

SD-OMEGA SD-5100

AMD Ryzen Embedded V1000 Processor AI GPU Computing

In-Vehicle Computing



Features

- AMD Ryzen Embedded V1000 Platform
- Vega GPU with up to 11 Compute units and 4 x DP 1.4
- 8 x GPI and 4 x GPO and 2 x RS-232/422/485
- Dual hot swappable SATA storage
- 9-48VDC input and operating temp. -40~70°C
- 8 GbE LAN (Optional for 8 x PoE)

System

CPU	AMD Ryzen V1807B Quad Core Soc (3.3~3.6GHZ)
Memory	2x DDR4L 2400MHz SO-DIMM up to 32GB
LAN Chipset	Intel i210
Watchdog	Watchdog Timer Support, Offer 1-255 Step
TPM	2.0

I/O

Serial Port	2 x RS-232/422/485
USB port	4 x USB 3.0 Ports
LAN	8 x RJ45 GbE port (optional for 8 x POE total 100W max.)
Video port	4 x DP
DIO port	8 x GPI and 4 x GPO
Audio	1 x Line-out, 1 x Line-in and 1 x Mic-in
Expansion Bus	3 full mini PCIe slot and 1 x M.2 A-E key 2230 slot (2 x SIM card sockets for 3G/LTE)

Graphics

Graphics	AMD Next-generation Graphics Core and Multimedia Vega GPU with up to 11 Compute Units H.2651 (10 bit) Decode & (8-bit) Encode, VP9 decode Up to 4 x DisplayPort 1.4
Resolution	Max Resolution (DP): 4096x2160@60Hz Max Resolution (DP): 4096x2304@60Hz

Storage

Type	2 x 2.5" Drive Bay for SATA Type HDD/SSD,
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WLAN (optional)

GPS	Built-in uBlox GPS with extended antenna cable
3G	Built-in 3G/4G module
WiFi & BT	Built-in 802.11b/g/n WiFi

Power Requirement

Power Input	9V - 48V DC Power input
Power Protection	Automatics recovery short circuit protection
Power management	Vehicle power ignition for variety vehicle
Power off control	Power off delay time setting by BIOS and software,
Battery	Internal battery kit for 10 minutes operating (optional)

Environmental & Mechanical

Operating temp.	-40°C ~ 70°C (SSD), ambient w/air
Storage temp.	-40°C ~ 80°C
Relative humidity	0% RH - 95% RH
Vibration (random)	IEC60068-2-64, random, 2.5g @5-500 Hz 1hr/axis with SSD
Vibration operating	MIL-STD-810G, Method 514.6, Procedure I, Category 4
Shock	Operating: MIL-STD-810G, Method 516.6, Procedure I, Trucks and semi-trailers=15G (11ms) with SSD
Certifications	CE, FCC Class A, E13

Mechanical

Construction	Aluminum alloy
Mounting	Support wall-mount, VESA-mount, DIN Rail mounting kit
Weight	3865g (bare-bone)
Dimensions	261(L) x 226(W) x 90(H)mm

Ordering Information

Part Number	SD-5100-V1807 SD-5100 P-V1807
Description	AMD Ryzen Embedded V1000 Processor w/ 8GbE 2 COM/9~48V / AI GPU Computing

All specifications are subject to change without notice.