	3	coef_probs_8x8 [0] [1] [4] [2] [0..2]	1, 86, 143	1, 86, 14	0	57 6												



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address						
					4x4 (KF)	4x4 (INTE R)	8x8 (K F)			8x8 (INTE R)	16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)		
					3	0	57									
631	3	coef_probs_8x8 [0] [1] [4] [3] [0..2]	1, 58, 100	1, 58, 100	1, 58, 100	0	579									
634	3	coef_probs_8x8 [0] [1] [4] [4] [0..2]	1, 31, 55	1, 31, 55	1, 31, 55	0	582									
637	3	coef_probs_8x8 [0] [1] [4] [5] [0..2]	1, 12, 22	1, 12, 22	1, 12, 22	0	585									
640	3	coef_probs_8x8 [0] [1] [5] [0] [0..2]	57, 192, 227	57, 192, 227	57, 192, 227	0	588									
643	3	coef_probs_8x8 [0] [1] [5] [1] [0..2]	20, 143, 204	20, 143, 204	20, 143, 204	0	591									
646	3	coef_probs_8x8 [0] [1] [5] [2] [0..2]	3, 96, 154	3, 96, 154	3, 96, 154	0	594									
649	3	coef_probs_8x8	1, 68,	1, 68,	1, 68,	0	59									



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address					
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)
			[0] [1] [5] [3] [0..2]	112	68, 11 2	7									
652	3	coef_probs_8x8 [0] [1] [5] [4] [0..2]	1, 42, 69	1, 42, 69	0	60 0									
655	3	coef_probs_8x8 [0] [1] [5] [5] [0..2]	1, 19, 32	1, 19, 32	0	60 3									
658	3	coef_probs_8x8 [1] [0] [0] [0] [0..2]	212, 35, 215	21 2, 35, 21 5	0	60 6						0-287			
661	3	coef_probs_8x8 [1] [0] [0] [1] [0..2]	113, 47, 169	11 3, 47, 16 9	0	60 9									
664	3	coef_probs_8x8 [1] [0] [0] [2] [0..2]	29, 48, 105	29, 48, 10 5	0	61 2									
667	3	coef_probs_8x8 [1] [0] [1] [0] [0..2]	74, 129, 203	74, 12 9,	0	61 5									



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTE R)			8x8 (KF)	8x8 (INTE R)	16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)		
					203											
	670	3	coef_probs_8x8 [1] [0] [1] [1] [0..2]	106, 120, 203	106, 120, 203	0 618										
	673	3	coef_probs_8x8 [1] [0] [1] [2] [0..2]	49, 107, 178	49, 107, 178	0 621										
	676	3	coef_probs_8x8 [1] [0] [1] [3] [0..2]	19, 84, 144	19, 84, 144	0 624										
	679	3	coef_probs_8x8 [1] [0] [1] [4] [0..2]	4, 50, 84	4, 50, 84	0 627										
	682	3	coef_probs_8x8 [1] [0] [1] [5] [0..2]	1, 15, 25	1, 15, 25	0 630										
	685	3	coef_probs_8x8 [1] [0] [2] [0] [0..2]	71, 172, 217	71, 172, 217	0 633										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
					217											
688	3	coef_probs_8x8 [1] [0] [2] [1] [0..2]	44, 141, 209	44, 141, 1, 209	0	636										
691	3	coef_probs_8x8 [1] [0] [2] [2] [0..2]	15, 102, 173	15, 102, 2, 173	0	639										
694	3	coef_probs_8x8 [1] [0] [2] [3] [0..2]	6, 76, 133	6, 76, 133	0	642										
697	3	coef_probs_8x8 [1] [0] [2] [4] [0..2]	2, 51, 89	2, 51, 89	0	645										
700	3	coef_probs_8x8 [1] [0] [2] [5] [0..2]	1, 24, 42	1, 24, 42	0	648										
703	3	coef_probs_8x8 [1] [0] [3] [0] [0..2]	64, 185, 231	64, 185, 5, 23	0	651										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address					
					4x4 (KF)	4x4 (INTE R)	8x8 (KF)			16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)		
					1	0	65								
	706	3	coef_probs_8x8 [1] [0] [3] [1] [0..2]	31, 148, 216	31, 148, 216	0	65								
	709	3	coef_probs_8x8 [1] [0] [3] [2] [0..2]	8, 103, 175	8, 103, 175	0	65								
	712	3	coef_probs_8x8 [1] [0] [3] [3] [0..2]	3, 74, 131	3, 74, 131	0	66								
	715	3	coef_probs_8x8 [1] [0] [3] [4] [0..2]	1, 46, 81	1, 46, 81	0	66								
	718	3	coef_probs_8x8 [1] [0] [3] [5] [0..2]	1, 18, 30	1, 18, 30	0	66								
	721	3	coef_probs_8x8 [1] [0] [4] [0] [0..2]	65, 196, 235	65, 196, 235	0	66								



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT			State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTE R)	8x8 (KF)					16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)				
	724	3	coef_probs_8x8 [1] [0] [4] [1] [0..2]	25, 157, 221	25, 157, 221	0 2	67 2												
	727	3	coef_probs_8x8 [1] [0] [4] [2] [0..2]	5, 105, 174	5, 105, 174	0 5	67 5												
	730	3	coef_probs_8x8 [1] [0] [4] [3] [0..2]	1, 67, 120	1, 67, 120	0 8	67 8												
	733	3	coef_probs_8x8 [1] [0] [4] [4] [0..2]	1, 38, 69	1, 38, 69	0 1	68 1												
	736	3	coef_probs_8x8 [1] [0] [4] [5] [0..2]	1, 15, 30	1, 15, 30	0 4	68 4												
	739	3	coef_probs_8x8 [1] [0] [5] [0] [0..2]	65, 204, 238	65, 204, 238	0 7	68 7												
	742	3	coef_probs_8x8	30,	30,	0	69												



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
			[1] [0] [5] [1] [0..2]	156, 224	15 6, 22 4	0										
745	3	coef_probs_8x8 [1] [0] [5] [2] [0..2]	7, 107, 177	7, 10 7, 17 7	0	69 3										
748	3	coef_probs_8x8 [1] [0] [5] [3] [0..2]	2, 70, 124	2, 70, 12 4	0	69 6										
751	3	coef_probs_8x8 [1] [0] [5] [4] [0..2]	1, 42, 73	1, 42, 73	0	69 9										
754	3	coef_probs_8x8 [1] [0] [5] [5] [0..2]	1, 18, 34	1, 18, 34	0	70 2										
757	3	coef_probs_8x8 [1] [1] [0] [0] [0..2]	225, 86, 251	22 5, 86, 25 1	0	70 5										
760	3	coef_probs_8x8 [1] [1] [0] [1]	144, 104,	14 4,	0	70 8										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTE R)			8x8 (KF)	8x8 (INTE R)	16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)		
			[0..2]	235	104, 235											
	763	3	coef_probs_8x8 [1] [1] [0] [2] [0..2]	42, 99, 181	42, 99, 181	0 71 1										
	766	3	coef_probs_8x8 [1] [1] [1] [0] [0..2]	85, 175, 239	85, 175, 239	0 71 4										
	769	3	coef_probs_8x8 [1] [1] [1] [1] [0..2]	112, 165, 229	112, 165, 229	0 71 7										
	772	3	coef_probs_8x8 [1] [1] [1] [2] [0..2]	29, 136, 200	29, 136, 200	0 72 0										
	775	3	coef_probs_8x8 [1] [1] [1] [3] [0..2]	12, 103, 162	12, 103, 162	0 72 3										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
				162												
778	3	coef_probs_8x8 [1] [1] [1] [4] [0..2]	6, 77, 123	6, 77, 123	0	726										
781	3	coef_probs_8x8 [1] [1] [1] [5] [0..2]	2, 53, 84	2, 53, 84	0	729										
784	3	coef_probs_8x8 [1] [1] [2] [0] [0..2]	75, 183, 239	75, 183, 239	0	732										
787	3	coef_probs_8x8 [1] [1] [2] [1] [0..2]	30, 155, 221	30, 155, 221	0	735										
790	3	coef_probs_8x8 [1] [1] [2] [2] [0..2]	3, 106, 171	3, 106, 171	0	738										
793	3	coef_probs_8x8 [1] [1] [2] [3]	1, 74, 128	1, 74, 128	0	741										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTE R)			8x8 (KF)	8x8 (INTE R)	16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)		
			[0..2]		128											
796	3	coef_probs_8x8 [1] [1] [2] [4] [0..2]	1, 44, 76	1, 44, 76	0	744										
799	3	coef_probs_8x8 [1] [1] [2] [5] [0..2]	1, 17, 28	1, 17, 28	0	747										
802	3	coef_probs_8x8 [1] [1] [3] [0] [0..2]	73, 185, 240	73, 185, 240	0	750										
805	3	coef_probs_8x8 [1] [1] [3] [1] [0..2]	27, 159, 222	27, 159, 222	0	753										
808	3	coef_probs_8x8 [1] [1] [3] [2] [0..2]	2, 107, 172	2, 107, 172	0	756										
811	3	coef_probs_8x8 [1] [1] [3] [3] [0..2]	1, 75, 127	1, 75, 127	0	759										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address					
					4x4 (KF)	4x4 (INTE R)	8x8 (KF)			16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)		
					7	0	76								
814	3	coef_probs_8x8 [1] [1] [3] [4] [0..2]	1, 42, 73	1, 42, 73	0	76	2								
817	3	coef_probs_8x8 [1] [1] [3] [5] [0..2]	1, 17, 29	1, 17, 29	0	76	5								
820	3	coef_probs_8x8 [1] [1] [4] [0] [0..2]	62, 190, 238	62, 190, 238	0	76	8								
823	3	coef_probs_8x8 [1] [1] [4] [1] [0..2]	21, 159, 222	21, 159, 222	0	77	1								
826	3	coef_probs_8x8 [1] [1] [4] [2] [0..2]	2, 107, 172	2, 107, 172	0	77	4								
829	3	coef_probs_8x8 [1] [1] [4] [3] [0..2]	1, 72, 122	1, 72, 122	0	77	7								



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT			State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTE R)	8x8 (KF)					16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)				
	832	3	coef_probs_8x8 [1] [1] [4] [4] [0..2]	1, 40, 71	1, 40, 71	0	78 0												
	835	3	coef_probs_8x8 [1] [1] [4] [5] [0..2]	1, 18, 32	1, 18, 32	0	78 3												
	838	3	coef_probs_8x8 [1] [1] [5] [0] [0..2]	61, 199, 240	61, 199, 240	0	78 6												
	841	3	coef_probs_8x8 [1] [1] [5] [1] [0..2]	27, 161, 226	27, 161, 226	0	78 9												
	844	3	coef_probs_8x8 [1] [1] [5] [2] [0..2]	4, 113, 180	4, 113, 180	0	79 2												
	847	3	coef_probs_8x8 [1] [1] [5] [3] [0..2]	1, 76, 129	1, 76, 129	0	79 5												
	850	3	coef_probs_8x8	1, 46,	1,	0	79												



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address					
					4x4 (KF)	4x4 (INTE R)	8x8 (KF)			16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)		
			[1] [1] [5] [4] [0..2]	80	46, 80	0	8								
	853	3	coef_probs_8x8 [1] [1] [5] [5] [0..2]	1, 23, 41	1, 23, 41	0	80 1								
	856	3	coef_probs_16x16 [0] [0] [0] [0] [0..2]	7, 27, 153	7, 27, 15 3	0	80 4		107			0- 287			
	859	3	coef_probs_16x16 [0] [0] [0] [1] [0..2]	5, 30, 95	5, 30, 95	0	80 7								
	862	3	coef_probs_16x16 [0] [0] [0] [2] [0..2]	1, 16, 30	1, 16, 30	0	81 0								
	865	3	coef_probs_16x16 [0] [0] [1] [0] [0..2]	50, 75, 127	50, 75, 12 7	0	81 3								
	868	3	coef_probs_16x16 [0] [0] [1] [1] [0..2]	57, 75, 124	57, 75, 12 4	0	81 6								
	871	3	coef_probs_16x16	27, 67,	27	0	81								



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTE R)	8x8 (KF)			16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)				
			6 [0] [0] [1] [2] [0..2]	108	67, 108	9											
	874	3	coef_probs_16x16 [0] [0] [1] [3] [0..2]	10, 54, 86	10, 54, 86	0 2	82										
	877	3	coef_probs_16x16 [0] [0] [1] [4] [0..2]	1, 33, 52	1, 33, 52	0	82 5										
	880	3	coef_probs_16x16 [0] [0] [1] [5] [0..2]	1, 12, 18	1, 12, 18	0	82 8										
	883	3	coef_probs_16x16 [0] [0] [2] [0] [0..2]	43, 125, 151	43, 125, 151	0	83 1										
	886	3	coef_probs_16x16 [0] [0] [2] [1] [0..2]	26, 108, 148	26, 108, 148	0	83 4										
	889	3	coef_probs_16x16 [7, 83, 7, 0]	7, 83, 7, 0	7, 83												



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)			16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)				
			6 [0] [0] [2] [2] [0..2]	122	83, 122	7											
	892	3	coef_probs_16x16 [0] [0] [2] [3] [0..2]	2, 59, 89	2, 59, 89	0	840										
	895	3	coef_probs_16x16 [0] [0] [2] [4] [0..2]	1, 38, 60	1, 38, 60	0	843										
	898	3	coef_probs_16x16 [0] [0] [2] [5] [0..2]	1, 17, 27	1, 17, 27	0	846										
	901	3	coef_probs_16x16 [0] [0] [3] [0] [0..2]	23, 144, 163	23, 144, 163	0	849										
	904	3	coef_probs_16x16 [0] [0] [3] [1] [0..2]	13, 112, 154	13, 112, 154	0	852										
	907	3	coef_probs_16x16 [2, 75,]	2, 75,	2,	0	85										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)			16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)				
			6 [0] [0] [3] [2] [0..2]	117	75, 117	5											
	910	3	coef_probs_16x16 [0] [0] [3] [3] [0..2]	1, 50, 81	1, 50, 81	0	858										
	913	3	coef_probs_16x16 [0] [0] [3] [4] [0..2]	1, 31, 51	1, 31, 51	0	861										
	916	3	coef_probs_16x16 [0] [0] [3] [5] [0..2]	1, 14, 23	1, 14, 23	0	864										
	919	3	coef_probs_16x16 [0] [0] [4] [0] [0..2]	18, 162, 185	18, 162, 185	0	867										
	922	3	coef_probs_16x16 [0] [0] [4] [1] [0..2]	6, 123, 171	6, 123, 171	0	870										
	925	3	coef_probs_16x16 [0] [0] [4] [1] [0..2]	1, 78,	1, 78,	0	87										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)			16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)				
			6 [0] [0] [4] [2] [0..2]	125	78, 125	3											
	928	3	coef_probs_16x16 [0] [0] [4] [3] [0..2]	1, 51, 86	1, 51, 86	0	876										
	931	3	coef_probs_16x16 [0] [0] [4] [4] [0..2]	1, 31, 54	1, 31, 54	0	879										
	934	3	coef_probs_16x16 [0] [0] [4] [5] [0..2]	1, 14, 23	1, 14, 23	0	882										
	937	3	coef_probs_16x16 [0] [0] [5] [0] [0..2]	15, 199, 227	15, 199, 227	0	885										
	940	3	coef_probs_16x16 [0] [0] [5] [1] [0..2]	3, 150, 204	3, 150, 204	0	888										
	943	3	coef_probs_16x16 [1, 91,] [0..2]	1, 91,	1, 91,	0	89										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)			16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)				
			6 [0] [0] [5] [2] [0..2]	146	91, 14 6	1											
	946	3	coef_probs_16x16 [0] [0] [5] [3] [0..2]	1, 55, 95	1, 55, 95	0	89 4										
	949	3	coef_probs_16x16 [0] [0] [5] [4] [0..2]	1, 30, 53	1, 30, 53	0	89 7										
	952	3	coef_probs_16x16 [0] [0] [5] [5] [0..2]	1, 11, 20	1, 11, 20	0	90 0										
	955	3	coef_probs_16x16 [0] [1] [0] [0] [0..2]	19, 55, 240	19, 55, 240	0	90 3										
	958	3	coef_probs_16x16 [0] [1] [0] [1] [0..2]	19, 59, 196	19, 59, 196	0	90 6										
	961	3	coef_probs_16x16 [0] [1] [0] [2]	3, 52, 105	3, 52, 105	0	90 9										



Alignm ent	Ne w Offs et	# Byt es	Description	Keyfra me defaul ts	Inter frame defaults			Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address					
					4x 4 (K F)	4x4 (INTE R)	8x 8 (K F)			16x 16 (KF)	16x1 6 (INTE R)	32x 32 (KF)	32x3 2 (INTE R)		
			[0..2]		5										
	964	3	coef_probs_16x1 6 [0] [1] [1] [0] [0..2]	41, 166, 207	41, 16 6, 20 7	0	91 2								
	967	3	coef_probs_16x1 6 [0] [1] [1] [1] [0..2]	104, 153, 199	10 4, 15 3, 19 9	0	91 5								
	970	3	coef_probs_16x1 6 [0] [1] [1] [2] [0..2]	31, 123, 181	31, 12 3, 18 1	0	91 8								
	973	3	coef_probs_16x1 6 [0] [1] [1] [3] [0..2]	14, 101, 152	14, 10 1, 15 2	0	92 1								
	976	3	coef_probs_16x1 6 [0] [1] [1] [4] [0..2]	5, 72, 106	5, 72, 10 6	0	92 4								



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTE R)	8x8 (KF)			16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)				
	979	3	coef_probs_16x16 [0] [1] [1] [5] [0..2]	1, 36, 52	1, 36, 52	0	92 7										
	982	3	coef_probs_16x16 [0] [1] [2] [0] [0..2]	35, 176, 211	35, 17 6, 21 1	0	93 0										
	985	3	coef_probs_16x16 [0] [1] [2] [1] [0..2]	12, 131, 190	12, 13 1, 19 0	0	93 3										
	988	3	coef_probs_16x16 [0] [1] [2] [2] [0..2]	2, 88, 144	2, 88, 14 4	0	93 6										
	991	3	coef_probs_16x16 [0] [1] [2] [3] [0..2]	1, 60, 101	1, 60, 10 1	0	93 9										
	994	3	coef_probs_16x16 [0] [1] [2] [4] [0..2]	1, 36, 60	1, 36, 60	0	94 2										



HEVC

Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTE R)	8x8 (KF)			16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)				
	997	3	coef_probs_16x16 [0] [1] [2] [5] [0..2]	1, 16, 28	1, 16, 28	0	945										
	1000	3	coef_probs_16x16 [0] [1] [3] [0] [0..2]	28, 183, 213	28, 183, 213	0	948										
	1003	3	coef_probs_16x16 [0] [1] [3] [1] [0..2]	8, 134, 191	8, 134, 191	0	951										
	1006	3	coef_probs_16x16 [0] [1] [3] [2] [0..2]	1, 86, 142	1, 86, 142	0	954										
	1009	3	coef_probs_16x16 [0] [1] [3] [3] [0..2]	1, 56, 96	1, 56, 96	0	957										
	1012	3	coef_probs_16x16 [0] [1] [3] [4] [0..2]	1, 30, 53	1, 30, 53	0	960										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address					
					4x4 (KF)	4x4 (INTE R)	8x8 (KF)			16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)		
	1015	3	coef_probs_16x16 [0] [1] [3] [5] [0..2]	1, 12, 20	1, 12, 20	0	963								
	1018	3	coef_probs_16x16 [0] [1] [4] [0] [0..2]	20, 190, 215	20, 190, 215	0	966								
	1021	3	coef_probs_16x16 [0] [1] [4] [1] [0..2]	4, 135, 192	4, 135, 192	0	969								
	1024	3	coef_probs_16x16 [0] [1] [4] [2] [0..2]	1, 84, 139	1, 84, 139	0	972								
	1027	3	coef_probs_16x16 [0] [1] [4] [3] [0..2]	1, 53, 91	1, 53, 91	0	975								
	1030	3	coef_probs_16x16 [0] [1] [4] [4] [0..2]	1, 28, 49	1, 28, 49	0	978								



HEVC

Alignm ent	Ne w Offs et	# Byt es	Description	Keyfra me defaul ts	Inter frame defaults			Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address					
					4x 4 (K F)	4x4 (INTE R)	8x 8 (K F)			16x 16 (KF)	16x1 6 (INTE R)	32x 32 (KF)	32x3 2 (INTE R)		
	103 3	3	coef_probs_16x1 6 [0] [1] [4] [5] [0..2]	1, 11, 20	1, 11, 20	0	98 1								
	103 6	3	coef_probs_16x1 6 [0] [1] [5] [0] [0..2]	13, 196, 216	13, 19 6, 21 6	0	98 4								
	103 9	3	coef_probs_16x1 6 [0] [1] [5] [1] [0..2]	2, 137, 192	2, 13 7, 19 2	0	98 7								
	104 2	3	coef_probs_16x1 6 [0] [1] [5] [2] [0..2]	1, 86, 143	1, 86, 14 3	0	99 0								
	104 5	3	coef_probs_16x1 6 [0] [1] [5] [3] [0..2]	1, 57, 99	1, 57, 99	0	99 3								
	104 8	3	coef_probs_16x1 6 [0] [1] [5] [4] [0..2]	1, 32, 56	1, 32, 56	0	99 6								



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)			16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)				
	1051	3	coef_probs_16x16 [0] [1] [5] [5] [0..2]	1, 13, 24	1, 13, 24	0	999										
	1054	3	coef_probs_16x16 [1] [0] [0] [0] [0..2]	211, 29, 217	21, 1, 29, 217	0	1002								0-287		
	1057	3	coef_probs_16x16 [1] [0] [0] [1] [0..2]	96, 47, 156	96, 47, 156	0	1005										
	1060	3	coef_probs_16x16 [1] [0] [0] [2] [0..2]	22, 43, 87	22, 43, 87	0	1008										
	1063	3	coef_probs_16x16 [1] [0] [1] [0] [0..2]	78, 120, 193	78, 120, 193	0	1011										
	1066	3	coef_probs_16x16 [1] [0] [1] [1] [0..2]	111, 116, 186	11, 1, 11, 6, 18	0	1014										



Alignm ent	Ne w Offs et	# Byt es	Description	Keyfra me defaul ts	Inter frame defaults			Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address					
					4x 4 (K F)	4x4 (INTE R)	8x 8 (K F)			8x8 (INTE R)	16x 16 (KF)	16x1 6 (INTE R)	32x 32 (KF)	32x3 2 (INTE R)	
					6										
106 9	3	coef_probs_16x1 6 [1] [0] [1] [2] [0..2]	46, 102, 164	46, 10 2, 16 4	0	10 17									
107 2	3	coef_probs_16x1 6 [1] [0] [1] [3] [0..2]	15, 80, 128	15, 80, 12 8	0	10 20									
107 5	3	coef_probs_16x1 6 [1] [0] [1] [4] [0..2]	2, 49, 76	2, 49, 76	0	10 23									
107 8	3	coef_probs_16x1 6 [1] [0] [1] [5] [0..2]	1, 18, 28	1, 18, 28	0	10 26									
108 1	3	coef_probs_16x1 6 [1] [0] [2] [0] [0..2]	71, 161, 203	71, 16 1, 20 3	0	10 29									
108 4	3	coef_probs_16x1 6 [1] [0] [2] [1]	42, 132, 192	42, 13 2,	0	10 32									



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
			[0..2]		192											
1087	3	coef_probs_16x16 [1] [0] [2] [2] [0..2]	10, 98, 150	10, 98, 150	0	1035										
1090	3	coef_probs_16x16 [1] [0] [2] [3] [0..2]	3, 69, 109	3, 69, 109	0	1038										
1093	3	coef_probs_16x16 [1] [0] [2] [4] [0..2]	1, 44, 70	1, 44, 70	0	1041										
1096	3	coef_probs_16x16 [1] [0] [2] [5] [0..2]	1, 18, 29	1, 18, 29	0	1044										
1099	3	coef_probs_16x16 [1] [0] [3] [0] [0..2]	57, 186, 211	57, 186, 211	0	1047										
1102	3	coef_probs_16x16 [1] [0] [3] [1]	30, 140, 196	30, 140, 196	0	1050										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
			[0..2]		19 6											
1105	3	coef_probs_16x16 [1] [0] [3] [2] [0..2]	4, 93, 146	4, 93, 14 6	0	10 53										
1108	3	coef_probs_16x16 [1] [0] [3] [3] [0..2]	1, 62, 102	1, 62, 10 2	0	10 56										
1111	3	coef_probs_16x16 [1] [0] [3] [4] [0..2]	1, 38, 65	1, 38, 65	0	10 59										
1114	3	coef_probs_16x16 [1] [0] [3] [5] [0..2]	1, 16, 27	1, 16, 27	0	10 62										
1117	3	coef_probs_16x16 [1] [0] [4] [0] [0..2]	47, 199, 217	47, 19 9, 21 7	0	10 65										
1120	3	coef_probs_16x16 [1] [0] [4] [1]	14, 145, 196	14, 14 5,	0	10 68										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address					
					4x4 (KF)	4x4 (INTE R)	8x8 (KF)			8x8 (INTE R)	16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)	
			[0..2]		19 6										
1123	3	coef_probs_16x16 [1] [0] [4] [2] [0..2]	1, 88, 142	1, 88, 14 2	0	10 71									
1126	3	coef_probs_16x16 [1] [0] [4] [3] [0..2]	1, 57, 98	1, 57, 98	0	10 74									
1129	3	coef_probs_16x16 [1] [0] [4] [4] [0..2]	1, 36, 62	1, 36, 62	0	10 77									
1132	3	coef_probs_16x16 [1] [0] [4] [5] [0..2]	1, 15, 26	1, 15, 26	0	10 80									
1135	3	coef_probs_16x16 [1] [0] [5] [0] [0..2]	26, 219, 229	26, 21 9, 22 9	0	10 83									
1138	3	coef_probs_16x16 [1] [0] [5] [1]	5, 155, 207	5, 15 5,	0	10 86									



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address					
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)			16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
			[0..2]		207										
1141	3	coef_probs_16x16 [1] [0] [5] [2] [0..2]	1, 94, 151	1, 94, 15 1	0	1089									
1144	3	coef_probs_16x16 [1] [0] [5] [3] [0..2]	1, 60, 104	1, 60, 10 4	0	1092									
1147	3	coef_probs_16x16 [1] [0] [5] [4] [0..2]	1, 36, 62	1, 36, 62	0	1095									
1150	3	coef_probs_16x16 [1] [0] [5] [5] [0..2]	1, 16, 28	1, 16, 28	0	1098									
1153	3	coef_probs_16x16 [1] [1] [0] [0] [0..2]	233, 29, 248	23 3, 29, 24 8	0	1101									
1156	3	coef_probs_16x16 [1] [1] [0] [1]	146, 47, 220	14 6, 47,	0	1104									



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
			[0..2]		220											
1159	3	coef_probs_16x16 [1] [1] [0] [2] [0..2]	43, 52, 140	43, 52, 140	0	1107										
1162	3	coef_probs_16x16 [1] [1] [1] [0] [0..2]	100, 163, 232	100, 163, 232	0	1110										
1165	3	coef_probs_16x16 [1] [1] [1] [1] [0..2]	179, 161, 222	179, 161, 222	0	1113										
1168	3	coef_probs_16x16 [1] [1] [1] [2] [0..2]	63, 142, 204	63, 142, 204	0	1116										
1171	3	coef_probs_16x16 [1] [1] [1] [3] [0..2]	37, 113, 174	37, 113, 174	0	1119										



HEVC

Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address								
					4	4x4	8x8			4 (KF)	(INTEGR)	(K F)	(INTEGR)	(KF)	(INTEGR)	(KF)		
					4													
1174	3	coef_probs_16x16 [1] [1] [1] [4] [0..2]	26, 89, 137	26, 89, 137	0	11	22											
1177	3	coef_probs_16x16 [1] [1] [1] [5] [0..2]	18, 68, 97	18, 68, 97	0	11	25											
1180	3	coef_probs_16x16 [1] [1] [2] [0] [0..2]	85, 181, 230	85, 181, 230	0	11	28											
1183	3	coef_probs_16x16 [1] [1] [2] [1] [0..2]	32, 146, 209	32, 146, 209	0	11	31											
1186	3	coef_probs_16x16 [1] [1] [2] [2] [0..2]	7, 100, 164	7, 100, 164	0	11	34											
1189	3	coef_probs_16x16	3, 71, 121	3, 71, 121	0	11	37											



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
			[1] [1] [2] [3] [0..2]		12 1											
1192	3	coef_probs_16x16 [1] [1] [2] [4] [0..2]	1, 45, 77	1, 45, 77	0	11 40										
1195	3	coef_probs_16x16 [1] [1] [2] [5] [0..2]	1, 18, 30	1, 18, 30	0	11 43										
1198	3	coef_probs_16x16 [1] [1] [3] [0] [0..2]	65, 187, 230	65, 18 7, 23 0	0	11 46										
1201	3	coef_probs_16x16 [1] [1] [3] [1] [0..2]	20, 148, 207	20, 14 8, 20 7	0	11 49										
1204	3	coef_probs_16x16 [1] [1] [3] [2] [0..2]	2, 97, 159	2, 97, 15 9	0	11 52										
1207	3	coef_probs_16x16	1, 68, 116	1, 68,	0	11 55										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTE R)			8x8 (KF)	8x8 (INTE R)	16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)		
			[1] [1] [3] [3] [0..2]		11 6											
1210	3	coef_probs_16x16 [1] [1] [3] [4] [0..2]	1, 40, 70	1, 40, 70	0	11 58										
1213	3	coef_probs_16x16 [1] [1] [3] [5] [0..2]	1, 14, 29	1, 14, 29	0	11 61										
1216	3	coef_probs_16x16 [1] [1] [4] [0] [0..2]	40, 194, 227	40, 19 4, 22 7	0	11 64										
1219	3	coef_probs_16x16 [1] [1] [4] [1] [0..2]	8, 147, 204	8, 14 7, 20 4	0	11 67										
1222	3	coef_probs_16x16 [1] [1] [4] [2] [0..2]	1, 94, 155	1, 94, 15 5	0	11 70										
1225	3	coef_probs_16x16	1, 65, 112	1, 65,	0	11 73										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)			16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)				
			[1] [1] [4] [3] [0..2]		112												
1228	3	coef_probs_16x16 [1] [1] [4] [4] [0..2]	1, 39, 66	1, 39, 66	1, 0	1176											
1231	3	coef_probs_16x16 [1] [1] [4] [5] [0..2]	1, 14, 26	1, 14, 26	0	1179											
1234	3	coef_probs_16x16 [1] [1] [5] [0] [0..2]	16, 208, 228	16, 208, 228	0	1182											
1237	3	coef_probs_16x16 [1] [1] [5] [1] [0..2]	3, 151, 207	3, 151, 207	0	1185											
1240	3	coef_probs_16x16 [1] [1] [5] [2] [0..2]	1, 98, 160	1, 98, 160	0	1188											
1243	3	coef_probs_16x16	1, 67, 117	1, 67, 117	0	1191											



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTE R)			8x8 (KF)	8x8 (INTE R)	16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)		
			[1] [1] [5] [3] [0..2]		11 7											
124 6	3	coef_probs_16x16 [1] [1] [5] [4] [0..2]	1, 41, 74	1, 41, 74	0	11 94										
124 9	3	coef_probs_16x16 [1] [1] [5] [5] [0..2]	1, 17, 31	1, 17, 31	0	11 97										
125 2	3	coef_probs_32x32 [0] [0] [0] [0] [0..2]	17, 38, 140	17, 38, 14 0	0	12 00		156 .5						0- 287		
125 5	3	coef_probs_32x32 [0] [0] [0] [1] [0..2]	7, 34, 80	7, 34, 80	0	12 03										
125 8	3	coef_probs_32x32 [0] [0] [0] [2] [0..2]	1, 17, 29	1, 17, 29	0	12 06										
126 1	3	coef_probs_32x32 [0] [0] [1] [0] [0..2]	37, 75, 128	37, 75, 12 8	0	12 09										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address					
					4x4 (KF)	4x4 (INTE R)	8x8 (KF)			8x8 (INTE R)	16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)	
	1264	3	coef_probs_32x32 [0] [0] [1] [1] [0..2]	41, 76, 128	41, 76, 128	0 12 12									
	1267	3	coef_probs_32x32 [0] [0] [1] [2] [0..2]	26, 66, 116	26, 66, 116	0 12 15									
	1270	3	coef_probs_32x32 [0] [0] [1] [3] [0..2]	12, 52, 94	12, 52, 94	0 12 18									
	1273	3	coef_probs_32x32 [0] [0] [1] [4] [0..2]	2, 32, 55	2, 32, 55	0 12 21									
	1276	3	coef_probs_32x32 [0] [0] [1] [5] [0..2]	1, 10, 16	1, 10, 16	0 12 24									
	1279	3	coef_probs_32x32 [0] [0] [2] [0] [0..2]	50, 127, 154	50, 127, 154	0 12 27									
	128	3	coef_probs_32x32	37,	37,	0 12									



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTE R)			8x8 (KF)	8x8 (INTE R)	16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)		
	2		2 [0] [0] [2] [1] [0..2]	109, 152	10, 9, 15, 2	30										
	1285	3	coef_probs_32x32 [0] [0] [2] [2] [0..2]	16, 82, 121	16, 82, 12, 1	0 12 33										
	1288	3	coef_probs_32x32 [0] [0] [2] [3] [0..2]	5, 59, 85	5, 59, 85	0 12 36										
	1291	3	coef_probs_32x32 [0] [0] [2] [4] [0..2]	1, 35, 54	1, 35, 54	0 12 39										
	1294	3	coef_probs_32x32 [0] [0] [2] [5] [0..2]	1, 13, 20	1, 13, 20	0 12 42										
	1297	3	coef_probs_32x32 [0] [0] [3] [0] [0..2]	40, 142, 167	40, 14, 2, 16, 7	0 12 45										
	130	3	coef_probs_32x32	17,	17,	0 12										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTE R)			8x8 (KF)	8x8 (INTE R)	16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)		
	0		2 [0] [0] [3] [1] [0..2]	110, 157	110, 157	48										
	1303	3	coef_probs_32x32 [0] [0] [3] [2] [0..2]	2, 71, 112	2, 71, 112	0 12 51										
	1306	3	coef_probs_32x32 [0] [0] [3] [3] [0..2]	1, 44, 72	1, 44, 72	0 12 54										
	1309	3	coef_probs_32x32 [0] [0] [3] [4] [0..2]	1, 27, 45	1, 27, 45	0 12 57										
	1312	3	coef_probs_32x32 [0] [0] [3] [5] [0..2]	1, 11, 17	1, 11, 17	0 12 60										
	1315	3	coef_probs_32x32 [0] [0] [4] [0] [0..2]	30, 175, 188	30, 175, 188	0 12 63										
	131	3	coef_probs_32x32	9, 124,	9,	0 12										



HEVC

Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
	8		2 [0] [0] [4] [1] [0..2]	169	12, 4, 16, 9	66										
	1321	3	coef_probs_32x32 [0] [0] [4] [2] [0..2]	1, 74, 116	1, 74, 116	0 12 69										
	1324	3	coef_probs_32x32 [0] [0] [4] [3] [0..2]	1, 48, 78	1, 48, 78	0 12 72										
	1327	3	coef_probs_32x32 [0] [0] [4] [4] [0..2]	1, 30, 49	1, 30, 49	0 12 75										
	1330	3	coef_probs_32x32 [0] [0] [4] [5] [0..2]	1, 11, 18	1, 11, 18	0 12 78										
	1333	3	coef_probs_32x32 [0] [0] [5] [0] [0..2]	10, 222, 223	10, 22, 2, 22, 3	0 12 81										
	133	3	coef_probs_32x32	2, 150,	2,	0 12										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
	6		2 [0] [0] [5] [1] [0..2]	194	150, 194	84										
	1339	3	coef_probs_32x32 [0] [0] [5] [2] [0..2]	1, 83, 128	1, 83, 128	0 12 87										
	1342	3	coef_probs_32x32 [0] [0] [5] [3] [0..2]	1, 48, 79	1, 48, 79	0 12 90										
	1345	3	coef_probs_32x32 [0] [0] [5] [4] [0..2]	1, 27, 45	1, 27, 45	0 12 93										
	1348	3	coef_probs_32x32 [0] [0] [5] [5] [0..2]	1, 11, 17	1, 11, 17	0 12 96										
	1351	3	coef_probs_32x32 [0] [1] [0] [0] [0..2]	36, 41, 235	36, 41, 235	0 12 99										
	1354	3	coef_probs_32x32 [0] [0] [5] [0..2]	29, 36, 193	29, 36, 193	0 13 02										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTE R)			8x8 (KF)	8x8 (INTE R)	16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)		
			[0] [1] [0] [1] [0..2]		19 3											
135 7	3	coef_probs_32x32 [0] [1] [0] [2] [0..2]	10, 27, 111	10, 27, 111	0 13 05											
136 0	3	coef_probs_32x32 [0] [1] [1] [0] [0..2]	85, 165, 222	85, 165, 222	0 13 08											
136 3	3	coef_probs_32x32 [0] [1] [1] [1] [0..2]	177, 162, 215	17, 16 2, 21 5	0 13 11											
136 6	3	coef_probs_32x32 [0] [1] [1] [2] [0..2]	110, 135, 195	11, 13 5, 19 5	0 13 14											
136 9	3	coef_probs_32x32 [0] [1] [1] [3] [0..2]	57, 113, 168	57, 11 3, 16	0 13 17											



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address					
					4x4 (KF)	4x4 (INTE R)	8x8 (KF)			8x8 (INTE R)	16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)	
					8										
1372	3	coef_probs_32x32 [0] [1] [1] [4] [0..2]	23, 83, 120	23, 83, 120	0	1320									
1375	3	coef_probs_32x32 [0] [1] [1] [5] [0..2]	10, 49, 61	10, 49, 61	0	1323									
1378	3	coef_probs_32x32 [0] [1] [2] [0] [0..2]	85, 190, 223	85, 190, 223	0	1326									
1381	3	coef_probs_32x32 [0] [1] [2] [1] [0..2]	36, 139, 200	36, 139, 200	0	1329									
1384	3	coef_probs_32x32 [0] [1] [2] [2] [0..2]	5, 90, 146	5, 90, 146	0	1332									
1387	3	coef_probs_32x32 [0] [1] [2] [3]	1, 60, 103	1, 60, 10	0	1335									



HEVC

Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTE R)	8x8 (KF)			16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)				
			[0..2]		3												
1390	3	2	coef_probs_32x32 [0] [1] [2] [4] [0..2]	1, 38, 65	1, 38, 65	0	13 38										
1393	3	2	coef_probs_32x32 [0] [1] [2] [5] [0..2]	1, 18, 30	1, 18, 30	0	13 41										
1396	3	2	coef_probs_32x32 [0] [1] [3] [0] [0..2]	72, 202, 223	72, 202, 223	0	13 44										
1399	3	2	coef_probs_32x32 [0] [1] [3] [1] [0..2]	23, 141, 199	23, 141, 199	0	13 47										
1402	3	2	coef_probs_32x32 [0] [1] [3] [2] [0..2]	2, 86, 140	2, 86, 140	0	13 50										
1405	3	2	coef_probs_32x32 [0] [1] [3] [3]	1, 56, 97	1, 56, 97	0	13 53										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTE R)	8x8 (KF)			8x8 (KF)	8x8 (INTE R)	16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)		
			[0..2]														
1408	3	coef_probs_32x32 [0] [1] [3] [4] [0..2]	1, 36, 61	1, 36, 61	0	13 56											
1411	3	coef_probs_32x32 [0] [1] [3] [5] [0..2]	1, 16, 27	1, 16, 27	0	13 59											
1414	3	coef_probs_32x32 [0] [1] [4] [0] [0..2]	55, 218, 225	55, 21 8, 22 5	0	13 62											
1417	3	coef_probs_32x32 [0] [1] [4] [1] [0..2]	13, 145, 200	13, 14 5, 20 0	0	13 65											
1420	3	coef_probs_32x32 [0] [1] [4] [2] [0..2]	1, 86, 141	1, 86, 14 1	0	13 68											
1423	3	coef_probs_32x32 [0] [1] [4] [3]	1, 57, 99	1, 57, 99	0	13 71											



HEVC

Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address					
					4x4 (KF)	4x4 (INTE R)	8x8 (KF)			8x8 (INTE R)	16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)	
			[0..2]												
1426	3	coef_probs_32x32 [0] [1] [4] [4] [0..2]	1, 35, 61	1, 35, 61	0	1374									
1429	3	coef_probs_32x32 [0] [1] [4] [5] [0..2]	1, 13, 22	1, 13, 22	0	1377									
1432	3	coef_probs_32x32 [0] [1] [5] [0] [0..2]	15, 235, 212	15, 235, 212	0	1380									
1435	3	coef_probs_32x32 [0] [1] [5] [1] [0..2]	1, 132, 184	1, 132, 184	0	1383									
1438	3	coef_probs_32x32 [0] [1] [5] [2] [0..2]	1, 84, 139	1, 84, 139	0	1386									
1441	3	coef_probs_32x32 [0] [1] [5] [3]	1, 57, 97	1, 57, 97	0	1389									



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address						
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)			8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
			[0..2]													
1444	3	2	coef_probs_32x32 [0] [1] [5] [4] [0..2]	1, 34, 56	1, 34, 56	0	1392									
1447	3	2	coef_probs_32x32 [0] [1] [5] [5] [0..2]	1, 14, 23	1, 14, 23	0	1395									
1450	3	2	coef_probs_32x32 [1] [0] [0] [0] [0..2]	181, 21, 201	18, 1, 21, 201	0	1398									0-287
1453	3	2	coef_probs_32x32 [1] [0] [0] [1] [0..2]	61, 37, 123	61, 37, 123	0	1401									
1456	3	2	coef_probs_32x32 [1] [0] [0] [2] [0..2]	10, 38, 71	10, 38, 71	0	1404									
1459	3	2	coef_probs_32x32 [1] [0] [1] [0] [0..2]	47, 106, 172	47, 106, 172	0	1407									



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address						
					4x4 (KF)	4x4 (INTE R)	8x8 (KF)			16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)			
					2											
1462	3	coef_probs_32x32 [1] [0] [1] [1] [0..2]	95, 104, 173	95, 104, 173	0	14 10										
1465	3	coef_probs_32x32 [1] [0] [1] [2] [0..2]	42, 93, 159	42, 93, 159	0	14 13										
1468	3	coef_probs_32x32 [1] [0] [1] [3] [0..2]	18, 77, 131	18, 77, 131	0	14 16										
1471	3	coef_probs_32x32 [1] [0] [1] [4] [0..2]	4, 50, 81	4, 50, 81	0	14 19										
1474	3	coef_probs_32x32 [1] [0] [1] [5] [0..2]	1, 17, 23	1, 17, 23	0	14 22										
1477	3	coef_probs_32x32 [1] [0] [2] [0] [0..2]	62, 147, 199	62, 147, 199	0	14 25										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address						
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)			16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)			
					9	0	14									
1480	3	coef_probs_32x32 [1] [0] [2] [1] [0..2]	44, 130, 189	44, 130, 189	13	0	28									
1483	3	coef_probs_32x32 [1] [0] [2] [2] [0..2]	28, 102, 154	28, 102, 154	10	0	31									
1486	3	coef_probs_32x32 [1] [0] [2] [3] [0..2]	18, 75, 115	18, 75, 115	75, 11	0	34									
1489	3	coef_probs_32x32 [1] [0] [2] [4] [0..2]	2, 44, 65	2, 44, 65	44, 65	0	37									
1492	3	coef_probs_32x32 [1] [0] [2] [5] [0..2]	1, 12, 19	1, 12, 19	12, 19	0	40									
1495	3	coef_probs_32x32 [1] [0] [3] [0]	55, 153, 210	55, 153, 210	15, 210	0	43									



HEVC

Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
			[0..2]		210											
1498	3	coef_probs_32x32 [1] [0] [3] [1] [0..2]	24, 130, 194	24, 130, 194	0	1446										
1501	3	coef_probs_32x32 [1] [0] [3] [2] [0..2]	3, 93, 146	3, 93, 146	0	1449										
1504	3	coef_probs_32x32 [1] [0] [3] [3] [0..2]	1, 61, 97	1, 61, 97	0	1452										
1507	3	coef_probs_32x32 [1] [0] [3] [4] [0..2]	1, 31, 50	1, 31, 50	0	1455										
1510	3	coef_probs_32x32 [1] [0] [3] [5] [0..2]	1, 10, 16	1, 10, 16	0	1458										
1513	3	coef_probs_32x32 [1] [0] [4] [0]	49, 186, 223	49, 186, 223	0	1461										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults				Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address						
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)	8x8 (INTEGR)			16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)			
			[0..2]		22 3												
1516	3	coef_probs_32x32 [1] [0] [4] [1] [0..2]	17, 148, 204	17, 148, 204	17, 14 8, 20 4	0	14 64										
1519	3	coef_probs_32x32 [1] [0] [4] [2] [0..2]	1, 96, 142	1, 96, 142	1, 96, 14 2	0	14 67										
1522	3	coef_probs_32x32 [1] [0] [4] [3] [0..2]	1, 53, 83	1, 53, 83	1, 53, 83	0	14 70										
1525	3	coef_probs_32x32 [1] [0] [4] [4] [0..2]	1, 26, 44	1, 26, 44	1, 26, 44	0	14 73										
1528	3	coef_probs_32x32 [1] [0] [4] [5] [0..2]	1, 11, 17	1, 11, 17	1, 11, 17	0	14 76										
1531	3	coef_probs_32x32 [1] [0] [5] [0]	13, 217, 212	13, 217, 212	13, 21 7,	0	14 79										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
			[0..2]		212											
1534	3	coef_probs_32x32 [1] [0] [5] [1] [0..2]	2, 136, 180	2, 136, 180	2, 136, 180	0 14 82										
1537	3	coef_probs_32x32 [1] [0] [5] [2] [0..2]	1, 78, 124	1, 78, 124	1, 78, 124	0 14 85										
1540	3	coef_probs_32x32 [1] [0] [5] [3] [0..2]	1, 50, 83	1, 50, 83	1, 50, 83	0 14 88										
1543	3	coef_probs_32x32 [1] [0] [5] [4] [0..2]	1, 29, 49	1, 29, 49	1, 29, 49	0 14 91										
1546	3	coef_probs_32x32 [1] [0] [5] [5] [0..2]	1, 14, 23	1, 14, 23	1, 14, 23	0 14 94										
1549	3	coef_probs_32x32 [1] [1] [0] [0]	197, 13, 247	197, 13, 247	197, 13, 247	0 14 97										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
			[0..2]		247											
1552	3	coef_probs_32x32 [1] [1] [0] [1] [0..2]	82, 17, 222	82, 17, 222	0	1500										
1555	3	coef_probs_32x32 [1] [1] [0] [2] [0..2]	25, 17, 162	25, 17, 162	0	1503										
1558	3	coef_probs_32x32 [1] [1] [1] [0] [0..2]	126, 186, 247	126, 186, 247	0	1506										
1561	3	coef_probs_32x32 [1] [1] [1] [1] [0..2]	234, 191, 243	234, 191, 243	0	1509										
1564	3	coef_probs_32x32 [1] [1] [1] [2] [0..2]	176, 177, 234	176, 177, 234	0	1512										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address						
					4	4x4	8x8			8x (K F)	8x8 (INTE R)	16x16	16x (KF)	16x16 (INTE R)	32x32	32x (KF)
					4											
1567	3	3	coef_probs_32x32 [1] [1] [1] [3] [0..2]	104, 158, 220	10, 4, 15, 8, 220	0	15, 15									
1570	3	3	coef_probs_32x32 [1] [1] [1] [4] [0..2]	66, 128, 186	66, 12, 8, 18, 6	0	15, 18									
1573	3	3	coef_probs_32x32 [1] [1] [1] [5] [0..2]	55, 90, 137	55, 90, 13, 7	0	15, 21									
1576	3	3	coef_probs_32x32 [1] [1] [2] [0] [0..2]	111, 197, 242	11, 1, 19, 7, 24, 2	0	15, 24									
1579	3	3	coef_probs_32x32 [1] [1] [2] [1] [0..2]	46, 158, 219	46, 15, 8, 21, 9	0	15, 27									



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT			State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)					8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)			
	1582	3	coef_probs_32x32 [1] [1] [2] [2] [0..2]	9, 104, 171	9, 104, 171	0	15 30												
	1585	3	coef_probs_32x32 [1] [1] [2] [3] [0..2]	2, 65, 125	2, 65, 125	0	15 33												
	1588	3	coef_probs_32x32 [1] [1] [2] [4] [0..2]	1, 44, 80	1, 44, 80	0	15 36												
	1591	3	coef_probs_32x32 [1] [1] [2] [5] [0..2]	1, 17, 91	1, 17, 91	0	15 39												
	1594	3	coef_probs_32x32 [1] [1] [3] [0] [0..2]	104, 208, 245	104, 208, 245	0	15 42												
	1597	3	coef_probs_32x32 [1] [1] [3] [1] [0..2]	39, 168, 224	39, 168, 224	0	15 45												



Alignm ent	Ne w Offs et	# Byt es	Description	Keyfra me defaul ts	Inter frame defaults			Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address							
					4	4x4	8x8			4x (KF)	4x4 (INTE R)	8x (KF)	8x8 (INTE R)	16x (KF)	16x16 (INTE R)	32x (KF)	32x32 (INTE R)
					4												
160 0	3	coef_probs_32x3 2 [1] [1] [3] [2] [0..2]	3, 109, 162	3, 10 9, 16 2	3, 10 9, 16 2	0	15 48										
160 3	3	coef_probs_32x3 2 [1] [1] [3] [3] [0..2]	1, 79, 124	1, 79, 12 4	1, 79, 12 4	0	15 51										
160 6	3	coef_probs_32x3 2 [1] [1] [3] [4] [0..2]	1, 50, 102	1, 50, 10 2	1, 50, 10 2	0	15 54										
160 9	3	coef_probs_32x3 2 [1] [1] [3] [5] [0..2]	1, 43, 102	1, 43, 10 2	1, 43, 10 2	0	15 57										
161 2	3	coef_probs_32x3 2 [1] [1] [4] [0] [0..2]	84, 220, 246	84, 22 0, 24 6	84, 22 0, 24 6	0	15 60										
161 5	3	coef_probs_32x3 2 [1] [1] [4] [1]	31, 177, 231	31, 17 7,	31, 17 7,	0	15 63										



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTE R)			8x8 (KF)	8x8 (INTE R)	16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)		
			[0..2]		23 1											
1618	3	coef_probs_32x32 [1] [1] [4] [2] [0..2]	2, 115, 180	2, 11 5, 18 0	0	15 66										
1621	3	coef_probs_32x32 [1] [1] [4] [3] [0..2]	1, 79, 134	1, 79, 13 4	0	15 69										
1624	3	coef_probs_32x32 [1] [1] [4] [4] [0..2]	1, 55, 77	1, 55, 77	0	15 72										
1627	3	coef_probs_32x32 [1] [1] [4] [5] [0..2]	1, 60, 79	1, 60, 79	0	15 75										
1630	3	coef_probs_32x32 [1] [1] [5] [0] [0..2]	43, 243, 240	43, 24 3, 24 0	0	15 78										
1633	3	coef_probs_32x32	8, 180, 217	8, 18	0	15 81										



HEVC

Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
			[1] [1] [5] [1] [0..2]		0, 21 7											
1636	3	coef_probs_32x32 [1] [1] [5] [2] [0..2]	1, 115, 166	1, 11 5, 16 6	0 15 84											
1639	3	coef_probs_32x32 [1] [1] [5] [3] [0..2]	1, 84, 121	1, 84, 12 1	0 15 87											
1642	3	coef_probs_32x32 [1] [1] [5] [4] [0..2]	1, 51, 67	1, 51, 67	0 15 90											
1645	3	coef_probs_32x32 [1] [1] [5] [5] [0..2]	1, 16, 6	1, 16, 6	0 15 93											
1648	16	DUMMY	0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0	0, 0, 0, 0, 0, 0, 0	16 15 96											



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT		State counter EBB Address	Coefficient counter EBB Address						
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)	8x8 (INTEGR)		16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)			
					0, 0, 0, 0, 0, 0, 0, 0, 0											
CL aligned	1664	3	mbskip_probs [0..2]	192, 128, 64	192, 128, 64	0 96	15	12 208	MODE COUNTERS (Others)	18-23						
	1667	3	inter_mode_probs [0] [0..2]	0, 0, 0	2, 17, 3, 34	0 99	15			24-51						
	1670	3	inter_mode_probs [1] [0..2]	0, 0, 0	7, 14, 5, 85	0 02	16	18								
	1673	3	inter_mode_probs [2] [0..2]	0, 0, 0	7, 16, 6, 63	0 05	16	21								
	167	3	inter_mode_probs	0, 0, 0	7,	0	16	24								



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address						
					94, 66	08				4x4 (K F)	4x4 (INTE R)	8x8 (K F)	8x8 (INTE R)	16x16 (KF)	16x16 (INTE R)	32x32 (KF)
	6		s [3] [0..2]		94, 66	08										
	1679	3	inter_mode_probs [4] [0..2]	0, 0, 0	8, 64, 46	0	16 11	27								
	1682	3	inter_mode_probs [5] [0..2]	0, 0, 0	17, 81, 31	0	16 14	30								
	1685	3	inter_mode_probs [6] [0..2]	0, 0, 0	25, 29, 30	0	16 17	33								
	1688	2	switchable_inter_p_probs [0] [0..1]	0, 0	23, 5, 16 2	0	16 20	36		52-63						
	1690	2	switchable_inter_p_probs [1] [0..1]	0, 0	36, 25 5	0	16 22	38								
	1692	2	switchable_inter_p_probs [2] [0..1]	0, 0	34, 3	0	16 24	40								
	1694	2	switchable_inter_p_probs [3] [0..1]	0, 0	14, 9, 14	0	16 26	42								



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults				Capture At DV_CNT	State count er EBB Addr ess	Coefficient counter EBB Address					
					4x4 (KF)	4x4 (INTE R)	8x8 (KF)	8x8 (INTE R)			16x16 (KF)	16x16 (INTE R)	32x32 (KF)	32x32 (INTE R)		
					4											
	1696	4	intra_inter_probs [0..3]	0, 0, 0, 0	9, 10, 2, 18, 7, 22, 5	0	16	28	44	64-71						
	1700	5	comp_inter_probs [0..4]	0, 0, 0, 0, 0	23, 9, 18, 3, 11, 9, 96, 41	0	16	32	48	72-81						
	1705	2	single_ref_probs [0] [0..1]	0, 0	33, 16	0	16	37	53	82-101						
	1707	2	single_ref_probs [1] [0..1]	0, 0	77, 74	0	16	39	55							
	1709	2	single_ref_probs [2] [0..1]	0, 0	14, 2, 14, 2	0	16	41	57							
	171	2	single_ref_probs	0, 0	17	0	16	59								



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
	1		[3] [0..1]		2, 17 0	43										
	171 3	2	single_ref_probs [4] [0..1]	0, 0	23 8, 24 7	0	16 45	61								
	171 5	5	comp_ref_probs [0..4]	0, 0, 0, 0, 0	50, 12 6, 12 3, 22 1, 22 6	0	16 47	63								
	172 0	9	y_mode_probs [0] [0..8]	0, 0, 0, 0, 0, 0, 0, 0, 0	65, 32, 18, 14 4, 16 2, 19 4, 41, 51,	0	16 52	68								



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
					98											
	172 9	9	y_mode_probs [1] [0..8]	0, 0, 0, 0, 0, 0, 0, 0, 0	13 2, 68, 18, 16 5, 21 7, 19 6, 45, 40, 78	0 61	16 77									
	173 8	9	y_mode_probs [2] [0..8]	0, 0, 0, 0, 0, 0, 0, 0, 0	17 3, 80, 19, 17 6, 24 0, 19 3, 64, 35, 46	0 70	16 86									



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults				Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)	8x8 (INTEGR)			16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)				
	1747	9	y_mode_probs [3] [0..8]	0, 0, 0, 0, 0, 0, 0, 0, 0	22, 1, 13, 5, 38, 19 4, 24 8, 12 1, 96, 85, 29	0, 16 79	95											
	1756	3	partition_probs [0] [0..2]	158, 97, 94	19, 9, 12, 2, 14, 1	0, 16 88	10, 4			152- 215								
	1759	3	partition_probs [1] [0..2]	93, 24, 99	14, 7, 63, 15 9	0, 16 91	10, 7											
	1762	3	partition_probs [2] [0..2]	85, 119, 44	14, 8, 119, 44	0, 16 94	11, 0											



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT		State counter EBB Address	Coefficient counter EBB Address					
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)	8x8 (INTEGR)		16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
				13, 3, 11, 8											
1765	3	partition_probs [3] [0..2]	62, 59, 67	12, 1, 10, 4, 11, 4	0	16, 97	11, 3								
1768	3	partition_probs [4] [0..2]	149, 53, 53	17, 4, 73, 87	0	17, 00	11, 6								
1771	3	partition_probs [5] [0..2]	94, 20, 48	92, 41, 83	0	17, 03	11, 9								
1774	3	partition_probs [6] [0..2]	83, 53, 24	82, 99, 50	0	17, 06	12, 2								
1777	3	partition_probs [7] [0..2]	52, 18, 18	53, 39, 39	0	17, 09	12, 5								
1780	3	partition_probs [8] [0..2]	150, 40, 39	17, 7, 58,	0	17, 12	12, 8								

Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address					
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)			8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)	
					59										
1783	3	partition_probs [9] [0..2]	78, 12, 26	68, 26, 63	0	17	15	13							
1786	3	partition_probs [10] [0..2]	67, 33, 11	52, 79, 25	0	17	18	13							
1789	3	partition_probs [11] [0..2]	24, 7, 5	17, 14, 12	0	17	21	13							
1792	3	partition_probs [12] [0..2]	174, 35, 49	22, 2, 34, 30	0	17	24	14							
1795	3	partition_probs [13] [0..2]	68, 11, 27	72, 16, 44	0	17	27	14							
1798	3	partition_probs [14] [0..2]	57, 15, 9	58, 32, 12	0	17	30	14							
1801	3	partition_probs [15] [0..2]	12, 3, 3	10, 7, 6	0	17	33	14							
1804	3	mvc_joints [3]	???	???	0	17	15		MV COUNTERS	216-219					
1801	1	mv_sign	0	12	0	17	15			220-					



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults			Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)			16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)				
	7		[0]		8	39	5		221								
	1808	10	mv_classes [0] [0..9]	0, 0, 0, 0, 0, 0, 0, 0, 0, 0 4, 14 4, 19 2, 16 8, 19 2, 17 6, 19 2, 19 8, 19 8, 24 5	22	0	17	15	222-232								
	1818	1	mv_class0 [0] [0..0]	0	216	0	17	16	233-234								
	1819	10	mv_bits [0] [0..9]	0, 0, 0, 0, 0, 0, 0, 0, 0, 0 6, 14 0,	13	0	17	16	235-254								

Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT		State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)	8x8 (INTEGR)		16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)				
				14 8, 16 0, 17 6, 19 2, 22 4, 23 4, 23 4, 24 0													
	182 9	1	mv_sign [1]	0	12 8	0	17 61	17 7									
	183 0	10	mv_classes [1] [0..9]	0, 0, 0, 0, 0, 0, 0, 0, 0, 0	21 6, 12 8, 17 6, 16 0, 17 6,	0	17 62	17 8									



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
					17 6, 19 2, 19 8, 19 8, 20 8											
1840	1	mv_class0 [1] [0..0]	0	0	20 8	0 72	17 8	18 8								
1841	10	mv_bits [1] [0..9]	0, 0, 0, 0, 0, 0, 0, 0, 0, 0	0, 0, 0, 0, 0, 0, 0, 0, 0, 0	13 6, 14 0, 14 8, 16 0, 17 6, 19 2, 22 4, 23 4,	0 73	17 9	18 9								



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
					23 4, 24 0											
185 1	3	mv_class0_fp [0] [0] [0..2]	0, 0, 0	12 8, 12 8, 64	12 0	17 83	19 9	290- 297								
					96, 11 2, 64	0	17 86									
185 4	3	mv_class0_fp [0] [1] [0..2]	0, 0, 0	96, 11 2, 64	96, 11 2, 64	0	17 86	298- 301								
					64, 96, 64	0	17 89									
185 7	3	mv_class0_fp [1] [0] [0..2]	0, 0, 0	12 8, 12 8, 64	12 0	17 92	20 8	302- 309								
					96, 11 2, 64	0	17 95									
186 0	3	mv_class0_fp [1] [1] [0..2]	0, 0, 0	96, 11 2, 64	96, 11 2, 64	0	17 95	310-								
					64,	0	17 21									







Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT		State counter EBB Address	Coefficient counter EBB Address					
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)	8x8 (INTEGR)		16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
					0, 0										
CL aligned	1920	9	uv_mode_probs [0] [0..8]	144, 11, 54, 157, 195, 130, 46, 58, 108	120, 7, 76, 17, 6, 20, 8, 12, 6, 28, 54, 10, 3	0051	1822	240	MODE COUNTERS (Others)	318-417					
	1929	9	uv_mode_probs [1] [0..8]	118, 15, 123, 148, 131, 101, 44, 93, 131	48, 12, 15, 4, 15, 5, 13, 9, 90, 34, 11, 7,	0140	1823	0							



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT	State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)			8x8 (KF)	8x8 (INTEGR)	16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
					11 9											
1938	9	uv_mode_probs [2] [0..8]	113, 12, 23, 188, 226, 142, 26, 32, 125	67, 6, 25, 20, 4, 24, 3, 15, 8, 13, 21, 96	0 23 9											
1947	9	uv_mode_probs [3] [0..8]	120, 11, 50, 123, 163, 135, 64, 77, 103	97, 5, 44, 13, 1, 17, 6, 13, 9, 48, 68, 97	0 32 8											
195	9	uv_mode_probs	113, 9,	83,	0 18 25											



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT		State counter EBB Address	Coefficient counter EBB Address					
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)	8x8 (INTEGR)		16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
	6		[4] [0..8]	36, 155, 111, 157, 32, 44, 161	5, 42, 15, 6, 11, 1, 15, 2, 26, 49, 15, 2	41	7								
	1965	9	uv_mode_probs [5] [0..8]	116, 9, 55, 176, 76, 96, 37, 61, 149	80, 5, 58, 17, 8, 74, 83, 33, 62, 14, 5	0	18	26	6						
	1974	9	uv_mode_probs [6] [0..8]	115, 9, 28, 141, 161, 167,	86, 5, 32, 15, 4,	0	18	27	5						



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT		State counter EBB Address	Coefficient counter EBB Address					
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)	8x8 (INTEGR)		16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
				21, 25, 193	19, 2, 16, 8, 14, 22, 16, 3										
1983	9	uv_mode_probs [7] [0..8]		120, 12, 32, 145, 195, 142, 32, 38, 86	85, 5, 32, 15, 6, 21, 6, 14, 8, 19, 29, 73	0, 68	18, 4								
1992	9	uv_mode_probs [8] [0..8]		116, 12, 64, 120, 140, 125, 49, 115, 121	77, 7, 64, 11, 6, 13, 2, 12	0, 77	18, 3	29							



Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT		State counter EBB Address	Coefficient counter EBB Address					
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)	8x8 (INTEGR)		16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)		
					2, 37, 12 6, 12 0										
2001	9	uv_mode_probs [9] [0..8]	102, 19, 66, 162, 182, 122, 35, 59, 128	10 1, 21, 10 7, 18 1, 19 2, 10 3, 19, 67, 12 5	0 0 86 2	18 86	30 2								
2010	7	seg_tree_probs [0..6]	255, 255, 255, 255, 255, 255, 255	25 5, 25 5, 25 5, 25 5, 25 5, 25	0 0 95 1	18 95	31 1								





Alignment	New Offset	# Bytes	Description	Keyframe defaults	Inter frame defaults		Capture At DV_CNT		State counter EBB Address	Coefficient counter EBB Address							
					4x4 (KF)	4x4 (INTEGR)	8x8 (KF)	8x8 (INTEGR)		16x16 (KF)	16x16 (INTEGR)	32x32 (KF)	32x32 (INTEGR)				
					0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0												
CL aligned	2048																

Stream-in formats for creating compressed header

The following memory surfaces are input to PAK for Compressed Header coding

- i. Prob Diff Surface

In Probability Diff Surface, there are 1805 8-bit Probability Diffs. Each of them corresponding to a Probability Diff in Compressed Header syntax. Although, for a given compressed header, not all the Probability Diff would be coded (depends on update flag), Probability Diff Surface is fully populated with 1805 entries ($1805 \times 8 / 512 = 29$ cachelines). The 1805 8-bit Probability Diffs are expected to follow Compressed Header syntax order and fully packed.

- ii. Compressed Header Syntax Surface

Each of the Compressed header Coding element (described in (2)) is represented by a 4-bit field. These 4-bit fields follows Compressed Header Syntax. Each of the field has a valid, Bin_probDiff_select, Prob_select, Bin as described in the table below.

	Description
Valid	Set to 1 if this is a valid Bin OR ProbabilityDiff field to code; Set to 0 to skip coding this field
Bin_ProbDiff_select	Set to 1 if Current field is a Bin (corresponding Prob, Bin are indicated by next 2 bits); Set to 0 if Current field is Probability Diff (probability diff to be coded is located in probability surface - ReMap)
Prob_Select	If current field is Bin, set to 1 if prob is 252; set to 0 if prob is 128
Bin	if current field is Bin, this is Bin value to be encoded

Compressed Header Syntax Surface is a fixed length surface. For syntax that should not be coded, valid bit should be set to 0. Total length of Compressed Header syntax Surface has 4033 Coding elements (16132 bits in 32 cachelines):

1805 Prob Diff and Prob Update flag

4 is_coeff_updated flag (per 4x4, 8x8, 16x16, 32x32)

5 control fields (MIN (tx_mode, ALLOW_32x32), tx_mode == TX_MODE_SELECT, use_compound_pred, use_hybrid_pred)

Probability Statistics Counters Table

In VP9 encoding, statistic collection is required to utilize the Forward Adaptation feature, which can substantially improve decoding performance because no intermediate computations based on encountered tokens is necessary. After encoding a frame, the VP9 encoder writes a Statistics Counter in the memory surface (HCP_IND_OBJ_BASE_ADDR_STATE: HCP VP9 PAK Probability Counter Streamout). The counter written in the memory surface is the same order as the VP9 Compressed header format.

The Statistics Counters collect frame statistics per symbol. In the VP9 Encoder, the PAK engine is responsible for statistics counter collection. The Kernel performs probability updates based on statistics counter values.

Each counter has an associated context according to the VP9 Specification/Model.



Probability Statistics Counters Table

Note: The following table is arranged such that each row corresponds to sixteen 32-bit counters. In other words, each row corresponds to 512 bits (1 Cacheline). The VP9 Encoder PAK engine will have a total of 193 cacheline writers in the memory surface (HCP_IND_OBJ_BASW_ADDR_STATE: HCP VP9 PAK Probability Counter Streamout) at the end of each frame.

For brevity, data in the table is abbreviated. A Context Legend table has been provided after the Probability Statistics Counters table that explains the data in more detail.

Rxxx Value 1 row = 1 Cacheline	16 32-bit counters																
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
R0	ct_tx_8x8				ct_tx_16x16					ct_tx_32x32							
	[0] [0]	[0] [1]	[1] [0]	[1] [1]	[0] [0]	[0] [1]	[0] [2]	[1] [0]	[1] [1]	[1] [2]	[0] [0]	[0] [1]	[0] [2]	[0] [3]	[1] [0]	[1] [1]	
R1	ct_tx_32x32		ct_coef														
	[1] [2]	[1] [3]	[T=0] [B=0] [R=0]														
R2	ct_coef																
	[T=0] [B=0] [R=0] [CB=1] [CT=0] [N=2]	[T=0] [B=0] [R=0] [CB=1] [CB=1] [CT=0]	[T=0] [B=0] [R=0] [CB=1] [CB=1] [CT=1]	[T=0] [B=0] [R=0] [CB=1] [CB=1] [CT=1]	[T=0] [B=0] [R=0] [CB=1] [CB=1] [CT=2]												

Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	ct_coef															
R3	[T=0] [B=0] [R=0] [CB=1] [CT=4] [N=2]	[T=0] [B=0] [R=0] [CB=1] [CT=4] [N=3]	[T=0] [B=0] [R=0] [CB=1] [CT=5] [N=0]	[T=0] [B=0] [R=0] [CB=1] [CT=5] [N=1]	[T=0] [B=0] [R=0] [CB=1] [CT=5] [N=2]	[T=0] [B=0] [R=0] [CB=1] [CT=5] [N=3]	[T=0] [B=0] [R=0] [CB=2] [CT=0] [N=0]	[T=0] [B=0] [R=0] [CB=2] [CT=0] [N=1]	[T=0] [B=0] [R=0] [CB=2] [CT=0] [N=2]	[T=0] [B=0] [R=0] [CB=2] [CT=0] [N=3]	[T=0] [B=0] [R=0] [CB=2] [CT=1] [N=0]	[T=0] [B=0] [R=0] [CB=2] [CT=1] [N=1]	[T=0] [B=0] [R=0] [CB=2] [CT=1] [N=2]	[T=0] [B=0] [R=0] [CB=2] [CT=1] [N=3]	[T=0] [B=0] [R=0] [CB=2] [CT=2] [N=0]	
R4	[T=0] [B=0] [R=0] [CB=2] [CT=2] [N=2]	[T=0] [B=0] [R=0] [CB=2] [CT=2] [N=3]	[T=0] [B=0] [R=0] [CB=2] [CT=3] [N=0]	[T=0] [B=0] [R=0] [CB=2] [CT=3] [N=1]	[T=0] [B=0] [R=0] [CB=2] [CT=3] [N=2]	[T=0] [B=0] [R=0] [CB=2] [CT=3] [N=3]	[T=0] [B=0] [R=0] [CB=2] [CT=4] [N=0]	[T=0] [B=0] [R=0] [CB=2] [CT=4] [N=1]	[T=0] [B=0] [R=0] [CB=2] [CT=4] [N=2]	[T=0] [B=0] [R=0] [CB=2] [CT=4] [N=3]	[T=0] [B=0] [R=0] [CB=2] [CT=5] [N=0]	[T=0] [B=0] [R=0] [CB=2] [CT=5] [N=1]	[T=0] [B=0] [R=0] [CB=2] [CT=5] [N=2]	[T=0] [B=0] [R=0] [CB=2] [CT=5] [N=3]	[T=0] [B=0] [R=0] [CB=3] [CT=0] [N=1]	
R5	[T=0] [B=0] [R=0] [CB=3] [CT=0] [N=2]	[T=0] [B=0] [R=0] [CB=3] [CT=0] [N=3]	[T=0] [B=0] [R=0] [CB=3] [CT=1] [N=0]	[T=0] [B=0] [R=0] [CB=3] [CT=1] [N=1]	[T=0] [B=0] [R=0] [CB=3] [CT=1] [N=2]	[T=0] [B=0] [R=0] [CB=3] [CT=1] [N=3]	[T=0] [B=0] [R=0] [CB=3] [CT=2] [N=0]	[T=0] [B=0] [R=0] [CB=3] [CT=2] [N=1]	[T=0] [B=0] [R=0] [CB=3] [CT=2] [N=2]	[T=0] [B=0] [R=0] [CB=3] [CT=2] [N=3]	[T=0] [B=0] [R=0] [CB=3] [CT=3] [N=0]	[T=0] [B=0] [R=0] [CB=3] [CT=3] [N=1]	[T=0] [B=0] [R=0] [CB=3] [CT=3] [N=2]	[T=0] [B=0] [R=0] [CB=3] [CT=3] [N=3]	[T=0] [B=0] [R=0] [CB=3] [CT=4] [N=0]	
R6	ct_coef															
	[T=0]	[T=0]														



Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[B=0] [R=0] [CB=3] [CT=4] [N=2]	[B=0] [R=0] [CB=3] [CT=4] [N=3]	[B=0] [R=0] [CB=3] [CT=5] [N=0]	[B=0] [R=0] [CB=3] [CT=5] [N=1]	[B=0] [R=0] [CB=3] [CT=5] [N=2]	[B=0] [R=0] [CB=4] [CT=0] [N=3]	[B=0] [R=0] [CB=4] [CT=0] [N=0]	[B=0] [R=0] [CB=4] [CT=0] [N=1]	[B=0] [R=0] [CB=4] [CT=0] [N=2]	[B=0] [R=0] [CB=4] [CT=0] [N=3]	[B=0] [R=0] [CB=4] [CT=1] [N=0]	[B=0] [R=0] [CB=4] [CT=1] [N=1]	[B=0] [R=0] [CB=4] [CT=1] [N=2]	[B=0] [R=0] [CB=4] [CT=1] [N=3]	[B=0] [R=0] [CB=4] [CT=2] [N=0]	
R7	ct_coeff															
	[T=0] [B=0] [R=0] [CB=4] [CT=2] [N=2]	[T=0] [B=0] [R=0] [CB=4] [CT=2] [N=3]	[T=0] [B=0] [R=0] [CB=4] [CT=3] [N=0]	[T=0] [B=0] [R=0] [CB=4] [CT=3] [N=1]	[T=0] [B=0] [R=0] [CB=4] [CT=3] [N=2]	[T=0] [B=0] [R=0] [CB=4] [CT=3] [N=3]	[T=0] [B=0] [R=0] [CB=4] [CT=4] [N=0]	[T=0] [B=0] [R=0] [CB=4] [CT=4] [N=1]	[T=0] [B=0] [R=0] [CB=4] [CT=4] [N=2]	[T=0] [B=0] [R=0] [CB=4] [CT=4] [N=3]	[T=0] [B=0] [R=0] [CB=4] [CT=5] [N=0]	[T=0] [B=0] [R=0] [CB=4] [CT=5] [N=1]	[T=0] [B=0] [R=0] [CB=4] [CT=5] [N=2]	[T=0] [B=0] [R=0] [CB=4] [CT=5] [N=3]	[T=0] [B=0] [R=0] [CB=5] [CT=0] [N=1]	
R8	ct_coeff															
	[T=0] [B=0] [R=0] [CB=5] [CT=0] [N=2]	[T=0] [B=0] [R=0] [CB=5] [CT=0] [N=3]	[T=0] [B=0] [R=0] [CB=5] [CT=1] [N=0]	[T=0] [B=0] [R=0] [CB=5] [CT=1] [N=1]	[T=0] [B=0] [R=0] [CB=5] [CT=1] [N=2]	[T=0] [B=0] [R=0] [CB=5] [CT=1] [N=3]	[T=0] [B=0] [R=0] [CB=5] [CT=2] [N=0]	[T=0] [B=0] [R=0] [CB=5] [CT=2] [N=1]	[T=0] [B=0] [R=0] [CB=5] [CT=2] [N=2]	[T=0] [B=0] [R=0] [CB=5] [CT=2] [N=3]	[T=0] [B=0] [R=0] [CB=5] [CT=3] [N=0]	[T=0] [B=0] [R=0] [CB=5] [CT=3] [N=1]	[T=0] [B=0] [R=0] [CB=5] [CT=3] [N=2]	[T=0] [B=0] [R=0] [CB=5] [CT=3] [N=3]	[T=0] [B=0] [R=0] [CB=5] [CT=4] [N=0]	
R9	ct_coeff															
	[T=0] [B=0] [R=0]	[T=0] [B=0] [R=0]	[T=0] [B=0] [R=0]	[T=0] [B=0] [R=0]	[T=0] [B=0] [R=0]	[T=0] [B=0] [R=0]	[T=0] [B=0] [R=1]									

Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[CB=5] [CT=4] [N=2]	[CB=5] [CT=4] [N=3]	[CB=5] [CT=5] [N=0]	[CB=5] [CT=5] [N=1]	[CB=5] [CT=5] [N=2]	[CB=5] [CT=5] [N=3]	[CB=0] [CT=0] [N=0]	[CB=0] [CT=0] [N=1]	[CB=0] [CT=0] [N=2]	[CB=0] [CT=0] [N=3]	[CB=0] [CT=1] [N=0]	[CB=0] [CT=1] [N=1]	[CB=0] [CT=1] [N=2]	[CB=0] [CT=1] [N=3]	[CB=0] [CT=2] [N=0]	[CB=0] [CT=2] [N=1]
R10	ct_coeff															
	[T=0] [B=0] [R=1] [CB=0] [CT=2] [N=2]	[T=0] [B=0] [R=1] [CB=0] [CT=2] [N=3]	[T=0] [B=0] [R=1] [CB=1] [CT=0] [N=0]	[T=0] [B=0] [R=1] [CB=1] [CT=0] [N=2]	[T=0] [B=0] [R=1] [CB=1] [CT=0] [N=3]	[T=0] [B=0] [R=1] [CB=1] [CT=1] [N=0]	[T=0] [B=0] [R=1] [CB=1] [CT=1] [N=1]	[T=0] [B=0] [R=1] [CB=1] [CT=1] [N=2]	[T=0] [B=0] [R=1] [CB=1] [CT=1] [N=3]	[T=0] [B=0] [R=1] [CB=1] [CT=2] [N=0]	[T=0] [B=0] [R=1] [CB=1] [CT=2] [N=1]	[T=0] [B=0] [R=1] [CB=1] [CT=2] [N=2]	[T=0] [B=0] [R=1] [CB=1] [CT=2] [N=3]	[T=0] [B=0] [R=1] [CB=1] [CT=3] [N=0]	[T=0] [B=0] [R=1] [CB=1] [CT=3] [N=1]	
R11	ct_coeff															
	[T=0] [B=0] [R=1] [CB=1] [CT=3] [N=2]	[T=0] [B=0] [R=1] [CB=1] [CT=3] [N=3]	[T=0] [B=0] [R=1] [CB=1] [CT=4] [N=0]	[T=0] [B=0] [R=1] [CB=1] [CT=4] [N=2]	[T=0] [B=0] [R=1] [CB=1] [CT=4] [N=3]	[T=0] [B=0] [R=1] [CB=1] [CT=5] [N=0]	[T=0] [B=0] [R=1] [CB=1] [CT=5] [N=1]	[T=0] [B=0] [R=1] [CB=1] [CT=5] [N=2]	[T=0] [B=0] [R=1] [CB=1] [CT=5] [N=3]	[T=0] [B=0] [R=1] [CB=2] [CT=0] [N=0]	[T=0] [B=0] [R=1] [CB=2] [CT=0] [N=1]	[T=0] [B=0] [R=1] [CB=2] [CT=0] [N=2]	[T=0] [B=0] [R=1] [CB=2] [CT=0] [N=3]	[T=0] [B=0] [R=1] [CB=2] [CT=1] [N=0]	[T=0] [B=0] [R=1] [CB=2] [CT=1] [N=1]	
R12	ct_coeff															
	[T=0] [B=0] [R=1] [CB=2] [CT=1]	[T=0] [B=0] [R=1] [CB=2] [CT=2]	[T=0] [B=0] [R=1] [CB=2] [CT=5]													



Rxxx Value 1 row = 1 Cacheline	16 32-bit counters																
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
	[N=2]	[CT=1] [N=3]	[CT=2] [N=0]	[CT=2] [N=1]	[CT=2] [N=2]	[CT=2] [N=3]	[CT=3] [N=0]	[CT=3] [N=1]	[CT=3] [N=2]	[CT=3] [N=3]	[CT=4] [N=0]	[CT=4] [N=1]	[CT=4] [N=2]	[CT=4] [N=3]	[CT=5] [N=0]	[N=1]	
R13	ct_coeff																
	[T=0] [B=0] [R=1] [CB=2] [CT=5] [N=2]	[T=0] [B=0] [R=1] [CB=2] [CT=2] [N=2]	[T=0] [B=0] [R=1] [CB=3] [CT=0] [N=0]	[T=0] [B=0] [R=1] [CB=3] [CT=0] [N=2]	[T=0] [B=0] [R=1] [CB=3] [CT=0] [N=3]	[T=0] [B=0] [R=1] [CB=3] [CT=1] [N=0]	[T=0] [B=0] [R=1] [CB=3] [CT=1] [N=1]	[T=0] [B=0] [R=1] [CB=3] [CT=1] [N=2]	[T=0] [B=0] [R=1] [CB=3] [CT=1] [N=3]	[T=0] [B=0] [R=1] [CB=3] [CT=2] [N=0]	[T=0] [B=0] [R=1] [CB=3] [CT=2] [N=1]	[T=0] [B=0] [R=1] [CB=3] [CT=2] [N=2]	[T=0] [B=0] [R=1] [CB=3] [CT=2] [N=3]	[T=0] [B=0] [R=1] [CB=3] [CT=3] [N=0]	[T=0] [B=0] [R=1] [CB=3] [CT=3] [N=1]	[T=0] [B=0] [R=1] [CB=3] [CT=3] [N=2]	[T=0] [B=0] [R=1] [CB=3] [CT=3] [N=3]
R14	ct_coeff																
	[T=0] [B=0] [R=1] [CB=3] [CT=3] [N=2]	[T=0] [B=0] [R=1] [CB=3] [CT=4] [N=0]	[T=0] [B=0] [R=1] [CB=3] [CT=4] [N=1]	[T=0] [B=0] [R=1] [CB=3] [CT=4] [N=2]	[T=0] [B=0] [R=1] [CB=3] [CT=4] [N=3]	[T=0] [B=0] [R=1] [CB=3] [CT=5] [N=0]	[T=0] [B=0] [R=1] [CB=3] [CT=5] [N=1]	[T=0] [B=0] [R=1] [CB=3] [CT=5] [N=2]	[T=0] [B=0] [R=1] [CB=3] [CT=5] [N=3]	[T=0] [B=0] [R=1] [CB=4] [CT=0] [N=0]	[T=0] [B=0] [R=1] [CB=4] [CT=0] [N=1]	[T=0] [B=0] [R=1] [CB=4] [CT=0] [N=2]	[T=0] [B=0] [R=1] [CB=4] [CT=0] [N=3]	[T=0] [B=0] [R=1] [CB=4] [CT=1] [N=0]	[T=0] [B=0] [R=1] [CB=4] [CT=1] [N=1]	[T=0] [B=0] [R=1] [CB=4] [CT=1] [N=2]	[T=0] [B=0] [R=1] [CB=4] [CT=1] [N=3]
R15	ct_coeff																
	[T=0] [B=0] [R=1] [CB=4] [CT=1] [N=2]	[T=0] [B=0] [R=1] [CB=4] [CT=2] [N=0]	[T=0] [B=0] [R=1] [CB=4] [CT=2] [N=1]	[T=0] [B=0] [R=1] [CB=4] [CT=2] [N=2]	[T=0] [B=0] [R=1] [CB=4] [CT=2] [N=3]	[T=0] [B=0] [R=1] [CB=4] [CT=3] [N=0]	[T=0] [B=0] [R=1] [CB=4] [CT=3] [N=1]	[T=0] [B=0] [R=1] [CB=4] [CT=3] [N=2]	[T=0] [B=0] [R=1] [CB=4] [CT=3] [N=3]	[T=0] [B=0] [R=1] [CB=4] [CT=4] [N=0]	[T=0] [B=0] [R=1] [CB=4] [CT=4] [N=1]	[T=0] [B=0] [R=1] [CB=4] [CT=4] [N=2]	[T=0] [B=0] [R=1] [CB=4] [CT=4] [N=3]	[T=0] [B=0] [R=1] [CB=4] [CT=5] [N=0]	[T=0] [B=0] [R=1] [CB=4] [CT=5] [N=1]	[T=0] [B=0] [R=1] [CB=4] [CT=5] [N=2]	[T=0] [B=0] [R=1] [CB=4] [CT=5] [N=3]

Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
		[N=3]	[N=0]	[N=1]	[N=2]	[N=3]	[N=0]	[N=1]	[N=2]	[N=3]			[N=2]	[N=3]	[N=0]	
R16	ct_coeff															
	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]
	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]
	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]
	[CB=4]															
	[CT=5]	[CB=4]	[CB=5]													
	[N=2]															
	[CT=5]	[CT=0]	[CT=0]	[CT=0]	[CT=0]	[CT=0]	[CT=1]	[CT=1]	[CT=1]	[CT=1]	[CT=1]	[N=0]	[N=1]	[CT=2]	[CT=2]	[CT=3]
	[N=3]	[N=0]	[N=1]	[N=2]	[N=3]	[N=0]	[N=1]	[N=2]	[N=3]							
R17	ct_coeff															
	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]
	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]
	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=0]	[R=0]	[R=0]
	[CB=5]															
	[CT=3]	[CB=5]	[CB=0]	[CB=0]	[CB=0]	[CB=0]	[CB=0]									
	[N=2]															
	[CT=3]	[CT=4]	[CT=4]	[CT=4]	[CT=4]	[CT=4]	[CT=5]	[CT=5]	[CT=5]	[CT=5]	[CT=5]	[N=0]	[N=1]	[CT=0]	[CT=0]	[CT=1]
	[N=3]	[N=0]	[N=1]	[N=2]	[N=3]	[N=0]	[N=1]	[N=2]	[N=3]							
R18	ct_coeff															
	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]
	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]
	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]
	[CB=0]															
	[CT=1]	[CB=0]	[CB=0]	[CB=0]	[CB=0]	[CB=0]	[CB=1]									
	[N=2]															
	[CT=1]	[CT=2]	[CT=2]	[CT=2]	[CT=2]	[CT=2]	[CT=0]	[CT=0]	[CT=0]	[CT=0]	[CT=0]	[N=0]	[N=1]	[CT=1]	[CT=1]	[CT=2]
	[N=3]	[N=0]	[N=1]	[N=2]	[N=3]	[N=0]	[N=1]	[N=2]	[N=3]							
R19	ct_coeff															



Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]
[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]
[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]
[CB=1]	[CB=1]	[CB=1]	[CB=1]	[CB=1]	[CB=1]	[CB=1]	[CB=1]	[CB=1]	[CB=1]	[CB=1]	[CB=1]	[CB=1]	[CB=1]	[CB=1]	[CB=1]	[CB=1]
[CT=2]	[CT=2]	[CT=2]	[CT=2]	[CT=2]	[CT=2]	[CT=2]	[CT=2]	[CT=2]	[CT=2]	[CT=2]	[CT=2]	[CT=2]	[CT=2]	[CT=2]	[CT=2]	[CT=2]
[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=2]
[CT=2]	[CT=3]	[CT=3]	[CT=3]	[CT=3]	[CT=3]	[CT=3]	[CT=4]	[CT=4]	[CT=4]	[CT=4]	[CT=4]	[CT=4]	[CT=5]	[CT=5]	[CT=5]	[CT=0]
[N=3]	[N=0]	[N=1]	[N=2]	[N=3]	[N=0]	[N=0]	[N=1]	[N=2]	[N=3]	[N=0]	[N=2]	[N=3]	[N=1]	[N=2]	[N=3]	[N=0]
R20	ct_coeff															
[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]
[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]
[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]
[CB=2]	[CB=2]	[CB=2]	[CB=2]	[CB=2]	[CB=2]	[CB=2]	[CB=2]	[CB=2]	[CB=2]	[CB=2]	[CB=2]	[CB=2]	[CB=2]	[CB=2]	[CB=2]	[CB=2]
[CT=0]	[CT=0]	[CT=0]	[CT=0]	[CT=0]	[CT=0]	[CT=0]	[CT=0]	[CT=0]	[CT=0]	[CT=0]	[CT=0]	[CT=0]	[CT=0]	[CT=0]	[CT=0]	[CT=0]
[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=2]
[CT=0]	[CT=1]	[CT=1]	[CT=1]	[CT=1]	[CT=1]	[CT=1]	[CT=2]	[CT=2]	[CT=2]	[CT=2]	[CT=2]	[CT=2]	[CT=3]	[CT=3]	[CT=3]	[CT=4]
[N=3]	[N=0]	[N=1]	[N=2]	[N=3]	[N=0]	[N=0]	[N=1]	[N=2]	[N=3]	[N=0]	[N=2]	[N=3]	[N=1]	[N=2]	[N=3]	[N=0]
R21	ct_coeff															
[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]
[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]
[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]
[CB=2]	[CB=2]	[CB=2]	[CB=2]	[CB=2]	[CB=2]	[CB=2]	[CB=3]	[CB=3]	[CB=3]	[CB=3]	[CB=3]	[CB=3]	[CB=3]	[CB=3]	[CB=3]	[CB=3]
[CT=4]	[CT=4]	[CT=4]	[CT=4]	[CT=4]	[CT=4]	[CT=4]	[CT=5]	[CT=5]	[CT=5]	[CT=5]	[CT=5]	[CT=5]	[CT=1]	[CT=1]	[CT=1]	[CT=2]
[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=2]	[N=3]	[N=3]	[N=3]	[N=3]	[N=3]	[N=3]	[N=0]	[N=1]	[N=2]	[N=1]
[CT=4]	[CT=5]	[CT=5]	[CT=5]	[CT=5]	[CT=5]	[CT=5]	[CT=0]	[CT=0]	[CT=0]	[CT=0]	[CT=0]	[CT=0]	[CT=1]	[CT=1]	[CT=1]	[CT=2]
[N=3]	[N=0]	[N=1]	[N=2]	[N=3]	[N=0]	[N=0]	[N=1]	[N=2]	[N=3]	[N=0]	[N=2]	[N=3]	[N=1]	[N=2]	[N=3]	[N=0]
R22	ct_coeff															
[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]
[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]

Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[R=0] [CB=3] [CT=2] [N=2]	[R=0] [CB=3] [CT=2] [N=3]	[R=0] [CB=3] [CT=3] [N=0]	[R=0] [CB=3] [CT=3] [N=1]	[R=0] [CB=3] [CT=3] [N=2]	[R=0] [CB=3] [CT=4] [N=3]	[R=0] [CB=3] [CT=4] [N=0]	[R=0] [CB=3] [CT=4] [N=1]	[R=0] [CB=3] [CT=4] [N=2]	[R=0] [CB=3] [CT=4] [N=3]	[R=0] [CB=3] [CT=5] [N=0]	[R=0] [CB=3] [CT=5] [N=1]	[R=0] [CB=3] [CT=5] [N=2]	[R=0] [CB=3] [CT=5] [N=3]	[R=0] [CB=4] [CT=0] [N=1]	[R=0] [CB=4] [CT=0] [N=0]
R23	ct_coef															
	[T=0] [B=1] [R=0] [CB=4] [CT=0] [N=2]	[T=0] [B=1] [R=0] [CB=4] [CT=0] [N=3]	[T=0] [B=1] [R=0] [CB=4] [CT=1] [N=0]	[T=0] [B=1] [R=0] [CB=4] [CT=1] [N=1]	[T=0] [B=1] [R=0] [CB=4] [CT=1] [N=2]	[T=0] [B=1] [R=0] [CB=4] [CT=1] [N=3]	[T=0] [B=1] [R=0] [CB=4] [CT=2] [N=0]	[T=0] [B=1] [R=0] [CB=4] [CT=2] [N=1]	[T=0] [B=1] [R=0] [CB=4] [CT=2] [N=2]	[T=0] [B=1] [R=0] [CB=4] [CT=2] [N=3]	[T=0] [B=1] [R=0] [CB=4] [CT=3] [N=0]	[T=0] [B=1] [R=0] [CB=4] [CT=3] [N=1]	[T=0] [B=1] [R=0] [CB=4] [CT=3] [N=2]	[T=0] [B=1] [R=0] [CB=4] [CT=3] [N=3]	[T=0] [B=1] [R=0] [CB=4] [CT=4] [N=0]	[T=0] [B=1] [R=0] [CB=4] [CT=4] [N=1]
R24	ct_coef															
	[T=0] [B=1] [R=0] [CB=4] [CT=4] [N=2]	[T=0] [B=1] [R=0] [CB=4] [CT=4] [N=3]	[T=0] [B=1] [R=0] [CB=4] [CT=5] [N=0]	[T=0] [B=1] [R=0] [CB=4] [CT=5] [N=1]	[T=0] [B=1] [R=0] [CB=4] [CT=5] [N=2]	[T=0] [B=1] [R=0] [CB=5] [CT=0] [N=3]	[T=0] [B=1] [R=0] [CB=5] [CT=0] [N=0]	[T=0] [B=1] [R=0] [CB=5] [CT=0] [N=1]	[T=0] [B=1] [R=0] [CB=5] [CT=0] [N=2]	[T=0] [B=1] [R=0] [CB=5] [CT=0] [N=3]	[T=0] [B=1] [R=0] [CB=5] [CT=1] [N=0]	[T=0] [B=1] [R=0] [CB=5] [CT=1] [N=1]	[T=0] [B=1] [R=0] [CB=5] [CT=1] [N=2]	[T=0] [B=1] [R=0] [CB=5] [CT=1] [N=3]	[T=0] [B=1] [R=0] [CB=5] [CT=2] [N=0]	[T=0] [B=1] [R=0] [CB=5] [CT=2] [N=1]
R25	ct_coef															
	[T=0] [B=1] [R=0] [CB=5]	[T=0] [B=1] [R=1] [CB=0]														



Rxxx Value 1 row = 1 Cacheline	16 32-bit counters																
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
	[CT=2] [N=2]	[CB=5]	[CB=5]	[CB=5]	[CB=5]	[CB=5]	[CB=5]	[CB=5]	[CB=5]	[CB=5]	[CB=5]	[CB=5]	[CB=5]	[CB=5]	[CB=0]	[CT=0] [N=1]	
	[CT=2] [N=3]	[CT=3] [N=0]	[CT=3] [N=1]	[CT=3] [N=2]	[CT=3] [N=3]	[CT=4] [N=0]	[CT=4] [N=1]	[CT=4] [N=2]	[CT=4] [N=3]	[CT=5] [N=0]	[CT=5] [N=1]	[CT=5] [N=2]	[CT=5] [N=3]	[CT=0] [N=0]			
R26	ct_coef																
	[T=0] [B=1] [R=1] [CB=0] [CT=0] [N=2]	[T=0] [B=1] [R=1] [CB=0] [CB=0] [N=3]	[T=0] [B=1] [R=1] [CB=0] [CB=0] [N=0]	[T=0] [B=1] [R=1] [CB=0] [CB=0] [N=2]	[T=0] [B=1] [R=1] [CB=0] [CB=0] [N=3]	[T=0] [B=1] [R=1] [CB=0] [CB=0] [N=0]	[T=0] [B=1] [R=1] [CB=0] [CB=0] [N=1]	[T=0] [B=1] [R=1] [CB=0] [CB=0] [N=2]	[T=0] [B=1] [R=1] [CB=1] [CB=1] [N=3]	[T=0] [B=1] [R=1] [CB=1] [CB=1] [N=0]	[T=0] [B=1] [R=1] [CB=1] [CB=1] [N=1]	[T=0] [B=1] [R=1] [CB=1] [CB=1] [N=2]	[T=0] [B=1] [R=1] [CB=1] [CB=1] [N=3]	[T=0] [B=1] [R=1] [CB=1] [CB=1] [N=0]	[T=0] [B=1] [R=1] [CB=1] [CB=1] [N=1]	[T=0] [B=1] [R=1] [CB=1] [CB=1] [N=2]	[T=0] [B=1] [R=1] [CB=1] [CB=1] [N=3]
R27	ct_coef																
	[T=0] [B=1] [R=1] [CB=1] [CT=1] [N=2]	[T=0] [B=1] [R=1] [CB=1] [CB=1] [N=3]	[T=0] [B=1] [R=1] [CB=1] [CB=1] [N=0]	[T=0] [B=1] [R=1] [CB=1] [CB=1] [N=2]	[T=0] [B=1] [R=1] [CB=1] [CB=1] [N=3]	[T=0] [B=1] [R=1] [CB=1] [CB=1] [N=0]	[T=0] [B=1] [R=1] [CB=1] [CB=1] [N=1]	[T=0] [B=1] [R=1] [CB=1] [CB=1] [N=2]	[T=0] [B=1] [R=1] [CB=1] [CB=1] [N=3]	[T=0] [B=1] [R=1] [CB=1] [CB=1] [N=0]	[T=0] [B=1] [R=1] [CB=1] [CB=1] [N=1]	[T=0] [B=1] [R=1] [CB=1] [CB=1] [N=2]	[T=0] [B=1] [R=1] [CB=1] [CB=1] [N=3]	[T=0] [B=1] [R=1] [CB=1] [CB=1] [N=0]	[T=0] [B=1] [R=1] [CB=1] [CB=1] [N=1]	[T=0] [B=1] [R=1] [CB=1] [CB=1] [N=2]	[T=0] [B=1] [R=1] [CB=1] [CB=1] [N=3]
R28	ct_coef																
	[T=0] [B=1] [R=1] [CB=1] [CT=5] [N=2]	[T=0] [B=1] [R=1] [CB=1] [CB=2] [N=3]	[T=0] [B=1] [R=1] [CB=2] [CB=2] [N=0]	[T=0] [B=1] [R=1] [CB=2] [CB=2] [N=2]	[T=0] [B=1] [R=1] [CB=2] [CB=2] [N=3]	[T=0] [B=1] [R=1] [CB=2] [CB=2] [CT=2]											

Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[CT=5] [N=3]	[CT=0] [N=0]	[CT=0] [N=1]	[CT=0] [N=2]	[CT=0] [N=3]	[CT=1] [N=0]	[CT=1] [N=1]	[CT=1] [N=2]	[CT=1] [N=3]	[N=0]	[N=1]	[CT=2] [N=2]	[CT=2] [N=3]	[CT=3] [N=0]		
R29	ct_coeff															
	[T=0] [B=1] [R=1] [CB=2] [CT=3] [N=2]	[T=0] [B=1] [R=1] [CB=2] [CT=3] [N=3]	[T=0] [B=1] [R=1] [CB=2] [CT=4] [N=0]	[T=0] [B=1] [R=1] [CB=2] [CT=4] [N=1]	[T=0] [B=1] [R=1] [CB=2] [CT=4] [N=2]	[T=0] [B=1] [R=1] [CB=2] [CT=4] [N=3]	[T=0] [B=1] [R=1] [CB=2] [CT=5] [N=0]	[T=0] [B=1] [R=1] [CB=2] [CT=5] [N=1]	[T=0] [B=1] [R=1] [CB=2] [CT=5] [N=2]	[T=0] [B=1] [R=1] [CB=3] [CT=0] [N=0]	[T=0] [B=1] [R=1] [CB=3] [CT=0] [N=1]	[T=0] [B=1] [R=1] [CB=3] [CT=0] [N=2]	[T=0] [B=1] [R=1] [CB=3] [CT=1] [N=0]			
R30	ct_coeff															
	[T=0] [B=1] [R=1] [CB=3] [CT=1] [N=2]	[T=0] [B=1] [R=1] [CB=3] [CT=1] [N=3]	[T=0] [B=1] [R=1] [CB=3] [CT=2] [N=0]	[T=0] [B=1] [R=1] [CB=3] [CT=2] [N=1]	[T=0] [B=1] [R=1] [CB=3] [CT=2] [N=2]	[T=0] [B=1] [R=1] [CB=3] [CT=3] [N=0]	[T=0] [B=1] [R=1] [CB=3] [CT=3] [N=1]	[T=0] [B=1] [R=1] [CB=3] [CT=3] [N=2]	[T=0] [B=1] [R=1] [CB=3] [CT=4] [N=0]	[T=0] [B=1] [R=1] [CB=3] [CT=4] [N=1]	[T=0] [B=1] [R=1] [CB=3] [CT=4] [N=2]	[T=0] [B=1] [R=1] [CB=3] [CT=5] [N=0]				
R31	ct_coeff															
	[T=0] [B=1] [R=1] [CB=3] [CT=5] [N=2]	[T=0] [B=1] [R=1] [CB=3] [CT=5] [N=3]	[T=0] [B=1] [R=1] [CB=4] [CT=0] [N=0]	[T=0] [B=1] [R=1] [CB=4] [CT=0] [N=1]	[T=0] [B=1] [R=1] [CB=4] [CT=0] [N=2]	[T=0] [B=1] [R=1] [CB=4] [CT=1] [N=0]	[T=0] [B=1] [R=1] [CB=4] [CT=1] [N=1]	[T=0] [B=1] [R=1] [CB=4] [CT=1] [N=2]	[T=0] [B=1] [R=1] [CB=4] [CT=2] [N=0]	[T=0] [B=1] [R=1] [CB=4] [CT=2] [N=1]	[T=0] [B=1] [R=1] [CB=4] [CT=2] [N=2]	[T=0] [B=1] [R=1] [CB=4] [CT=3] [N=0]				



Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
R32	ct_coef															
	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]
	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]
	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]
	[CB=4]															
	[CT=3]	[CB=4]	[CB=5]	[CB=5]	[CB=5]	[CB=5]	[CB=5]	[CB=5]								
	[N=2]										[CT=0]	[CT=0]	[CT=0]	[CT=0]	[CT=1]	[N=1]
	[CT=3]	[CT=4]	[CT=4]	[CT=4]	[CT=4]	[CT=4]	[CT=5]	[CT=5]	[CT=5]	[CT=5]	[N=0]	[N=1]	[CT=0]	[CT=0]	[CT=1]	[N=0]
	[N=3]	[N=0]	[N=1]	[N=2]	[N=3]	[N=0]	[N=1]	[N=2]	[N=3]							
R33	ct_coef															
	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]	[T=0]
	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]
	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]
	[CB=5]															
	[CT=1]	[CB=5]														
	[N=2]															
	[CT=1]	[CT=2]	[CT=2]	[CT=2]	[CT=2]	[CT=2]	[CT=3]	[CT=3]	[CT=3]	[CT=3]	[N=0]	[N=1]	[CT=4]	[CT=4]	[CT=5]	[N=0]
	[N=3]	[N=0]	[N=1]	[N=2]	[N=3]	[N=0]	[N=1]	[N=2]	[N=3]							
R34	ct_coef															
	[T=0]	[T=0]	[T=1]													
	[B=1]	[B=1]	[B=0]													
	[R=1]	[R=1]	[R=0]													
	[CB=5]															
	[CT=5]	[CB=5]	[CB=0]	[CB=1]	[CB=1]											
	[N=2]															
	[CT=5]	[CT=0]	[CT=0]	[CT=0]	[CT=0]	[CT=0]	[CT=1]	[CT=1]	[CT=1]	[CT=1]	[N=0]	[N=1]	[CT=2]	[CT=2]	[CT=0]	[N=0]
	[N=3]	[N=0]	[N=1]	[N=2]	[N=3]	[N=0]	[N=1]	[N=2]	[N=3]							
R35	ct_coef															
	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]

Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[B=0] [R=0] [CB=1] [CT=0] [N=2]	[B=0] [R=0] [CB=1] [CT=0] [N=3]	[B=0] [R=0] [CB=1] [CT=1] [N=0]	[B=0] [R=0] [CB=1] [CT=1] [N=1]	[B=0] [R=0] [CB=1] [CT=1] [N=2]	[B=0] [R=0] [CB=1] [CT=1] [N=3]	[B=0] [R=0] [CB=1] [CT=2] [N=0]	[B=0] [R=0] [CB=1] [CT=2] [N=1]	[B=0] [R=0] [CB=1] [CT=2] [N=2]	[B=0] [R=0] [CB=1] [CT=2] [N=3]	[B=0] [R=0] [CB=1] [CT=3] [N=0]	[B=0] [R=0] [CB=1] [CT=3] [N=1]	[B=0] [R=0] [CB=1] [CT=3] [N=2]	[B=0] [R=0] [CB=1] [CT=3] [N=3]	[B=0] [R=0] [CB=1] [CT=4] [N=0]	
R36	ct_coeff															
	[T=1] [B=0] [R=0] [CB=1] [CT=4] [N=2]	[T=1] [B=0] [R=0] [CB=1] [CT=4] [N=3]	[T=1] [B=0] [R=0] [CB=1] [CT=5] [N=0]	[T=1] [B=0] [R=0] [CB=1] [CT=5] [N=1]	[T=1] [B=0] [R=0] [CB=1] [CT=5] [N=2]	[T=1] [B=0] [R=0] [CB=1] [CT=5] [N=3]	[T=1] [B=0] [R=0] [CB=2] [CT=0] [N=0]	[T=1] [B=0] [R=0] [CB=2] [CT=0] [N=1]	[T=1] [B=0] [R=0] [CB=2] [CT=0] [N=2]	[T=1] [B=0] [R=0] [CB=2] [CT=0] [N=3]	[T=1] [B=0] [R=0] [CB=2] [CT=1] [N=0]	[T=1] [B=0] [R=0] [CB=2] [CT=1] [N=1]	[T=1] [B=0] [R=0] [CB=2] [CT=1] [N=2]	[T=1] [B=0] [R=0] [CB=2] [CT=1] [N=3]	[T=1] [B=0] [R=0] [CB=2] [CT=2] [N=0]	
R37	ct_coeff															
	[T=1] [B=0] [R=0] [CB=2] [CT=2] [N=2]	[T=1] [B=0] [R=0] [CB=2] [CT=2] [N=3]	[T=1] [B=0] [R=0] [CB=2] [CT=3] [N=0]	[T=1] [B=0] [R=0] [CB=2] [CT=3] [N=1]	[T=1] [B=0] [R=0] [CB=2] [CT=3] [N=2]	[T=1] [B=0] [R=0] [CB=2] [CT=3] [N=3]	[T=1] [B=0] [R=0] [CB=2] [CT=4] [N=0]	[T=1] [B=0] [R=0] [CB=2] [CT=4] [N=1]	[T=1] [B=0] [R=0] [CB=2] [CT=4] [N=2]	[T=1] [B=0] [R=0] [CB=2] [CT=4] [N=3]	[T=1] [B=0] [R=0] [CB=2] [CT=5] [N=0]	[T=1] [B=0] [R=0] [CB=2] [CT=5] [N=1]	[T=1] [B=0] [R=0] [CB=2] [CT=5] [N=2]	[T=1] [B=0] [R=0] [CB=2] [CT=5] [N=3]	[T=1] [B=0] [R=0] [CB=3] [CT=0] [N=1]	
R38	ct_coeff															
	[T=1] [B=0] [R=0]															



Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[CB=3] [CT=0] [N=2]	[CB=3] [CT=0] [N=3]	[CB=3] [CT=1] [N=0]	[CB=3] [CT=1] [N=1]	[CB=3] [CT=1] [N=2]	[CB=3] [CT=1] [N=3]	[CB=3] [CT=2] [N=0]	[CB=3] [CT=2] [N=1]	[CB=3] [CT=2] [N=2]	[CB=3] [CT=2] [N=3]	[CB=3] [CT=3] [N=0]	[CB=3] [CT=3] [N=1]	[CB=3] [CT=3] [N=2]	[CB=3] [CT=3] [N=3]	[CB=3] [CT=4] [N=0]	[CB=3] [CT=4] [N=1]
R39	ct_coeff															
	[T=1] [B=0] [R=0] [CB=3] [CT=4] [N=2]	[T=1] [B=0] [R=0] [CB=3] [CT=4] [N=2]	[T=1] [B=0] [R=0] [CB=3] [CT=4] [N=2]	[T=1] [B=0] [R=0] [CB=3] [CT=4] [N=2]	[T=1] [B=0] [R=0] [CB=3] [CT=4] [N=2]	[T=1] [B=0] [R=0] [CB=4] [CT=4] [N=3]	[T=1] [B=0] [R=0] [CB=4] [CT=4] [N=0]	[T=1] [B=0] [R=0] [CB=4] [CT=4] [N=1]	[T=1] [B=0] [R=0] [CB=4] [CT=4] [N=2]	[T=1] [B=0] [R=0] [CB=4] [CT=4] [N=3]	[T=1] [B=0] [R=0] [CB=4] [CT=1] [N=0]	[T=1] [B=0] [R=0] [CB=4] [CT=1] [N=1]	[T=1] [B=0] [R=0] [CB=4] [CT=1] [N=2]	[T=1] [B=0] [R=0] [CB=4] [CT=1] [N=3]	[T=1] [B=0] [R=0] [CB=4] [CT=2] [N=0]	[T=1] [B=0] [R=0] [CB=4] [CT=2] [N=1]
R40	ct_coeff															
	[T=1] [B=0] [R=0] [CB=4] [CT=2] [N=2]	[T=1] [B=0] [R=0] [CB=4] [CT=2] [N=2]	[T=1] [B=0] [R=0] [CB=4] [CT=2] [N=1]	[T=1] [B=0] [R=0] [CB=4] [CT=3] [N=2]	[T=1] [B=0] [R=0] [CB=4] [CT=3] [N=3]	[T=1] [B=0] [R=0] [CB=4] [CT=4] [N=0]	[T=1] [B=0] [R=0] [CB=4] [CT=4] [N=1]	[T=1] [B=0] [R=0] [CB=4] [CT=4] [N=2]	[T=1] [B=0] [R=0] [CB=4] [CT=4] [N=3]	[T=1] [B=0] [R=0] [CB=4] [CT=5] [N=0]	[T=1] [B=0] [R=0] [CB=4] [CT=5] [N=1]	[T=1] [B=0] [R=0] [CB=4] [CT=5] [N=2]	[T=1] [B=0] [R=0] [CB=4] [CT=5] [N=3]	[T=1] [B=0] [R=0] [CB=5] [CT=0] [N=0]	[T=1] [B=0] [R=0] [CB=5] [CT=0] [N=1]	
R41	ct_coeff															
	[T=1] [B=0] [R=0] [CB=5] [CT=0]	[T=1] [B=0] [R=0] [CB=5] [CT=4]														

Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[N=2]	[CT=0] [N=3]	[CT=1] [N=0]	[CT=1] [N=1]	[CT=1] [N=2]	[CT=1] [N=3]	[CT=2] [N=0]	[CT=2] [N=1]	[CT=2] [N=2]	[CT=2] [N=3]	[CT=3] [N=0]	[CT=3] [N=1]	[CT=3] [N=2]	[CT=3] [N=3]	[CT=4] [N=0]	[N=1]
ct_coeff																
R42	[T=1] [B=0] [R=0] [CB=5] [CT=4] [N=2]	[T=1] [B=0] [R=0] [CB=5] [CT=5] [N=3]	[T=1] [B=0] [R=0] [CB=5] [CT=5] [N=2]	[T=1] [B=0] [R=0] [CB=5] [CT=5] [N=3]	[T=1] [B=0] [R=0] [CB=5] [CT=0] [N=0]	[T=1] [B=0] [R=1] [CB=0] [CT=0] [N=1]	[T=1] [B=0] [R=1] [CB=0] [CT=0] [N=2]	[T=1] [B=0] [R=1] [CB=0] [CT=0] [N=3]	[T=1] [B=0] [R=1] [CB=0] [CT=1] [N=0]	[T=1] [B=0] [R=1] [CB=0] [CT=1] [N=1]	[T=1] [B=0] [R=1] [CB=0] [CT=1] [N=2]	[T=1] [B=0] [R=1] [CB=0] [CT=1] [N=3]	[T=1] [B=0] [R=1] [CB=0] [CT=2] [N=0]	[T=1] [B=0] [R=1] [CB=0] [CT=2] [N=1]	[T=1] [B=0] [R=1] [CB=0] [CT=2] [N=2]	[T=1] [B=0] [R=1] [CB=0] [CT=2] [N=3]
R43	[T=1] [B=0] [R=1] [CB=0] [CT=2] [N=2]	[T=1] [B=0] [R=1] [CB=0] [CT=0] [N=3]	[T=1] [B=0] [R=1] [CB=1] [CT=0] [N=2]	[T=1] [B=0] [R=1] [CB=1] [CT=0] [N=3]	[T=1] [B=0] [R=1] [CB=1] [CT=1] [N=0]	[T=1] [B=0] [R=1] [CB=1] [CT=1] [N=1]	[T=1] [B=0] [R=1] [CB=1] [CT=1] [N=2]	[T=1] [B=0] [R=1] [CB=1] [CT=1] [N=3]	[T=1] [B=0] [R=1] [CB=1] [CT=2] [N=0]	[T=1] [B=0] [R=1] [CB=1] [CT=2] [N=1]	[T=1] [B=0] [R=1] [CB=1] [CT=2] [N=2]	[T=1] [B=0] [R=1] [CB=1] [CT=2] [N=3]	[T=1] [B=0] [R=1] [CB=1] [CT=3] [N=0]	[T=1] [B=0] [R=1] [CB=1] [CT=3] [N=1]	[T=1] [B=0] [R=1] [CB=1] [CT=3] [N=2]	
R44	[T=1] [B=0] [R=1] [CB=1] [CT=3] [N=2]	[T=1] [B=0] [R=1] [CB=1] [CT=4] [N=4]	[T=1] [B=0] [R=1] [CB=1] [CT=4] [N=4]	[T=1] [B=0] [R=1] [CB=1] [CT=4] [N=5]	[T=1] [B=0] [R=1] [CB=1] [CT=5] [N=5]	[T=1] [B=0] [R=1] [CB=1] [CT=5] [N=5]	[T=1] [B=0] [R=1] [CB=1] [CT=5] [N=5]	[T=1] [B=0] [R=1] [CB=1] [CT=5] [N=5]	[T=1] [B=0] [R=1] [CB=2] [CT=0] [N=0]	[T=1] [B=0] [R=1] [CB=2] [CT=0] [N=1]	[T=1] [B=0] [R=1] [CB=2] [CT=0] [N=2]	[T=1] [B=0] [R=1] [CB=2] [CT=0] [N=3]	[T=1] [B=0] [R=1] [CB=2] [CT=1] [N=1]	[T=1] [B=0] [R=1] [CB=2] [CT=1] [N=2]	[T=1] [B=0] [R=1] [CB=2] [CT=1] [N=3]	



Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
		[N=3]	[N=0]	[N=1]	[N=2]	[N=3]	[N=0]	[N=1]	[N=2]	[N=3]			[N=2]	[N=3]	[N=0]	
R45	ct_coeff															
	[T=1] [B=0] [R=1] [CB=2] [CT=1] [N=2]	[T=1] [B=0] [R=1] [CB=2] [CB=2] [CT=1]	[T=1] [B=0] [R=1] [CB=2] [CB=2] [CT=2]	[T=1] [B=0] [R=1] [CB=2] [CB=2] [CT=2]	[T=1] [B=0] [R=1] [CB=2] [CB=2] [CT=3]	[T=1] [B=0] [R=1] [CB=2] [CB=2] [CT=3]	[T=1] [B=0] [R=1] [CB=2] [CB=2] [CT=3]	[T=1] [B=0] [R=1] [CB=2] [CB=2] [CT=3]	[T=1] [B=0] [R=1] [CB=2] [CB=2] [CT=4]	[T=1] [B=0] [R=1] [CB=2] [CB=2] [CT=4]	[T=1] [B=0] [R=1] [CB=2] [CB=2] [CT=4]	[T=1] [B=0] [R=1] [CB=2] [CB=2] [CT=5]	[T=1] [B=0] [R=1] [CB=2] [CB=2] [N=1]	[T=1] [B=0] [R=1] [CB=2] [CB=2] [N=1]	[T=1] [B=0] [R=1] [CB=2] [CB=2] [N=0]	
R46	ct_coeff															
	[T=1] [B=0] [R=1] [CB=2] [CT=5] [N=2]	[T=1] [B=0] [R=1] [CB=2] [CB=2] [CT=5]	[T=1] [B=0] [R=1] [CB=3] [CB=3] [CT=0]	[T=1] [B=0] [R=1] [CB=3] [CB=3] [CT=0]	[T=1] [B=0] [R=1] [CB=3] [CB=3] [CT=1]	[T=1] [B=0] [R=1] [CB=3] [CB=3] [CT=1]	[T=1] [B=0] [R=1] [CB=3] [CB=3] [CT=1]	[T=1] [B=0] [R=1] [CB=3] [CB=3] [CT=1]	[T=1] [B=0] [R=1] [CB=3] [CB=3] [CT=2]	[T=1] [B=0] [R=1] [CB=3] [CB=3] [CT=2]	[T=1] [B=0] [R=1] [CB=3] [CB=3] [CT=2]	[T=1] [B=0] [R=1] [CB=3] [CB=3] [CT=3]	[T=1] [B=0] [R=1] [CB=3] [CB=3] [N=1]	[T=1] [B=0] [R=1] [CB=3] [CB=3] [N=0]		
R47	ct_coeff															
	[T=1] [B=0] [R=1] [CB=3] [CT=3] [N=2]	[T=1] [B=0] [R=1] [CB=3] [CB=3] [CT=3]	[T=1] [B=0] [R=1] [CB=3] [CB=3] [CT=4]	[T=1] [B=0] [R=1] [CB=3] [CB=3] [CT=4]	[T=1] [B=0] [R=1] [CB=3] [CB=3] [CT=5]	[T=1] [B=0] [R=1] [CB=3] [CB=3] [CT=5]	[T=1] [B=0] [R=1] [CB=3] [CB=3] [CT=5]	[T=1] [B=0] [R=1] [CB=4] [CB=4] [CT=0]	[T=1] [B=0] [R=1] [CB=4] [CB=4] [CT=0]	[T=1] [B=0] [R=1] [CB=4] [CB=4] [CT=0]	[T=1] [B=0] [R=1] [CB=4] [CB=4] [CT=1]	[T=1] [B=0] [R=1] [CB=4] [CB=4] [N=1]	[T=1] [B=0] [R=1] [CB=4] [CB=4] [N=0]	[T=1] [B=0] [R=1] [CB=4] [CB=4] [N=2]		
R48	ct_coeff															

Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[T=1] [B=0] [R=1] [CB=4] [CT=1] [N=2]	[T=1] [B=0] [R=1] [CB=4] [CT=1] [N=3]	[T=1] [B=0] [R=1] [CB=4] [CT=2] [N=0]	[T=1] [B=0] [R=1] [CB=4] [CT=2] [N=2]	[T=1] [B=0] [R=1] [CB=4] [CT=2] [N=3]	[T=1] [B=0] [R=1] [CB=4] [CT=3] [N=0]	[T=1] [B=0] [R=1] [CB=4] [CT=3] [N=1]	[T=1] [B=0] [R=1] [CB=4] [CT=3] [N=2]	[T=1] [B=0] [R=1] [CB=4] [CT=3] [N=3]	[T=1] [B=0] [R=1] [CB=4] [CT=4] [N=0]	[T=1] [B=0] [R=1] [CB=4] [CT=4] [N=1]	[T=1] [B=0] [R=1] [CB=4] [CT=4] [N=2]	[T=1] [B=0] [R=1] [CB=4] [CT=4] [N=3]	[T=1] [B=0] [R=1] [CB=4] [CT=5] [N=0]	[T=1] [B=0] [R=1] [CB=4] [CT=5] [N=1]	
R49	ct_coeff															
	[T=1] [B=0] [R=1] [CB=4] [CT=5] [N=2]	[T=1] [B=0] [R=1] [CB=4] [CT=5] [N=3]	[T=1] [B=0] [R=1] [CB=5] [CT=0] [N=0]	[T=1] [B=0] [R=1] [CB=5] [CT=0] [N=2]	[T=1] [B=0] [R=1] [CB=5] [CT=0] [N=3]	[T=1] [B=0] [R=1] [CB=5] [CT=1] [N=0]	[T=1] [B=0] [R=1] [CB=5] [CT=1] [N=1]	[T=1] [B=0] [R=1] [CB=5] [CT=1] [N=2]	[T=1] [B=0] [R=1] [CB=5] [CT=1] [N=3]	[T=1] [B=0] [R=1] [CB=5] [CT=2] [N=0]	[T=1] [B=0] [R=1] [CB=5] [CT=2] [N=1]	[T=1] [B=0] [R=1] [CB=5] [CT=2] [N=2]	[T=1] [B=0] [R=1] [CB=5] [CT=2] [N=3]	[T=1] [B=0] [R=1] [CB=5] [CT=3] [N=0]	[T=1] [B=0] [R=1] [CB=5] [CT=3] [N=1]	
R50	ct_coeff															
	[T=1] [B=0] [R=1] [CB=5] [CT=3] [N=2]	[T=1] [B=0] [R=1] [CB=5] [CT=4] [N=0]	[T=1] [B=0] [R=1] [CB=5] [CT=4] [N=1]	[T=1] [B=0] [R=1] [CB=5] [CT=4] [N=2]	[T=1] [B=0] [R=1] [CB=5] [CT=4] [N=3]	[T=1] [B=0] [R=1] [CB=5] [CT=5] [N=0]	[T=1] [B=0] [R=1] [CB=5] [CT=5] [N=1]	[T=1] [B=0] [R=1] [CB=5] [CT=5] [N=2]	[T=1] [B=0] [R=1] [CB=5] [CT=5] [N=3]	[T=1] [B=1] [R=0] [CB=0] [CT=0] [N=0]	[T=1] [B=1] [R=0] [CB=0] [CT=0] [N=1]	[T=1] [B=1] [R=0] [CB=0] [CT=0] [N=2]	[T=1] [B=1] [R=0] [CB=0] [CT=0] [N=3]	[T=1] [B=1] [R=0] [CB=0] [CT=1] [N=0]	[T=1] [B=1] [R=0] [CB=0] [CT=1] [N=1]	
R51	ct_coeff															
	[T=1] [B=1]															



Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[R=0] [CB=0] [CT=1] [N=2]	[R=0] [CB=0] [CT=1] [N=3]	[R=0] [CB=0] [CT=2] [N=0]	[R=0] [CB=0] [CT=2] [N=1]	[R=0] [CB=0] [CT=2] [N=2]	[R=0] [CB=0] [CT=2] [N=3]	[R=0] [CB=1] [CT=0] [N=0]	[R=0] [CB=1] [CT=0] [N=1]	[R=0] [CB=1] [CT=0] [N=2]	[R=0] [CB=1] [CT=0] [N=3]	[R=0] [CB=1] [CT=1] [N=0]	[R=0] [CB=1] [CT=1] [N=1]	[R=0] [CB=1] [CT=1] [N=2]	[R=0] [CB=1] [CT=1] [N=3]	[R=0] [CB=1] [CT=2] [N=0]	[R=0] [CB=1] [CT=2] [N=1]
R52	ct_coeff															
	[T=1] [B=1] [R=0] [CB=1] [CT=2] [N=2]	[T=1] [B=1] [R=0] [CB=1] [CT=2] [N=3]	[T=1] [B=1] [R=0] [CB=1] [CT=3] [N=0]	[T=1] [B=1] [R=0] [CB=1] [CT=3] [N=1]	[T=1] [B=1] [R=0] [CB=1] [CT=3] [N=2]	[T=1] [B=1] [R=0] [CB=1] [CT=3] [N=3]	[T=1] [B=1] [R=0] [CB=1] [CT=4] [N=0]	[T=1] [B=1] [R=0] [CB=1] [CT=4] [N=1]	[T=1] [B=1] [R=0] [CB=1] [CT=4] [N=2]	[T=1] [B=1] [R=0] [CB=1] [CT=4] [N=3]	[T=1] [B=1] [R=0] [CB=1] [CT=5] [N=0]	[T=1] [B=1] [R=0] [CB=1] [CT=5] [N=1]	[T=1] [B=1] [R=0] [CB=1] [CT=5] [N=2]	[T=1] [B=1] [R=0] [CB=1] [CT=5] [N=3]	[T=1] [B=1] [R=0] [CB=2] [CT=0] [N=0]	[T=1] [B=1] [R=0] [CB=2] [CT=0] [N=1]
R53	ct_coeff															
	[T=1] [B=1] [R=0] [CB=2] [CT=0] [N=2]	[T=1] [B=1] [R=0] [CB=2] [CT=0] [N=3]	[T=1] [B=1] [R=0] [CB=2] [CT=1] [N=0]	[T=1] [B=1] [R=0] [CB=2] [CT=1] [N=1]	[T=1] [B=1] [R=0] [CB=2] [CT=1] [N=2]	[T=1] [B=1] [R=0] [CB=2] [CT=1] [N=3]	[T=1] [B=1] [R=0] [CB=2] [CT=2] [N=0]	[T=1] [B=1] [R=0] [CB=2] [CT=2] [N=1]	[T=1] [B=1] [R=0] [CB=2] [CT=2] [N=2]	[T=1] [B=1] [R=0] [CB=2] [CT=2] [N=3]	[T=1] [B=1] [R=0] [CB=2] [CT=3] [N=0]	[T=1] [B=1] [R=0] [CB=2] [CT=3] [N=1]	[T=1] [B=1] [R=0] [CB=2] [CT=3] [N=2]	[T=1] [B=1] [R=0] [CB=2] [CT=3] [N=3]	[T=1] [B=1] [R=0] [CB=2] [CT=4] [N=0]	[T=1] [B=1] [R=0] [CB=2] [CT=4] [N=1]
R54	ct_coeff															
	[T=1] [B=1] [R=0] [CB=2]	[T=1] [B=1] [R=0] [CB=3]														





Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
		[CT=4] [N=3]	[CT=5] [N=0]	[CT=5] [N=1]	[CT=5] [N=2]	[CT=5] [N=3]	[CT=0] [N=0]	[CT=0] [N=1]	[CT=0] [N=2]	[CT=0] [N=3]	[N=0]	[N=1]	[CT=1] [N=2]	[CT=1] [N=3]	[CT=2] [N=0]	
R58	ct_coef															
	[T=1] [B=1] [R=0] [CB=5] [CT=2] [N=2]	[T=1] [B=1] [R=0] [CB=5] [CT=2] [N=3]	[T=1] [B=1] [R=0] [CB=5] [CT=3] [N=0]	[T=1] [B=1] [R=0] [CB=5] [CT=3] [N=1]	[T=1] [B=1] [R=0] [CB=5] [CT=3] [N=2]	[T=1] [B=1] [R=0] [CB=5] [CT=4] [N=0]	[T=1] [B=1] [R=0] [CB=5] [CT=4] [N=1]	[T=1] [B=1] [R=0] [CB=5] [CT=4] [N=2]	[T=1] [B=1] [R=0] [CB=5] [CT=4] [N=3]	[T=1] [B=1] [R=0] [CB=5] [CT=5] [N=0]	[T=1] [B=1] [R=0] [CB=5] [CT=5] [N=1]	[T=1] [B=1] [R=0] [CB=5] [CT=5] [N=2]	[T=1] [B=1] [R=0] [CB=5] [CT=5] [N=3]	[T=1] [B=1] [R=1] [CB=0] [CT=0] [N=1]		
R59	ct_coef															
	[T=1] [B=1] [R=1] [CB=0] [CT=0] [N=2]	[T=1] [B=1] [R=1] [CB=0] [CT=0] [N=3]	[T=1] [B=1] [R=1] [CB=0] [CT=1] [N=0]	[T=1] [B=1] [R=1] [CB=0] [CT=1] [N=1]	[T=1] [B=1] [R=1] [CB=0] [CT=1] [N=2]	[T=1] [B=1] [R=1] [CB=0] [CT=2] [N=0]	[T=1] [B=1] [R=1] [CB=0] [CT=2] [N=1]	[T=1] [B=1] [R=1] [CB=0] [CT=2] [N=2]	[T=1] [B=1] [R=1] [CB=0] [CT=2] [N=3]	[T=1] [B=1] [R=1] [CB=1] [CT=0] [N=0]	[T=1] [B=1] [R=1] [CB=1] [CT=0] [N=1]	[T=1] [B=1] [R=1] [CB=1] [CT=0] [N=2]	[T=1] [B=1] [R=1] [CB=1] [CT=0] [N=3]	[T=1] [B=1] [R=1] [CB=1] [CT=1] [N=0]		
R60	ct_coef															
	[T=1] [B=1] [R=1] [CB=1] [CT=1] [N=2]	[T=1] [B=1] [R=1] [CB=1] [CT=1] [N=3]	[T=1] [B=1] [R=1] [CB=1] [CT=2] [N=0]	[T=1] [B=1] [R=1] [CB=1] [CT=2] [N=1]	[T=1] [B=1] [R=1] [CB=1] [CT=2] [N=2]	[T=1] [B=1] [R=1] [CB=1] [CT=3] [N=0]	[T=1] [B=1] [R=1] [CB=1] [CT=3] [N=1]	[T=1] [B=1] [R=1] [CB=1] [CT=3] [N=2]	[T=1] [B=1] [R=1] [CB=1] [CT=3] [N=3]	[T=1] [B=1] [R=1] [CB=1] [CT=4] [N=0]	[T=1] [B=1] [R=1] [CB=1] [CT=4] [N=1]	[T=1] [B=1] [R=1] [CB=1] [CT=4] [N=2]	[T=1] [B=1] [R=1] [CB=1] [CT=4] [N=3]	[T=1] [B=1] [R=1] [CB=1] [CT=5] [N=0]		





Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[B=1] [R=1] [CB=3] [CT=5] [N=2]	[B=1] [R=1] [CB=3] [CB=4] [CB=4]	[B=1] [R=1] [CB=4] [CB=4] [CB=4]													
R65	ct_coeff															
	[T=1] [B=1] [R=1] [CB=4] [CT=3] [N=2]	[T=1] [B=1] [R=1] [CB=4] [CB=4]	[T=1] [B=1] [R=1] [CB=4] [CB=4]	[T=1] [B=1] [CB=4] [CB=4] [CB=4]												
R66	ct_coeff															
	[T=1] [B=1] [R=1] [CB=5] [CT=1] [N=2]	[T=1] [B=1] [R=1] [CB=5] [CB=5]	[T=1] [B=1] [R=1] [CB=5] [CB=5]	[T=1] [B=1] [CB=5] [CB=5] [CB=5]												
R67	ct_coeff															
	[T=1] [B=1] [R=1]	[T=1] [B=1] [R=1]	[T=2] [B=0] [R=0]	[T=2] [B=0] [R=0]												

Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[CB=5] [CT=5] [N=2]	[CB=5] [CT=5] [N=3]	[CB=0] [CT=0] [N=0]	[CB=0] [CT=0] [N=1]	[CB=0] [CT=0] [N=2]	[CB=0] [CT=0] [N=3]	[CB=0] [CT=1] [N=0]	[CB=0] [CT=1] [N=1]	[CB=0] [CT=1] [N=2]	[CB=0] [CT=1] [N=3]	[CB=0] [CT=2] [N=0]	[CB=0] [CT=2] [N=1]	[CB=0] [CT=2] [N=2]	[CB=0] [CT=2] [N=3]	[CB=1] [CT=0] [N=1]	[CB=1] [CT=0] [N=0]
R68	ct_coeff															
	[T=2] [B=0] [R=0] [CB=1] [CT=0] [N=2]	[T=2] [B=0] [R=0] [CB=1] [CT=1] [N=3]	[T=2] [B=0] [R=0] [CB=1] [CT=1] [N=0]	[T=2] [B=0] [R=0] [CB=1] [CT=1] [N=2]	[T=2] [B=0] [R=0] [CB=1] [CT=1] [N=3]	[T=2] [B=0] [R=0] [CB=1] [CT=2] [N=0]	[T=2] [B=0] [R=0] [CB=1] [CT=2] [N=1]	[T=2] [B=0] [R=0] [CB=1] [CT=2] [N=2]	[T=2] [B=0] [R=0] [CB=1] [CT=2] [N=3]	[T=2] [B=0] [R=0] [CB=1] [CT=3] [N=0]	[T=2] [B=0] [R=0] [CB=1] [CT=3] [N=1]	[T=2] [B=0] [R=0] [CB=1] [CT=3] [N=2]	[T=2] [B=0] [R=0] [CB=1] [CT=3] [N=3]	[T=2] [B=0] [R=0] [CB=1] [CT=4] [N=0]	[T=2] [B=0] [R=0] [CB=1] [CT=4] [N=1]	
R69	ct_coeff															
	[T=2] [B=0] [R=0] [CB=1] [CT=4] [N=2]	[T=2] [B=0] [R=0] [CB=1] [CT=5] [N=3]	[T=2] [B=0] [R=0] [CB=1] [CT=5] [N=2]	[T=2] [B=0] [R=0] [CB=1] [CT=5] [N=3]	[T=2] [B=0] [R=0] [CB=2] [CT=0] [N=0]	[T=2] [B=0] [R=0] [CB=2] [CT=0] [N=1]	[T=2] [B=0] [R=0] [CB=2] [CT=0] [N=2]	[T=2] [B=0] [R=0] [CB=2] [CT=0] [N=3]	[T=2] [B=0] [R=0] [CB=2] [CT=1] [N=0]	[T=2] [B=0] [R=0] [CB=2] [CT=1] [N=1]	[T=2] [B=0] [R=0] [CB=2] [CT=1] [N=2]	[T=2] [B=0] [R=0] [CB=2] [CT=1] [N=3]	[T=2] [B=0] [R=0] [CB=2] [CT=2] [N=0]	[T=2] [B=0] [R=0] [CB=2] [CT=2] [N=1]	[T=2] [B=0] [R=0] [CB=2] [CT=2] [N=2]	
R70	ct_coeff															
	[T=2] [B=0] [R=0] [CB=2] [CT=2]	[T=2] [B=0] [R=0] [CB=3] [CT=0]														



Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[N=2]	[CT=2] [N=3]	[CT=3] [N=0]	[CT=3] [N=1]	[CT=3] [N=2]	[CT=3] [N=3]	[CT=4] [N=0]	[CT=4] [N=1]	[CT=4] [N=2]	[CT=4] [N=3]	[CT=5] [N=0]	[CT=5] [N=1]	[CT=5] [N=2]	[CT=5] [N=3]	[CT=0] [N=0]	[N=1]
R71	ct_coeff															
	[T=2] [B=0] [R=0] [CB=3] [CT=0] [N=2]	[T=2] [B=0] [R=0] [CB=3] [CT=0] [N=3]	[T=2] [B=0] [R=0] [CB=3] [CT=1] [N=0]	[T=2] [B=0] [R=0] [CB=3] [CT=1] [N=2]	[T=2] [B=0] [R=0] [CB=3] [CT=1] [N=3]	[T=2] [B=0] [R=0] [CB=3] [CT=2] [N=0]	[T=2] [B=0] [R=0] [CB=3] [CT=2] [N=1]	[T=2] [B=0] [R=0] [CB=3] [CT=2] [N=2]	[T=2] [B=0] [R=0] [CB=3] [CT=2] [N=3]	[T=2] [B=0] [R=0] [CB=3] [CT=3] [N=0]	[T=2] [B=0] [R=0] [CB=3] [CT=3] [N=1]	[T=2] [B=0] [R=0] [CB=3] [CT=3] [N=2]	[T=2] [B=0] [R=0] [CB=3] [CT=3] [N=3]	[T=2] [B=0] [R=0] [CB=3] [CT=4] [N=1]	[T=2] [B=0] [R=0] [CB=3] [CT=4] [N=2]	[T=2] [B=0] [R=0] [CB=3] [CT=4] [N=0]
R72	ct_coeff															
	[T=2] [B=0] [R=0] [CB=3] [CT=4] [N=2]	[T=2] [B=0] [R=0] [CB=3] [CT=4] [N=3]	[T=2] [B=0] [R=0] [CB=3] [CT=5] [N=0]	[T=2] [B=0] [R=0] [CB=3] [CT=5] [N=2]	[T=2] [B=0] [R=0] [CB=3] [CT=5] [N=3]	[T=2] [B=0] [R=0] [CB=4] [CT=0] [N=0]	[T=2] [B=0] [R=0] [CB=4] [CT=0] [N=1]	[T=2] [B=0] [R=0] [CB=4] [CT=0] [N=2]	[T=2] [B=0] [R=0] [CB=4] [CT=0] [N=3]	[T=2] [B=0] [R=0] [CB=4] [CT=1] [N=0]	[T=2] [B=0] [R=0] [CB=4] [CT=1] [N=1]	[T=2] [B=0] [R=0] [CB=4] [CT=1] [N=2]	[T=2] [B=0] [R=0] [CB=4] [CT=1] [N=3]	[T=2] [B=0] [R=0] [CB=4] [CT=2] [N=0]	[T=2] [B=0] [R=0] [CB=4] [CT=2] [N=1]	[T=2] [B=0] [R=0] [CB=4] [CT=2] [N=2]
R73	ct_coeff															
	[T=2] [B=0] [R=0] [CB=4] [CT=2] [N=2]	[T=2] [B=0] [R=0] [CB=4] [CT=2] [N=3]	[T=2] [B=0] [R=0] [CB=4] [CT=3] [N=0]	[T=2] [B=0] [R=0] [CB=4] [CT=3] [N=1]	[T=2] [B=0] [R=0] [CB=4] [CT=3] [N=2]	[T=2] [B=0] [R=0] [CB=4] [CT=3] [N=3]	[T=2] [B=0] [R=0] [CB=4] [CT=4] [N=0]	[T=2] [B=0] [R=0] [CB=4] [CT=4] [N=1]	[T=2] [B=0] [R=0] [CB=4] [CT=4] [N=2]	[T=2] [B=0] [R=0] [CB=4] [CT=5] [N=0]	[T=2] [B=0] [R=0] [CB=4] [CT=5] [N=1]	[T=2] [B=0] [R=0] [CB=4] [CT=5] [N=2]	[T=2] [B=0] [R=0] [CB=5] [CT=0] [N=1]	[T=2] [B=0] [R=0] [CB=5] [CT=0] [N=0]	[T=2] [B=0] [R=0] [CB=5] [CT=0] [N=1]	

Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
		[N=3]	[N=0]	[N=1]	[N=2]	[N=3]	[N=0]	[N=1]	[N=2]	[N=3]			[N=2]	[N=3]	[N=0]	
R74	ct_coeff															
	[T=2] [B=0] [R=0] [CB=5] [CT=0] [N=2]	[T=2] [B=0] [R=0] [CB=5] [CT=0] [N=3]	[T=2] [B=0] [R=0] [CB=5] [CT=1] [N=0]	[T=2] [B=0] [R=0] [CB=5] [CT=1] [N=1]	[T=2] [B=0] [R=0] [CB=5] [CT=1] [N=2]	[T=2] [B=0] [R=0] [CB=5] [CT=1] [N=3]	[T=2] [B=0] [R=0] [CB=5] [CT=2] [N=0]	[T=2] [B=0] [R=0] [CB=5] [CT=2] [N=1]	[T=2] [B=0] [R=0] [CB=5] [CT=2] [N=2]	[T=2] [B=0] [R=0] [CB=5] [CT=2] [N=3]			[T=2] [B=0] [R=0] [CB=5] [CT=3] [N=1]	[T=2] [B=0] [R=0] [CB=5] [CT=3] [N=2]	[T=2] [B=0] [R=0] [CB=5] [CT=4] [N=0]	
R75	ct_coeff															
	[T=2] [B=0] [R=0] [CB=5] [CT=4] [N=2]	[T=2] [B=0] [R=0] [CB=5] [CT=4] [N=3]	[T=2] [B=0] [R=0] [CB=5] [CT=5] [N=0]	[T=2] [B=0] [R=0] [CB=5] [CT=5] [N=1]	[T=2] [B=0] [R=1] [CB=5] [CT=5] [N=2]	[T=2] [B=0] [R=1] [CB=0] [CT=0] [N=3]	[T=2] [B=0] [R=1] [CB=0] [CT=0] [N=0]	[T=2] [B=0] [R=1] [CB=0] [CT=0] [N=1]	[T=2] [B=0] [R=1] [CB=0] [CT=0] [N=2]	[T=2] [B=0] [R=1] [CB=0] [CT=1] [N=3]			[T=2] [B=0] [R=1] [CB=0] [CT=1] [N=0]	[T=2] [B=0] [R=1] [CB=0] [CT=1] [N=2]	[T=2] [B=0] [R=1] [CB=0] [CT=2] [N=0]	
R76	ct_coeff															
	[T=2] [B=0] [R=1] [CB=0] [CT=2] [N=2]	[T=2] [B=0] [R=1] [CB=0] [CT=2] [N=3]	[T=2] [B=0] [R=1] [CB=1] [CT=0] [N=0]	[T=2] [B=0] [R=1] [CB=1] [CT=0] [N=1]	[T=2] [B=0] [R=1] [CB=1] [CT=1] [N=0]	[T=2] [B=0] [R=1] [CB=1] [CT=1] [N=1]	[T=2] [B=0] [R=1] [CB=1] [CT=1] [N=2]	[T=2] [B=0] [R=1] [CB=1] [CT=1] [N=3]	[T=2] [B=0] [R=1] [CB=1] [CT=2] [N=0]	[T=2] [B=0] [R=1] [CB=1] [CT=2] [N=1]			[T=2] [B=0] [R=1] [CB=1] [CT=2] [N=2]	[T=2] [B=0] [R=1] [CB=1] [CT=2] [N=3]	[T=2] [B=0] [R=1] [CB=1] [CT=3] [N=0]	
R77	ct_coeff															



Rxxx Value 1 row = 1 Cacheline	16 32-bit counters																
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
[T=2] [B=0] [R=1] [CB=1] [CT=3] [N=2]	[T=2] [B=0] [R=1] [CB=1] [CT=3] [N=3]	[T=2] [B=0] [R=1] [CB=1] [CT=4] [N=0]	[T=2] [B=0] [R=1] [CB=1] [CT=4] [N=1]	[T=2] [B=0] [R=1] [CB=1] [CT=4] [N=2]	[T=2] [B=0] [R=1] [CB=1] [CT=4] [N=3]	[T=2] [B=0] [R=1] [CB=1] [CT=5] [N=0]	[T=2] [B=0] [R=1] [CB=1] [CT=5] [N=1]	[T=2] [B=0] [R=1] [CB=1] [CT=5] [N=2]	[T=2] [B=0] [R=1] [CB=2] [CT=0] [N=0]	[T=2] [B=0] [R=1] [CB=2] [CT=0] [N=1]	[T=2] [B=0] [R=1] [CB=2] [CT=0] [N=2]	[T=2] [B=0] [R=1] [CB=2] [CT=0] [N=3]	[T=2] [B=0] [R=1] [CB=2] [CT=1] [N=0]	[T=2] [B=0] [R=1] [CB=2] [CT=1] [N=1]	[T=2] [B=0] [R=1] [CB=2] [CT=1] [N=2]	[T=2] [B=0] [R=1] [CB=2] [CT=1] [N=3]	[T=2] [B=0] [R=1] [CB=2] [CT=1] [N=0]
R78	ct_coeff																
[T=2] [B=0] [R=1] [CB=2] [CT=1] [N=2]	[T=2] [B=0] [R=1] [CB=2] [CT=1] [N=3]	[T=2] [B=0] [R=1] [CB=2] [CT=2] [N=0]	[T=2] [B=0] [R=1] [CB=2] [CT=2] [N=1]	[T=2] [B=0] [R=1] [CB=2] [CT=2] [N=2]	[T=2] [B=0] [R=1] [CB=2] [CT=2] [N=3]	[T=2] [B=0] [R=1] [CB=2] [CT=3] [N=0]	[T=2] [B=0] [R=1] [CB=2] [CT=3] [N=1]	[T=2] [B=0] [R=1] [CB=2] [CT=3] [N=2]	[T=2] [B=0] [R=1] [CB=2] [CT=3] [N=3]	[T=2] [B=0] [R=1] [CB=2] [CT=4] [N=0]	[T=2] [B=0] [R=1] [CB=2] [CT=4] [N=1]	[T=2] [B=0] [R=1] [CB=2] [CT=4] [N=2]	[T=2] [B=0] [R=1] [CB=2] [CT=4] [N=3]	[T=2] [B=0] [R=1] [CB=2] [CT=5] [N=0]	[T=2] [B=0] [R=1] [CB=2] [CT=5] [N=1]		
R79	ct_coeff																
[T=2] [B=0] [R=1] [CB=2] [CT=5] [N=2]	[T=2] [B=0] [R=1] [CB=2] [CT=5] [N=3]	[T=2] [B=0] [R=1] [CB=3] [CT=0] [N=0]	[T=2] [B=0] [R=1] [CB=3] [CT=0] [N=1]	[T=2] [B=0] [R=1] [CB=3] [CT=0] [N=2]	[T=2] [B=0] [R=1] [CB=3] [CT=0] [N=3]	[T=2] [B=0] [R=1] [CB=3] [CT=1] [N=0]	[T=2] [B=0] [R=1] [CB=3] [CT=1] [N=1]	[T=2] [B=0] [R=1] [CB=3] [CT=1] [N=2]	[T=2] [B=0] [R=1] [CB=3] [CT=1] [N=3]	[T=2] [B=0] [R=1] [CB=3] [CT=2] [N=0]	[T=2] [B=0] [R=1] [CB=3] [CT=2] [N=1]	[T=2] [B=0] [R=1] [CB=3] [CT=2] [N=2]	[T=2] [B=0] [R=1] [CB=3] [CT=2] [N=3]	[T=2] [B=0] [R=1] [CB=3] [CT=3] [N=0]	[T=2] [B=0] [R=1] [CB=3] [CT=3] [N=1]		
R80	ct_coeff																
[T=2] [B=0]	[T=2] [B=0]	[T=2] [B=0]	[T=2] [B=0]	[T=2] [B=0]	[T=2] [B=0]	[T=2] [B=0]	[T=2] [B=0]	[T=2] [B=0]	[T=2] [B=0]	[T=2] [B=0]	[T=2] [B=0]	[T=2] [B=0]	[T=2] [B=0]	[T=2] [B=0]	[T=2] [B=0]		

Rxxx Value 1 row = 1 Cacheline	16 32-bit counters														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	[R=1] [CB=3] [CT=3] [N=2]	[R=1] [CB=3] [CT=3] [N=3]	[R=1] [CB=3] [CT=4] [N=0]	[R=1] [CB=3] [CT=4] [N=1]	[R=1] [CB=3] [CT=4] [N=2]	[R=1] [CB=3] [CT=5] [N=3]	[R=1] [CB=3] [CT=5] [N=0]	[R=1] [CB=3] [CT=5] [N=1]	[R=1] [CB=3] [CT=5] [N=2]	[R=1] [CB=3] [CT=5] [N=3]	[R=1] [CB=4] [CT=0] [N=0]	[R=1] [CB=4] [CT=0] [N=1]	[R=1] [CB=4] [CT=0] [N=2]	[R=1] [CB=4] [CT=0] [N=3]	[R=1] [CB=4] [CT=1] [N=0]
R81	ct_coeff														
	[T=2] [B=0] [R=1] [CB=4] [CT=1] [N=2]	[T=2] [B=0] [R=1] [CB=4] [CT=1] [N=3]	[T=2] [B=0] [R=1] [CB=4] [CT=2] [N=0]	[T=2] [B=0] [R=1] [CB=4] [CT=2] [N=1]	[T=2] [B=0] [R=1] [CB=4] [CT=2] [N=2]	[T=2] [B=0] [R=1] [CB=4] [CT=3] [N=3]	[T=2] [B=0] [R=1] [CB=4] [CT=3] [N=0]	[T=2] [B=0] [R=1] [CB=4] [CT=3] [N=1]	[T=2] [B=0] [R=1] [CB=4] [CT=3] [N=2]	[T=2] [B=0] [R=1] [CB=4] [CT=3] [N=3]	[T=2] [B=0] [R=1] [CB=4] [CT=4] [N=0]	[T=2] [B=0] [R=1] [CB=4] [CT=4] [N=1]	[T=2] [B=0] [R=1] [CB=4] [CT=4] [N=2]	[T=2] [B=0] [R=1] [CB=4] [CT=4] [N=3]	[T=2] [B=0] [R=1] [CB=4] [CT=5] [N=0]
R82	ct_coeff														
	[T=2] [B=0] [R=1] [CB=4] [CT=5] [N=2]	[T=2] [B=0] [R=1] [CB=4] [CT=5] [N=3]	[T=2] [B=0] [R=1] [CB=5] [CT=0] [N=0]	[T=2] [B=0] [R=1] [CB=5] [CT=0] [N=1]	[T=2] [B=0] [R=1] [CB=5] [CT=0] [N=2]	[T=2] [B=0] [R=1] [CB=5] [CT=1] [N=3]	[T=2] [B=0] [R=1] [CB=5] [CT=1] [N=0]	[T=2] [B=0] [R=1] [CB=5] [CT=1] [N=1]	[T=2] [B=0] [R=1] [CB=5] [CT=1] [N=2]	[T=2] [B=0] [R=1] [CB=5] [CT=1] [N=3]	[T=2] [B=0] [R=1] [CB=5] [CT=2] [N=0]	[T=2] [B=0] [R=1] [CB=5] [CT=2] [N=1]	[T=2] [B=0] [R=1] [CB=5] [CT=2] [N=2]	[T=2] [B=0] [R=1] [CB=5] [CT=2] [N=3]	[T=2] [B=0] [R=1] [CB=5] [CT=3] [N=0]
R83	ct_coeff														
	[T=2] [B=0] [R=1] [CB=5]	[T=2] [B=1] [R=0]	[T=2] [B=1] [R=0]	[T=2] [B=1] [R=0]	[T=2] [B=1] [R=0]	[T=2] [B=1] [R=0]									



Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[CT=3] [N=2]	[CB=5]	[CB=0] [CT=0]	[CB=0] [CT=0]	[CB=0] [CT=0]	[CB=0] [CT=0]	[CB=0] [CT=1]	[CT=1] [N=1]								
	[CT=3] [N=3]	[CT=4] [N=0]	[CT=4] [N=1]	[CT=4] [N=2]	[CT=4] [N=3]	[CT=5] [N=0]	[CT=5] [N=1]	[CT=5] [N=2]	[CT=5] [N=3]	[CT=0] [N=0]	[CT=0] [N=1]	[CT=0] [N=2]	[CT=0] [N=3]	[CT=1] [N=0]		
R84	ct_coef															
	[T=2] [B=1] [R=0] [CB=0] [CT=1] [N=2]	[T=2] [B=1] [R=0] [CB=0] [CT=0] [N=3]	[T=2] [B=1] [R=0] [CB=0] [CT=1] [N=0]	[T=2] [B=1] [R=0] [CB=0] [CT=2] [N=1]	[T=2] [B=1] [R=0] [CB=0] [CT=2] [N=2]	[T=2] [B=1] [R=0] [CB=1] [CT=2] [N=3]	[T=2] [B=1] [R=0] [CB=1] [CT=0] [N=0]	[T=2] [B=1] [R=0] [CB=1] [CT=0] [N=1]	[T=2] [B=1] [R=0] [CB=1] [CT=0] [N=2]	[T=2] [B=1] [R=0] [CB=1] [CT=0] [N=3]	[T=2] [B=1] [R=0] [CB=1] [CT=1] [N=0]	[T=2] [B=1] [R=0] [CB=1] [CT=1] [N=1]	[T=2] [B=1] [R=0] [CB=1] [CT=1] [N=2]	[T=2] [B=1] [R=0] [CB=1] [CT=1] [N=3]	[T=2] [B=1] [R=0] [CB=1] [CT=2] [N=0]	[T=2] [B=1] [R=0] [CB=1] [CT=2] [N=1]
R85	ct_coef															
	[T=2] [B=1] [R=0] [CB=1] [CT=2] [N=2]	[T=2] [B=1] [R=0] [CB=1] [CT=2] [N=3]	[T=2] [B=1] [R=0] [CB=1] [CT=3] [N=0]	[T=2] [B=1] [R=0] [CB=1] [CT=3] [N=2]	[T=2] [B=1] [R=0] [CB=1] [CT=3] [N=3]	[T=2] [B=1] [R=0] [CB=1] [CT=4] [N=0]	[T=2] [B=1] [R=0] [CB=1] [CT=4] [N=1]	[T=2] [B=1] [R=0] [CB=1] [CT=4] [N=2]	[T=2] [B=1] [R=0] [CB=1] [CT=4] [N=3]	[T=2] [B=1] [R=0] [CB=1] [CT=5] [N=0]	[T=2] [B=1] [R=0] [CB=1] [CT=5] [N=1]	[T=2] [B=1] [R=0] [CB=1] [CT=5] [N=2]	[T=2] [B=1] [R=0] [CB=1] [CT=5] [N=3]	[T=2] [B=1] [R=0] [CB=2] [CT=0] [N=0]	[T=2] [B=1] [R=0] [CB=2] [CT=0] [N=1]	
R86	ct_coef															
	[T=2] [B=1] [R=0] [CB=2] [CT=0] [N=2]	[T=2] [B=1] [R=0] [CB=2] [CT=0] [N=3]	[T=2] [B=1] [R=0] [CB=2] [CT=0] [N=1]	[T=2] [B=1] [R=0] [CB=2] [CT=0] [N=2]	[T=2] [B=1] [R=0] [CB=2] [CT=0] [N=3]	[T=2] [B=1] [R=0] [CB=2] [CT=1] [N=0]	[T=2] [B=1] [R=0] [CB=2] [CT=1] [N=1]	[T=2] [B=1] [R=0] [CB=2] [CT=1] [N=2]	[T=2] [B=1] [R=0] [CB=2] [CT=1] [N=3]	[T=2] [B=1] [R=0] [CB=2] [CT=2] [N=0]	[T=2] [B=1] [R=0] [CB=2] [CT=2] [N=1]	[T=2] [B=1] [R=0] [CB=2] [CT=2] [N=2]	[T=2] [B=1] [R=0] [CB=2] [CT=2] [N=3]	[T=2] [B=1] [R=0] [CB=2] [CT=4] [N=1]	[T=2] [B=1] [R=0] [CB=2] [CT=4] [N=2]	

Rxxx Value 1 row = 1 Cacheline	16 32-bit counters																	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
	[CT=0] [N=3]	[CT=1] [N=0]	[CT=1] [N=1]	[CT=1] [N=2]	[CT=1] [N=3]	[CT=2] [N=0]	[CT=2] [N=1]	[CT=2] [N=2]	[CT=2] [N=3]	[N=0]	[N=1]	[CT=3] [N=2]	[CT=3] [N=3]	[CT=4] [N=0]				
R87	ct_coef																	
	[T=2] [B=1] [R=0] [CB=2] [CT=4] [N=2]	[T=2] [B=1] [R=0] [CB=2] [CT=4] [N=3]	[T=2] [B=1] [R=0] [CB=2] [CT=5] [N=0]	[T=2] [B=1] [R=0] [CB=2] [CT=5] [N=1]	[T=2] [B=1] [R=0] [CB=2] [CT=5] [N=2]	[T=2] [B=1] [R=0] [CB=3] [CT=0] [N=3]	[T=2] [B=1] [R=0] [CB=3] [CT=0] [N=0]	[T=2] [B=1] [R=0] [CB=3] [CT=0] [N=1]	[T=2] [B=1] [R=0] [CB=3] [CT=0] [N=2]	[T=2] [B=1] [R=0] [CB=3] [CT=0] [N=3]	[T=2] [B=1] [R=0] [CB=3] [CT=1] [N=0]	[T=2] [B=1] [R=0] [CB=3] [CT=1] [N=1]	[T=2] [B=1] [R=0] [CB=3] [CT=1] [N=2]	[T=2] [B=1] [R=0] [CB=3] [CT=1] [N=3]	[T=2] [B=1] [R=0] [CB=3] [CT=2] [N=0]	[T=2] [B=1] [R=0] [CB=3] [CT=2] [N=1]	[T=2] [B=1] [R=0] [CB=3] [CT=2] [N=2]	[T=2] [B=1] [R=0] [CB=3] [CT=2] [N=3]
R88	ct_coef																	
	[T=2] [B=1] [R=0] [CB=3] [CT=2] [N=2]	[T=2] [B=1] [R=0] [CB=3] [CT=2] [N=3]	[T=2] [B=1] [R=0] [CB=3] [CT=3] [N=0]	[T=2] [B=1] [R=0] [CB=3] [CT=3] [N=1]	[T=2] [B=1] [R=0] [CB=3] [CT=3] [N=2]	[T=2] [B=1] [R=0] [CB=3] [CT=4] [N=3]	[T=2] [B=1] [R=0] [CB=3] [CT=4] [N=0]	[T=2] [B=1] [R=0] [CB=3] [CT=4] [N=1]	[T=2] [B=1] [R=0] [CB=3] [CT=4] [N=2]	[T=2] [B=1] [R=0] [CB=3] [CT=4] [N=3]	[T=2] [B=1] [R=0] [CB=3] [CT=5] [N=0]	[T=2] [B=1] [R=0] [CB=3] [CT=5] [N=1]	[T=2] [B=1] [R=0] [CB=3] [CT=5] [N=2]	[T=2] [B=1] [R=0] [CB=3] [CT=5] [N=3]	[T=2] [B=1] [R=0] [CB=4] [CT=0] [N=1]	[T=2] [B=1] [R=0] [CB=4] [CT=0] [N=2]	[T=2] [B=1] [R=0] [CB=4] [CT=0] [N=3]	
R89	ct_coef																	
	[T=2] [B=1] [R=0] [CB=4] [CT=0] [N=2]	[T=2] [B=1] [R=0] [CB=4] [CT=0] [N=3]	[T=2] [B=1] [R=0] [CB=4] [CT=1] [N=0]	[T=2] [B=1] [R=0] [CB=4] [CT=1] [N=1]	[T=2] [B=1] [R=0] [CB=4] [CT=1] [N=2]	[T=2] [B=1] [R=0] [CB=4] [CT=2] [N=3]	[T=2] [B=1] [R=0] [CB=4] [CT=2] [N=0]	[T=2] [B=1] [R=0] [CB=4] [CT=2] [N=1]	[T=2] [B=1] [R=0] [CB=4] [CT=2] [N=2]	[T=2] [B=1] [R=0] [CB=4] [CT=2] [N=3]	[T=2] [B=1] [R=0] [CB=4] [CT=3] [N=0]	[T=2] [B=1] [R=0] [CB=4] [CT=3] [N=1]	[T=2] [B=1] [R=0] [CB=4] [CT=3] [N=2]	[T=2] [B=1] [R=0] [CB=4] [CT=3] [N=3]	[T=2] [B=1] [R=0] [CB=4] [CT=4] [N=0]	[T=2] [B=1] [R=0] [CB=4] [CT=4] [N=1]	[T=2] [B=1] [R=0] [CB=4] [CT=4] [N=2]	[T=2] [B=1] [R=0] [CB=4] [CT=4] [N=3]



Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	ct_coef															
R90	[T=2] [B=1] [R=0] [CB=4] [CT=4] [N=2]	[T=2] [B=1] [R=0] [CB=4] [CT=4] [N=3]	[T=2] [B=1] [R=0] [CB=4] [CT=5] [N=0]	[T=2] [B=1] [R=0] [CB=4] [CT=5] [N=1]	[T=2] [B=1] [R=0] [CB=4] [CT=5] [N=2]	[T=2] [B=1] [R=0] [CB=5] [CT=5] [N=3]	[T=2] [B=1] [R=0] [CB=5] [CT=0] [N=0]	[T=2] [B=1] [R=0] [CB=5] [CT=0] [N=1]	[T=2] [B=1] [R=0] [CB=5] [CT=0] [N=2]	[T=2] [B=1] [R=0] [CB=5] [CT=0] [N=3]	[T=2] [B=1] [R=0] [CB=5] [CT=1] [N=0]	[T=2] [B=1] [R=0] [CB=5] [CT=1] [N=1]	[T=2] [B=1] [R=0] [CB=5] [CT=1] [N=2]	[T=2] [B=1] [R=0] [CB=5] [CT=1] [N=3]	[T=2] [B=1] [R=0] [CB=5] [CT=2] [N=0]	
R91	[T=2] [B=1] [R=0] [CB=5] [CT=2] [N=2]	[T=2] [B=1] [R=0] [CB=5] [CT=2] [N=3]	[T=2] [B=1] [R=0] [CB=5] [CT=3] [N=0]	[T=2] [B=1] [R=0] [CB=5] [CT=3] [N=1]	[T=2] [B=1] [R=0] [CB=5] [CT=3] [N=2]	[T=2] [B=1] [R=0] [CB=5] [CT=4] [N=3]	[T=2] [B=1] [R=0] [CB=5] [CT=4] [N=0]	[T=2] [B=1] [R=0] [CB=5] [CT=4] [N=1]	[T=2] [B=1] [R=0] [CB=5] [CT=4] [N=2]	[T=2] [B=1] [R=0] [CB=5] [CT=4] [N=3]	[T=2] [B=1] [R=0] [CB=5] [CT=5] [N=0]	[T=2] [B=1] [R=0] [CB=5] [CT=5] [N=1]	[T=2] [B=1] [R=0] [CB=5] [CT=5] [N=2]	[T=2] [B=1] [R=0] [CB=5] [CT=5] [N=3]	[T=2] [B=1] [R=1] [CB=0] [CT=0] [N=1]	
R92	[T=2] [B=1] [R=1] [CB=0] [CT=0] [N=2]	[T=2] [B=1] [R=1] [CB=0] [CT=0] [N=3]	[T=2] [B=1] [R=1] [CB=0] [CT=1] [N=0]	[T=2] [B=1] [R=1] [CB=0] [CT=1] [N=1]	[T=2] [B=1] [R=1] [CB=0] [CT=1] [N=2]	[T=2] [B=1] [R=1] [CB=0] [CT=2] [N=3]	[T=2] [B=1] [R=1] [CB=0] [CT=2] [N=0]	[T=2] [B=1] [R=1] [CB=0] [CT=2] [N=1]	[T=2] [B=1] [R=1] [CB=0] [CT=2] [N=2]	[T=2] [B=1] [R=1] [CB=0] [CT=2] [N=3]	[T=2] [B=1] [R=1] [CB=1] [CT=0] [N=0]	[T=2] [B=1] [R=1] [CB=1] [CT=0] [N=1]	[T=2] [B=1] [R=1] [CB=1] [CT=0] [N=2]	[T=2] [B=1] [R=1] [CB=1] [CT=0] [N=3]	[T=2] [B=1] [R=1] [CB=1] [CT=1] [N=0]	
R93	ct_coef															
	[T=2]	[T=2]														

Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[B=1] [R=1] [CB=1] [CT=1] [N=2]	[B=1] [R=1] [CB=1] [CT=1] [N=3]	[B=1] [R=1] [CB=1] [CT=2] [N=0]	[B=1] [R=1] [CB=1] [CT=2] [N=1]	[B=1] [R=1] [CB=1] [CT=2] [N=2]	[B=1] [R=1] [CB=1] [CT=2] [N=3]	[B=1] [R=1] [CB=1] [CT=3] [N=0]	[B=1] [R=1] [CB=1] [CT=3] [N=1]	[B=1] [R=1] [CB=1] [CT=3] [N=2]	[B=1] [R=1] [CB=1] [CT=3] [N=3]	[B=1] [R=1] [CB=1] [CT=4] [N=0]	[B=1] [R=1] [CB=1] [CT=4] [N=1]	[B=1] [R=1] [CB=1] [CT=4] [N=2]	[B=1] [R=1] [CB=1] [CT=4] [N=3]	[B=1] [R=1] [CB=1] [CT=5] [N=0]	
R94	ct_coef															
	[T=2] [B=1] [R=1] [CB=1] [CT=5] [N=2]	[T=2] [B=1] [R=1] [CB=1] [CT=5] [N=3]	[T=2] [B=1] [R=1] [CB=2] [CT=0] [N=0]	[T=2] [B=1] [R=1] [CB=2] [CT=0] [N=1]	[T=2] [B=1] [R=1] [CB=2] [CT=0] [N=2]	[T=2] [B=1] [R=1] [CB=2] [CT=0] [N=3]	[T=2] [B=1] [R=1] [CB=2] [CT=1] [N=0]	[T=2] [B=1] [R=1] [CB=2] [CT=1] [N=1]	[T=2] [B=1] [R=1] [CB=2] [CT=1] [N=2]	[T=2] [B=1] [R=1] [CB=2] [CT=1] [N=3]	[T=2] [B=1] [R=1] [CB=2] [CT=2] [N=0]	[T=2] [B=1] [R=1] [CB=2] [CT=2] [N=1]	[T=2] [B=1] [R=1] [CB=2] [CT=2] [N=2]	[T=2] [B=1] [R=1] [CB=2] [CT=2] [N=3]	[T=2] [B=1] [R=1] [CB=2] [CT=3] [N=0]	
R95	ct_coef															
	[T=2] [B=1] [R=1] [CB=2] [CT=3] [N=2]	[T=2] [B=1] [R=1] [CB=2] [CT=4] [N=0]	[T=2] [B=1] [R=1] [CB=2] [CT=4] [N=1]	[T=2] [B=1] [R=1] [CB=2] [CT=4] [N=2]	[T=2] [B=1] [R=1] [CB=2] [CT=4] [N=3]	[T=2] [B=1] [R=1] [CB=2] [CT=5] [N=0]	[T=2] [B=1] [R=1] [CB=2] [CT=5] [N=1]	[T=2] [B=1] [R=1] [CB=2] [CT=5] [N=2]	[T=2] [B=1] [R=1] [CB=2] [CT=5] [N=3]	[T=2] [B=1] [R=1] [CB=3] [CT=0] [N=0]	[T=2] [B=1] [R=1] [CB=3] [CT=0] [N=1]	[T=2] [B=1] [R=1] [CB=3] [CT=0] [N=2]	[T=2] [B=1] [R=1] [CB=3] [CT=0] [N=3]	[T=2] [B=1] [R=1] [CB=3] [CT=1] [N=0]		
R96	ct_coef															
	[T=2] [B=1] [R=1]															



Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[CB=3] [CT=1] [N=2]	[CB=3] [CT=1] [N=3]	[CB=3] [CT=2] [N=0]	[CB=3] [CT=2] [N=1]	[CB=3] [CT=2] [N=2]	[CB=3] [CT=2] [N=3]	[CB=3] [CT=3] [N=0]	[CB=3] [CT=3] [N=1]	[CB=3] [CT=3] [N=2]	[CB=3] [CT=3] [N=3]	[CB=3] [CT=4] [N=0]	[CB=3] [CT=4] [N=1]	[CB=3] [CT=4] [N=2]	[CB=3] [CT=4] [N=3]	[CB=3] [CT=5] [N=0]	[CB=3] [CT=5] [N=1]
R97	ct_coeff															
	[T=2] [B=1] [R=1] [CB=3] [CT=5] [N=2]	[T=2] [B=1] [R=1] [CB=3] [CT=5] [N=2]	[T=2] [B=1] [R=1] [CB=4] [CT=0] [N=3]	[T=2] [B=1] [R=1] [CB=4] [CT=0] [N=2]	[T=2] [B=1] [R=1] [CB=4] [CT=0] [N=3]	[T=2] [B=1] [R=1] [CB=4] [CT=1] [N=0]	[T=2] [B=1] [R=1] [CB=4] [CT=1] [N=1]	[T=2] [B=1] [R=1] [CB=4] [CT=1] [N=2]	[T=2] [B=1] [R=1] [CB=4] [CT=1] [N=3]	[T=2] [B=1] [R=1] [CB=4] [CT=2] [N=0]	[T=2] [B=1] [R=1] [CB=4] [CT=2] [N=1]	[T=2] [B=1] [R=1] [CB=4] [CT=2] [N=2]	[T=2] [B=1] [R=1] [CB=4] [CT=2] [N=3]	[T=2] [B=1] [R=1] [CB=4] [CT=3] [N=0]	[T=2] [B=1] [R=1] [CB=4] [CT=3] [N=1]	
R98	ct_coeff															
	[T=2] [B=1] [R=1] [CB=4] [CT=3] [N=2]	[T=2] [B=1] [R=1] [CB=4] [CT=3] [N=2]	[T=2] [B=1] [R=1] [CB=4] [CT=4] [N=1]	[T=2] [B=1] [R=1] [CB=4] [CT=4] [N=2]	[T=2] [B=1] [R=1] [CB=4] [CT=4] [N=3]	[T=2] [B=1] [R=1] [CB=4] [CT=5] [N=0]	[T=2] [B=1] [R=1] [CB=4] [CT=5] [N=1]	[T=2] [B=1] [R=1] [CB=4] [CT=5] [N=2]	[T=2] [B=1] [R=1] [CB=4] [CT=5] [N=3]	[T=2] [B=1] [R=1] [CB=5] [CT=0] [N=0]	[T=2] [B=1] [R=1] [CB=5] [CT=0] [N=1]	[T=2] [B=1] [R=1] [CB=5] [CT=0] [N=2]	[T=2] [B=1] [R=1] [CB=5] [CT=0] [N=3]	[T=2] [B=1] [R=1] [CB=5] [CT=1] [N=0]	[T=2] [B=1] [R=1] [CB=5] [CT=1] [N=1]	
R99	ct_coeff															
	[T=2] [B=1] [R=1] [CB=5] [CT=1]															

Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[N=2]	[CT=1] [N=3]	[CT=2] [N=0]	[CT=2] [N=1]	[CT=2] [N=2]	[CT=2] [N=3]	[CT=3] [N=0]	[CT=3] [N=1]	[CT=3] [N=2]	[CT=3] [N=3]	[CT=4] [N=0]	[CT=4] [N=1]	[CT=4] [N=2]	[CT=4] [N=3]	[CT=5] [N=0]	[N=1]
R100	ct_coeff															
	[T=2] [B=1] [R=1] [CB=5] [CT=5] [N=2]	[T=2] [B=1] [R=1] [CB=5] [CT=5] [N=3]	[T=3] [B=0] [R=0] [CB=0] [CT=0] [N=0]	[T=3] [B=0] [R=0] [CB=0] [CT=0] [N=2]	[T=3] [B=0] [R=0] [CB=0] [CT=0] [N=3]	[T=3] [B=0] [R=0] [CB=0] [CT=1] [N=0]	[T=3] [B=0] [R=0] [CB=0] [CT=1] [N=1]	[T=3] [B=0] [R=0] [CB=0] [CT=1] [N=2]	[T=3] [B=0] [R=0] [CB=0] [CT=1] [N=3]	[T=3] [B=0] [R=0] [CB=0] [CT=2] [N=0]	[T=3] [B=0] [R=0] [CB=0] [CT=2] [N=1]	[T=3] [B=0] [R=0] [CB=0] [CT=2] [N=2]	[T=3] [B=0] [R=0] [CB=0] [CT=2] [N=3]	[T=3] [B=0] [R=0] [CB=1] [CT=0] [N=1]	[T=3] [B=0] [R=0] [CB=1] [CT=0] [N=0]	
R101	ct_coeff															
	[T=3] [B=0] [R=0] [CB=1] [CT=0] [N=2]	[T=3] [B=0] [R=0] [CB=1] [CT=0] [N=3]	[T=3] [B=0] [R=0] [CB=1] [CT=1] [N=0]	[T=3] [B=0] [R=0] [CB=1] [CT=1] [N=2]	[T=3] [B=0] [R=0] [CB=1] [CT=1] [N=3]	[T=3] [B=0] [R=0] [CB=1] [CT=2] [N=0]	[T=3] [B=0] [R=0] [CB=1] [CT=2] [N=1]	[T=3] [B=0] [R=0] [CB=1] [CT=2] [N=2]	[T=3] [B=0] [R=0] [CB=1] [CT=2] [N=3]	[T=3] [B=0] [R=0] [CB=1] [CT=3] [N=0]	[T=3] [B=0] [R=0] [CB=1] [CT=3] [N=1]	[T=3] [B=0] [R=0] [CB=1] [CT=3] [N=2]	[T=3] [B=0] [R=0] [CB=1] [CT=3] [N=3]	[T=3] [B=0] [R=0] [CB=1] [CT=4] [N=0]	[T=3] [B=0] [R=0] [CB=1] [CT=4] [N=1]	
R102	ct_coeff															
	[T=3] [B=0] [R=0] [CB=1] [CT=4] [N=2]	[T=3] [B=0] [R=0] [CB=1] [CT=4] [N=4]	[T=3] [B=0] [R=0] [CB=1] [CT=5] [N=5]	[T=3] [B=0] [R=0] [CB=1] [CT=5] [N=5]	[T=3] [B=0] [R=0] [CB=2] [CT=0] [N=0]	[T=3] [B=0] [R=0] [CB=2] [CT=0] [N=1]	[T=3] [B=0] [R=0] [CB=2] [CT=0] [N=2]	[T=3] [B=0] [R=0] [CB=2] [CT=0] [N=3]	[T=3] [B=0] [R=0] [CB=2] [CT=1] [N=0]	[T=3] [B=0] [R=0] [CB=2] [CT=1] [N=1]	[T=3] [B=0] [R=0] [CB=2] [CT=1] [N=2]	[T=3] [B=0] [R=0] [CB=2] [CT=1] [N=3]	[T=3] [B=0] [R=0] [CB=2] [CT=2] [N=1]	[T=3] [B=0] [R=0] [CB=2] [CT=2] [N=2]		



Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
		[N=3]	[N=0]	[N=1]	[N=2]	[N=3]	[N=0]	[N=1]	[N=2]	[N=3]			[N=2]	[N=3]	[N=0]	
R103	ct_coeff															
	[T=3] [B=0] [R=0] [CB=2] [CT=2] [N=2]	[T=3] [B=0] [R=0] [CB=2] [CT=2] [N=3]	[T=3] [B=0] [R=0] [CB=2] [CT=3] [N=0]	[T=3] [B=0] [R=0] [CB=2] [CT=3] [N=2]	[T=3] [B=0] [R=0] [CB=2] [CT=3] [N=3]	[T=3] [B=0] [R=0] [CB=2] [CT=4] [N=0]	[T=3] [B=0] [R=0] [CB=2] [CT=4] [N=1]	[T=3] [B=0] [R=0] [CB=2] [CT=4] [N=2]	[T=3] [B=0] [R=0] [CB=2] [CT=4] [N=3]	[T=3] [B=0] [R=0] [CB=2] [CT=5] [N=0]	[T=3] [B=0] [R=0] [CB=2] [CT=5] [N=1]	[T=3] [B=0] [R=0] [CB=2] [CT=5] [N=2]	[T=3] [B=0] [R=0] [CB=2] [CT=5] [N=3]	[T=3] [B=0] [R=0] [CB=3] [CT=0] [N=1]	[T=3] [B=0] [R=0] [CB=3] [CT=0] [N=0]	[T=3] [B=0] [R=0] [CB=3] [CT=0] [N=1]
R104	ct_coeff															
	[T=3] [B=0] [R=0] [CB=3] [CT=0] [N=2]	[T=3] [B=0] [R=0] [CB=3] [CT=0] [N=3]	[T=3] [B=0] [R=0] [CB=3] [CT=1] [N=0]	[T=3] [B=0] [R=0] [CB=3] [CT=1] [N=2]	[T=3] [B=0] [R=0] [CB=3] [CT=1] [N=3]	[T=3] [B=0] [R=0] [CB=3] [CT=2] [N=0]	[T=3] [B=0] [R=0] [CB=3] [CT=2] [N=1]	[T=3] [B=0] [R=0] [CB=3] [CT=2] [N=2]	[T=3] [B=0] [R=0] [CB=3] [CT=2] [N=3]	[T=3] [B=0] [R=0] [CB=3] [CT=3] [N=0]	[T=3] [B=0] [R=0] [CB=3] [CT=3] [N=1]	[T=3] [B=0] [R=0] [CB=3] [CT=3] [N=2]	[T=3] [B=0] [R=0] [CB=3] [CT=3] [N=3]	[T=3] [B=0] [R=0] [CB=3] [CT=4] [N=0]	[T=3] [B=0] [R=0] [CB=3] [CT=4] [N=1]	
R105	ct_coeff															
	[T=3] [B=0] [R=0] [CB=3] [CT=4] [N=2]	[T=3] [B=0] [R=0] [CB=3] [CT=4] [N=3]	[T=3] [B=0] [R=0] [CB=3] [CT=5] [N=0]	[T=3] [B=0] [R=0] [CB=3] [CT=5] [N=2]	[T=3] [B=0] [R=0] [CB=3] [CT=5] [N=3]	[T=3] [B=0] [R=0] [CB=4] [CT=0] [N=0]	[T=3] [B=0] [R=0] [CB=4] [CT=0] [N=1]	[T=3] [B=0] [R=0] [CB=4] [CT=0] [N=2]	[T=3] [B=0] [R=0] [CB=4] [CT=0] [N=3]	[T=3] [B=0] [R=0] [CB=4] [CT=1] [N=0]	[T=3] [B=0] [R=0] [CB=4] [CT=1] [N=1]	[T=3] [B=0] [R=0] [CB=4] [CT=1] [N=2]	[T=3] [B=0] [R=0] [CB=4] [CT=1] [N=3]	[T=3] [B=0] [R=0] [CB=4] [CT=2] [N=0]	[T=3] [B=0] [R=0] [CB=4] [CT=2] [N=1]	
R106	ct_coeff															

Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[T=3] [B=0] [R=0] [CB=4] [CT=2] [N=2]	[T=3] [B=0] [R=0] [CB=4] [CT=2] [N=3]	[T=3] [B=0] [R=0] [CB=4] [CT=3] [N=0]	[T=3] [B=0] [R=0] [CB=4] [CT=3] [N=2]	[T=3] [B=0] [R=0] [CB=4] [CT=3] [N=3]	[T=3] [B=0] [R=0] [CB=4] [CT=4] [N=0]	[T=3] [B=0] [R=0] [CB=4] [CT=4] [N=1]	[T=3] [B=0] [R=0] [CB=4] [CT=4] [N=2]	[T=3] [B=0] [R=0] [CB=4] [CT=4] [N=3]	[T=3] [B=0] [R=0] [CB=4] [CT=5] [N=0]	[T=3] [B=0] [R=0] [CB=4] [CT=5] [N=1]	[T=3] [B=0] [R=0] [CB=4] [CT=5] [N=2]	[T=3] [B=0] [R=0] [CB=4] [CT=5] [N=3]	[T=3] [B=0] [R=0] [CB=5] [CT=0] [N=0]	[T=3] [B=0] [R=0] [CB=5] [CT=0] [N=1]	
R107	ct_coeff															
	[T=3] [B=0] [R=0] [CB=5] [CT=0] [N=2]	[T=3] [B=0] [R=0] [CB=5] [CT=0] [N=3]	[T=3] [B=0] [R=0] [CB=5] [CT=1] [N=0]	[T=3] [B=0] [R=0] [CB=5] [CT=1] [N=1]	[T=3] [B=0] [R=0] [CB=5] [CT=1] [N=2]	[T=3] [B=0] [R=0] [CB=5] [CT=2] [N=3]	[T=3] [B=0] [R=0] [CB=5] [CT=2] [N=0]	[T=3] [B=0] [R=0] [CB=5] [CT=2] [N=1]	[T=3] [B=0] [R=0] [CB=5] [CT=2] [N=2]	[T=3] [B=0] [R=0] [CB=5] [CT=2] [N=3]	[T=3] [B=0] [R=0] [CB=5] [CT=3] [N=0]	[T=3] [B=0] [R=0] [CB=5] [CT=3] [N=1]	[T=3] [B=0] [R=0] [CB=5] [CT=3] [N=2]	[T=3] [B=0] [R=0] [CB=5] [CT=3] [N=3]	[T=3] [B=0] [R=0] [CB=5] [CT=4] [N=0]	
R108	ct_coeff															
	[T=3] [B=0] [R=0] [CB=5] [CT=4] [N=2]	[T=3] [B=0] [R=0] [CB=5] [CT=4] [N=3]	[T=3] [B=0] [R=0] [CB=5] [CT=5] [N=0]	[T=3] [B=0] [R=0] [CB=5] [CT=5] [N=2]	[T=3] [B=0] [R=0] [CB=5] [CT=5] [N=3]	[T=3] [B=0] [R=1] [CB=0] [CT=0] [N=0]	[T=3] [B=0] [R=1] [CB=0] [CT=0] [N=1]	[T=3] [B=0] [R=1] [CB=0] [CT=0] [N=2]	[T=3] [B=0] [R=1] [CB=0] [CT=0] [N=3]	[T=3] [B=0] [R=1] [CB=0] [CT=1] [N=0]	[T=3] [B=0] [R=1] [CB=0] [CT=1] [N=1]	[T=3] [B=0] [R=1] [CB=0] [CT=1] [N=2]	[T=3] [B=0] [R=1] [CB=0] [CT=1] [N=3]	[T=3] [B=0] [R=1] [CB=0] [CT=2] [N=0]		
R109	ct_coeff															
	[T=3] [B=0]															



Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[R=1] [CB=0] [CT=2] [N=2]	[R=1] [CB=0] [CT=2] [N=3]	[R=1] [CB=1] [CT=0] [N=0]	[R=1] [CB=1] [CT=0] [N=1]	[R=1] [CB=1] [CT=0] [N=2]	[R=1] [CB=1] [CT=1] [N=3]	[R=1] [CB=1] [CT=1] [N=0]	[R=1] [CB=1] [CT=1] [N=1]	[R=1] [CB=1] [CT=1] [N=2]	[R=1] [CB=1] [CT=1] [N=3]	[R=1] [CB=1] [CT=2] [N=0]	[R=1] [CB=1] [CT=2] [N=1]	[R=1] [CB=1] [CT=2] [N=2]	[R=1] [CB=1] [CT=2] [N=3]	[R=1] [CB=1] [CT=3] [N=0]	[R=1] [CB=1] [CT=3] [N=1]
R110	ct_coeff															
	[T=3] [B=0] [R=1] [CB=1] [CT=3] [N=2]	[T=3] [B=0] [R=1] [CB=1] [CT=3] [N=3]	[T=3] [B=0] [R=1] [CB=1] [CT=4] [N=0]	[T=3] [B=0] [R=1] [CB=1] [CT=4] [N=1]	[T=3] [B=0] [R=1] [CB=1] [CT=4] [N=2]	[T=3] [B=0] [R=1] [CB=1] [CT=5] [N=3]	[T=3] [B=0] [R=1] [CB=1] [CT=5] [N=0]	[T=3] [B=0] [R=1] [CB=1] [CT=5] [N=1]	[T=3] [B=0] [R=1] [CB=1] [CT=5] [N=2]	[T=3] [B=0] [R=1] [CB=2] [CT=0] [N=0]	[T=3] [B=0] [R=1] [CB=2] [CT=0] [N=1]	[T=3] [B=0] [R=1] [CB=2] [CT=0] [N=2]	[T=3] [B=0] [R=1] [CB=2] [CT=0] [N=3]	[T=3] [B=0] [R=1] [CB=2] [CT=1] [N=0]	[T=3] [B=0] [R=1] [CB=2] [CT=1] [N=1]	[T=3] [B=0] [R=1] [CB=2] [CT=1] [N=2]
R111	ct_coeff															
	[T=3] [B=0] [R=1] [CB=2] [CT=1] [N=2]	[T=3] [B=0] [R=1] [CB=2] [CT=1] [N=3]	[T=3] [B=0] [R=1] [CB=2] [CT=2] [N=0]	[T=3] [B=0] [R=1] [CB=2] [CT=2] [N=1]	[T=3] [B=0] [R=1] [CB=2] [CT=2] [N=2]	[T=3] [B=0] [R=1] [CB=2] [CT=3] [N=0]	[T=3] [B=0] [R=1] [CB=2] [CT=3] [N=1]	[T=3] [B=0] [R=1] [CB=2] [CT=3] [N=2]	[T=3] [B=0] [R=1] [CB=2] [CT=3] [N=3]	[T=3] [B=0] [R=1] [CB=2] [CT=4] [N=0]	[T=3] [B=0] [R=1] [CB=2] [CT=4] [N=1]	[T=3] [B=0] [R=1] [CB=2] [CT=4] [N=2]	[T=3] [B=0] [R=1] [CB=2] [CT=4] [N=3]	[T=3] [B=0] [R=1] [CB=2] [CT=5] [N=0]	[T=3] [B=0] [R=1] [CB=2] [CT=5] [N=1]	[T=3] [B=0] [R=1] [CB=2] [CT=5] [N=2]
R112	ct_coeff															
	[T=3] [B=0] [R=1] [CB=2]	[T=3] [B=0] [R=1] [CB=3]														



Rxxx Value 1 row = 1 Cacheline		16 32-bit counters															
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[CT=5] [N=2]	[CB=2]	[CB=3]	[CB=3]	[CB=3]	[CB=3]	[CB=3]	[CT=3] [N=1]									
	[CT=5] [N=3]	[CT=0]	[CT=0]	[CT=0]	[CT=0]	[CT=0]	[CT=0]	[CT=1]	[CT=1]	[CT=1]	[CT=1]	[CT=1]	[CT=1]	[CT=2] [N=2]	[CT=2] [N=3]	[CT=3] [N=0]	[CT=3] [N=1]
R113	ct_coef																
	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	
	[R=1] [CB=3]	[R=1] [CB=3]	[R=1] [CB=3]	[R=1] [CB=3]	[R=1] [CB=3]	[R=1] [CB=3]	[R=1] [CB=3]	[R=1] [CB=3]	[R=1] [CB=3]	[R=1] [CB=3]	[R=1] [CB=3]	[R=1] [CB=3]	[R=1] [CB=3]	[R=1] [CB=3]	[R=1] [CB=3]	[R=1] [CB=3]	
	[CT=3] [N=2]	[CB=3]	[CB=3]	[CB=3]	[CB=3]	[CB=3]	[CB=3]	[CB=3]	[CB=3]	[CB=3]	[CB=3]	[CB=4] [CT=0]	[CB=4] [CT=0]	[CB=4] [CT=0]	[CB=4] [CT=0]	[CB=4] [CT=1] [N=1]	[CB=4] [CT=1] [N=1]
	[CT=3] [N=3]	[CT=4] [N=0]	[CT=4] [N=1]	[CT=4] [N=2]	[CT=4] [N=3]	[CT=5] [N=0]	[CT=5] [N=1]	[CT=5] [N=2]	[CT=5] [N=3]			[CT=0] [N=1]	[CT=0] [N=2]	[CT=0] [N=3]	[CT=1] [N=0]	[CT=1] [N=1]	[CT=1] [N=0]
R114	ct_coef																
	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	
	[R=1] [CB=4]	[R=1] [CB=4]	[R=1] [CB=4]	[R=1] [CB=4]	[R=1] [CB=4]	[R=1] [CB=4]	[R=1] [CB=4]	[R=1] [CB=4]	[R=1] [CB=4]	[R=1] [CB=4]	[R=1] [CB=4]	[R=1] [CB=4]	[R=1] [CB=4]	[R=1] [CB=4]	[R=1] [CB=4]	[R=1] [CB=4]	
	[CT=1] [N=2]	[CB=4]	[CB=4]	[CB=4]	[CB=4]	[CB=4]	[CB=4]	[CB=4]	[CB=4]	[CB=4]	[CB=4]	[CB=4] [CT=4]	[CB=4] [CT=4]	[CB=4] [CT=4]	[CB=4] [CT=5]	[CB=4] [CT=5] [N=1]	[CB=4] [CT=5] [N=0]
	[CT=1] [N=3]	[CT=2] [N=0]	[CT=2] [N=1]	[CT=2] [N=2]	[CT=2] [N=3]	[CT=3] [N=0]	[CT=3] [N=1]	[CT=3] [N=2]	[CT=3] [N=3]			[CT=4] [N=1]	[CT=4] [N=2]	[CT=4] [N=3]	[CT=5] [N=0]	[CT=5] [N=1]	[CT=5] [N=0]
R115	ct_coef																
	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	[T=3] [B=0]	
	[R=1] [CB=4]	[R=1] [CB=4]	[R=1] [CB=5]	[R=1] [CB=5] [CT=2]	[R=1] [CB=5] [CT=2]	[R=1] [CB=5] [CT=2]	[R=1] [CB=5] [CT=3]	[R=1] [CB=5] [CT=3]	[R=1] [CB=5] [CT=3]								
	[CT=5] [N=2]	[CB=4]	[CB=5]	[CB=5] [CT=2]	[CB=5] [CT=2]	[CB=5] [CT=2]	[CB=5] [CT=3]	[CB=5] [CT=3]	[CB=5] [CT=3]								



Rxxx Value 1 row = 1 Cacheline	16 32-bit counters																
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
	[CT=5] [N=3]	[CT=0] [N=0]	[CT=0] [N=1]	[CT=0] [N=2]	[CT=0] [N=3]	[CT=1] [N=0]	[CT=1] [N=1]	[CT=1] [N=2]	[CT=1] [N=3]	[N=0]	[N=1]	[CT=2] [N=2]	[CT=2] [N=3]	[CT=3] [N=0]			
R116	ct_coef																
	[T=3] [B=0] [R=1] [CB=5] [CT=3] [N=2]	[T=3] [B=0] [R=1] [CB=5] [CT=3] [N=3]	[T=3] [B=0] [R=1] [CB=5] [CT=4] [N=0]	[T=3] [B=0] [R=1] [CB=5] [CT=4] [N=1]	[T=3] [B=0] [R=1] [CB=5] [CT=4] [N=2]	[T=3] [B=0] [R=1] [CB=5] [CT=5] [N=0]	[T=3] [B=0] [R=1] [CB=5] [CT=5] [N=1]	[T=3] [B=0] [R=1] [CB=5] [CT=5] [N=2]	[T=3] [B=0] [R=1] [CB=5] [CT=5] [N=3]	[T=3] [B=1] [R=0] [CB=0] [CT=0] [N=0]	[T=3] [B=1] [R=0] [CB=0] [CT=0] [N=1]	[T=3] [B=1] [R=0] [CB=0] [CT=0] [N=2]	[T=3] [B=1] [R=0] [CB=0] [CT=0] [N=3]	[T=3] [B=1] [R=0] [CB=0] [CT=1] [N=0]	[T=3] [B=1] [R=0] [CB=0] [CT=1] [N=1]	[T=3] [B=1] [R=0] [CB=0] [CT=1] [N=2]	[T=3] [B=1] [R=0] [CB=0] [CT=1] [N=3]
R117	ct_coef																
	[T=3] [B=1] [R=0] [CB=0] [CT=1] [N=2]	[T=3] [B=1] [R=0] [CB=0] [CT=1] [N=3]	[T=3] [B=1] [R=0] [CB=0] [CT=2] [N=0]	[T=3] [B=1] [R=0] [CB=0] [CT=2] [N=1]	[T=3] [B=1] [R=0] [CB=0] [CT=2] [N=2]	[T=3] [B=1] [R=0] [CB=1] [CT=0] [N=0]	[T=3] [B=1] [R=0] [CB=1] [CT=0] [N=1]	[T=3] [B=1] [R=0] [CB=1] [CT=0] [N=2]	[T=3] [B=1] [R=0] [CB=1] [CT=0] [N=3]	[T=3] [B=1] [R=0] [CB=1] [CT=1] [N=0]	[T=3] [B=1] [R=0] [CB=1] [CT=1] [N=1]	[T=3] [B=1] [R=0] [CB=1] [CT=1] [N=2]	[T=3] [B=1] [R=0] [CB=1] [CT=1] [N=3]	[T=3] [B=1] [R=0] [CB=1] [CT=2] [N=0]	[T=3] [B=1] [R=0] [CB=1] [CT=2] [N=1]	[T=3] [B=1] [R=0] [CB=1] [CT=2] [N=2]	[T=3] [B=1] [R=0] [CB=1] [CT=2] [N=3]
R118	ct_coef																
	[T=3] [B=1] [R=0] [CB=1] [CT=2] [N=2]	[T=3] [B=1] [R=0] [CB=1] [CT=2] [N=3]	[T=3] [B=1] [R=0] [CB=1] [CT=3] [N=0]	[T=3] [B=1] [R=0] [CB=1] [CT=3] [N=1]	[T=3] [B=1] [R=0] [CB=1] [CT=3] [N=2]	[T=3] [B=1] [R=0] [CB=1] [CT=4] [N=0]	[T=3] [B=1] [R=0] [CB=1] [CT=4] [N=1]	[T=3] [B=1] [R=0] [CB=1] [CT=4] [N=2]	[T=3] [B=1] [R=0] [CB=1] [CT=4] [N=3]	[T=3] [B=1] [R=0] [CB=1] [CT=5] [N=0]	[T=3] [B=1] [R=0] [CB=1] [CT=5] [N=1]	[T=3] [B=1] [R=0] [CB=1] [CT=5] [N=2]	[T=3] [B=1] [R=0] [CB=1] [CT=5] [N=3]	[T=3] [B=1] [R=0] [CB=2] [CT=0] [N=1]	[T=3] [B=1] [R=0] [CB=2] [CT=0] [N=2]	[T=3] [B=1] [R=0] [CB=2] [CT=0] [N=3]	

Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	ct_coef															
R119	[T=3] [B=1] [R=0] [CB=2] [CT=0] [N=2]	[T=3] [B=1] [R=0] [CB=2] [CT=0] [N=3]	[T=3] [B=1] [R=0] [CB=2] [CT=1] [N=0]	[T=3] [B=1] [R=0] [CB=2] [CT=1] [N=1]	[T=3] [B=1] [R=0] [CB=2] [CT=1] [N=2]	[T=3] [B=1] [R=0] [CB=2] [CT=1] [N=3]	[T=3] [B=1] [R=0] [CB=2] [CT=2] [N=0]	[T=3] [B=1] [R=0] [CB=2] [CT=2] [N=1]	[T=3] [B=1] [R=0] [CB=2] [CT=2] [N=2]	[T=3] [B=1] [R=0] [CB=2] [CT=2] [N=3]	[T=3] [B=1] [R=0] [CB=2] [CT=3] [N=0]	[T=3] [B=1] [R=0] [CB=2] [CT=3] [N=1]	[T=3] [B=1] [R=0] [CB=2] [CT=3] [N=2]	[T=3] [B=1] [R=0] [CB=2] [CT=4] [N=0]	[T=3] [B=1] [R=0] [CB=2] [CT=4] [N=1]	
R120	[T=3] [B=1] [R=0] [CB=2] [CT=4] [N=2]	[T=3] [B=1] [R=0] [CB=2] [CT=4] [N=3]	[T=3] [B=1] [R=0] [CB=2] [CT=5] [N=0]	[T=3] [B=1] [R=0] [CB=2] [CT=5] [N=1]	[T=3] [B=1] [R=0] [CB=2] [CT=5] [N=2]	[T=3] [B=1] [R=0] [CB=2] [CT=0] [N=3]	[T=3] [B=1] [R=0] [CB=3] [CT=0] [N=0]	[T=3] [B=1] [R=0] [CB=3] [CT=0] [N=1]	[T=3] [B=1] [R=0] [CB=3] [CT=0] [N=2]	[T=3] [B=1] [R=0] [CB=3] [CT=0] [N=3]	[T=3] [B=1] [R=0] [CB=3] [CT=1] [N=0]	[T=3] [B=1] [R=0] [CB=3] [CT=1] [N=1]	[T=3] [B=1] [R=0] [CB=3] [CT=1] [N=2]	[T=3] [B=1] [R=0] [CB=3] [CT=1] [N=3]	[T=3] [B=1] [R=0] [CB=3] [CT=2] [N=0]	
R121	[T=3] [B=1] [R=0] [CB=3] [CT=2] [N=2]	[T=3] [B=1] [R=0] [CB=3] [CT=2] [N=3]	[T=3] [B=1] [R=0] [CB=3] [CT=3] [N=0]	[T=3] [B=1] [R=0] [CB=3] [CT=3] [N=1]	[T=3] [B=1] [R=0] [CB=3] [CT=3] [N=2]	[T=3] [B=1] [R=0] [CB=3] [CT=4] [N=0]	[T=3] [B=1] [R=0] [CB=3] [CT=4] [N=1]	[T=3] [B=1] [R=0] [CB=3] [CT=4] [N=2]	[T=3] [B=1] [R=0] [CB=3] [CT=4] [N=3]	[T=3] [B=1] [R=0] [CB=3] [CT=5] [N=0]	[T=3] [B=1] [R=0] [CB=3] [CT=5] [N=1]	[T=3] [B=1] [R=0] [CB=3] [CT=5] [N=2]	[T=3] [B=1] [R=0] [CB=3] [CT=5] [N=3]	[T=3] [B=1] [R=0] [CB=4] [CT=0] [N=1]		
R122	ct_coef															
	[T=3]	[T=3]														



Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[B=1] [R=0] [CB=4] [CT=0] [N=2]	[B=1] [R=0] [CB=4] [CT=0] [N=3]	[B=1] [R=0] [CB=4] [CT=1] [N=0]	[B=1] [R=0] [CB=4] [CT=1] [N=1]	[B=1] [R=0] [CB=4] [CT=1] [N=2]	[B=1] [R=0] [CB=4] [CT=1] [N=3]	[B=1] [R=0] [CB=4] [CT=2] [N=0]	[B=1] [R=0] [CB=4] [CT=2] [N=1]	[B=1] [R=0] [CB=4] [CT=2] [N=2]	[B=1] [R=0] [CB=4] [CT=2] [N=3]	[B=1] [R=0] [CB=4] [CT=3] [N=0]	[B=1] [R=0] [CB=4] [CT=3] [N=1]	[B=1] [R=0] [CB=4] [CT=3] [N=2]	[B=1] [R=0] [CB=4] [CT=3] [N=3]	[B=1] [R=0] [CB=4] [CT=4] [N=0]	
R123	ct_coeff															
	[T=3] [B=1] [R=0] [CB=4] [CT=4] [N=2]	[T=3] [B=1] [R=0] [CB=4] [CT=4] [N=3]	[T=3] [B=1] [R=0] [CB=4] [CT=5] [N=0]	[T=3] [B=1] [R=0] [CB=4] [CT=5] [N=1]	[T=3] [B=1] [R=0] [CB=4] [CT=5] [N=2]	[T=3] [B=1] [R=0] [CB=4] [CT=5] [N=3]	[T=3] [B=1] [R=0] [CB=5] [CT=0] [N=0]	[T=3] [B=1] [R=0] [CB=5] [CT=0] [N=1]	[T=3] [B=1] [R=0] [CB=5] [CT=0] [N=2]	[T=3] [B=1] [R=0] [CB=5] [CT=0] [N=3]	[T=3] [B=1] [R=0] [CB=5] [CT=1] [N=0]	[T=3] [B=1] [R=0] [CB=5] [CT=1] [N=1]	[T=3] [B=1] [R=0] [CB=5] [CT=1] [N=2]	[T=3] [B=1] [R=0] [CB=5] [CT=1] [N=3]	[T=3] [B=1] [R=0] [CB=5] [CT=2] [N=0]	
R124	ct_coeff															
	[T=3] [B=1] [R=0] [CB=5] [CT=2] [N=2]	[T=3] [B=1] [R=0] [CB=5] [CT=2] [N=3]	[T=3] [B=1] [R=0] [CB=5] [CT=3] [N=0]	[T=3] [B=1] [R=0] [CB=5] [CT=3] [N=1]	[T=3] [B=1] [R=0] [CB=5] [CT=3] [N=2]	[T=3] [B=1] [R=0] [CB=5] [CT=3] [N=3]	[T=3] [B=1] [R=0] [CB=5] [CT=4] [N=0]	[T=3] [B=1] [R=0] [CB=5] [CT=4] [N=1]	[T=3] [B=1] [R=0] [CB=5] [CT=4] [N=2]	[T=3] [B=1] [R=0] [CB=5] [CT=4] [N=3]	[T=3] [B=1] [R=0] [CB=5] [CT=5] [N=0]	[T=3] [B=1] [R=0] [CB=5] [CT=5] [N=1]	[T=3] [B=1] [R=0] [CB=5] [CT=5] [N=2]	[T=3] [B=1] [R=0] [CB=5] [CT=5] [N=3]	[T=3] [B=1] [R=1] [CB=0] [CT=0] [N=1]	
R125	ct_coeff															
	[T=3] [B=1] [R=1]															

Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[CB=0] [CT=0] [N=2]	[CB=0] [CT=0] [N=3]	[CB=0] [CT=1] [N=0]	[CB=0] [CT=1] [N=1]	[CB=0] [CT=1] [N=2]	[CB=0] [CT=1] [N=3]	[CB=0] [CT=2] [N=0]	[CB=0] [CT=2] [N=1]	[CB=0] [CT=2] [N=2]	[CB=0] [CT=2] [N=3]	[CB=1] [CT=0] [N=0]	[CB=1] [CT=0] [N=1]	[CB=1] [CT=0] [N=2]	[CB=1] [CT=0] [N=3]	[CB=1] [CT=1] [N=0]	[CB=1] [CT=1] [N=1]
R126	ct_coeff															
	[T=3] [B=1] [R=1] [CB=1] [CT=1] [N=2]	[T=3] [B=1] [R=1] [CB=1] [CT=1] [N=2]	[T=3] [B=1] [R=1] [CB=1] [CT=2] [N=0]	[T=3] [B=1] [R=1] [CB=1] [CT=2] [N=1]	[T=3] [B=1] [R=1] [CB=1] [CT=2] [N=2]	[T=3] [B=1] [R=1] [CB=1] [CT=3] [N=3]	[T=3] [B=1] [R=1] [CB=1] [CT=3] [N=0]	[T=3] [B=1] [R=1] [CB=1] [CT=3] [N=1]	[T=3] [B=1] [R=1] [CB=1] [CT=3] [N=2]	[T=3] [B=1] [R=1] [CB=1] [CT=4] [N=3]	[T=3] [B=1] [R=1] [CB=1] [CT=4] [N=0]	[T=3] [B=1] [R=1] [CB=1] [CT=4] [N=1]	[T=3] [B=1] [R=1] [CB=1] [CT=4] [N=2]	[T=3] [B=1] [R=1] [CB=1] [CT=5] [N=3]	[T=3] [B=1] [R=1] [CB=1] [CT=5] [N=0]	
R127	ct_coeff															
	[T=3] [B=1] [R=1] [CB=1] [CT=5] [N=2]	[T=3] [B=1] [R=1] [CB=1] [CT=5] [N=0]	[T=3] [B=1] [R=1] [CB=2] [CT=0] [N=1]	[T=3] [B=1] [R=1] [CB=2] [CT=0] [N=2]	[T=3] [B=1] [R=1] [CB=2] [CT=0] [N=3]	[T=3] [B=1] [R=1] [CB=2] [CT=1] [N=0]	[T=3] [B=1] [R=1] [CB=2] [CT=1] [N=1]	[T=3] [B=1] [R=1] [CB=2] [CT=1] [N=2]	[T=3] [B=1] [R=1] [CB=2] [CT=1] [N=3]	[T=3] [B=1] [R=1] [CB=2] [CT=2] [N=0]	[T=3] [B=1] [R=1] [CB=2] [CT=2] [N=1]	[T=3] [B=1] [R=1] [CB=2] [CT=2] [N=2]	[T=3] [B=1] [R=1] [CB=2] [CT=2] [N=3]	[T=3] [B=1] [R=1] [CB=2] [CT=3] [N=0]		
R128	ct_coeff															
	[T=3] [B=1] [R=1] [CB=2] [CT=3]	[T=3] [B=1] [R=1] [CB=3] [CT=1]	[T=3] [B=1] [R=1] [CB=3] [CT=1]													



Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[N=2]	[CT=3] [N=3]	[CT=4] [N=0]	[CT=4] [N=1]	[CT=4] [N=2]	[CT=4] [N=3]	[CT=5] [N=0]	[CT=5] [N=1]	[CT=5] [N=2]	[CT=5] [N=3]	[CT=0] [N=0]	[CT=0] [N=1]	[CT=0] [N=2]	[CT=0] [N=3]	[CT=1] [N=0]	[N=1]
R129	ct_coeff															
	[T=3] [B=1] [R=1] [CB=3] [CT=1] [N=2]	[T=3] [B=1] [R=1] [CB=3] [CT=1] [N=3]	[T=3] [B=1] [R=1] [CB=3] [CT=2] [N=0]	[T=3] [B=1] [R=1] [CB=3] [CT=2] [N=2]	[T=3] [B=1] [R=1] [CB=3] [CT=2] [N=3]	[T=3] [B=1] [R=1] [CB=3] [CT=3] [N=0]	[T=3] [B=1] [R=1] [CB=3] [CT=3] [N=1]	[T=3] [B=1] [R=1] [CB=3] [CT=3] [N=2]	[T=3] [B=1] [R=1] [CB=3] [CT=3] [N=3]	[T=3] [B=1] [R=1] [CB=3] [CT=4] [N=0]	[T=3] [B=1] [R=1] [CB=3] [CT=4] [N=1]	[T=3] [B=1] [R=1] [CB=3] [CT=4] [N=2]	[T=3] [B=1] [R=1] [CB=3] [CT=4] [N=3]	[T=3] [B=1] [R=1] [CB=3] [CT=5] [N=0]	[T=3] [B=1] [R=1] [CB=3] [CT=5] [N=1]	[T=3] [B=1] [R=1] [CB=3] [CT=5] [N=2]
R130	ct_coeff															
	[T=3] [B=1] [R=1] [CB=3] [CT=5] [N=2]	[T=3] [B=1] [R=1] [CB=3] [CT=5] [N=3]	[T=3] [B=1] [R=1] [CB=4] [CT=0] [N=1]	[T=3] [B=1] [R=1] [CB=4] [CT=0] [N=2]	[T=3] [B=1] [R=1] [CB=4] [CT=0] [N=3]	[T=3] [B=1] [R=1] [CB=4] [CT=1] [N=0]	[T=3] [B=1] [R=1] [CB=4] [CT=1] [N=1]	[T=3] [B=1] [R=1] [CB=4] [CT=1] [N=2]	[T=3] [B=1] [R=1] [CB=4] [CT=1] [N=3]	[T=3] [B=1] [R=1] [CB=4] [CT=2] [N=0]	[T=3] [B=1] [R=1] [CB=4] [CT=2] [N=1]	[T=3] [B=1] [R=1] [CB=4] [CT=2] [N=2]	[T=3] [B=1] [R=1] [CB=4] [CT=2] [N=3]	[T=3] [B=1] [R=1] [CB=4] [CT=3] [N=0]	[T=3] [B=1] [R=1] [CB=4] [CT=3] [N=1]	[T=3] [B=1] [R=1] [CB=4] [CT=3] [N=2]
R131	ct_coeff															
	[T=3] [B=1] [R=1] [CB=4] [CT=3] [N=2]	[T=3] [B=1] [R=1] [CB=4] [CT=3] [N=3]	[T=3] [B=1] [R=1] [CB=4] [CT=4] [N=4]	[T=3] [B=1] [R=1] [CB=4] [CT=4] [N=5]	[T=3] [B=1] [R=1] [CB=4] [CT=5] [N=5]	[T=3] [B=1] [R=1] [CB=4] [CT=5] [N=5]	[T=3] [B=1] [R=1] [CB=5] [CT=0] [N=0]	[T=3] [B=1] [R=1] [CB=5] [CT=0] [N=1]	[T=3] [B=1] [R=1] [CB=5] [CT=0] [N=1]	[T=3] [B=1] [R=1] [CB=5] [CT=0] [N=1]	[T=3] [B=1] [R=1] [CB=5] [CT=0] [N=1]	[T=3] [B=1] [R=1] [CB=5] [CT=0] [N=1]	[T=3] [B=1] [R=1] [CB=5] [CT=1] [N=1]	[T=3] [B=1] [R=1] [CB=5] [CT=1] [N=1]	[T=3] [B=1] [R=1] [CB=5] [CT=1] [N=1]	

Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
		[N=3]	[N=0]	[N=1]	[N=2]	[N=3]	[N=0]	[N=1]	[N=2]	[N=3]			[N=2]	[N=3]	[N=0]	
R132	ct_coef															
	[T=3] [B=1] [R=1] [CB=5] [CT=1] [N=2]	[T=3] [B=1] [R=1] [CB=5] [CT=1] [N=3]	[T=3] [B=1] [R=1] [CB=5] [CT=2] [N=0]	[T=3] [B=1] [R=1] [CB=5] [CT=2] [N=1]	[T=3] [B=1] [R=1] [CB=5] [CT=2] [N=2]	[T=3] [B=1] [R=1] [CB=5] [CT=2] [N=3]	[T=3] [B=1] [R=1] [CB=5] [CT=3] [N=0]	[T=3] [B=1] [R=1] [CB=5] [CT=3] [N=1]	[T=3] [B=1] [R=1] [CB=5] [CT=3] [N=2]	[T=3] [B=1] [R=1] [CB=5] [CT=4] [N=3]	[T=3] [B=1] [R=1] [CB=5] [CT=4] [N=0]	[T=3] [B=1] [R=1] [CB=5] [CT=4] [N=1]	[T=3] [B=1] [R=1] [CB=5] [CT=4] [N=2]	[T=3] [B=1] [R=1] [CB=5] [CT=4] [N=3]	[T=3] [B=1] [R=1] [CB=5] [CT=5] [N=0]	[T=3] [B=1] [R=1] [CB=5] [CT=5] [N=1]
R133	ct_coef		ct_mbskip						ct_inter_mode							
	[T=3] [B=1] [R=1] [CB=5] [CT=5] [N=2]	[T=3] [B=1] [R=1] [CB=5] [CT=5] [N=3]	[0] [0]	[0] [1]	[1] [0]	[1] [1]	[2] [0]	[2] [1]	[0] [0]	[0] [1]	[0] [2]	[0] [3]	[1] [0]	[1] [1]	[1] [2]	[1] [3]
R134	ct_inter_mode															
	[2] [0]	[2] [1]	[2] [2]	[2] [3]	[3] [0]	[3] [1]	[3] [2]	[3] [3]	[4] [0]	[4] [1]	[4] [2]	[4] [3]	[5] [0]	[5] [1]	[5] [2]	[5] [3]
R135	ct_inter_mode				ct_switchable_interp											
	[6] [0]	[6] [1]	[6] [2]	[6] [3]	[0] [0]	[0] [1]	[0] [2]	[1] [0]	[1] [1]	[1] [2]	[2] [0]	[2] [1]	[2] [2]	[3] [0]	[3] [1]	[3] [2]
R136	ct_intra_inter								ct_comp_inter							
	[0] [0]	[0] [1]	[1] [0]	[1] [1]	[2] [0]	[2] [1]	[3] [0]	[3] [1]	[0] [0]	[0] [1]	[1] [0]	[1] [1]	[2] [0]	[2] [1]	[3] [0]	[3] [1]



Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	ct_comp_inter															
R137	[4] [0]	[4] [1]	[0] [0]	[0] [1]	[0] [1]	[0] [1]	[1] [0]	[1] [0]	[1] [1]	[1] [1]	[2] [0]	[2] [1]	[2] [1]	[2] [1]	[3] [0]	[3] [1]
R138	ct_single_ref						ct_comp_ref									
R139	[3] [1] [0]	[3] [1] [1]	[4] [0]	[4] [0]	[4] [1]	[4] [1]	[0] [0]	[0] [1]	[1] [0]	[1] [1]	[2] [0]	[2] [1]	[3] [0]	[3] [1]	[4] [0]	[4] [1]
R140	ct_y_mode															
R141	[1] [6]	[1] [7]	[1] [8]	[1] [9]	[2] [0]	[2] [1]	[2] [2]	[2] [3]	[2] [4]	[2] [5]	[2] [6]	[2] [7]	[2] [8]	[2] [9]	[3] [0]	[3] [1]
R142	ct_y_mode								ct_partition							
R143	[2] [0]	[2] [1]	[2] [2]	[2] [3]	[3] [0]	[3] [1]	[3] [2]	[3] [3]	[4] [0]	[4] [1]	[4] [2]	[4] [3]	[5] [0]	[5] [1]	[5] [2]	[5] [3]
R144	ct_partition															
R145	ct_partition								ct_mv_joints				ct_mv_sign		ct_mv_classes	

Rxxx Value 1 row = 1 Cacheline	16 32-bit counters																
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
	[14] [0]	[14] [1]	[14] [2]	[14] [3]	[15] [0]	[15] [1]	[15] [2]	[15] [3]	[0]	[1]	[2]	[3]	[0] [1]	[0] [1]	[0] [1]	[0] [1]	
R146	ct_mv_classes										ct_mv_class0	ct_mv_bits					
	[0] [2]	[0] [3]	[0] [4]	[0] [5]	[0] [6]	[0] [7]	[0] [8]	[0] [9]	[0] [10]	[0] [0]	[0] [1]	[0] [0]	[0] [0]	[0] [1]	[0] [1]	[0] [0]	
R147	ct_mv_bits															ct_mv_sign	
	[0] [2] [1]	[0] [3] [0]	[0] [3] [1]	[0] [4] [0]	[0] [4] [1]	[0] [5] [0]	[0] [5] [1]	[0] [6] [0]	[0] [6] [1]	[0] [7] [0]	[0] [7] [1]	[0] [8] [0]	[0] [8] [1]	[0] [9] [0]	[0] [9] [1]	[1] [0]	
R148	ct_mv_sign	ct_mv_classes										ct_mv_class0	ct_mv_bits				
	[1] [1]	[1] [0]	[1] [1]	[1] [2]	[1] [3]	[1] [4]	[1] [5]	[1] [6]	[1] [7]	[1] [8]	[1] [9]	[1] [10]	[1] [0]	[1] [1]	[1] [0]	[1] [1]	
R149	ct_mv_bits																
	[1] [1] [0]	[1] [1] [1]	[1] [2] [0]	[1] [2] [1]	[1] [3] [0]	[1] [3] [1]	[1] [4] [0]	[1] [4] [1]	[1] [5] [0]	[1] [5] [1]	[1] [6] [0]	[1] [6] [1]	[1] [7] [0]	[1] [7] [1]	[1] [8] [0]	[1] [8] [1]	
R150	ct_mv_bits		ct_mv_class0_fp								ct_mv_fp				ct_mv_class0_fp		
	[1] [9] [0]	[1] [9] [1]	[0] [0] [0]	[0] [0] [1]	[0] [0] [2]	[0] [0] [3]	[0] [1] [0]	[0] [1] [1]	[0] [1] [2]	[0] [1] [3]	[0] [0]	[0] [1]	[0] [2]	[0] [3]	[1] [0] [0]	[1] [0] [1]	
R151	ct_mv_class0_fp						ct_mv_fp				ct_mv_class0_hp	ct_mv_hp			ct_mv_class0_hp		
	[1] [0] [2]	[1] [0] [3]	[1] [1] [0]	[1] [1] [1]	[1] [1] [2]	[1] [1] [3]	[1] [0] [1]	[1] [1] [2]	[1] [2] [3]	[1] [3]	[0] [0]	[0] [1]	[0] [0]	[0] [1]	[1] [0] [1]	[1] [0] [1]	
R152	ct_mv_hp		ct_eob_br														



Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[1] [0]	[1] [1]	[T=0] [B=0] [R=0]													
R153	ct_eob_br															
	[T=0] [B=0] [R=0] [CB=2] [CT=5]	[T=0] [B=0] [R=0]														
R154	ct_eob_br															
	[T=0] [B=0] [R=0] [CB=5] [CT=3]	[T=0] [B=0] [R=0]	[T=0] [B=0] [R=0]	[T=0] [B=0] [R=1]												
R155	ct_eob_br															
	[T=0] [B=0] [R=1] [CB=2] [CT=4]	[T=0] [B=0] [R=1]														





Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[R=1] [CB=2] [CT=2]	[R=1] [CB=2] [CT=2]	[R=1] [CB=2] [CT=5]	[R=1] [CB=2] [CT=0]	[R=1] [CB=3] [CT=1]	[R=1] [CB=3] [CT=2]	[R=1] [CB=3] [CT=3]	[R=1] [CB=3] [CT=4]	[R=1] [CB=3] [CT=5]	[R=1] [CB=4] [CT=0]	[R=1] [CB=4] [CT=1]	[R=1] [CB=4] [CT=2]	[R=1] [CB=4] [CT=3]	[R=1] [CB=4] [CT=4]	[R=1] [CB=4] [CT=5]	[R=1] [CB=4] [CT=5]
R160																
	[T=0] [B=1] [R=1] [CB=5] [CT=0]	[T=0] [B=1] [R=1] [CB=5] [CT=1]	[T=0] [B=1] [R=1] [CB=5] [CT=2]	[T=0] [B=1] [R=1] [CB=5] [CT=3]	[T=0] [B=1] [R=1] [CB=5] [CT=4]	[T=0] [B=1] [R=1] [CB=5] [CT=5]	[T=1] [B=0] [R=0]									
R161																
	[T=1] [B=0] [R=0] [CB=2] [CT=1]	[T=1] [B=0] [R=0] [CB=2] [CT=2]	[T=1] [B=0] [R=0] [CB=2] [CT=3]	[T=1] [B=0] [R=0] [CB=2] [CT=4]	[T=1] [B=0] [R=0] [CB=3] [CT=5]	[T=1] [B=0] [R=0]	[T=1] [B=0] [R=0]	[T=1] [B=0] [R=0]	[T=1] [B=0] [R=0]	[T=1] [B=0] [R=0]	[T=1] [B=0] [R=0]	[T=1] [B=0] [R=0]	[T=1] [B=0] [R=0]	[T=1] [B=0] [R=0]	[T=1] [B=0] [R=0]	
R162																
	[T=1] [B=0] [R=0] [CB=4] [CT=5]	[T=1] [B=0] [R=0] [CB=5] [CT=0]	[T=1] [B=0] [R=0] [CB=5] [CT=1]	[T=1] [B=0] [R=0] [CB=5] [CT=2]	[T=1] [B=0] [R=0] [CB=5] [CT=3]	[T=1] [B=0] [R=0] [CB=5] [CT=4]	[T=1] [B=0] [R=1]									

Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
R163	ct_eob_br															
	[T=1] [B=0] [R=1] [CB=2] [CT=0]	[T=1] [B=0] [R=1] [CB=2] [CT=1]	[T=1] [B=0] [R=1] [CB=2] [CT=2]	[T=1] [B=0] [R=1] [CB=2] [CT=3]	[T=1] [B=0] [R=1] [CB=2] [CT=4]	[T=1] [B=0] [R=1] [CB=2] [CT=5]	[T=1] [B=0] [R=1] [CB=3] [CT=0]	[T=1] [B=0] [R=1] [CB=3] [CT=1]	[T=1] [B=0] [R=1] [CB=3] [CT=2]	[T=1] [B=0] [R=1] [CB=3] [CT=3]	[T=1] [B=0] [R=1] [CB=3] [CT=4]	[T=1] [B=0] [R=1] [CB=4] [CT=5]	[T=1] [B=0] [R=1] [CB=4] [CT=0]	[T=1] [B=0] [R=1] [CB=4] [CT=1]	[T=1] [B=0] [R=1] [CB=4] [CT=2]	
R164	ct_eob_br															
	[T=1] [B=0] [R=1] [CB=4] [CT=4]	[T=1] [B=0] [R=1] [CB=4] [CT=5]	[T=1] [B=0] [R=1] [CB=5] [CT=0]	[T=1] [B=0] [R=1] [CB=5] [CT=1]	[T=1] [B=0] [R=1] [CB=5] [CT=2]	[T=1] [B=0] [R=1] [CB=5] [CT=3]	[T=1] [B=0] [R=1] [CB=5] [CT=4]	[T=1] [B=0] [R=1] [CB=5] [CT=5]	[T=1] [B=0] [R=1] [CB=0] [CT=0]	[T=1] [B=1] [R=0] [CB=0] [CT=1]	[T=1] [B=1] [R=0] [CB=0] [CT=2]	[T=1] [B=1] [R=0] [CB=1] [CT=0]	[T=1] [B=1] [R=0] [CB=1] [CT=1]	[T=1] [B=1] [R=0] [CB=1] [CT=2]	[T=1] [B=1] [R=0] [CB=1] [CT=3]	
R165	ct_eob_br															
	[T=1] [B=1] [R=0] [CB=1] [CT=5]	[T=1] [B=1] [R=0] [CB=2] [CT=0]	[T=1] [B=1] [R=0] [CB=2] [CT=1]	[T=1] [B=1] [R=0] [CB=2] [CT=2]	[T=1] [B=1] [R=0] [CB=2] [CT=3]	[T=1] [B=1] [R=0] [CB=2] [CT=4]	[T=1] [B=1] [R=0] [CB=2] [CT=5]	[T=1] [B=1] [R=0] [CB=3] [CT=0]	[T=1] [B=1] [R=0] [CB=3] [CT=1]	[T=1] [B=1] [R=0] [CB=3] [CT=2]	[T=1] [B=1] [R=0] [CB=3] [CT=3]	[T=1] [B=1] [R=0] [CB=3] [CT=4]	[T=1] [B=1] [R=0] [CB=4] [CT=5]	[T=1] [B=1] [R=0] [CB=4] [CT=0]	[T=1] [B=1] [R=0] [CB=4] [CT=1]	
R166	ct_eob_br															
	[T=1] [B=1] [R=0] [CB=4]	[T=1] [B=1] [R=1] [CB=4]														



Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[CT=3]	[CB=4]	[CB=4]	[CB=5]	[CB=5]	[CB=5]	[CB=5]	[CB=5]	[CB=5]	[CB=0]	[CB=0]	[CB=1]	[CB=1]	[CB=1]	[CB=1]	[CT=3]
	[CT=4]	[CT=5]	[CT=0]	[CT=1]	[CT=2]	[CT=3]	[CT=4]	[CT=5]	[CT=0]	[CT=1]	[CT=2]	[CT=0]	[CT=1]	[CT=1]	[CT=2]	
R167	ct_eob_br															
	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]
	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]
	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]
	[CB=1]															[CB=4]
	[CT=4]	[CB=1]	[CB=2]	[CB=2]	[CB=2]	[CB=2]	[CB=2]	[CB=2]	[CB=3]	[CB=3]	[CB=3]	[CB=3]	[CB=3]	[CB=3]	[CB=4]	[CT=1]
	[CT=5]	[CT=0]	[CT=1]	[CT=2]	[CT=3]	[CT=4]	[CT=5]	[CT=0]	[CT=1]							[CT=0]
R168	ct_eob_br															
	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=1]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]
	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]
	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]
	[CB=4]															[CB=1]
	[CT=2]	[CB=4]	[CB=4]	[CB=4]	[CB=5]	[CB=5]	[CB=5]	[CB=5]	[CB=5]	[CB=5]	[CB=0]	[CB=0]	[CB=0]	[CB=1]	[CB=1]	[CT=2]
	[CT=3]	[CT=4]	[CT=5]	[CT=0]	[CT=1]	[CT=2]	[CT=3]	[CT=4]	[CT=5]	[CT=0]						[CT=1]
R169	ct_eob_br															
	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]
	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]
	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]
	[CB=1]															[CB=4]
	[CT=3]	[CB=1]	[CB=1]	[CB=2]	[CB=2]	[CB=2]	[CB=2]	[CB=2]	[CB=3]	[CT=0]						
	[CT=4]	[CT=5]	[CT=0]	[CT=1]	[CT=2]	[CT=3]	[CT=4]	[CT=5]	[CT=0]							[CT=5]
R170	ct_eob_br															
	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]

Rxxx Value 1 row = 1 Cacheline	16 32-bit counters														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	[B=0] [R=0] [CB=4] [CT=1]	[B=0] [R=0] [CB=4] [CT=2]	[B=0] [R=0] [CB=4] [CT=3]	[B=0] [R=0] [CB=4] [CT=4]	[B=0] [R=0] [CB=4] [CT=5]	[B=0] [R=0] [CB=5] [CT=0]	[B=0] [R=0] [CB=5] [CT=1]	[B=0] [R=0] [CB=5] [CT=2]	[B=0] [R=0] [CB=5] [CT=3]	[B=0] [R=0] [CB=5] [CT=4]	[B=0] [R=0] [CB=0] [CT=0]	[B=0] [R=1] [CB=0] [CT=1]	[B=0] [R=1] [CB=0] [CT=2]	[B=0] [R=1] [CB=1] [CT=0]	[B=0] [R=1] [CB=1] [CT=1]
R171	ct_eob_br														
	[T=2] [B=0] [R=1] [CB=1] [CT=2]	[T=2] [B=0] [R=1] [CB=1] [CT=3]	[T=2] [B=0] [R=1] [CB=1] [CT=4]	[T=2] [B=0] [R=1] [CB=1] [CT=5]	[T=2] [B=0] [R=1] [CB=2] [CT=0]	[T=2] [B=0] [R=1] [CB=2] [CT=1]	[T=2] [B=0] [R=1] [CB=2] [CT=2]	[T=2] [B=0] [R=1] [CB=2] [CT=3]	[T=2] [B=0] [R=1] [CB=2] [CT=4]	[T=2] [B=0] [R=1] [CB=3] [CT=0]	[T=2] [B=0] [R=1] [CB=3] [CT=1]	[T=2] [B=0] [R=1] [CB=3] [CT=2]	[T=2] [B=0] [R=1] [CB=3] [CT=3]	[T=2] [B=0] [R=1] [CB=3] [CT=4]	
R172	ct_eob_br														
	[T=2] [B=0] [R=1] [CB=4] [CT=0]	[T=2] [B=0] [R=1] [CB=4] [CT=1]	[T=2] [B=0] [R=1] [CB=4] [CT=2]	[T=2] [B=0] [R=1] [CB=4] [CT=3]	[T=2] [B=0] [R=1] [CB=4] [CT=4]	[T=2] [B=0] [R=1] [CB=5] [CT=0]	[T=2] [B=0] [R=1] [CB=5] [CT=1]	[T=2] [B=0] [R=1] [CB=5] [CT=2]	[T=2] [B=0] [R=1] [CB=5] [CT=3]	[T=2] [B=0] [R=1] [CB=5] [CT=4]	[T=2] [B=0] [R=0] [CB=0] [CT=0]	[T=2] [B=1] [R=0] [CB=0] [CT=1]	[T=2] [B=1] [R=0] [CB=0] [CT=2]	[T=2] [B=1] [R=0] [CB=1] [CT=0]	
R173	ct_eob_br														
	[T=2] [B=1] [R=0] [CB=1] [CT=1]	[T=2] [B=1] [R=0] [CB=1] [CT=1]	[T=2] [B=1] [R=0] [CB=1] [CT=1]	[T=2] [B=1] [R=0] [CB=1] [CT=1]	[T=2] [B=1] [R=0] [CB=2] [CT=2]	[T=2] [B=1] [R=0] [CB=2] [CT=2]	[T=2] [B=1] [R=0] [CB=2] [CT=2]	[T=2] [B=1] [R=0] [CB=2] [CT=2]	[T=2] [B=1] [R=0] [CB=2] [CT=2]	[T=2] [B=1] [R=0] [CB=3] [CT=0]	[T=2] [B=1] [R=0] [CB=3] [CT=0]	[T=2] [B=1] [R=0] [CB=3] [CT=0]	[T=2] [B=1] [R=0] [CB=3] [CT=0]	[T=2] [B=1] [R=0] [CB=3] [CT=0]	



Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
		[CT=2]	[CT=3]	[CT=4]	[CT=5]	[CT=0]	[CT=1]	[CT=2]	[CT=3]	[CT=4]			[CT=1]	[CT=2]	[CT=3]	
R174	ct_eob_br															
	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]
	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]
	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]
	[CB=3]															
	[CT=5]	[CB=4]	[CB=4]	[CB=4]	[CB=4]	[CB=4]	[CB=4]	[CB=5]	[CB=5]	[CB=5]	[CB=5]	[CB=5]	[CB=5]	[CB=0]	[CB=0]	[CT=2]
	[CT=0]	[CT=1]	[CT=2]	[CT=3]	[CT=4]	[CT=5]	[CT=0]	[CT=1]	[CT=2]							
R175	ct_eob_br															
	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]
	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]
	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]
	[CB=1]															
	[CT=0]	[CB=1]	[CB=1]	[CB=1]	[CB=1]	[CB=1]	[CB=2]	[CB=2]	[CB=2]	[CB=2]	[CB=2]	[CB=2]	[CB=3]	[CB=3]	[CB=3]	[CT=3]
	[CT=1]	[CT=2]	[CT=3]	[CT=4]	[CT=5]	[CT=0]	[CT=1]	[CT=2]	[CT=3]							
R176	ct_eob_br															
	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]	[T=2]
	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]	[B=1]
	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]	[R=1]
	[CB=3]															
	[CT=4]	[CB=3]	[CB=4]	[CB=4]	[CB=4]	[CB=4]	[CB=4]	[CB=4]	[CB=5]	[CB=5]	[CB=5]	[CB=5]	[CB=5]	[CB=5]	[CB=0]	[CT=1]
	[CT=5]	[CT=0]	[CT=1]	[CT=2]	[CT=3]	[CT=4]	[CT=5]	[CT=0]	[CT=1]							
R177	ct_eob_br															
	[T=3]	[T=3]	[T=3]	[T=3]	[T=3]	[T=3]	[T=3]	[T=3]	[T=3]	[T=3]	[T=3]	[T=3]	[T=3]	[T=3]	[T=3]	[T=3]
	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]	[B=0]
	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]	[R=0]

Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[CB=0] [CT=2]	[CB=1] [CT=0]	[CB=1] [CT=1]	[CB=1] [CT=2]	[CB=1] [CT=3]	[CB=1] [CT=4]	[CB=1] [CT=5]	[CB=2] [CT=0]	[CB=2] [CT=1]	[CB=2] [CT=2]	[CB=2] [CT=3]	[CB=2] [CT=4]	[CB=2] [CT=5]	[CB=3] [CT=0]	[CB=3] [CT=1]	[CB=3] [CT=2]
R178	ct_eob_br															
	[T=3] [B=0] [R=0] [CB=3] [CT=3]	[T=3] [B=0] [R=0] <td>[T=3] [B=0] [R=0]</td>	[T=3] [B=0] [R=0]													
R179	ct_eob_br															
	[T=3] [B=0] [R=1] [CB=0] [CT=1]	[T=3] [B=0] [R=1] <td>[T=3] [B=0] [R=1]</td>	[T=3] [B=0] [R=1]													
R180	ct_eob_br															
	[T=3] [B=0] [R=1] [CB=3] [CT=2]	[T=3] [B=0] [R=1] <td>[T=3] [B=0] [R=1]</td>	[T=3] [B=0] [R=1]													
R181	ct_eob_br															



Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[T=3] [B=1] [R=0] [CB=0] [CT=0]	[T=3] [B=1] [R=0] [CB=0] [CT=0]	[T=3] [B=1] [R=0] [CB=0] [CT=0]	[T=3] [B=1] [R=0] [CB=1] [CT=1]	[T=3] [B=1] [R=0] [CB=1] [CT=2]	[T=3] [B=1] [R=0] [CB=1] [CT=3]	[T=3] [B=1] [R=0] [CB=1] [CT=4]	[T=3] [B=1] [R=0] [CB=1] [CT=5]	[T=3] [B=1] [R=0] [CB=2] [CT=0]	[T=3] [B=1] [R=0] [CB=2] [CT=1]	[T=3] [B=1] [R=0] [CB=2] [CT=2]	[T=3] [B=1] [R=0] [CB=2] [CT=3]	[T=3] [B=1] [R=0] [CB=2] [CT=4]	[T=3] [B=1] [R=0] [CB=2] [CT=5]	[T=3] [B=1] [R=0] [CB=3] [CT=0]	
R182	ct_eob_br															
	[T=3] [B=1] [R=0] [CB=3] [CT=1]	[T=3] [B=1] [R=0] [CB=3] [CT=2]	[T=3] [B=1] [R=0] [CB=3] [CT=3]	[T=3] [B=1] [R=0] [CB=3] [CT=4]	[T=3] [B=1] [R=0] [CB=4] [CT=5]	[T=3] [B=1] [R=0] [CB=4] [CT=0]	[T=3] [B=1] [R=0] [CB=4] [CT=1]	[T=3] [B=1] [R=0] [CB=4] [CT=2]	[T=3] [B=1] [R=0] [CB=4] [CT=3]	[T=3] [B=1] [R=0] [CB=4] [CT=4]	[T=3] [B=1] [R=0] [CB=5] [CT=5]	[T=3] [B=1] [R=0] [CB=5] [CT=0]	[T=3] [B=1] [R=0] [CB=5] [CT=1]	[T=3] [B=1] [R=0] [CB=5] [CT=2]	[T=3] [B=1] [R=0] [CB=5] [CT=3]	
R183	ct_eob_br															
	[T=3] [B=1] [R=0] [CB=5] [CT=5]	[T=3] [B=1] [R=1] [CB=0] [CT=0]	[T=3] [B=1] [R=1] [CB=0] [CT=1]	[T=3] [B=1] [R=1] [CB=1] [CT=2]	[T=3] [B=1] [R=1] [CB=1] [CT=0]	[T=3] [B=1] [R=1] [CB=1] [CT=1]	[T=3] [B=1] [R=1] [CB=1] [CT=2]	[T=3] [B=1] [R=1] [CB=1] [CT=3]	[T=3] [B=1] [R=1] [CB=1] [CT=4]	[T=3] [B=1] [R=1] [CB=2] [CT=5]	[T=3] [B=1] [R=1] [CB=2] [CT=0]	[T=3] [B=1] [R=1] [CB=2] [CT=1]	[T=3] [B=1] [R=1] [CB=2] [CT=2]	[T=3] [B=1] [R=1] [CB=2] [CT=3]	[T=3] [B=1] [R=1] [CB=2] [CT=5]	
R184	ct_eob_br															
	[T=3] [B=1] [R=1] [CB=3] [CT=0]	[T=3] [B=1] [R=1] [CB=3] [CT=1]	[T=3] [B=1] [R=1] [CB=3] [CT=2]	[T=3] [B=1] [R=1] [CB=3] [CT=0]	[T=3] [B=1] [R=1] [CB=3] [CT=1]	[T=3] [B=1] [R=1] [CB=4] [CT=4]	[T=3] [B=1] [R=1] [CB=4] [CT=4]	[T=3] [B=1] [R=1] [CB=4] [CT=5]	[T=3] [B=1] [R=1] [CB=4] [CT=4]	[T=3] [B=1] [R=1] [CB=5] [CT=5]	[T=3] [B=1] [R=1] [CB=5] [CT=0]	[T=3] [B=1] [R=1] [CB=5] [CT=1]	[T=3] [B=1] [R=1] [CB=5] [CT=2]	[T=3] [B=1] [R=1] [CB=5] [CT=3]	[T=3] [B=1] [R=1] [CB=5] [CT=5]	

Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[CT=1]	[CT=2]	[CT=3]	[CT=4]	[CT=5]	[CT=0]	[CT=1]	[CT=2]	[CT=3]	[CT=4]	[CT=5]	[CT=0]	[CT=1]	[CT=1]	[CT=2]	
R185	ct_eob_br	ct_uv_mode														
	[T=3] [B=1] [R=1] [CB=5] [CT=4]	[T=3] [B=1] [R=1] [CB=5]	[0] [0] [1] [2]	[0] [1] [2] [3]	[0] [2] [3] [4]	[0] [3] [4] [5]	[0] [4] [5] [6]	[0] [5] [6] [7]	[0] [6] [7] [8]	[0] [7] [8] [9]	[0] [8] [9] [0]	[1] [9] [0] [1]	[1] [0] [1] [2]	[1] [1] [2] [3]	[1] [2] [3]	
R186	ct_uv_mode															
	[1] [4]	[1] [5]	[1] [6]	[1] [7]	[1] [8]	[1] [9]	[2] [0]	[2] [1]	[2] [2]	[2] [3]	[2] [4]	[2] [5]	[2] [6]	[2] [7]	[2] [8]	[2] [9]
R187	ct_uv_mode															
	[3] [0]	[3] [1]	[3] [2]	[3] [3]	[3] [4]	[3] [5]	[3] [6]	[3] [7]	[3] [8]	[3] [9]	[4] [0]	[4] [1]	[4] [2]	[4] [3]	[4] [4]	[4] [5]
R188	ct_uv_mode															
	[4] [6]	[4] [7]	[4] [8]	[4] [9]	[5] [0]	[5] [1]	[5] [2]	[5] [3]	[5] [4]	[5] [5]	[5] [6]	[5] [7]	[5] [8]	[5] [9]	[6] [0]	[6] [1]
R189	ct_uv_mode															
	[6] [2]	[6] [3]	[6] [4]	[6] [5]	[6] [6]	[6] [7]	[6] [8]	[6] [9]	[7] [0]	[7] [1]	[7] [2]	[7] [3]	[7] [4]	[7] [5]	[7] [6]	[7] [7]
R190	ct_uv_mode															
	[7] [8]	[7] [9]	[8] [0]	[8] [1]	[8] [2]	[8] [3]	[8] [4]	[8] [5]	[8] [6]	[8] [7]	[8] [8]	[8] [9]	[9] [0]	[9] [1]	[9] [2]	[9] [3]
R191	ct_uv_mode						ct_seg_id						ct_seg_pred			
	[9]	[9]	[9]	[9]	[9]	[9]	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[0]	[0]



Rxxx Value 1 row = 1 Cacheline	16 32-bit counters															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	[4]	[5]	[6]	[7]	[8]	[9]									[0]	[1]
R192	ct_seg_pred															
	[1]	[1]	[2]	[2]												
	[0]	[1]	[0]	[1]												

Probability Statistics Counters Context Legend

Counter	i	j	k	l	m	n	Dimension	Total Number of Counters
ct_tx_8x8	Context	Node					2X2	4
[i] [j]								
ct_tx_16x16	Context	Node					2X3	6
[i] [j]								
ct_tx_32x32	Context	Node					2X4	8
[i] [j]								
ct_coeff	T = TransformSize (0 4x4, 1 8x8, 2 16x16, 3 32x32)	B = BlockType (0 Y, 1 UV)	R = ReferenceType (0 Intra, 1 Inter)	CB = CoefficientBand	CT = Context	N = Node (0 ZERO, 1 ONE, 2 TWO, 3)	4X2X2X6X6X4	2112
[T=i] [B=j] [R=k] [CB=l] [CT=m] [N=n]								

Counter	i	j	k	l	m	n	Dimension	Total Number of Counters
						EOB)		
ct_mbskip	Context	Node					3X2	6
[i] [j]								
ct_inter_mode	Context (BOTH_ZERO, ZERO_PLUS_PREDICTED, BOTH_PREDICTED, NEW_PLUS_NON_INTRA, BOTH_NEW, INTRA_PLUS_NON_INTRA, BOTH_INTRA)	Node (NEARESTMV, NEARMV, ZEROMV, NEWMV)					7X4	28
[i] [j]								
ct_switchable_interp	Context	Node (MV_JOINT_ZERO, MV_JOINT_HNZVZ, MV_JOINT_HZVNZ, MV_JOINT_HNZVNZ)					3X4	12
[i] [j]								
ct_intra_inter	Context	Node					4X2	8
[i] [j]								
ct_comp_inter	Context	Node					5X2	10
[i] [j]								
ct_single_ref	P0,P1	Context	Node				2X5X2	20
[i] [j] [k]								
ct_comp_ref	Context	Node					5X2	10



Counter	i	j	k	l	m	n	Dimension	Total Number of Counters
[i] [j]								
ct_y_mode	BLOCK_SIZE_GROUPS	Node (DC_PRED, TM_PRED, V_PRED, H_PRED, D135_PRED, D117_PRED, D45_PRED, D63_PRED, D153_PRED, D27_PRED)					4x10	40
[i] [j]								
ct_partition	Context	Node (00: NONE, 01: HORZ, 10: VERT, 11: SPLIT)					16X4	64
[i] [j]								
ct_mv_joints	Node (MV_JOINT_ZERO, MV_JOINT_HNZVZ, MV_JOINT_HZVNZ, MV_JOINT_HNZVNZ)						4	4
[i]								
ct_mv_sign	XY	Node					2X2	4
[i] [j]								
ct_mv_classes	XY	MV CLASS					2X10	20
[i] [j]								
ct_mv_class0	XY	Node					2X2	4
[i] [j]								
ct_mv_bits	XY	MV BIT POSITION	Node				2X10X2	40

Counter	i	j	k	l	m	n	Dimension	Total Number of Counters
[i] [j] [k]								
ct_mv_class0_fp	XY	MV_CLASS0 BIT	Node				2X2X4	16
[i] [j] [k]								
ct_mv_fp	XY	Node					2X4	8
[i] [j]								
ct_mv_class0_hp	XY	Node					2X2	4
[i] [j]								
ct_mv_hp	XY	Node					2X2	4
[i] [j]								
ct_eob_br	T = TransformSize (0 4x4, 1 8x8, 2 16x16, 3 32x32)	B = BlockType (0 Y, 1 UV)	R = ReferenceType (0 Intra, 1 Inter)	CB = CoefficientBand	CT = Context		4X2X2X6X6	528
[T=i] [B=j] [R=k] [CB=l] [CT=m]								
ct_uv_mode	Context	Node(DC_PRED, TM_PRED, V_PRED, H_PRED, D135_PRED, D117_PRED, D45_PRED,					10x10	100
[i] [j]								



Counter	i	j	k	l	m	n	Dimension	Total Number of Counters
		D63_PRED, D153_PRED, D27_PRED)						
ct_seg_id[i]	Node						8	8
[i]								
ct_seg_pred	Context	Node					3X2	6
[i] [j]								
								3074

VP9 PAK Quant Lookup Tables

Qindex	IQ_Scale						FQ_Shift						FQ_Quant					
	8b		10b		12b		8b		10b		12b		8b		10b		12b	
	DC	AC	DC	AC	DC	AC	D C	A C	D C	A C	D C	A C	DC	AC	DC	AC	DC	AC
0	4	4	4	4	4	4	1	1	1	1	1	1	3276 8	3276 8	3276 8	3276 8	3276 8	3276 8
1	8	8	9	9	12	13	2	2	2	2	2	2	3276 8	3276 8	2912 7	2912 7	2184 5	2016 4
2	8	9	10	11	18	19	2	2	2	2	3	3	3276 8	2912 7	2621 4	2383 1	2912 7	2759 4
3	9	10	13	13	25	27	2	2	2	2	3	3	2912 7	2621 4	2016 4	2016 4	2097 1	1941 8
4	10	11	15	16	33	35	2	2	2	3	4	4	2621 4	2383 1	1747 6	3276 8	3177 5	2995 9
5	11	12	17	18	41	44	2	2	3	3	4	4	2383 1	2184 5	3084 0	2912 7	2557 5	2383 1
6	12	13	20	21	50	54	2	2	3	3	4	4	2184 5	2016 4	2621 4	2496 6	2097 1	1941 8
7	12	14	22	24	60	64	2	2	3	3	4	5	2184 5	1872 4	2383 1	2184 5	1747 6	3276 8
8	13	15	25	27	70	75	2	2	3	3	5	5	2016 4	1747 6	2097 1	1941 8	2995 9	2796 2
9	14	16	28	30	80	87	2	3	3	3	5	5	1872 4	3276 8	1872 4	1747 6	2621 4	2410 5
10	15	17	31	33	91	99	2	3	3	4	5	5	1747 6	3084 0	1691 2	3177 5	2304 5	2118 3
11	16	18	34	37	103	112	3	3	4	4	5	5	3276 8	2912 7	3084 0	2833 9	2036 0	1872 4
12	17	19	37	40	115	126	3	3	4	4	5	5	3084 0	2759 4	2833 9	2621 4	1823 6	1664 4
13	18	20	40	44	127	139	3	3	4	4	5	6	2912 7	2621 4	2621 4	2383 1	1651 3	3017 4
14	19	21	43	48	140	154	3	3	4	4	6	6	2759 4	2496 6	2438 5	2184 5	2995 9	2723 5
15	19	22	47	51	153	168	3	3	4	4	6	6	2759 4	2383 1	2231 0	2056 0	2741 3	2496 6
16	20	23	50	55	166	183	3	3	4	4	6	6	2621 4	2279 5	2097 1	1906 5	2526 6	2291 9
17	21	24	53	59	180	199	3	3	4	4	6	6	2496 6	2184 5	1978 4	1777 2	2330 1	2107 6

Qindex	IQ_Scale						FQ_Shift						FQ_Quant					
	8b		10b		12b		8b		10b		12b		8b		10b		12b	
	DC	AC	DC	AC	DC	AC	DC	AC	DC	AC	DC	AC	DC	AC	DC	AC	DC	AC
18	22	25	57	63	194	214	3	3	4	4	6	6	2383	2097	1839	1664	2162	1959
19	23	26	60	67	208	230	3	3	4	5	6	6	2279	2016	1747	3130	2016	1823
20	24	27	64	71	222	247	3	3	5	5	6	6	2184	1941	3276	2953	1889	1698
21	25	28	68	75	237	263	3	3	5	5	6	7	2097	1872	3084	2796	1769	3189
22	26	29	71	79	251	280	3	3	5	5	6	7	2016	1807	2953	2654	1671	2995
23	26	30	75	83	266	297	3	3	5	5	7	7	2016	1747	2796	2526	3153	2824
24	27	31	78	88	281	314	3	3	5	5	7	7	1941	1691	2688	2383	2985	2671
25	28	32	82	92	296	331	3	4	5	5	7	7	1872	3276	2557	2279	2833	2534
26	29	33	86	96	312	349	3	4	5	5	7	7	1807	3177	2438	2184	2688	2403
27	30	34	90	100	327	366	3	4	5	5	7	7	1747	3084	2330	2097	2565	2291
28	31	35	93	105	343	384	3	4	5	5	7	7	1691	2995	2255	1997	2445	2184
29	32	36	97	109	358	402	4	4	5	5	7	7	3276	2912	2162	1923	2343	2086
30	32	37	101	114	374	420	4	4	5	5	7	7	3276	2833	2076	1839	2242	1997
31	33	38	105	118	390	438	4	4	5	5	7	7	3177	2759	1997	1777	2150	1915
32	34	39	109	122	405	456	4	4	5	5	7	7	3084	2688	1923	1718	2071	1839
33	35	40	113	127	421	475	4	4	5	5	7	7	2995	2621	1855	1651	1992	1766
34	36	41	116	131	437	493	4	4	5	6	7	7	2912	2557	1807	3201	1919	1701
35	37	42	120	136	453	511	4	4	5	6	7	7	2833	2496	1747	3084	1851	1641
36	38	43	124	140	469	530	4	4	5	6	7	8	2759	2438	1691	2995	1788	3165

Qindex	IQ_Scale						FQ_Shift						FQ_Quant					
	8b		10b		12b		8b		10b		12b		8b		10b		12b	
	DC	AC	DC	AC	DC	AC	D C	A C	D C	A C	D C	A C	DC	AC	DC	AC	DC	AC
													4	5	2	9	6	5
37	38	44	128	145	484	548	4	4	6	6	7	8	2759	2383	3276	2892	1733	3061
													4	1	8	6	1	5
38	39	45	132	149	500	567	4	4	6	6	7	8	2688	2330	3177	2814	1677	2958
													6	1	5	9	7	9
39	40	46	136	154	516	586	4	4	6	6	8	8	2621	2279	3084	2723	3251	2863
													4	5	0	5	3	0
40	41	47	140	158	532	604	4	4	6	6	8	8	2557	2231	2995	2654	3153	2777
													5	0	9	6	6	6
41	42	48	143	163	548	623	4	4	6	6	8	8	2496	2184	2933	2573	3061	2692
													6	5	0	1	5	9
42	43	49	147	168	564	642	4	4	6	6	8	8	2438	2139	2853	2496	2974	2613
													5	9	2	6	6	2
43	43	50	151	172	580	660	4	4	6	6	8	8	2438	2097	2777	2438	2892	2542
													5	1	6	5	6	0
44	44	51	155	177	596	679	4	4	6	6	8	8	2383	2056	2706	2369	2814	2470
													1	0	0	6	9	8
45	45	52	159	181	611	698	4	4	6	6	8	8	2330	2016	2637	2317	2745	2403
													1	4	9	2	8	6
46	46	53	163	186	627	716	4	4	6	6	8	8	2279	1978	2573	2255	2675	2343
													5	4	1	0	7	1
47	47	54	166	190	643	735	4	4	6	6	8	8	2231	1941	2526	2207	2609	2282
													0	8	6	5	2	6
48	48	55	170	195	659	753	4	4	6	6	8	8	2184	1906	2467	2150	2545	2228
													5	5	2	9	8	0
49	48	56	174	199	674	772	4	4	6	6	8	8	2184	1872	2410	2107	2489	2173
													5	4	5	6	2	2
50	49	57	178	204	690	791	4	4	6	6	8	8	2139	1839	2356	2056	2431	2121
													9	6	3	0	4	0
51	50	58	182	208	706	809	4	4	6	6	8	8	2097	1807	2304	2016	2376	2073
													1	8	5	4	3	8
52	51	59	185	213	721	828	4	4	6	6	8	8	2056	1777	2267	1969	2326	2026
													0	2	1	1	9	2
53	52	60	189	217	737	846	4	4	6	6	8	8	2016	1747	2219	1932	2276	1983
													4	6	2	8	4	1
54	53	61	193	222	752	865	4	4	6	6	8	8	1978	1718	2173	1889	2231	1939
													4	9	2	3	0	5

Qindex	IQ_Scale						FQ_Shift						FQ_Quant					
	8b		10b		12b		8b		10b		12b		8b		10b		12b	
	DC	AC	DC	AC	DC	AC	DC	AC	DC	AC	DC	AC	DC	AC	DC	AC	DC	AC
55	53	62	197	226	768	884	4	4	6	6	8	8	1978	1691	2129	1855	2184	1897
56	54	63	200	231	783	902	4	4	6	6	8	8	1941	1664	2097	1815	2142	1860
57	55	64	204	235	798	920	4	5	6	6	8	8	1906	3276	2056	1784	2102	1823
58	56	65	208	240	814	939	4	5	6	6	8	8	1872	3226	2016	1747	2061	1786
59	57	66	212	244	829	957	4	5	6	6	8	8	1839	3177	1978	1718	2023	1753
60	57	67	215	249	844	976	4	5	6	6	8	8	1839	3130	1950	1684	1987	1718
61	58	68	219	253	859	994	4	5	6	6	8	8	1807	3084	1915	1657	1953	1687
62	59	69	223	258	874	1012	4	5	6	7	8	8	1777	3039	1880	3251	1919	1657
63	60	70	226	262	889	1030	4	5	6	7	8	9	1747	2995	1855	3201	1887	3257
64	61	71	230	267	904	1049	4	5	6	7	8	9	1718	2953	1823	3141	1855	3198
65	62	72	233	271	919	1067	4	5	6	7	8	9	1691	2912	1800	3095	1825	3144
66	62	73	237	275	934	1085	4	5	6	7	8	9	1691	2872	1769	3050	1796	3092
67	63	74	241	280	949	1103	4	5	6	7	8	9	1664	2833	1740	2995	1767	3042
68	64	75	244	284	964	1121	5	5	6	7	8	9	3276	2796	1718	2953	1740	2993
69	65	76	248	289	978	1139	5	5	6	7	8	9	3226	2759	1691	2902	1715	2945
70	66	77	251	293	993	1157	5	5	6	7	8	9	3177	2723	1671	2863	1689	2900
71	66	78	255	297	1008	1175	5	5	6	7	8	9	3177	2688	1644	2824	1664	2855
72	67	79	259	302	1022	1193	5	5	7	7	8	9	3130	2654	3238	2777	1641	2812
73	68	80	262	306	1037	1211	5	5	7	7	9	9	3084	2621	3201	2741	3235	2770

Qindex	IQ_Scale						FQ_Shift						FQ_Quant					
	8b		10b		12b		8b		10b		12b		8b		10b		12b	
	DC	AC	DC	AC	DC	AC	D C	A C	D C	A C	D C	A C	DC	AC	DC	AC	DC	AC
													0	4	7	3	7	8
74	69	81	266	311	1051	1229	5	5	7	7	9	9	3039	2589	3153	2697	3192	2730
													3	0	6	3	6	2
75	70	82	269	315	1065	1246	5	5	7	7	9	9	2995	2557	3118	2663	3150	2692
													9	5	4	0	6	9
76	70	83	273	319	1080	1264	5	5	7	7	9	9	2995	2526	3072	2629	3106	2654
													9	6	7	6	8	6
77	71	84	276	324	1094	1282	5	5	7	7	9	9	2953	2496	3039	2589	3067	2617
													7	6	3	0	1	3
78	72	85	280	328	1108	1299	5	5	7	7	9	9	2912	2467	2995	2557	3028	2583
													7	2	9	5	3	0
79	73	86	283	332	1122	1317	5	5	7	7	9	9	2872	2438	2964	2526	2990	2547
													8	5	1	6	5	7
80	74	87	287	337	1136	1335	5	5	7	7	9	9	2833	2410	2922	2489	2953	2513
													9	5	8	2	7	4
81	74	88	290	341	1151	1352	5	5	7	7	9	9	2833	2383	2892	2460	2915	2481
													9	1	6	0	2	8
82	75	89	293	345	1165	1370	5	5	7	7	9	9	2796	2356	2863	2431	2880	2449
													2	3	0	4	2	2
83	76	90	297	349	1179	1387	5	5	7	7	9	9	2759	2330	2824	2403	2846	2419
													4	1	4	6	0	2
84	77	91	300	354	1192	1405	5	5	7	7	9	9	2723	2304	2796	2369	2814	2388
													5	2	6	9	2	2
85	78	92	304	358	1206	1422	5	5	7	7	9	9	2688	2279	2759	2343	2782	2359
													6	5	4	1	2	6
86	78	93	307	362	1220	1440	5	5	7	7	9	9	2688	2255	2732	2317	2750	2330
													6	0	4	2	3	1
87	79	94	310	367	1234	1457	5	5	7	7	9	9	2654	2231	2706	2285	2719	2302
													6	0	0	7	1	9
88	80	95	314	371	1248	1474	5	5	7	7	9	9	2621	2207	2671	2261	2688	2276
													4	5	5	0	6	4
89	81	96	317	375	1261	1491	5	5	7	7	9	9	2589	2184	2646	2236	2660	2250
													0	5	2	9	9	4
90	81	97	321	379	1275	1509	5	5	7	7	9	9	2589	2162	2613	2213	2631	2223
													0	0	2	3	7	6
91	82	98	324	384	1288	1526	5	5	7	7	9	9	2557	2139	2589	2184	2605	2198
													5	9	0	5	1	8

Qindex	IQ_Scale						FQ_Shift						FQ_Quant					
	8b		10b		12b		8b		10b		12b		8b		10b		12b	
	DC	AC	DC	AC	DC	AC	D C	A C	D C	A C	D C	A C	DC	AC	DC	AC	DC	AC
92	83	99	327	388	1302	1543	5	5	7	7	9	9	2526 6	2118 3	2565 3	2162 0	2577 1	2174 6
93	84	100	331	392	1315	1560	5	5	7	7	9	9	2496 6	2097 1	2534 3	2139 9	2551 6	2150 9
94	85	101	334	396	1329	1577	5	5	7	7	9	9	2467 2	2076 3	2511 5	2118 3	2524 7	2127 7
95	85	102	337	401	1342	1595	5	5	7	7	9	9	2467 2	2056 0	2489 2	2091 9	2500 3	2103 7
96	87	104	343	409	1368	1627	5	5	7	7	9	9	2410 5	2016 4	2445 6	2051 0	2452 8	2062 3
97	88	106	350	417	1393	1660	5	5	7	7	9	9	2383 1	1978 4	2396 7	2011 6	2408 7	2021 3
98	90	108	356	425	1419	1693	5	5	7	7	9	9	2330 1	1941 8	2356 3	1973 7	2364 6	1981 9
99	92	110	362	433	1444	1725	5	5	7	7	9	9	2279 5	1906 5	2317 2	1937 3	2323 7	1945 1
100	93	112	369	441	1469	1758	5	5	7	7	9	9	2255 0	1872 4	2273 3	1902 1	2284 1	1908 6
101	95	114	375	449	1494	1791	5	5	7	7	9	9	2207 5	1839 6	2236 9	1868 2	2245 9	1873 5
102	96	116	381	458	1519	1824	5	5	7	7	9	9	2184 5	1807 8	2201 7	1831 5	2208 9	1839 6
103	98	118	387	466	1544	1856	5	5	7	7	9	9	2139 9	1777 2	2167 5	1800 1	2173 2	1807 8
104	99	120	394	474	1569	1889	5	5	7	7	9	9	2118 3	1747 6	2129 0	1769 7	2138 5	1776 3
105	101	122	400	482	1594	1922	5	5	7	7	9	9	2076 3	1718 9	2097 1	1740 3	2105 0	1745 8
106	102	124	406	490	1618	1954	5	5	7	7	9	9	2056 0	1691 2	2066 1	1711 9	2073 8	1717 2
107	104	126	412	498	1643	1987	5	5	7	7	9	9	2016 4	1664 4	2036 0	1684 4	2042 2	1688 6
108	105	128	418	506	1668	2020	5	6	7	7	9	9	1997 2	3276 8	2006 8	1657 8	2011 6	1661 1
109	107	130	424	514	1692	2052	5	6	7	8	9	10	1959 9	3226 3	1978 4	3264 0	1983 1	3270 4
110	108	132	430	523	1717	2085	5	6	7	8	9	10	1941	3177	1950	3207	1954	3218

Qindex	IQ_Scale						FQ_Shift						FQ_Quant					
	8b		10b		12b		8b		10b		12b		8b		10b		12b	
	DC	AC	DC	AC	DC	AC	D C	A C	D C	A C	D C	A C	DC	AC	DC	AC	DC	AC
													8	5	8	8	2	6
111	110	134	436	531	1741	2118	5	6	7	8	9	10	1906	3130	1923	3159	1927	3168
													5	0	9	5	3	5
112	111	136	442	539	1765	2150	5	6	7	8	9	10	1889	3084	1897	3112	1901	3121
													3	0	8	6	1	3
113	113	138	448	547	1789	2183	5	6	7	8	9	10	1855	3039	1872	3067	1875	3074
													8	3	4	1	5	1
114	114	140	454	555	1814	2216	5	6	7	8	9	10	1839	2995	1847	3022	1849	3028
													6	9	7	9	7	3
115	116	142	460	563	1838	2248	5	6	7	8	9	10	1807	2953	1823	2979	1825	2985
													8	7	6	9	5	2
116	117	144	466	571	1862	2281	5	6	7	8	9	10	1792	2912	1800	2938	1802	2942
													4	7	1	2	0	0
117	118	146	472	579	1885	2313	5	6	7	8	9	10	1777	2872	1777	2897	1780	2901
													2	8	2	6	0	3
118	120	148	478	588	1909	2346	5	6	7	8	9	10	1747	2833	1754	2853	1757	2860
													6	9	9	2	6	5
119	121	150	484	596	1933	2378	5	6	7	8	9	10	1733	2796	1733	2814	1735	2822
													1	2	1	9	8	0
120	123	152	490	604	1957	2411	5	6	7	8	9	10	1705	2759	1711	2777	1714	2783
													0	4	9	6	5	4
121	125	155	499	616	1992	2459	5	6	7	8	9	10	1677	2706	1681	2723	1684	2729
													7	0	0	5	4	1
122	127	158	507	628	2027	2508	5	6	7	8	9	10	1651	2654	1654	2671	1655	2675
													3	6	5	3	7	0
123	129	161	516	640	2061	2556	6	6	8	8	10	10	3251	2605	3251	2621	3256	2625
													3	1	3	4	1	5
124	131	164	525	652	2096	2605	6	6	8	8	10	10	3201	2557	3195	2573	3201	2576
													7	5	6	1	7	1
125	134	167	533	664	2130	2653	6	6	8	8	10	10	3130	2511	3147	2526	3150	2529
													0	5	6	6	6	5
126	136	170	542	676	2165	2701	6	6	8	8	10	10	3084	2467	3095	2481	3099	2484
													0	2	4	8	7	5
127	138	173	550	688	2199	2750	6	6	8	8	10	10	3039	2424	3050	2438	3051	2440
													3	4	4	5	7	3
128	140	176	559	700	2233	2798	6	6	8	8	10	10	2995	2383	3001	2396	3005	2398
													9	1	2	7	3	4

Qindex	IQ_Scale						FQ_Shift						FQ_Quant					
	8b		10b		12b		8b		10b		12b		8b		10b		12b	
	DC	AC	DC	AC	DC	AC	D C	A C	D C	A C	D C	A C	DC	AC	DC	AC	DC	AC
129	142	179	567	713	2267	2847	6	6	8	8	10	10	2953	2343	2958	2353	2960	2357
130	144	182	576	725	2300	2895	6	6	8	8	10	10	2912	2304	2912	2314	2917	2318
131	146	185	584	737	2334	2943	6	6	8	8	10	10	2872	2267	2872	2276	2875	2280
132	148	188	592	749	2367	2992	6	6	8	8	10	10	2833	2231	2833	2239	2835	2242
133	150	191	601	761	2400	3040	6	6	8	8	10	10	2796	2195	2791	2204	2796	2207
134	152	194	609	773	2434	3088	6	6	8	8	10	10	2759	2162	2754	2170	2757	2173
135	154	197	617	785	2467	3137	6	6	8	8	10	10	2723	2129	2719	2137	2720	2139
136	156	200	625	797	2499	3185	6	6	8	8	10	10	2688	2097	2684	2105	2685	2107
137	158	203	634	809	2532	3234	6	6	8	8	10	10	2654	2066	2646	2073	2650	2075
138	161	207	644	825	2575	3298	6	6	8	8	10	10	2605	2026	2605	2033	2606	2034
139	164	211	655	841	2618	3362	6	6	8	8	10	10	2557	1987	2561	1994	2563	1996
140	166	215	666	857	2661	3426	6	6	8	8	10	10	2526	1950	2519	1957	2521	1958
141	169	219	676	873	2704	3491	6	6	8	8	10	10	2481	1915	2481	1921	2481	1922
142	172	223	687	889	2746	3555	6	6	8	8	10	10	2438	1880	2442	1887	2443	1887
143	174	227	698	905	2788	3619	6	6	8	8	10	10	2410	1847	2403	1853	2407	1854
144	177	231	708	922	2830	3684	6	6	8	8	10	10	2369	1815	2369	1819	2371	1821
145	180	235	718	938	2872	3748	6	6	8	8	10	10	2330	1784	2336	1788	2336	1790
146	182	239	729	954	2913	3812	6	6	8	8	10	10	2304	1754	2301	1758	2303	1760
147	185	243	739	970	2954	3876	6	6	8	8	10	10	2267	1726	2270	1729	2271	1731

Qindex	IQ_Scale						FQ_Shift						FQ_Quant					
	8b		10b		12b		8b		10b		12b		8b		10b		12b	
	DC	AC	DC	AC	DC	AC	D C	A C	D C	A C	D C	A C	DC	AC	DC	AC	DC	AC
													1	0	2	6	7	3
148	187	247	749	986	2995	3941	6	6	8	8	10	10	2242	1698	2239	1701	2240	1702
149	190	251	759	1002	3036	4005	6	6	8	8	10	10	2207	1671	2210	1674	2210	1675
150	192	255	770	1018	3076	4069	6	6	8	8	10	10	2184	1644	2178	1648	2181	1649
151	195	260	782	1038	3127	4149	6	7	8	9	10	11	2150	3226	2145	3232	2146	3234
152	199	265	795	1058	3177	4230	6	7	8	9	10	11	2107	3165	2110	3171	2112	3172
153	202	270	807	1078	3226	4310	6	7	8	9	10	11	2076	3106	2078	3112	2080	3114
154	205	275	819	1098	3275	4390	6	7	8	9	10	11	2046	3050	2048	3055	2049	3057
155	208	280	831	1118	3324	4470	6	7	8	9	10	11	2016	2995	2018	3001	2018	3002
156	211	285	844	1138	3373	4550	6	7	8	9	10	11	1987	2943	1987	2948	1989	2949
157	214	290	856	1158	3421	4631	6	7	8	9	10	11	1959	2892	1959	2897	1961	2898
158	217	295	868	1178	3469	4711	6	7	8	9	10	11	1932	2843	1932	2848	1934	2849
159	220	300	880	1198	3517	4791	6	7	8	9	10	11	1906	2796	1906	2800	1908	2801
160	223	305	891	1218	3565	4871	6	7	8	9	10	11	1880	2750	1882	2754	1882	2755
161	226	311	906	1242	3621	4967	6	7	8	9	10	11	1855	2697	1851	2701	1853	2702
162	230	317	920	1266	3677	5064	6	7	8	9	10	11	1823	2646	1823	2650	1825	2650
163	233	323	933	1290	3733	5160	6	7	8	9	10	11	1800	2597	1798	2601	1797	2601
164	237	329	947	1314	3788	5256	6	7	8	9	10	11	1769	2549	1771	2553	1771	2553
165	240	335	961	1338	3843	5352	6	7	8	9	10	11	1747	2504	1745	2507	1746	2507

Qindex	IQ_Scale						FQ_Shift						FQ_Quant					
	8b		10b		12b		8b		10b		12b		8b		10b		12b	
	DC	AC	DC	AC	DC	AC	DC	C	A	DC	C	A	DC	C	A	DC	AC	DC
166	243	341	975	1362	3897	5448	6	7	8	9	10	11	17260	24600	17207	24636	17220	24636
167	247	347	988	1386	3951	5544	6	7	8	9	10	11	16980	24174	16980	24209	16985	24209
168	250	353	1001	1411	4005	5641	6	7	8	9	10	11	16777	23763	16760	23780	16756	23793
169	253	359	1015	1435	4058	5737	6	7	8	9	10	11	16578	23366	16529	23382	16537	23395
170	257	366	1030	1463	4119	5849	7	7	9	9	11	11	32640	22919	32577	22935	32585	22947
171	261	373	1045	1491	4181	5961	7	7	9	9	11	11	32140	22489	32109	22504	32101	22515
172	265	380	1061	1519	4241	6073	7	7	9	9	11	11	31655	22075	31625	22089	31647	22100
173	269	387	1076	1547	4301	6185	7	7	9	9	11	11	31184	21675	31184	21690	31206	21700
174	272	394	1090	1575	4361	6297	7	7	9	9	11	11	30840	21290	30783	21304	30776	21314
175	276	401	1105	1603	4420	6410	7	7	9	9	11	11	30393	20919	30366	20932	30366	20938
176	280	408	1120	1631	4479	6522	7	7	9	9	11	11	29959	20560	29959	20572	29966	20579
177	284	416	1137	1663	4546	6650	7	7	9	9	11	11	29537	20164	29511	20177	29524	20183
178	288	424	1153	1695	4612	6778	7	7	9	9	11	11	29127	19784	29101	19796	29101	19801
179	292	432	1170	1727	4677	6906	7	7	9	9	11	11	28728	19418	28679	19429	28697	19434
180	296	440	1186	1759	4742	7034	7	7	9	9	11	11	28339	19065	28292	19075	28304	19081
181	300	448	1202	1791	4807	7162	7	7	9	9	11	11	27962	18724	27915	18735	27921	18740
182	304	456	1218	1823	4871	7290	7	7	9	9	11	11	27594	18396	27548	18406	27554	18411
183	309	465	1236	1859	4942	7435	7	7	9	9	11	11	27147	18040	27147	18049	27158	18052
184	313	474	1251	1891	5013	7579	7	7	9	9	11	11	26801	17690	26777	17701	26777	17701

Qindex	IQ_Scale						FQ_Shift						FQ_Quant					
	8b		10b		12b		8b		10b		12b		8b		10b		12b	
	DC	AC	DC	AC	DC	AC	D C	A C	D C	A C	D C	A C	DC	AC	DC	AC	DC	AC
			3	5									0	7	9	6	3	9
185	317	483	127	193	5083	7723	7	7	9	9	11	11	2646	1736	2640	1737	2640	1737
186	322	492	128	196	5153	7867	7	7	9	9	11	11	2605	1705	2605	1705	2604	1706
187	326	501	130	200	5222	8011	7	7	9	9	11	11	2573	1674	2569	1675	2570	1675
188	330	510	132	203	5291	8155	7	7	9	9	11	11	2542	1644	2536	1645	2536	1645
189	335	520	134	207	5367	8315	7	8	9	10	11	12	2504	3226	2500	3227	2500	3228
190	340	530	136	211	5442	8475	7	8	9	10	11	12	2467	3165	2465	3167	2466	3167
191	344	540	137	215	5517	8635	7	8	9	10	11	12	2438	3106	2433	3108	2432	3108
192	349	550	139	219	5591	8795	7	8	9	10	11	12	2403	3050	2400	3051	2400	3052
193	354	560	141	223	5665	8956	7	8	9	10	11	12	2369	2995	2369	2997	2369	2997
194	359	571	143	228	5745	9132	7	8	9	10	11	12	2336	2938	2336	2939	2336	2939
195	364	582	145	232	5825	9308	7	8	9	10	11	12	2304	2882	2304	2883	2304	2883
196	369	593	147	237	5905	9484	7	8	9	10	11	12	2273	2829	2273	2830	2272	2830
197	374	604	149	241	5984	9660	7	8	9	10	11	12	2242	2777	2242	2778	2242	2778
198	379	615	151	245	6063	9836	7	8	9	10	11	12	2213	2728	2213	2729	2213	2729
199	384	627	153	250	6149	1002	7	8	9	10	11	12	2184	2675	2183	2676	2182	2676
200	389	639	155	255	6234	1022	7	8	9	10	11	12	2156	2625	2152	2626	2152	2626
201	395	651	158	260	6319	1041	7	8	9	10	11	12	2123	2577	2123	2578	2124	2578
202	400	663	160	265	6404	1060	7	8	9	10	11	12	2097	2530	2095	2531	2095	2531

Qindex	IQ_Scale						FQ_Shift						FQ_Quant					
	8b		10b		12b		8b		10b		12b		8b		10b		12b	
	DC	AC	DC	AC	DC	AC	DC	C	A	C	D	C	A	DC	AC	DC	AC	DC
203	406	676	162	270	6495	1081	7	8	9	10	11	12	2066	2481	2066	2482	2066	2482
204	411	689	164	275	6587	1102	7	8	9	10	11	12	2041	2435	2037	2435	2037	2435
205	417	702	167	280	6678	1122	7	8	9	10	11	12	2011	2389	2009	2390	2009	2390
206	423	715	169	285	6769	1143	7	8	9	10	11	12	1983	2346	1983	2347	1982	2347
207	429	729	171	291	6867	1166	7	8	9	10	11	12	1955	2301	1954	2302	1954	2301
208	435	743	174	297	6966	1188	7	8	9	10	11	12	1928	2258	1927	2258	1926	2258
209	441	757	176	302	7064	1210	7	8	9	10	11	12	1902	2216	1900	2217	1900	2216
210	447	771	179	308	7163	1233	7	8	9	10	11	12	1876	2176	1873	2176	1873	2176
211	454	786	181	314	7269	1257	7	8	9	10	11	12	1847	2134	1846	2135	1846	2135
212	461	801	184	320	7376	1281	7	8	9	10	11	12	1819	2094	1819	2095	1819	2095
213	467	816	187	326	7483	1305	7	8	9	10	11	12	1796	2056	1793	2056	1793	2056
214	475	832	190	332	7599	1330	7	8	9	10	11	12	1766	2016	1766	2017	1766	2016
215	482	848	192	339	7715	1356	7	8	9	10	11	12	1740	1978	1739	1979	1739	1978
216	489	864	195	345	7832	1382	7	8	9	10	11	12	1715	1941	1713	1942	1713	1942
217	497	881	199	352	7958	1409	7	8	9	10	11	12	1687	1904	1686	1904	1686	1904
218	505	898	202	359	8085	1436	7	8	9	10	11	12	1661	1868	1660	1868	1660	1868
219	513	915	205	365	8214	1463	8	8	10	10	12	12	3270	1833	3267	1834	3268	1833
220	522	933	208	373	8352	1492	8	8	10	10	12	12	3214	1798	3214	1798	3214	1798
221	530	951	212	380	8492	1521	8	8	10	10	12	12	3165	1764	3161	1764	3161	1764

Qindex	IQ_Scale						FQ_Shift						FQ_Quant					
	8b		10b		12b		8b		10b		12b		8b		10b		12b	
	DC	AC	DC	AC	DC	AC	D C	A C	D C	A C	D C	A C	DC	AC	DC	AC	DC	AC
			3	3		3							5	1	0	6	0	5
222	539	969	215 9	387 6	8635	1550 2	8	8	10	10	12	12	3112 6	1731 3	3108 3	1731 3	3108 6	1731 6
223	549	988	219 7	395 2	8788	1580 6	8	8	10	10	12	12	3055 9	1698 0	3054 5	1698 0	3054 5	1698 3
224	559	100 7	223 6	402 8	8945	1611 0	8	8	10	10	12	12	3001 2	1666 0	3001 2	1666 0	3000 9	1666 2
225	569	102 6	227 6	410 4	9104	1641 4	8	9	10	11	12	13	2948 5	3270 4	2948 5	3270 4	2948 5	3270 8
226	579	104 6	231 9	418 4	9275	1673 4	8	9	10	11	12	13	2897 6	3207 8	2893 8	3207 8	2894 1	3208 2
227	590	106 6	236 3	426 4	9450	1705 4	8	9	10	11	12	13	2843 5	3147 6	2839 9	3147 6	2840 5	3148 0
228	602	108 7	241 0	434 8	9639	1739 0	8	9	10	11	12	13	2786 9	3086 8	2784 6	3086 8	2784 8	3087 2
229	614	110 8	245 8	443 2	9832	1772 6	8	9	10	11	12	13	2732 4	3028 3	2730 2	3028 3	2730 2	3028 7
230	626	112 9	250 8	451 6	1003	1806 1	8	9	10	11	12	13	2680 0	2972 0	2675 7	2972 0	2676 0	2972 3
231	640	115 1	256 1	460 4	1024 5	1841 4	8	9	10	11	12	13	2621 4	2915 2	2620 4	2915 2	2620 1	2915 5
232	654	117 3	261 6	469 2	1046 5	1876 6	8	9	10	11	12	13	2565 3	2860 5	2565 3	2860 5	2565 0	2860 8
233	668	119 6	267 5	478 4	1070 2	1913 4	8	9	10	11	12	13	2511 5	2805 5	2508 7	2805 5	2508 2	2805 8
234	684	121 9	273 7	487 6	1094 6	1950 2	8	9	10	11	12	13	2452 8	2752 6	2451 9	2752 6	2452 3	2752 9
235	700	124 3	280 2	497 2	1121 0	1988 6	8	9	10	11	12	13	2396 7	2699 4	2395 0	2699 4	2394 6	2699 7
236	717	126 7	287 1	506 8	1148 2	2027 0	8	9	10	11	12	13	2339 9	2648 3	2337 4	2648 3	2337 8	2648 5
237	736	129 2	294 4	516 8	1177 6	2067 0	8	9	10	11	12	13	2279 5	2597 0	2279 5	2597 0	2279 5	2597 3
238	755	131 7	302 0	526 8	1208 1	2107 0	8	9	10	11	12	13	2222 1	2547 7	2222 1	2547 7	2221 9	2548 0
239	775	134 3	310 2	537 2	1240 9	2148 6	8	9	10	11	12	13	2164 8	2498 4	2163 4	2498 4	2163 2	2498 7

Qindex	IQ_Scale						FQ_Shift						FQ_Quant					
	8b		10b		12b		8b		10b		12b		8b		10b		12b	
	DC	AC	DC	AC	DC	AC	D C	A C	D C	A C	D C	A C	DC	AC	DC	AC	DC	AC
240	796	136	318	547	1275	2190	8	9	10	11	12	13	2107	2451	2105	2451	2105	2451
241	819	139	328	558	1311	2233	8	9	10	11	12	13	2048	2403	2046	2403	2046	2403
242	843	142	337	569	1350	2276	8	9	10	11	12	13	1990	2358	1988	2358	1988	2358
243	869	145	347	580	1391	2321	8	9	10	11	12	13	1930	2312	1929	2312	1929	2312
244	896	147	358	591	1434	2366	8	9	10	11	12	13	1872	2268	1871	2268	1871	2268
245	925	150	370	603	1480	2412	8	9	10	11	12	13	1813	2225	1812	2225	1812	2225
246	955	153	382	614	1529	2459	8	9	10	11	12	13	1756	2183	1755	2183	1755	2183
247	988	156	395	626	1581	2507	8	9	10	11	12	13	1698	2141	1697	2141	1697	2141
248	102	159	408	638	1635	2555	8	9	10	11	12	13	1641	2101	1641	2101	1641	2101
249	105	162	423	651	1694	2604	9	9	11	11	13	13	3171	2061	3168	2061	3168	2061
250	109	166	439	664	1757	2655	9	9	11	11	13	13	3055	2021	3054	2021	3054	2021
251	113	169	455	676	1823	2707	9	9	11	11	13	13	2945	1983	2944	1983	2943	1983
252	118	172	473	690	1894	2759	9	9	11	11	13	13	2833	1945	2833	1945	2833	1945
253	123	175	492	703	1971	2814	9	9	11	11	13	13	2723	1907	2723	1907	2722	1907
254	128	179	513	717	2052	2868	9	9	11	11	13	13	2617	1871	2616	1871	2616	1871
255	133	182	534	731	2138	2924	9	9	11	11	13	13	2511	1835	2510	1835	2510	1835

SB, CU/PU and TU Sizes – Encoder Only

CU/PU/TU Partitioning Configurations

SB size	CU size	min/max TU range
64x64	64x64	32x32..4x4
	32x32	32x32..4x4
	16x16	16x16..4x4
	8x8	8x8..4x4

PU Options for a Given CU

Current CU size	Possible CU sizes	Allowed CU/PU partition types.
64x64	64x64	2Nx2N, 2NxN, Nx2N
	32x32	2Nx2N, 2NxN, Nx2N
	16x16	2Nx2N, 2NxN, Nx2N
	8x8	2Nx2N, 2NxN, Nx2N, NxN

Definition of the VP9 CU Record Structure - Encoder Only

The following table defines the CU record structure as indirect data to the PAK Object Command. Entries are DW based (4 bytes) and cache aligned. This memory surface is pointed to by the HCP Indirect CU Object Base Address in the HCP_IND_OBJ_BASE_ADDR_STATE Command.

VP9 CU Record Structure Definition (UnPacked CU)

DW	Bit	Field	Bits	Definition	Comments
0	1:0	cu_size	2	0: 8x8, 1:16x16, 2: 32x32, and 3: 64x64	Indicates size of the CU
	3:2	Reserved	4	MBZ	
	5:4	cu_part_mode	2	0: 2Nx2N, 1: 2NxN, 2: Nx2N, 3: NxN (8x8 only)	
	7:6	Reserved	2	MBZ	
	11:8	intra_chroma_mode[0][3:0]	4	0:DC_PRED 1:V_PRED 2:H_PRED 3:TM_PRED 4:D45_PRED 5:D135_PRED 6:D117_PRED 7:D153_PRED 8:D207_PRED 9:D63_PRED 10-15 Reserved	
	15:12	Reserved	4	MBZ	
	19:16	intra_chroma_mode[1][3:0]	4	0:DC_PRED 1:V_PRED 2:H_PRED 3:TM_PRED 4:D45_PRED	Applicable for part1 of shapes > 8x8

DW	Bit	Field	Bits	Definition	Comments
				5:D135_PRED 6:D117_PRED 7:D153_PRED 8:D207_PRED 9:D63_PRED 10-15 Reserved	
	20	cu_pred_mode0	1	0: Intra 1: Inter	Pred mode for part0 in raster scan order cu_pred_mode=intra means ref_refframe0=intra
	21	cu_pred_mode1	1	0: Intra 1: Inter	Pred mode for part1 in raster scan order cu_pred_mode=intra means ref_refframe0=intra
	23:22	Reserved	2	MBZ	
	24	interpred_comp0	1	0: Single 1: Compound(ref_refframe1>intra)	Interpred comp mode for Part0
	25	interpred_comp1	0	0: Single 1: Compound(ref_refframe1>intra)	Interpred comp mode for Part1
	31:26	Reserved	6	MBZ	
1	3:0	intra_mode[0][3:0]	4	0:DC_PRED 1:V_PRED 2:H_PRED 3:TM_PRED 4:D45_PRED 5:D135_PRED 6:D117_PRED 7:D153_PRED 8:D207_PRED 9:D63_PRED	Luma Intra mode for part0
	7:4	Reserved	4		
	11:8	intra_mode[1][3:0]	4		Luma pred mode for part1
	15:12	Reserved	4		
	19:16	intra_mode[2][3:0]	4		Luma pred mode for part2;

DW	Bit	Field	Bits	Definition	Comments
					applicable for 4x4 only
	23:19	Reserved	4		
	27:24	intra_mode[3][3:0]	4		Luma pred mode for part3; applicable for 4x4 only
	31:28	Reserved	4		
2	15:0	mvx_refframe0[0][15:0]	16		Frame0(Forward) MVx for part0 16-bit each(2's complement with 3 fractional bits); encodable range is [-16382,16382]).
	31:16	mvy_refframe0[0][15:0]	16		Frame0(Forward) MVy for part0 16-bit each(2's complement with 3 fractional bits); encodable range is [-16382,16382]).
3	15:0	mvx_refframe0[1][15:0]	16		Frame0 (Forward) MVx for part1 16-bit each(2's complement with 3 fractional bits); encodable range is [-16382,16382]).
	31:16	mvy_refframe0[1][15:0]	16		Frame0 (Forward) MVy for part1 16-bit each(2's complement with 3 fractional bits); encodable range is [-16382,16382]).
4	15:0	mvx_refframe0[2][15:0]	16		
	31:16	mvy_refframe0[2][15:0]	16		
5	15:0	mvx_refframe0[3][15:0]	16		
	31:16	mvy_refframe0[3][15:0]	16		
6	15:0	mvx_refframe1[0][15:0]	16		
	31:16	mvy_refframe1[0][15:0]	16		
7	15:0	mvx_refframe1[1][15:0]	16		
	31:16	mvy_refframe1[1][15:0]	16		
8	15:0	mvx_refframe1[2][15:0]	16		Interleaved X and Y
	31:16	mvy_refframe1[2][15:0]	16		
9	15:0	mvx_refframe1[3][15:0]	16		
	31:16	mvy_refframe1[3][15:0]	16		
10	1:0	ref_refframe0[0][1:0]	2	0:intra	frame0(forward)reference frame

DW	Bit	Field	Bits	Definition	Comments
				1:last 2:golden 3:altref	id for part0 HW uses if SegmentReferenceEnabled=0 in segment ID command
	3:2	Reserved	2	MBZ	
	5:4	ref_refframe0[1][1:0]	2	0:intra 1:last 2:golden 3:altref	frame0(forward)reference frame id for part1
	7:6	Reserved	2	MBZ	
	9:8	ref_refframe1 [0][1:0]	2	0:intra 1:last 2:golden 3:altref	frame1(backward)reference frame id for part0
	11:10	Reserved	2	MBZ	
	13:12	ref_refframe1 [1][1:0]	2	0:intra 1:last 2:golden 3:altref	frame0(forward)reference frame id for part1
	15:14	Reserved	2	MBZ	
	18:16	QuantRound0	3	0:+1/16 1:+2/16 2:+3/16 3:+4/16 4:+5/16 5:+6/16(default) 6:+7/16 7:+8/16	Quantization Round value for Part0 (8x8 and below shapes will have the same round value)
	19	Reserved		MBZ	
	22:20	QuantRound1	3	0:+1/16	Quantization Round value for Part1

DW	Bit	Field	Bits	Definition	Comments
				1:+2/16 2:+3/16 3:+4/16 4:+5/16 5:+6/16(default) 6:+7/16 7:+8/16	
	31:23	Reserved	1	MBZ	
11	1:0	tu_size[0][1:0]	2	0: 4x4 1: 8x8 2: 16x16 3: 32x32	tu_size[2][1:0], tu_size[3][1:0] must be 0 (4x4)
11	3:2	tu_size[1][1:0]	2	0: 4x4 1: 8x8 2: 16x16 3: 32x32	
11	13:4	Reserved	10	MBZ	
11	14	segmentPredFlag0	1	0:Diable 1:Enable	Segment Prediction disable for Part0
11	15	segmentPredFlag1	1	0:Diable 1:Enable	Segment Prediction disable for Part1
11	18:16	SegmentIdx[0][2:0]	3	Segment 0 to 7	SegmentID for part0 of blocks > 8x8
11	21:19	SegmentIdx[1][2:0]	3	Segment 0 to 7	SegmentID for part1 of blocks > 8x8
11	23:22	MotionComp_flttype[0][1:0]	2	0: EIGHTTAP 1: EIGHTTAP_SMOOTH 2: EIGHTTAP_SHARP 3: BILINEAR	HW will use this filtertype if SWITCHABLE=1 in pic state; Used for part0
11	25:24	MotionComp_flttype[1][1:0]	2	0: EIGHTTAP	For part1 of blocks >8x8

DW	Bit	Field	Bits	Definition	Comments
				1: EIGHTTAP_SMOOTH 2: EIGHTTAP_SHARP 3: BILINEAR	
11	31:26	Reserved	6	MBZ	
12..15	31:0	Reserved		MBZ	

Allowed SB Size Encoder Only

The following table details the SB size allowed and the number of records per SB for the encoder.

Allowed SB Size – Encoder Only

SB Size Allowed	Number of Records per SB
64x64	64

Note: HW will support partial SBs within a frame boundary to a minimum CU8x8 granularity

HCP Commands

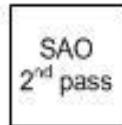
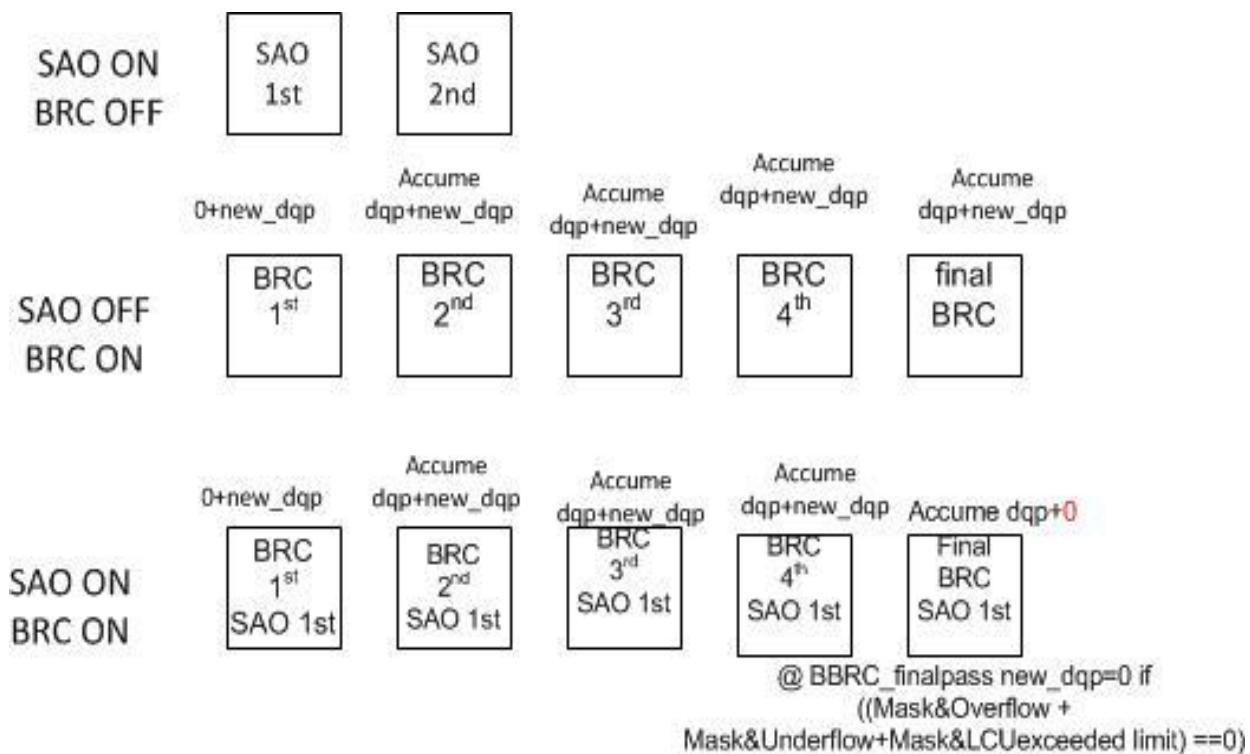
The HCP Commands specify the HEVC BSD object and PAK object level configuration.

HCP_BSD_OBJECT (VideoCS)

HCP_PAK_OBJECT_VideoCS

HCP_PAK_INSERT_OBJECT_VideoCS

Multipass flow during BRC and SAO



Add baseQP+deltaQP if (non_first_pass +
 SAO_sencod_pass)==1)

CU and Slice level stat streamOut

Along with final bitstream, HLC writes out two statistics related streamout cachelines to the memory. Streamout0 cacheline is composed of 4 quarter cachelines, each containing information on CU skip flag, coding block flag for the TUs in a CU, residual/coefficient bit count for a CU, total bit count for CU, LCU exceed limit flag. A typical streamout0 cacheline, therefore, has information on statistics for 4 CUs and lcu exceed limit flag.

Streamout1 cacheline is composed of quarter cachelines., each quarter cacheline consisting of bit count of current slice.

Pak pipeline streamout enable bit, set by HCP_PIPE_MODE_SELECT command, enables or disables the streamout.

Streamout 0: Per CU Quarter Cacheline Format

Level	Field	Width	Cacheline	Comment
CU	CU Skip Flag	1	qcacheline[0]	Packed in Quarter Cacheline in CU format
LCU	LCU exceed limit	1	qcacheline[1]	Packed in Quarter Cacheline in CU format (valid in last CU of LCU)
	Reserved	14	qcacheline[15:2]	Reserved
CU	TU CBF Y/U/V	48	qcacheline[63:16]	Packed in Quarter Cacheline in CU format
CU	CU Coefficient Bit Count (Only residual)	18	qcacheline[81:64]	Packed in Quarter Cacheline in CU format
CU	CU Bit Count (all CU Syntax)	18	qcacheline[113:96]	Packed in Quarter Cacheline in CU format
	Reserved	14	qcacheline[127:114]	Reserved

Streamout 1: Per Slice Quarter Cacheline

Level	Field	Width	Cacheline	Comment
Slice	Slice Bit Count (slice header + data + tail)	32	cacheline[31:0]	
	Reserved	32	cacheline[63:32]	
	SlicePositionX[15:0]	16	cacheline[79:64]	
	SlicePositionY[15:0]	16	cacheline[95:80]	
	Reserved	32	cacheline[127:96]	

Definition of the CU Record Structure for Ext Interface – Encoder Only

The following table defines the CU record structure as indirect data to the PAK Object Command. Entries are DW based (4 bytes) and cache aligned. This memory surface is pointed to by the HCP Indirect CU Object Base Address in the HCP_IND_OBJ_BASE_ADDR_STATE Command.

CU Record Structure Definition

DWord	Bitfield	Field	Bits	Definition	Comments
0	1:0	cu_size	2	0: 8x8	
				1: 16x16	
				2: 32x32	
				3: 64x64	
	2	cu_pred_mode	1	0: Intra	For I slices, pred_mode is always 0.
				1: Inter	
	3	cu_transquant_bypass_flag	1		Note: HW ignores this bit for RhoDomain calculation so the statics will be slightly inaccurate. This bit should not be set to 1 if transform_skip=1
6:4	6:4	cu_part_mode	3	0: 2Nx2N	
				1: 2NxN (inter only)	
				2: Nx2N (inter only)	
				3: NxN (intra only)	only if CU size is 8x8
				4: 2NxhN (inter only)	
				5: hNx2N (inter only)	
	7	IPCM_enable	1	1: Enable IPCM 0: Disable IPCM	MBZ Reserved If IPCM is enabled, then entire CU is IPCM predicted. Both PU and TU sizes should be same as CU size. Cu_pred_mode is ignored when IPCM is enabled.
					Note: Supports 8bit pixel depth only
10:8		intra_chroma_mode	3	0: DM	(use Luma mode, from block 0 if NxN)
				1: Reserved	(supposedly to be defined for LM mode)

DWord	Bitfield	Field	Bits	Definition	Comments
				2: Planar	
				3: Vertical	
				4: Horizontal	
				5: DC	
	11	zero_out_coefficient	1	0: Do not force coefficients to zero 1: Force coefficients to zero	If this bit is set to 1, HW will force coefficients to zero.
	15:12	Reserved	5		
	22:16	cu_qp	7	in 7-bit	Valid range: 0 to 51 for 8bit mode -12 to 51 for 10bit mode <i>diff_cu_qp_delta_depth = 0 (No QP change allowed at CU Level).</i>
	23	cu_qp_sign	1	0:positive 1:negative	Only allow QP change across LCU, no change across CU for PAK only.
	31:24	interpred_idc[3:0][1:0]	8	2 bits each 0: L0 1: L1 2: Bi 3: reserved	in Z-order interpred_idc[0][1:0] - block 0 = [25:24] interpred_idc[15][1:0] - block 15 = [31:30]
	1	5:0	6	final explicit luma mode. Valid values are 0..34.	1 per cu partition, and only active partitions have valid intra mode value
	7:6	Reserved	2		
	13:8	intra_mode[1][5:0]	6	final explicit luma mode. Valid values are 0..34.	
	15:14	Reserved	2		
	21:16	intra_mode[2][5:0]	6	final explicit luma mode. Valid values are 0..34.	
	23:22	Reserved	2		
	29:24	intra_mode[3][5:0]	6	final explicit luma mode. Valid values are	

DWord	Bitfield	Field	Bits	Definition	Comments
				0..34.	
	31:30	Reserved	2		
2	15:0 31:16	mvx_l0[0][15:0] mvx_l0[1][15:0]	64	16-bit each	[0] in the least sig position in Z-order (1st index starts at LSB and goes up)
3	15:0 31:16	mvx_l0[2][15:0] mvx_l0[3][15:0]			
4	15:0 31:16	mvy_l0[0][15:0] mvy_l0[1][15:0]	64	16-bit each	in Z-order (1st index starts at LSB and goes up)
5	15:0 31:16	mvy_l0[2][15:0] mvy_l0[3][15:0]			
6	15:0 31:16	mvx_l1[0][15:0] mvx_l1[1][15:0]	64	16-bit each	in Z-order (1st index starts at LSB and goes up)
7	15:0 31:16	mvx_l1[2][15:0] mvx_l1[3][15:0]			
8	15:0 31:16	mvy_l1[0][15:0] mvy_l1[1][15:0]	64	16-bit each	in Z-order (1st index starts at LSB and goes up)
9	15:0 31:16	mvy_l1[2][15:0] mvy_l1[3][15:0]			
10	3:0 7:4 11:8 15:12	reserved[0] intra_chroma_mode1[2:0] reserved[0] intra_chroma_mode2[2:0] reserved[0] intra_chroma_mode3[2:0] reserved[3:0]		3-bits each	
10	3:0 7:4 11:8 15:12	ref_idx_l0[0][3:0] ref_idx_l0[1][3:0] ref_idx_l0[2][3:0] ref_idx_l0[3][3:0]	16	4-bit each	in Z-order (1st index starts at LSB and goes up)
	19:16 23:20 27:24 31:28	ref_idx_l1[0][3:0] ref_idx_l1[1][3:0] ref_idx_l1[2][3:0] ref_idx_l1[3][3:0]	16	4-bit each	Combined list is not supported in Z-order (1st index starts at LSB and goes up)
11		tu_size[15:0]	32	0: 4x4	in Z-order (1st index starts at LSB and goes up)
				1: 8x8	
				2: 16x16	
				3: 32x32	
12	15:0	tu_xform_Yskip[15:0]	16	0: TU transform skip flag for luma	In Z-order (1st index starts at LSB and goes up). Populated for each TU even if transform skip

DWord	Bitfield	Field	Bits	Definition	Comments
				component is not set (normal transform) 1: TU transform skip flag for luma component is set	is not supported for that particular TU size. This bit should not be set to 1 if transquant_bypass=1
	27:16	Reserved	12		
	31:28	tu_countm1[3:0]	4	number of TU count per CU minus 1	Intel restriction max 16 TU per CU (however spec allows up to 256 TUs). If there is no TU inside a CU, it is indicated by cbf and skip flag.
13	15:0	tu_xform_Uskip[15:0]	16	0: TU transform skip flag for chroma cb component is not set (normal transform) 1: TU transform skip flag for chroma cb component is set	Indexed by tu_xform_Yskip index. Populated for each TU even if transform skip is not supported for that particular TU size. For the case where a 4x4 chroma TU is associated with a group of four 4x4 luma TUs the chroma cb transform skip is coded in the same position as the last 4x4 luma TU (the prior 3 indexed positions are skipped/ignored). For example an 8x8 CU with four 4x4 luma TUs would code the chroma cb TU transform skip flag as tu_xform_Uskip[3]. Restriction: For 422, 2 TUs for each Chroma correspond to 1 Luma TU share the same transformskip flag. This bit should not be set to 1 if transquant_bypass=1
	31:16	tu_xform_Vskip[15:0]	16	0: TU transform skip flag for chroma cr component is not set (normal transform) 1: TU transform skip flag for chroma cr component is set	Indexing identical tu_xform_Uskip. Populated for each TU even if transform skip is not supported for that particular TU size. This bit should not be set to 1 if transquant_bypass=1

Intel restriction max 16 TU per CU, max 256 TUs in a CU.

Max 64 CUs, and each CU record max is 1 cacheline 64 bytes in size (1 cacheline 64 bytes)

LCU, CU, TU, and PU Sizes – Encoder Only

LCU/CU Partitioning Configurations

LCU size	min CU size	CU Depth	Hierarchical Depth=CU Depth+1
64x64	64x64	0	1
	32x32	1	2
	16x16	2	3
	8x8	3	4
32x32	32x32	0	1
	16x16	1	2
	8x8	2	3
16x16	16x16	0	1
	8x8	1	2
8x8	8x8	X	Not allowed in spec

PU Options for a Given CU

Current CU size (leaf node)	min CU sizes (Pic State)	Allowed PU partition types.
64x64 (2Nx2N) Must be a LCU	64x64	Skip : 2Nx2N Intra : 2Nx2N, NxN Inter : 2Nx2N, 2NxN, Nx2N, NxN
	32x32	Skip : 2Nx2N Intra : 2Nx2N (no NxN defined in the spec.) Inter :

		2Nx2N, 2NxN, Nx2N, 2NxN, 2NxN, nLx2N, nRx2N
	16x16	Skip : 2Nx2N Intra : 2Nx2N (no NxN defined in the spec.) Inter : 2Nx2N, 2NxN, Nx2N, 2NxN, 2NxN, nLx2N, nRx2N
	8x8	Skip : 2Nx2N Intra : 2Nx2N (no NxN defined in the spec.) Inter : 2Nx2N, 2NxN, Nx2N, 2NxN, 2NxN, nLx2N, nRx2N
32x32 (2Nx2N) Can or is not a LCU	32x32	Skip : 2Nx2N Intra : 2Nx2N,

		NxN Inter : 2Nx2N, 2NxN, Nx2N, NxN
	16x16	Skip : 2Nx2N Intra : 2Nx2N Inter : 2Nx2N, 2NxN, Nx2N, 2NxN, 2NxN, 2NxN, nLx2N, nRx2N
	8x8	Skip : 2Nx2N Intra : 2Nx2N Inter : 2Nx2N, 2NxN, Nx2N, 2NxN, 2NxN, 2NxN, nLx2N, nRx2N
16x16 (2Nx2N) Can or is not a LCU	16x16	Skip : 2Nx2N Intra : 2Nx2N, NxN Inter : 2Nx2N, 2NxN, Nx2N, NxN
	8x8	Skip :

		2Nx2N Intra : 2Nx2N Inter : 2Nx2N, 2NxN, Nx2N, 2NxN, 2NxN, nLx2N, nRx2N
8x8 (2Nx2N) Cannot be a LCU	8x8	Skip : 2Nx2N Intra : 2Nx2N and NxN Inter : 2Nx2N, 2NxN, Nx2N (both NxN and AMP are not allowed for 8x8 inter CU)

Note: In an 8x8 Inter CU NxN isn't allowed if the SPS parameter disable_inter_4x4 is 1. In Main profile currently this flag is always 1.

U.D, L and R (Up, Down, Left and Right)

n = $\frac{1}{4}$ or - .

TU Partitioning for a Given CU

CU size	TU size	TU Depth	Max Depth=TU Depth+1	PAK supported TU sizes and corresponding number of TUs in CU
64x64	64x64	0	1	no 64x64 transform, so automatically breakdown into 4 32x32 TUs.
	32x32	1	2	number of TUs in CU = 4
	16x16	2	3	number of TUs in CU = 16
	8x8	3	4	this configuration is currently not supported.

	4x4	4	5	this configuration is currently not supported.
32x32	32x32	0	1	number of TUs in CU = 1
	16x16	1	2	number of TUs in CU = 4
	8x8	2	3	number of TUs in CU = 16
	4x4	3	4	this configuration is currently not supported.
16x16	16x16	0	1	number of TUs in CU = 1
	8x8	1	2	number of TUs in CU = 4
	4x4	2	3	number of TUs in CU = 16
8x8	8x8	0	1	number of TUs in CU = 1
	4x4	1	2	number of TUs in CU = 4

The actual level of partitioning is governed by

- MaxTUSize and MinTUSize in Pic State.
- max_transform_hierarchy_depth_inter <= 2 (intel restriction) DW4 bit 3:2 Pic State
- max_transform_hierarchy_depth_intra <= 2 (intel restriction) DW4 bit 1:0 Pic State

Allowed LCU Size – Encoder Only

The following table details the LCU size allowed and the number of records per LCU for the encoder.

LCU Size Allowed	Fixed Number of Records per LCU
64x64	64
32x32	16
16x16	4

Note: 0.5 CL per CU record in VME mode and 1 CL per CU record in extENC mode.

HEVC Error Concealment

The HCP implements an error concealment policy, which is always enabled and cannot be disabled. The objective is that the HCP will always complete a frame/field workload by either decoding the bit stream normally until it finishes the workload or by concealing blocks until the slice or workload is completed. It should never be allowed to hang.

Error concealment, implemented by the HCP hardware, is configured for each slice in the HCP_BSD_OBJECT command. The following information in the HCP_BSD_OBJECT command is utilized for error concealment.

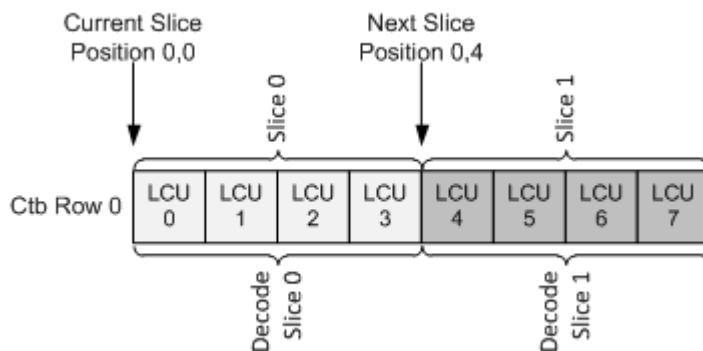
- **SliceStartCtbY, SliceStartCtbX:** The current slice position specified in Ctb coordinates.
- **NextSliceStartCtbY, NextSliceStartCtbX:** The next slice position specified in Ctb coordinates. If the current slice is the last slice in the picture, the next slice values are set to (0,0).
- **LastSliceofPic:** Indicates that the current slice is the last slice in the picture.
- **slice_type:** Indicates the picture type: I, P or B.

The host software will remove all extra slices in the picture. The HCP will not be given a workload that includes extra slices beyond the picture. The last slice in the picture will always be marked by the host software.

The host software will remove any overlapping slices in the picture. The HCP will not be given a workload that includes overlapping slices in the picture.

A HCP_BSD_OBJECT command will include the current slice position and the next slice position. For non-errored streams, it is guaranteed that the slice bit stream will be decoded by the HCP starting from the current slice position through to the Ctb (inclusive) adjacent to the Ctb indicated by the next slice position. *HEVC Error Concealment* illustrates the example of a non-errored stream decode starting with XXX.

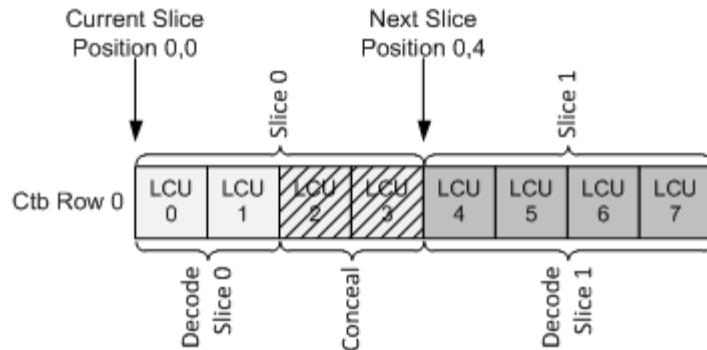
HEVC Slice Decode for Non-errored Stream Cases



For error stream cases where the next slice position does not align itself with the last successfully decoded Ctb in the current slice, the HCP will conceal Ctb's from the last decoded Ctb in the current slice through to the last Ctb prior to the Ctb indicated by the next slice position. If the error occurs such that the current decoded Ctb cannot be decoded, the HCP will ensure that the current Ctb is written out by

any means before writing out concealed Ctbs for the remaining Ctbs in the current slice. In the case of the last slice in a picture, the HCP will conceal Ctbs from the last decoded Ctb in the current slice through to the last Ctb position in the picture indicated by the resolution of the picture in the HCP_PICT_STATE command. *HEVC Error Concealment* illustrates the case described.

HEVC Slice Decode for Missing Blocks in a Slice



Since the host software removes overlapping slices, the next slice position will never be equal to or less than the current slice position.

A concealed Ctb for an I-slice is constructed by the HCP specifying the Intra_Planar prediction mode for the Ctb.

A concealed Ctb for a P-slice is constructed by the HCP specifying the skip_flag.

A concealed Ctb for a B-slice is constructed by the HCP specifying the skip_flag.

VP9 Register Definitions

This section describes the VP9 Register Definitions as follows:

- Register Attributes Description
- VP9 Register Map
- VP9 Encoder Register Descriptions

Register Attributes Description

Host Register Attributes gives the defined register tags and their description.

Host Register Attributes

Tag	Name	Description
R/W	Read/Write	Bit is read and writeable.
R/SW	Read/Special Write	Bit is readable. Write is only allowed once after a reset.
RO	Read Only	Bit is only readable, but writes have no effects.
WO	Write Only	Bit is only writeable, reads return zeroes.
RV	Reserved	Bit is reserved and not visible. Reads will return 0, and writes have no effect.
NA	Not Accessible	This bit is not accessible.

VP9 Register Map

These are MMIO register definitions for decoder/encoder:

VP9 Encoder Register Descriptions

HCP_IMAGE_STATUS_MASK - HCP Image Status Mask

HCP_IMAGE_STATUS_CONTROL - HCP Image Status Control

HCP_UNIT_DONE - HCP Unit Done

HEVC Register Definitions

The Message Channel Interface is a read-only bus used to access the HCP status registers. All registers are 32 bits where reserved bits return a value of zero and subtractive-decode is used to return 0x0000 for all register holes. The Unit ID is 28h. For HCP, the address range is 0x0001E900h to 0001E9FFh.

Register Attributes Description

Host Register Attributes gives the defined register tags and their description.

Host Register Attributes

Tag	Name	Description
R/W	Read/Write	Bit is read and writeable.
R/SW	Read/Special Write	Bit is readable. Write is only allowed once after a reset.
RO	Read Only	Bit is only readable, but writes have no effects.
WO	Write Only	Bit is only writeable, reads return zeros.
RV	Reserved	Bit is reserved and not visible. Reads will return 0, and writes have no effect.
NA	Not Accessible	This bit is not accessible.

HCP Decoder Register Map

This documents all HEVC Decoder MMIO Registers.

HCP Decoder Register Descriptions

The HCP implements the following MMIO registers. A description of the register including its address and DWord descriptions are provided.

HCP CABAC Status

HCP Picture Checksum cIdx0

HCP Picture Checksum cIdx1

HCP Picture Checksum cIdx2

HCP Encoder Register Map

These are MMIO register definitions for encoder.

HCP Encoder Register Descriptions

HCP_FRAME_PERFORMANCE_CT - HCP Frame Performance Count

HCP_LAT_CT1 - HCP Memory Latency Count1

HCP_LAT_CT2 - HCP Memory Latency Count2

HCP_LAT_CT3 - HCP Memory Latency Count3

HCP_LAT_CT4 - HCP Memory Latency Count4

HCP_LAT_CT5 - HCP Memory Latency Count5

HCP_LAT_CT6 - HCP Memory Latency Count6

HCP_BIN_CT - HCP Frame BitStream BIN Count

HCP_READ_CT - HCP Frame Motion Comp Read Count

HCP_MISS_CT - HCP Frame Motion Comp Miss Count

HCP_BITSTREAMSE_BITCOUNT_FRAME - Reported Bitstream Output Bit Count for Syntax Elements Only

HCP_CABAC_BIN_COUNT_FRAME - Reported Bitstream Output CABAC Bin Count Register

HCP_CABAC_INSERTION_COUNT - Reported Bitstream Output CABAC Insertion Count

HCP_MINSIZE_PADDING_COUNT - Bitstream Output Minimal Size Padding Count Report Register

HCP_IMAGE_STATUS_CONTROL - HCP Image Status Control

HCP_QP_STATUS_COUNT - HCP Qp Status Count

HCP_UNIT_DONE - HCP Unit Done

HCP_IMAGE_STATUS_MASK - HCP Image Status Mask

HUC Status Register Descriptions

Following are HUC Status Register Descriptions:

UKERNEL_HDR_INFO - uKernel Header Info

Acronyms and Applicable Standards

Acronyms and Abbreviations

The table below defines acronyms and abbreviations used in this document.

Acronyms

Acronym	Meaning
AAC	Advanced Audio Coding — part of the MPEG specification, AAC is the latest development in audio compression. It provides higher-quality audio reproduction than MPEG-1 Layer 3 (MP3), while requiring nearly 50% less data. It is defined in ISO/IEC 13818-7.
ADSL	Asymmetrical Digital Subscriber Line — an asymmetrical DSL technology that takes advantage of the one-way nature of most multimedia communication, and provides much faster data rates for downstream (to the subscriber) than the upstream.
API	Application Programming Interface — a set of routines used by an application program to request and carry out low-level services performed by the operating system.
ARGB	Alpha Red Green Blue — color channel components.
ARIB	Association of Radio Industries and Business — designated by the Ministry of Public Management, Home Affairs, Posts and Telecommunications (MPHPT) in Japan. ARIB members include broadcasters, radio equipment manufacturers, telecommunication operators, and related organizations.
ASP	Advanced Simple Profile – MPEG4-2
ATSC	ATSC Advanced Television Systems Committee – an organization in US that establishes and promotes technical standards for advanced television systems, such as digital television (DTV).

Acronym	Meaning
BDU	Bit-stream Data Unit
BIST	Built In Self Test
BPP	Bits Per Pixel
BSD	Byte Stream Decoder
CA, CAM	Conditional Access, Conditional Access Module – the removable descrambling module implemented in digital cable or satellite television system. The data flows through the module, which can have any proprietary scrambling algorithm implemented, yet maintaining system interface compatibility. The CAMs are usually provided by the operators in the TV network.
CPU	Central Processing Unit
DAA	Direct Access Arrangement
DAC	Digital-to-Analog Converter
DDA	Digital Difference Analyzer
DDS	Direct Digital Synthesizer
DPB	Decoded Picture Buffer. This buffer holds the decoded pictures for reference and for output along with the currently decoding picture. This differs from the DPB in the standard, which only holds the decoded pictures for reference.
DVB	Digital Video Broadcasting — a set of open worldwide standards that define digital broadcasting using existing satellite, cable, and terrestrial infrastructures. It uses MPEG-2 specification as a universal foundation and expands it with DVB data structures and processes DVB-compliant digital broadcasting and equipment is widely available to consumers and is indicated with the DVB logo.
DVB-S	Satellite television DVB standards, based on QPSK and 8-DPSK modulation.
DVB-T	Terrestrial television DVB standards, based on 2k and 8k OFDM modulation.
DVD	Digital Versatile Disc
DVD-R	Recordable DVD. Since different disk formats are currently in use, including DVD-R,DVD+R, they are collectively mentioned as DVD-R in this document
DVI	Digital Visual Interface standard (EIA/CEA-861A). The standard defines a method for sending digital video signals over DVI and OpenLDI interface specifications. The standard is fully backward compatible with earlier DVI standards. New features include carrying auxiliary video information, such as aspect ratio and native video format information.
DVO	Digital Video Output - the parallel, low voltage signaling interface defined for Intel® video chipsets
DSL xDSL	Digital Subscriber Line – transmission of data over copper telephone lines capable of bringing high-bandwidth to subscribers. Many flavors of DSL are currently in use, which are collectively called xDSL throughout the document.
DSP	Digital Signal Processor
DST	Destination
DWord	A 32-bit word
ES	Elementary Streams — the raw output of an encoder, containing only what is necessary for a decoder to approximate the original picture or audio.
FIFO	First in First Out

Acronym	Meaning
FIR	Finite Impulse Response
FPU	Floating Point Unit
FW	Firmware running on the decoder controller, as used in Volume 4 of the <i>Olo River Plus Silicon EAS</i>
IDR	Instantaneous Decoding Refresh
IEEE 1394 1394	IEEE 1394 or iLink* or FireWire* An IEEE electronics industry standard for connecting multimedia and computing Up to 63 devices can be attached to your PC via a single plug-and-socket connection.
IEEE 802.11 802.11	The Institute for Electronics and Electrical Engineers (IEEE) wireless network specification. 802.11g and 802.11a networks can transmit payload at the rates in excess 34Mbits/s and allow for the wireless transmission at distances from several dozen to several hundred feet indoors.
IF	Intermediate Frequency — the fixed, relatively low-frequency carrier to which current programs are ported by the tuner.
GMCH	Graphics and Memory Control Hub — a chip that connects the IA processor to memory and other components in PC.
HDD	Hard Disk Drive — magnetic mass storage device used in media centers for audiovisual program recording.
HDMI	High Definition Multimedia Interface (HDMI). This interface is used between any audio/video source, such as a set-top box, DVD player, or A/V receiver, and an audio or video monitor, such as a DTV. HDMI supports standard, enhanced or high-definition video, plus multi-channel digital audio on a single cable. The format transmits all ATSC HDTV standards and supports eight-channel digital audio (at up to a 192kHz sampling rate), with bandwidth to spare for future enhancements.
HDTV	High-Definition Television — HDTV specifically refers to the highest-resolution formats of the 18 total DTV formats, true HDTV is generally considered to be 1,080-line interlaced (1080i) or 720-line progressive (720p).
HSR	Hidden Surface Removal
HW	Hardware
I/F	Interface
IEEE	IEEE 32-bit Floating Point number format representation
ISP	Image Synthesis Processor — A collective term to describe all components of the hidden surface removal operation within the PowerVR architecture.
LOD	Level Of Detail — used in texturing calculations.
LSB	Least Significant Bit
LUT	Look-up table
MBAFF	Block Adaptive Field Frame mode
MFD	Multi-Format Decoder
MMU	Memory Management Unit
MMMC	Multi-port, Multi-channel Memory Controller
MSA	Intel Micro Signal Architecture — microprocessor architecture combining the features of microcontroller and digital signal processor. MSA is used here as a synonym of the processor core

Acronym	Meaning
	used in Olo River Plus
MSB	Most Significant Bit
MPEG	Motion Picture Experts Group – Organization that develops standards for digital video and digital audio compression.
MPR	Inter Prediction Module
NAL	Network Abstraction Layer
NAL unit	Syntax structure in a H.264 stream
NTSC	National Television System Committee, North American 525-line analog broadcast TV standard.
NIM	Network Interface Module – the integrated tuner and digital demodulator in the (satellite) TV systems. The DVB NIMs output MPEG transport stream.
NOP	No operation
OEM	Original Equipment Manufacturer
OGL/OpenGL	Open GL application programming interface
PAL	Phase Alternation Line - TV standard used in Europe. PAL uses 625 lines per frame, a 25 frames per second update rate and YUV color encoding. The number of visible pixels for PAL video is 768 x 576.
PCI	Peripheral Component Interconnect bus, a bi-directional bus defined in PCI 2.x specification
PES	Packetized Elementary Streams — packetized streams are the ES streams arranged in data packets with PES header starting every packet. The syntax of the ES and PES is defined in MPEG. See definition for ES.
PIP	Picture In Picture display mode
POD	Point of Deployment conditional access module — the removable conditional access module defined in the OpenCable* specification in US.
PPS	Picture Parameter set
PTS	Presentation time stamp
PVR	Personal Video Recorder, also PDR or personal digital recorder — an interactive TV-recording device that records programs in digital format and allows users to search for/record shows based on type (for instance all basketball games or all episodes of a particular program). Users can also pause, rewind, stop, or fast-forward live programs with only a small time lag.
PWL	Piece-wise Linear
PXD	Pixel Decoder Module
RF	Radio Frequency – usually, modulated carriers which can be directly received by the tuners of TVs or radio receivers
RISC	Reduced Instruction Set Computer
RHW	Reciprocal Homogenous W — W is a 3-D coordinate representation like X Y Z
RSB	Row Store Buffer
RTL	Register Transfer Language/Level
SEI	Supplementary Enhancement Information

Acronym	Meaning
SIF	Semaphore Interface Module
SIMD	Single Instruction Multiple Data
SMPTE	Society of Motion Picture and Television Engineers
SOC	System on chip
SP	Simple Profile – MPEG4-2
SPS	Sequence Parameter set
SRC	Source
SDTV	Standard-Definition Television — a digital television system that is similar to current analog TV standards in picture resolution and aspect ratio. Typical SDTV resolution is 480i or 480p.
STB	Set Top Box — a device that effectively turns a television set into an interactive Internet device and/or allows the television to receive and decode digital television (DTV) broadcasts.
TA	Tile Accelerator
TS	MPEG-2 Transport Stream — a sequence of 188-byte packets carrying the multi-program audiovisual data
TSP	Texture Shading Processor — a collective term to describe all components of the texture, shading and pixel blending operations within the PowerVR architecture.
VCL	Video Coded Layer
VCXO	Voltage Controlled Crystal Oscillator
VGP/ VGP Lite	Vertex Geometry Processor
VLC	Variable length coded. This refers to the collection of coding techniques that are used in VC1, and include CABAC, CAVLC and Exp-Golomb.
VOL	Video Object Layer
VOP	Video Object Plane
WAN	Wide Area Network
WSS	Wide Screen Signaling
XDS	Extended Data Services — data services sending data in line 21/283 of the analog NTSC TV signal
XSI	Intel® XScale® System Interconnect
X, Y, Z, W	3-D coordinate representations
YUV	YUV texture format, primarily for video formats