Ampere® Altra® Family 64-Bit Multi-Core Processor
Approved Vendor List (AVL)

March 20, 2024

Contents

1. Introduction

Ampere's Approved Vendor List (AVL) represents components known to function on Ampere Customer Reference Boards (CRBs) with the latest firmware releases. Test reports and configuration guidelines may be available upon request. OxMs and customers are responsible for validating the components on their platform and sourcing the components.

2. Ampere® Altra® Family AVL: Qualified Device List

CATEGORY	PART NUMBER	VENDOR	TYPE	CAPACITY	SPEED GRADE	DESCRIPTION
Memory	KSM32RS4-16MRR	Kingston	RDIMM	16GB	3200	1Rx4, RCD: Rambus
Memory	KSM32RS4-32HAR	Kingston	RDIMM	32GB	3200	1Rx4, RCD: Rambus
Memory	MTA18ASF2G72PDZ-2G6E1	Micron	RDIMM	16GB	2666	2Rx8 E-Die
Memory	MTA18ASF2G72PDZ-3G2E1	Micron	RDIMM	16GB	3200	2Rx8, 8Gb
Memory	MTA18ASF2G72PZ-2G9E1	Micron	RDIMM	16GB	2933	1Rx4 E-Die
Memory	MTA36ASF4G72PZ-2G6E1	Micron	RDIMM	32GB	2666	2Rx4, E-Die
Memory	MTA36ASF4G72PZ-2G6D1	Micron	RDIMM	32GB	2666	2Rx4
Memory	MTA36ASF4G72PZ-3G2E2	Micron	RDIMM	32GB	3200	2Rx4, 8Gb E2-Die, RCD: IDT
Memory	MTA36ASF8G72PZ-3G2E1	Micron	RDIMM	64GB	3200	2Rx4
Memory	M393A2K40CB2-CTD6Q	Samsung	RDIMM	16GB	2666	1Rx4, 8Gb, C-Die
Memory	M393A2K43CB2-CTD	Samsung	RDIMM	16GB	2666	2Rx8
Memory	M393A2K43DB2-CVF	Samsung	RDIMM	16GB	2933	2Rx8
Memory	M393A2K43CB2-CVF	Samsung	RDIMM	16GB	2933	2Rx8
Memory	M393A2K40DB2-CVFBQ	Samsung	RDIMM	16GB	2933	2Rx4, RCD: IDT
Memory	M393A2K40DB3-CWE	Samsung	RDIMM	16GB	3200	1Rx4, 8Gb
Memory	M393A2K43DB3-CWE	Samsung	RDIMM	16GB	3200	2Rx8, 8Gb
Memory	M393A2K43EB3-CWEBQ	Samsung	RDIMM	16GB	3200	2Rx8, RCD: IDT
Memory	M393A2K43EB3-CWECQ	Samsung	RDIMM	16GB	3200	2Rx8, RCD: Montage
Memory	M393A2K40EB3-CWEBQ	Samsung	RDIMM	16GB	3200	1Rx4, RCD: IDT
Memory	M393A2K40EB3-CWECQ	Samsung	RDIMM	16GB	3200	1Rx4, RCD: Montage
Memory	M393A2K40EB3-CWEGQ	Samsung	RDIMM	16GB	3200	1Rx4, RCD: Rambus
Memory	M393A4K40CB2-CTD	Samsung	RDIMM	32GB	2666	2Rx4, 8Gb, C-Die
Memory	M393A4K40BB2-CTD	Samsung	RDIMM	32GB	2666	2Rx4
Memory	M393A4K40CB2-CVF	Samsung	RDIMM	32GB	2933	2Rx4, 8Gb, C-Die
Memory	M393A4K40DB2-CVF	Samsung	RDIMM	32GB	2933	2R, x4
Memory	M393A4K40DB2-CWE	Samsung	RDIMM	32GB	3200	2R, x4, 8Gb

CATEGORY	PART NUMBER	VENDOR	TYPE	CAPACITY	SPEED GRADE	DESCRIPTION
Memory	M393A4G40AB3-CWE	Samsung	RDIMM	32GB	3200	1Rx4, 16Gb
Memory	M393A4K40DB3-CWE	Samsung	RDIMM	32GB	3200	2Rx4, 8Gb, D-Die
Memory	M393A4G43AB3-CWE	Samsung	RDIMM	32GB	3200	2Rx8, 16Gb, A-Die
Memory	M393A4G40BB3-CWEBQ	Samsung	RDIMM	32GB	3200	1Rx4, RCD: IDT
Memory	M393A4G40BB3-CWEGQ	Samsung	RDIMM	32GB	3200	1Rx4, RCD: Rambus
Memory	M393A4G40BB3-CWECQ	Samsung	RDIMM	32GB	3200	1Rx4, RCD: Montage
Memory	M393A4G43BB4-CWEBQ	Samsung	RDIMM	32GB	3200	2Rx8, RCD: IDT
Memory	M393A4G43BB4-CWECQ	Samsung	RDIMM	32GB	3200	2Rx8, RCD: Montage
Memory	M393A4K40EB3-CWECQ	Samsung	RDIMM	32GB	3200	2Rx4, RCD: Montage
Memory	M393A8G40MB2-CTD	Samsung	RDIMM	64GB	2666	2Rx4, 16Gb
Memory	M393A8G40MB2-CVF	Samsung	RDIMM	64GB	2933	16Gb
Memory	M393A8G40AB2-CVF	Samsung	RDIMM	64GB	2933	2Rx4
Memory	M393A8G40AB2-CWE	Samsung	RDIMM	64GB	3200	2Rx4, 16Gb
Memory	M393AAG40M3B-CYF	Samsung	RDIMM	128GB	2933	4Rx4
Memory	HMABAGR7A2R4N-XS	SK Hynix	RDIMM	128GB	3200	3DS, 4Rx4, 16Gb
Memory	HMABAGL7A2R4N-XST5	SK Hynix	LRDIMM	128GB	3200	3DS, 4Rx4, 16Gb, RCD: Montage
Memory	HMA82GR7CJR4N-VK	SK Hynix	RDIMM	16GB	2666	1Rx4
Memory	HMA82GR7CJR4N-XN	SK Hynix	RDIMM	16GB	3200	1Rx4, 8Gb
Memory	HMA82GR7DJR4N-XNTG	SK Hynix	RDIMM	16GB	3200	RCD: IDT
Memory	HMA82GR7DJR4N-XNT4	SK Hynix	RDIMM	16GB	3200	RCD: Montage
Memory	HMAT14JXSLB189N	SK Hynix	LRDIMM	256GB	3200	3DS, 8Rx4, 16Gb, RCD: IDT
Memory	HMA84GR7CJR4N-VK	SK Hynix	RDIMM	32GB	2666	C-Die
Memory	HMA84GR7CJR4N-XN	SK Hynix	RDIMM	32GB	3200	2Rx4, 8Gb
Memory	HMA84GR7DJR4N-XNTG	SK Hynix	RDIMM	32GB	3200	2Rx4, IDT
Memory	HMA84GR7DJR4N-XNT4	SK Hynix	RDIMM	32GB	3200	2Rx4, RCD: Montage
Memory	HMAA8GR7AJR4N-XNTG	SK Hynix	RDIMM	64GB	3200	2Rx4, RCD: IDT
Memory	HMAA8GR7AJR4N-XNT4	SK Hynix	RDIMM	64GB	3200	2Rx4, RCD: Montage
Memory	HMAA8GR7AJR4N-XNT8	SK Hynix	RDIMM	64GB	3200	2Rx4, RCD: Rambus

CATEGORY	PART NUMBER	VENDOR	TYPE	CAPACITY	SPEED GRADE	DESCRIPTION
PCIE-Adapter (NVMe)	HYPER M.2 X16 CARD V2	ASUS	PCIe		PCIe 4.0	4 x NVMe M.2
PCIE-Adapter (NVMe)	CMT4032	Gigabyte	PCIe-M2		PCIe 3.0	PCIe 3.0 x8, 2 x PCIe 3.0 x4 M.2 SSD drives
PCIE-Adapter (NVMe)	AOC-SLG3-2M2	Supermicro	PCIe-M2		PCIe 3.0	PCIe 3.0 x8, 2x M.2 NVMe
PCIE-GPU/Accel	T4	Nvidia	PCIe		PCIe 3.0 x8	Tesla T4 GPU 16GB, 75W
PCIE-GPU/Accel	A10	Nvidia	PCIe		PCIe 4.0 x16	Nvidia A10 GPU, 24GB, 150W
PCIE-GPU/Accel	A16	Nvidia	PCIe		PCIe 4.0 x16	Nvidia A16 GPU, 4 x 16GB, 250W
PCIE-GPU/Accel	A30	Nvidia	PCIe		PCIe 4.0 x16	Nvidia A30 GPU, 24GB, 165W
PCIE-GPU/Accel	A100	Nvidia	PCIe		PCIe 4.0 x16	Nvidia A100 GPU, 40GB, 250W
PCIE-GPU/Accel	T408-U2	Netint	PCIe		PCIe 3.0	PCIe 3.0 x4, U.2
PCIE-NIC	7ZT7A00496	Broadcom	PCIe		PCIe 3.0, 2x 10GbE	PCIe 3.0 x8, BRCM 57416 (BCM957416A4160LC)
PCIE-NIC	4XC7A08238	Broadcom	PCIe		PCIe 3.0, 2x 25GbE	PCIe 3.0 x8, BRCM 57414 (BCM957414A4141LC), SFP28
PCIE-NIC	BCM957414N4140C	Broadcom	OCP 3.0		PCIe 3.0, 2x 25GbE	PCIe 3.0 x8, OCP 3.0 SFF
PCIE-NIC	BCM957504-N1100G	Broadcom	OCP 3.0		PCIe 4.0, 100GbE	PCIe 4.0 x16, QSFP56
PCIE-NIC	BCM957508-P2100G	Broadcom	PCIe		PCIe 4.0, 2x 100GbE	PCIe 4.0 x16, QSFP56/QSFP28
PCIE-NIC	BCM957504-N425G	Broadcom	OCP 3.0		PCIe 4.0, 4x 25GbE	PCIe 4.0 x16, OCP 3.0 SFF, SFP28
PCIE-NIC	BCM957412N4120C	Broadcom	OCP 3.0		PCIe 3.0, 2x 10GbE	PCIe 3.0 x8
PCIE-NIC	BCM957416N4160C	Broadcom	OCP 3.0		PCIe 3.0, 2x 10GbE	PCIe 3.0 x8, OCP 3.0
PCIE-NIC	BCM957504-P425G	Broadcom	PCIe		PCIe 4.0, 4x25GE	PCIe 4.0 x16, SFP28
PCIE-NIC	I210T1	Intel	PCIe		PCIe 1.0, 1x 1GbE	PCIe 1.0 x1
PCIE-NIC	I350-T2	Intel	PCIe		PCIe 2.1, 2x 1GbE	PCIe 2.1 x4
PCIE-NIC	X550-T2	Intel	PCIe		PCIe 3.0, 2x 10GbE	PCIe 3.0 x4
PCIE-NIC	MCX515A-CCAT	Mellanox	PCIe		PCIe 3.0, 1x 100Gb	PCIe 3.0 x16, QSFP28
PCIE-NIC	MCX4131A-GCAT	Mellanox	PCIe		PCIe 3.0, 1x 50GbE	PCIe 3.0 x8, QSFP28/QSFP+/QSFP
PCIE-NIC	MCX516A-CCAT	Mellanox	PCIe		PCIe 3.0, 2x 100GbE	PCIe 3.0 x16, QSFP28/QSFP+/QSFP
PCIE-NIC	MCX4421A-XCQN	Mellanox	OCP 2.0		PCIe 3.0, 2x 10GbE	PCIe 3.0 x8, OCP 2.0 SFF, SFP28
PCIE-NIC	MCX4121A-XCAT	Mellanox	PCIe		PCIe 3.0, 2x 10GbE	PCIe 3.0 x8, SFP28/SFP+/SFP
PCIE-NIC	MCX4421A-ACQN	Mellanox	OCP 2.0		PCIe 3.0, 2x 25GbE	PCIe 3.0 x8, OCP 2.0 SFF, SFP28/SFP+/SFP
PCIE-NIC	MCX4121A-ACAT	Mellanox	PCIe		PCIe 3.0, 2x 25GbE	PCIe 3.0 x8, SFP28/SFP+/SFP

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PCIE-NIC	MCX512A-ACAT	Mellanox	PCIe		PCIe 3.0, 2x 25GbE	PCIe 3.0 x8, SFP28
PCIE-NIC	MCX542A-ACAN	Mellanox	OCP 2.0		PCIe 3.0, 2x 25GbE	PCIe 3.0, SFP28/SFP+/SFP
PCIE-NIC	MCX4621A-ACAB	Mellanox	OCP 3.0		PCIe 3.0, 2x 25GbE	PCIe 3.0 x8, SFP28/SFP+
PCIE-NIC	MCX512A-ACUT	Mellanox	PCIe		PCIe 3.0, 2x 25GbE	PCIe 3.0 x8, SFP28
PCIE-NIC	MCX516A-CDAT	Mellanox	PCIe		PCIe 4.0, 2x 100GbE	PCIe 4.0 x16, QSFP28
PCIE-NIC	MCX631102AS-ADAT	Nvidia	PCIe		PCIe 4.0, 2x 25GbE	PCIe 4.0 x8, SFP28
PCIE-NIC	MCX623106AC-CDAT	Nvidia	PCIe		PCIe 4.0, 2x 100GbE	PCIe 4.0 x16, QSFP56
PCIE-NIC	MCX623106AE-CDAT	Nvidia	PCIe		PCIe 4.0, 2x 100GbE	PCIe 4.0 x16, QSFP56
PCIE-NIC	MCX623106AN-CDAT	Nvidia	PCIe		PCIe 4.0, 2x 100GbE	PCIe 4.0 x16, QSFP56
PCIE-NIC	MCX623432AN-ADAB	Nvidia	OCP 3.0		PCIe 4.0, 2x 25GbE	PCIe 4.0 x16, SFF, SFP28
PCIE-NIC	MCX623102AN-ADAT	Nvidia	PCIe		PCIe 4.0, 2x 25GbE	PCIe 4.0 x16, HHHL, SFP28
PCIE-NIC	MCX631102AN-ADAT	Nvidia	PCIe		PCIe 4.0, 2x 25GbE	PCIe 4.0 x8, SFP28, No Crypto, Tall Bracket
PCIE-NIC	MCX653105A-HDAT	Nvidia	PCIe		PCIe 4.0, 1x 200GbE	PCIe 4.0 x16, QSFP56
PCIE-NIC	MBF2H516C-EESOT	Nvidia	PCIe		PCIe 4.0	PCIe 4.0, x16, FHHL, Crypto Disabled, Secure Boot, DPU
PCIE-NIC	MCX653106A-HDAT	Nvidia	PCIe		PCIe 4.0, 2x 200GbE	PCIe 4.0 x16, QSFP56
PCIE-Storage (HBA)	ASM1061R	ASMedia	PCIe		PCIe 2.0	PCIe 2.0 x2, 2x SATA 6Gbps
PCIE-Storage (HBA)	ASM1062R	ASMedia	PCIe		PCIe 2.0	PCIe 2.0 x2, 2x SATA 6Gbps
PCIE-Storage (HBA)	9305-16i	Broadcom	PCIe		PCIe 3.0, 12Gb/s	PCIe 3.0 x8, 4 Mini-SAS HD SFF-8643
PCIE-Storage (HBA)	9405W-16i	Broadcom	PCIe		PCIe 3.1	PCIe 3.1 x16, SAS3616W Tri-Mode, Four (x4) SFF-8643
PCIE-Storage (HBA)	9460-16i	Broadcom	PCIe		PCIe 3.1, 12Gb/s	PCIe 3.1 x8, Controller SAS3516, 4 Mini-SAS HD SFF-8643
PCIE-Storage (HBA)	9460-8i	Broadcom	PCIe		PCIe 3.1, 12Gb/s	PCIe 3.1 x8, Controller SAS3508, 2 Mini-SAS HD SFF-8643
PCIE-Storage (HBA)	9400-16i	Broadcom	PCIe		PCIe 3.0, 12Gb/s	PCIe 3.0 x8, 4 Mini-SAS HD SFF-8643
PCIE-Storage (HBA)	9400-8i	Broadcom	PCIe		PCIe 3.0, 12x3Gb/s	PCIe 3.0 x8, 12, 6, and 3Gb/s SAS and 6, 3Gb/s SATA
PCIE-Storage (HBA)	9500-16i	Broadcom	PCIe		PCIe 4.0	PCIe 4.0 x8, SAS3916 (Triple-mode), Two x8 SFF-8654
PCIE-Storage (HBA)	9500-8i	Broadcom	PCIe		PCIe 4.0	PCIe 4.0 x8, SAS3808
PCIE-Storage (HBA)	9560-8i	Broadcom	PCIe		PCIe 4.0	PCIe 4.0 x8
PCIE-Storage (HBA)	CRA3338	Gigabyte	PCIe		PCIe 3.0	PCIe 3.0 x8, 2 Mini-SAS HD SFF8644, SW RAID (SAS3008)

CATEGORY	PART NUMBER	VENDOR	TYPE	CAPACITY	SPEED GRADE	DESCRIPTION
PCIE-Storage (HBA)	CRA4448	Gigabyte	PCIe		PCIe 3.0	PCIe 3.0 x8, 2 Mini-SAS HD SFF8644, HW RAID (CRA4448-LSI SAS3108)
PCIE-Storage (HBA)	JMB582/585	JMicron	PCIe		PCIe 3.0	PCIe 3.0 x1 to x2 SATA 6Gb/s Bridge
PCIE-Storage (HBA)	88SE9230	Marvell	PCIe		PCIe 2.0	PCIe 2.0 (5.0 Gb/s)
PCIE-Storage (NVMe)	GP-AG70S2TB	GigaByte	M.2	2.0TB	PCIe 4.0	PCIe 4.0 x4, NVMe 1.4
PCIE-Storage (NVMe)	SSDPE21K015TA	Intel	U.2	1.5TB	PCIe 3.0	PCIe 3.0 x4, 2.5", 15mm DC P4800X
PCIE-Storage (NVMe)	SSDPE2KE016T8	Intel	U.2	1.6TB	PCIe 3.1	PCIe 3.1 x4, 2.5", DC P4610
PCIE-Storage (NVMe)	SSDPE2KX010T801	Intel	U.2	1.0TB	PCIe 3.1	PCIe 3.1 x4, 2.5", DC P4510
PCIE-Storage (NVMe)	SSDPE2KX020T801	Intel	U.2	2.0TB	PCIe 3.1	PCIe 3. 1 x4, DC P4510
PCIE-Storage (NVMe)	SSDPE2KE032T8	Intel	U.2	3.2TB	PCIe 3.1	PCIe 3.1 x4, 2.5", DC P4610
PCIE-Storage (NVMe)	SSDPE2KX040T8	Intel	U.2	4.0TB	PCIe 3.1	PCIe 3.1 x4, DC P4510
PCIE-Storage (NVMe)	SSDPE2KE064T8	Intel	U.2	6.4TB	PCIe 3.1	PCIe 3.1 x4, 2.5", P4610
PCIE-Storage (NVMe)	SSDPE2NV076T8	Intel	U.2	7.68TB	PCIe 3.1	PCIe 3.1 x4, 2.5", D5-P4320
PCIE-Storage (NVMe)	KXD6CRJJ1T92	Kioxia	E1.S 9.5mm	1.92TB	PCIe 4.0	PCIe 4.0 x4, XD6
PCIE-Storage (NVMe)	KCD61LUL3T84	Kioxia	U.2	3.84TB	PCIe 4.0	PCIe 4.0, CD6
PCIE-Storage (NVMe)	KCD61LUL960G	Kioxia	U.2	960GB	PCIe 4.0	PCIe 4.0, CD6
PCIE-Storage (NVMe)	KCM61RUL960G	Kioxia	U.2	960GB	PCIe 4.0	PCIe 4.0, CM6
PCIE-Storage (NVMe)	MTFDHBA960TDF-1AW1ZAB	Micron	M.2	960GB	PCIe 3.0	PCIe 3.0 x4, 7300 PRO
PCIE-Storage (NVMe)	MTFDHBE960TDF-1AW1ZAB	Micron	U.2	960GB	PCIe 3.0	PCIe 3.0 x4, 7300 PRO
PCIE-Storage (NVMe)	MZ1LB1T9HALS-00007	Samsung	M.2	1.92TB	PCIe 3.0	PCIe 3.0 x4
PCIE-Storage (NVMe)	MZWLR1T9HBJR-00007	Samsung	U.2	1.92TB	PCIe 4.0	PCIe 4.0 x4, PM1733
PCIE-Storage (NVMe)	MZQL21T9HCJR-00A07	Samsung	U.2	1.92TB	PCIe 4.0	PCIe 4.0 x4, PM9A3
PCIE-Storage (NVMe)	MZ1L21T9HCLS-00A07	Samsung	M.2	1.92TB	PCIe 4.0	PCIe 4.0 x4, PM9A3
PCIE-Storage (NVMe)	MZWLR3T8HBLS-00AU3	Samsung	U.2	3.84TB	PCIe 4.0	PCIe 4.0 x4, PM1733
PCIE-Storage (NVMe)	MZPLJ6T4HALA-00007	Samsung	U.2	6.4TB	PCIe 4.0	PCIe 4.0 x8, PM1735
PCIE-Storage (NVMe)	MZ1LB960HAJQ-00007	Samsung	M.2	960GB	PCIe 3.0	PCIe 3.0 x4, 983
PCIE-Storage (NVMe)	MZQLB960HAJR	Samsung	U.2	960GB	PCIe 3.0	PCIe 3.0 x4, 983
PCIE-Storage (NVMe)	HFS1T9GD0FEI-A430A	SK hynix	M.2	1.92TB	PCIe 3.0	PCIe 3.0, PE6110

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PCIE-Storage (NVMe)	HFS960GD0FEI-A430A	SK hynix	M.2	960GB	PCIe 3.0	PCIe 3.0, PE6110
PCIE-Storage (NVMe)	SSDPF2KX038TZ	Solidigm	U.2	3.8TB	PCIe 4.0	PCIe 4.0 x4, D7-P5510
PCIE-Storage (NVMe)	SSDPF2KX038T9S1	Solidigm	U.2	3.8TB	PCIe 4.0	PCIe 4.0 x4, D7-P5500
PCIE-Storage (NVMe)	SSDPF2KX076TZ	Solidigm	U.2	7.68TB	PCIe 4.0	PCIe 4.0 x4, D7-P5510
PCIE-Storage (NVMe)	WUS4BA119DSP3X1	Western Digital	U.2	1.92TB	PCIe 3.1, x4	PCIe 3.1 x4, DC SN840
TPM	CTM010-rev-10	Gigabyte	OCP SPI	N/A	N/A	TPM 2.0, Infineon SLB9670VQ2
TPM	ST33HTPH2E32AHC0	STMicroelectronics	OCP SPI			TCG TPM 2.0
TPM	ST33HTPH2X32AHE0	STMicroelectronics	OCP SPI			TCG TPM 2.0
TPM	B91.01410.0012	Wiwynn	OCP SPI	N/A	N/A	TPM 2.0, Infineon SLB 9670VQ2

Note: Customers must check with vendors/suppliers for the EOL for parts used on their platforms.

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