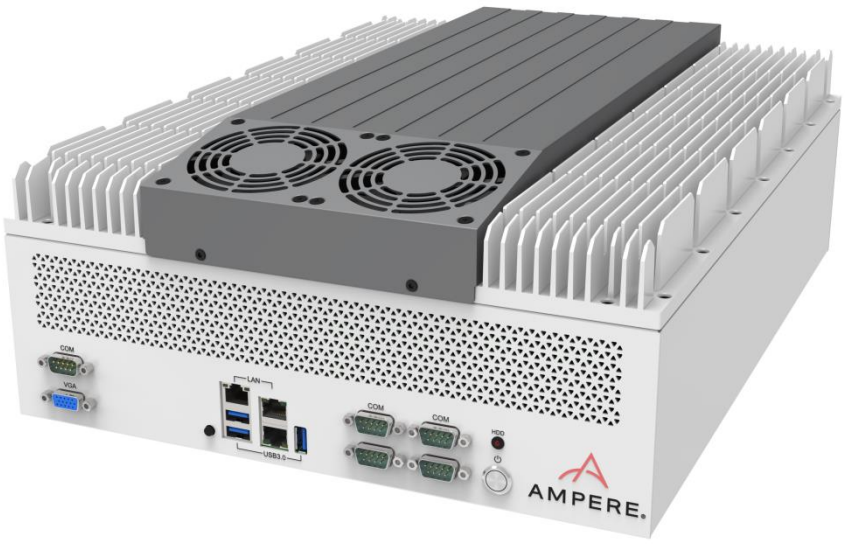
AA6Q

Autonomous Driving GPU Server



- High Performance Ampere® Altra®Q64-22 (64Core 2.2Ghz 95W) Processor Option Ampere Altra Q32 and Ampere Altra Max M128
- RAM DDR4-3200MT/s 4TB
- Nvidia RTX A6000 GPU 10752 CUDA cores 48GB GDDR6 PCIe Gen 4 (TDP 300W)
- Mellanox 4 x 25GbE SFP+ LAN(Option), 2x10GbE LAN, 1x GbE LAN
- 4 x Channel CAN and CAN FD interface
- 1 x RS232
- 2x2.5" SATA SSD (Options for PCIe 4.0 U.2)
- Design to meet MIL-STD-810G Vibration & Shock

Specifications

System	
CPU	Ampere® Altra® Q64-22 Processors 2.2GHz 64Cores Option Ampere Altra Q32 and Ampere Altra Max M128
Memory type	16 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
Storage	
SSD	2 x 2.5" SATA SSD
Ethernet	
Ethernet	4 x Port 25Gigabit Ethernet with SFP+(Option)
	2 x 10 GbE with RJ45
	1 x GbE with RJ45
	1 x IPMI LAN
I/O	
CAN	4 x Channel PCAN-M.2 CAN and CAN FD interface for M.2
USB	5 x USB 3.0
COM	1 x RS232
Side I/O	
Video Port	1 x VGA
CAN Bus Port	4 x CAN Bus Connect
Ethernet Port	4 x Port 25Gigabit Ethernet with SFP+(Option)
	2 x 10 GbE with RJ45
	1 x GbE with RJ45
	1 x IPMI LAN
USB Port	4 x USB3.0
Serial Port	4 x COM (RS-232/422/485)
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	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) 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) Method 501.5, Procedure I (Storage/High Temperature) Method 501.5, Procedure II (Operation/High Temperature) Method 502.5, Procedure I (Storage/Low Temperature) Method 502.5, Procedure II (Operation/Low Temperature) Method 503.5, Procedure I (Temperature shock) Method 507.5, Procedure II (Temperature & Humidity) Method 509.7 Salt Spray (50±5)g/L Method 514.6, Vibration Category 24/Non-Operating (Category 20 & 24,Vibration) Method 514.6, Vibration Category 20/Operating (Category 20 & 24,Vibration) Method 516.6, Shock-Procedure V Non-Operating (Mechanical Shock) Method 516.6, Shock-Procedure I Operating (Mechanical Shock)
Reliability	Conduction Cooling Designed & Manufactured using ISO 9001 Certified Quality Program.
CE/FCC	EN 61000-4-2: Air discharge: 8 kV, Contact discharge: 6kV EN 61000-4-3: 10V/m EN 61000-4-4: Signal and DC-Net: 1 kV EN 61000-4-5: Leads vs. ground potential 1kV, Signal und DC-Net: 0.5 kV CE and FCC

Ordering Information

	AA640-A1	AA640-A2
CPU	Q64-22	Q64-22
GPU-1	RTXA6000	RTXA6000
GPU-2	N/A	RTXA6000
RAM	Up to DDR4-128GB	
Storage	2x 2.5" SATA SSD (Options for 2x PCIe 4.0 U.2)	
CAN	Options up to 4x CAN	
COM	1xRS232	
LAN	2x10 GbE LAN, 1x GbE LAN	
25G SFP+	Options for 4x 25G SFP+	
Power	DC 18V~36V	