USB4 Re-timer 0.96 ENGINEERING CHANGE NOTICE FORM

Title: Adds Support for ENTER_EI_TEST Operation
Applied to: USB4 Re-timer Specification Version 0.96

Brief description of the functional changes:
Adds ENTER_EI_TEST Operation to the list of Port Operations that a re-timer shall support. Also removes undefined Operations.

Benefits as a result of the changes:
Fixes error.

An assessment of the impact to the existing revision and systems that currently conform to the USB specification:
None

An analysis of the hardware implications:
None

An analysis of the software implications:
None

An analysis of the compliance testing implications:
None

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Actual Change

(a). Table 5-1

To Text:

Table 5-1. Port Operation Supported by a Re-timer (Required)

Port Operation	Opcode[1]	Operation		Completion		Reference
		Metadata DW	Data DWs	Metadata DW	Data DWs	
QUERY_LAST_RE-TIMER	LAST (5453414Ch)	0	0	1	0	Section 5.1.1
QUERY_CABLE_RE-TIMER	CBLR (524C4243h)	0	0	1	0	Section 5.1.2
SET_TX_COMPLIANCE	TXCM (4D435854h)	1	0	0	0	USB4 Specification
SET_RX_COMPLIANCE	RXCM (4D435852h)	1	0	0	0	USB4 Specification
~~ENTER_EI_TEST~~	~~EEIT (54494545h)~~	~~1~~	~~0~~	~~0~~	~~0~~	~~USB4 Specification~~
~~GET_RX_TXFFE_PRESET~~	~~GRTP (50545247h)~~	~~1~~	~~0~~	~~0 or 1~~	~~0~~	~~USB4 Specification~~
~~ACK_RX_TXFFE_PRESET~~	~~ARTP (50545241h)~~	~~1~~	~~0~~	~~0~~	~~0~~	~~USB4 Specification~~
START_BER_TEST	SBER (52454253h)	1	0	0	0	USB4 Specification
END_BER_TEST	EBER (52454245h)	1	0	0	2	USB4 Specification
END_BURST_TEST	BBER (52454242h)	1	0	0	3	USB4 Specification
READ_BURST_TEST	RBER (52454252h)	1	0	0	3	USB4 Specification
SET_INBOUND_SBTX	LSUP (5055534Ch)	0	0	0	0	Section 5.2.1
UNSET_INBOUND_SBTX	USUP (50555355h)	0	0	0	0	Section 5.2.2

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[1] Byte 0 of the Opcode is the rightmost byte of the hexadecimal representation.

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GET_NVM_SECTOR_SIZE	GNSS (53534E47h)	0	0	1	0	Section 5.2.3
NVM_SET_OFFSET	BOPS (53504F42h)	1	0	0	0	Section 5.2.4
NVM_BLOCK_WRITE	BLKW (574B4C42h)	0	16	0	0	Section 5.2.5
NVM_AUTH_WRITE	AUTH (48545541h)	0	0	1	0	Section 5.2.6
NVM_READ	AFRR (52524641h)	1	0	0	0 to 16	Section 5.2.7
READ_LANE_MARGIN_CAP	RDCP (50434452h)	0	0	0	2	USB4 Specification
RUN_HW_LANE_MARGINING	RHMG (474D4852h)	1	0	0	2	USB4 Specification
RUN_SW_LANE_MARGINING	RSMG (474D5352h)	1	0	0	0	USB4 Specification
READ_SW_MARGIN_ERR	RDSW (57534452h)	0	0	1	0	USB4 Specification