



LAND



SEA



AIR



AAB40-M128

Autonomous Driving GPU Server



- High Performance Ampere® MAX M128-30 (128Core 3.0Ghz), Ampere Altra
- RAM DDR4-3200MT/s 4TB
- Nvidia RTX A6000 GPU, 10752 CUDA, 48GB GDDR6
- Mellanox 4 x 25GbE SFP+ LAN(Optional), 2 x 10GbE LAN, 1 x GbE LAN
- 4 x Channel CAN and CAN FD interface
- 1 x RS232, 1 x IPMI
- 5 x USB 3.0, 1 x VGA
- 2 x 2.5" SATA SSD (Options for PCIe 4.0 U.2)
- DC-DC 18V~36V
- Design to meet MIL-STD-810 Vibration & Shock

Specifications

System

CPU	Ampere® Altra® MAX M128-30 Processors 3.0GHz 128Cores, option Ampere Altra Q32 and Ampere Altra Q64
Memory type	16 DIMM DIMM sockets with individual memory channels Up to 4TB (16x 256GB) DDR4 RDIMM memory, up to 3200MT/s

GPU

Graphics Card	Nvidia RTX A6000 (48GB GDDR6, 10752 CUDA Cores) PCIe Gen4 x16
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Storage

SSD	2 x 2.5" SATA SSD
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Ethernet

Ethernet	4 x Port 25 GbE with SFP+(Option) 2 x 10 GbE with RJ45 1 x 1 GbE with RJ45 1 x IPMI LAN
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I/O

CAN	4 x Channel PCAN-M.2 CAN and CAN FD interface for M.2
USB	4 x USB 3.0
COM	1 x COM RS232

Side I/O

Video Port	1 x VGA
CAN Bus Port	4 x CAN Bus Connect
Ethernet Port	4 x 25 GbE (Option) 2 x 10 GbE/1 x GbE/1 x IPMI LAN
USB Port	5 x USB3.0
Serial Port	1 x COM RS232
DC-IN	1 x D38999
Power Button	1 x Power Button with LED backlight

OS support list

OS	Linux RedHat ,Ubuntu
Power Requirement	DC-IN (18V~36V)
Dimension	400mm x 350mm x 200mm (DxWxH)

Weight	8 KG
Operating Temp.	0 to 60°C
Storage Temp.	-40°C to 85°C
Relative Humidity	5% to 95%, non-condensing
Environmental	
MIL-STD-810 Test	<p>Method 500.5, Procedures I and II (Altitude, Operation): 12,192M, (40,000 ft) for the initial cabin altitude (18.8Kpa or 2.73 Psia)</p> <p>Method 500.5, Procedures III and IV (Altitude, Non-Operation): 15,240, (50,000 ft) for the initial cabin altitude (14.9Kpa or 2.16 Psia)</p> <p>Method 501.5, Procedure I (Storage/High Temperature)</p> <p>Method 501.5, Procedure II (Operation/High Temperature)</p> <p>Method 502.5, Procedure I (Storage/Low Temperature)</p> <p>Method 502.5, Procedure II (Operation/Low Temperature)</p> <p>Method 503.5, Procedure I (Temperature shock)</p> <p>Method 507.5, Procedure II (Temperature & Humidity)</p> <p>Method 509.7 Salt Spray (50±5)g/L</p> <p>Method 514.6, Vibration Category 24/Non-Operating (Category 20 & 24,Vibration)</p> <p>Method 514.6, Vibration Category 20/Operating (Category 20 & 24,Vibration)</p> <p>Method 516.6, Shock-Procedure V Non-Operating (Mechanical Shock)</p> <p>Method 516.6, Shock-Procedure I Operating (Mechanical Shock)</p>
Reliability	<p>Conduction Cooling</p> <p>Designed & Manufactured using ISO 9001 Certified Quality Program.</p>
CE/FCC	<p>EN 61000-4-2: Air discharge: 8 kV, Contact discharge: 6kV</p> <p>EN 61000-4-3: 10V/m</p> <p>EN 61000-4-4: Signal and DC-Net: 1 kV</p> <p>EN 61000-4-5: Leads vs. ground potential 1kV, Signal und DC-Net: 0.5 kV</p> <p>CE and FCC</p>

Ordering Information

	AA640-M128-A1	AA640-M128-A2
CPU	M128-30	M128-30
GPU-1	RTXA6000	RTXA6000
GPU-2	N/A	RTXA6000
RAM	Up to DDR4- 4 TB	
Storage	2 x 2.5" SATA SSD (Options for 2 x PCIe 4.0 U.2)	
CAN	Options up to 4 x CAN	
COM	1 x RS232	
LAN	2 x 10GbE LAN, 1 x GbE LAN	
25G SFP+	Options for 4 x 25G SFP+	
Power	DC 18V~36V	