

ADM-AL30

Intel® 12th Gen Core i9/i7 and
 NVIDIA GPU AI Computing
 Platform for Autonomous
 Driving Applications

Preliminary



ADM

Features

- Intel® 12th Gen Core i9/i7 CPU
- NVIDIA RTX 4000 SFF
- Automotive Ethernet: 2x 10G Base-T and 8x 1G Base-T1
- 4x CAN 2.0; 8x CAN FD (optional with M.2 CAN module)
- Automotive Connectors
- ISO 16750-2 and ISO 7637-2 Design Compliance

Specifications

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System core	CPU	1x Intel® Alder Lake-S 12th CPU i9/i7
	GPU	1x NVIDIA RTX 4000 SFF
	Memory	4x 32G DDR5 SO-DIMM, up to 128G, with 2 channel ECC
	Storage	1x 256G M.2 2280 NVME SSD 2x 256G 2.5" SATA SSD
I/O Ports	Display	1x HDMI, 1x DP
	Ethernet	2x 10G BASE-T (M12 connector) 8x 1G Base T1 (MATEnet Connector)
	CAN	4x CAN 2.0 (Molex CMC connector) 8x CAN FD (optional, Molex CMC connector)
	USB 3.0	4x USB 3.2 Gen2, type A
	Serial Port	2x RS-232
Extension Slot	M.2	1x M Key 2280 for M.2 NVME SSD 1x M.2 Key A+E, 2230 2x M.2 Key B+M, 2260/2280 for CAN FD module
Power Requirements	DC Power Input	9-36 VDC with
	Ignition Control	Built-in ignition power control
	AC/DC Power Adapter	450W adapter (optional)
	Power Button	1x Power On/Off button
Mechanical	Fail Reset	1x Hardware reset button
	Dimensions	325mm x 258mm x 145mm
	IP	IP30

Specifications		
Environmental	Operating Temperature	-20°C to 60°C (35W CPU) -20°C to 50°C (65W CPU) 0°C to 45°C with GPU card
	Operating Humidity	~95% @ 40°C (non-condensing)
	Storage Temperature	-40°C to 85°C
	Vibration	3Grms, random, 5-500 Hz, 3 axes / 1hr (w/SSD) 5Grms, random, 5-500Hz, 3 axes / 30 mins (w/SSD)
	Shock	50 G, half sine 11ms duration (w/SSD)
	ESD	Contact +/- 4KV, Air +/- 8KV
	EMC	CE/FCC, class A, EN 55032/35 ; ISO 7637-2: 2011, Level 3 ; E-Mark (12/24V)
	Deisgn Compliance	ISO 16750-2
	Software	OS
TPM		TPM 2.0