ABOX-5100

AMD Ryzen™ Embedded V1000 Processor w/ 8 x GbE/ 2 x COM/ 4 x DP/ 4 USB 3.0/ 9-48V Input AI GPU Computing

Features

- **AMD Ryzen™ Embedded V1000 Platform**
- **Vega GPU with up to 11 Compute Units and 4 x DP 1.4**
- **8 x GPI, 4 x GPO and 3 x RS-232/422/485**
- **Dual Hot Swappable SATA Storage**
- **9-48V DC Input and Operating Temp.: -40~70°C**
- **8 x GbE LAN (Optional for 8 x PoE)**

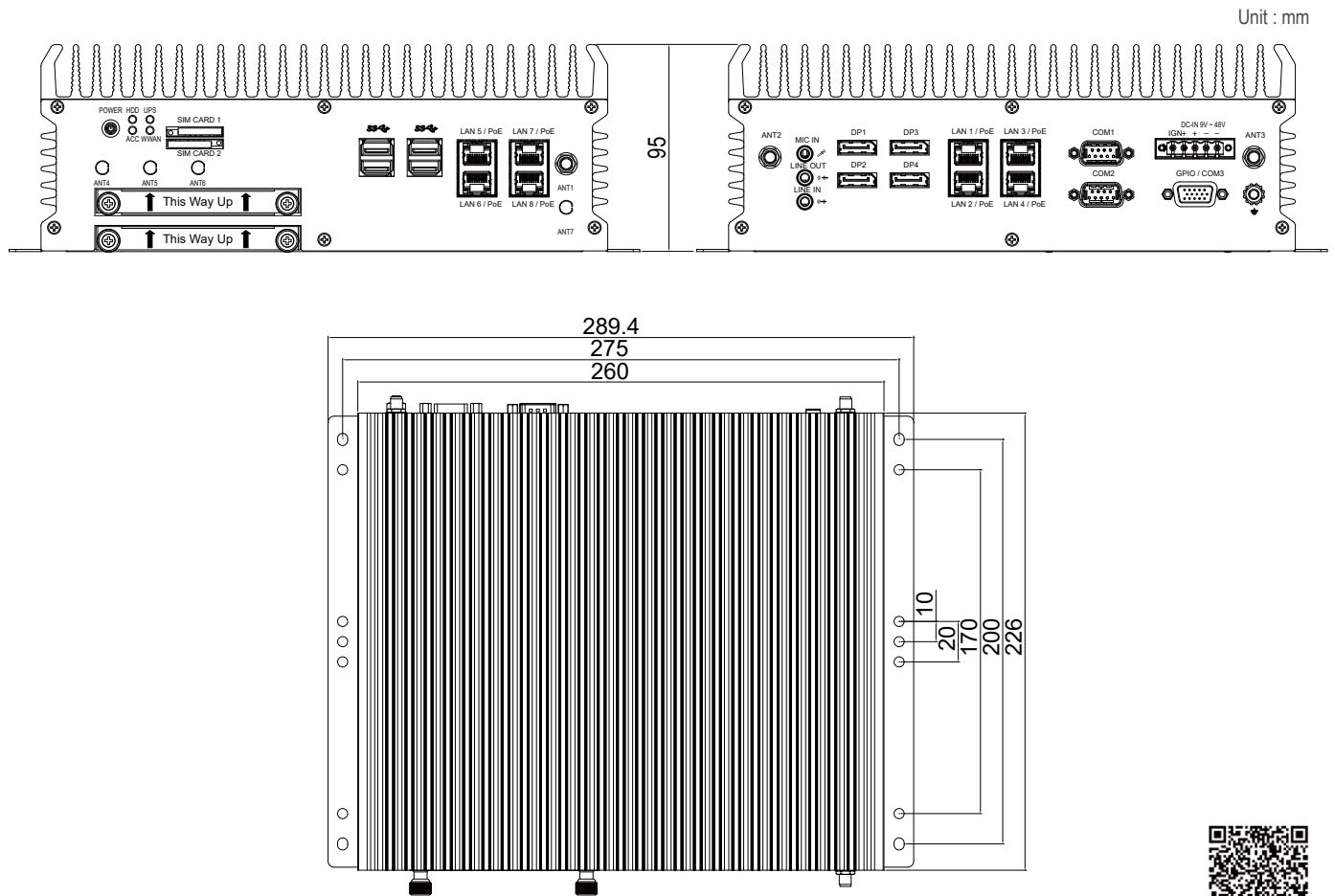| POE	GPS	Wireless	Wide Range	Delay Time

Introduction

The ABOX-5100 is powered by AMD Ryzen Embedded V1000 Processor with 8 x GbE/ 2 x COM/ 4 x DP/ 4 x USB 3.0/ 9-48V Fanless Box Computer. ABOX-5100 provide the Dual Hot Swappable SATA Storage RAID 0,1,5, which provides more flexibility for hardware maintenance and expansion. These computers can be operated in extreme weather conditions (operating temperature: -40ºC ~ 70 ºC) and can be adapted to various industrial requirements such as Smart Patrol, Smart Factory Automation Control System, Surveillance System as well as Visual Management System such as Automatic License Plate Recognition, Mining Machines and Vision Control System.

Specifications

System	
CPU	AMD Ryzen™ V1807B Quad Core Soc (3.3~3.6GHZ)
Memory	2 x DDR4 2400 MHz SO-DIMM up to 32GB
LAN Chipset	Intel i210AT x 2 to LAN Switch Marvell 88E6176-A1 x 2
Watchdog	1 ~ 255 Level Reset
TPM	2.0

I/O	
Serial Port	3 x RS-232/422/485 (Optional Max 4 x RS-232/422/485)
USB Port	4 x USB 3.0 Ports
LAN	8 x RJ45 GbE by 2 x Switch Design (MAC x 2), Optoinal PoE for the 8 Ports 100W max.
Video Port	4 x DP Ports
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 x Full Mini-PCle Slots and 1x M.2 A-E Key 2230 slot (2 x SIM Card Sockets for 3G/LTE)

Software	
Operating System	Win10 LTSC 1809, Ubuntu 18.04 64bit

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 4x DisplayPort 1.4
Resolution	Max Resolution (DP) : 4096x2304@60Hz

Environmental	
Operating Temp.	-40ºC ~ 70ºC * CPU configure at 25W, ambient w/ 0.6m/s airflow
Storage Temp.	-40ºC ~ 80ºC
Relative Humidity	10% RH – 90% RH (non-condensing)
Vibration (with SSD)	IEC60068-2-64, random, 2.5G@5~500Hz, 1hr/axis
	MIL-STD-810G, Method 514.6, Procedure I, Cat.4, Operating
Shock	Operating: MIL-STD-810G, Method 516.6, Procedure I, Trucks and semi-trailers=15G (11ms) with SSD
Certifications	CE, FCC Class A, E13

Storage	
Type	2 x 2.5" Drive Bay for SATA Type HDD/SSD

Power Requirement	
Power Input	9V - 48V DC Power Input
Power Protection	Automatics Recovery Short Circuit Protection
Power Mgmt.	Vehicle Power Ignition for Variety Vehicle
Power Off Control	Power off Delay Time Setting by BIOS and Software
Battery (UPS)	Internal Battery Kit for 10 Mins Operating (optional) *UPS backup time varies depending on actual overall system power consumption. **Patent No. : M447854 - Build-in Battery**

Mechanical	
Construction	Aluminum Alloy
Mounting	Wall-mount
Weight	5220g (Barebone)
Dimensions	260(L) x 226(W) x 95(H) mm

Dimensions

Unit : mm

Please Scan The QR Code For More Information

Ordering Information

Part Number	ABOX-5100-V1807
	ABOX-5100 P-V1807 (with PoE)
Description	AMD Ryzen™ Embedded V1000 Processor w/ 8 GbE/2 COM/ 9-48V Input AI GPU Computing
State of Origin	Made in Taiwan

Optional Accessories

DRAM	SO-DIMM max.DDR4-2400,4GB~32GB,0~70ºC/-40~85ºC
SATA SSD	2.5inch MLC/TLC 64GB~1TB 0~70ºC/-40~85ºC
Wifi	M.2 802.3a/b/g/n/ac
Modem	LTE miniPCIe card
GPS	GPS miniPCIe card
CANBUS	CANBUS miniPCIe card
Battery backup kit	BAT-5200 kit, 5200mA/h, -30~60ºC, discharge -20~60ºC, operating about 10 mins.
Power adapter	AC/DC 220W/24Vor 280W/24V power adaper

All specifications are subject to change without notice.