

# ABOX-5100G1

AMD Ryzen™ Embedded V1000 Processor w/ 8 x GbE/ 2 x COM/ 4 x DP/ 4 x HDMI/ 4 USB 3.0/ NVIDIA® GeForce GTX 1050 GPU/ 9-48V AI GPU Computing

AI GPU Computing

In-Vehicle Computing

Embedded Computing

Video Surveillance



Delay Time



Power Ignition



Wide Range



Wireless



Battery backup

## Features

- AMD Ryzen™ Embedded V1000 Platform
- NVIDIA® GeForce GTX 1050 GPU
- Support 768 CUDA Cores
- 8 x GPI, 4 x GPO and 2 x RS-232/422/485
- Dual Hot Swappable SATA Storage
- 9-48VDC Input and Operating Temp.: -40~60°C
- 8 x GbE LAN (Optional for 8 x PoE)

Taiwan Patent No. M447854  
Taiwan Patent No. M448011

## System

<b>CPU</b>	AMD Ryzen™ V1807B Quad Core Soc (3.3~3.6GHZ)
<b>Memory</b>	2 x DDR4 2400 MHz SO-DIMM up to 32GB
<b>LAN Chipset</b>	Intel i210
<b>Watchdog</b>	1 ~ 255 Level Reset
<b>TPM</b>	2.0

## I/O

<b>Serial Port</b>	2 x RS 232/422/485
<b>USB Port</b>	4 x USB 3.0 Ports
<b>LAN</b>	8 x RJ45 Ports for GbE (Optional for 8 x POE total 100W max.)
<b>Video Port</b>	4 x DP, 4 x HDMI
<b>DIO Port</b>	8 x GPI and 4 x GPO
<b>Audio</b>	1 x Line-out, 1 x Line-in and 1 x Mic-in
<b>Expansion Bus</b>	3 x Full Mini-PCIe Slots and 1x M.2 A-E Key 2230 slot (2 x SIM Card Sockets for 3G/LTE)

## Graphics

<b>Graphics</b>	NVIDIA® GeForce GTX 1050 GPU (768 CUDA Cores) Support for OpenGL 4.5 and OpenCL™ 1.2 Support for DirectX® 12 (Feature Level 12_0) features
<b>Resolution</b>	Max Resolution (HDMI 2.0b) : 7680x3840@60Hz (DP) : 4096x2160@60Hz

## Storage

<b>Type</b>	2 x 2.5" Drive Bay for SATA Type HDD/SSD
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## Power Requirement

<b>Power Input</b>	9V - 48V DC Power Input
<b>Power Protection</b>	Automatics Recovery Short Circuit Protection
<b>Power Management</b>	Vehicle Power Ignition for Variety Vehicle
<b>Power Off Control</b>	Power off Delay Time Setting by BIOS and Software
<b>Battery (UPS)</b>	Internal Battery Kit for UPS (Optional) <b>Patent No. : M447854 - Build-in Battery</b>

## Environmental

<b>Operating Temp.</b>	-40°C ~ 60°C * CPU configure at 25W
<b>Storage Temp.</b>	-40°C ~ 80°C
<b>Relative Humidity</b>	0% RH – 95% RH
<b>Vibration(random)</b>	IEC60068-2-64, random, 2.5G@5~500Hz, 1hr/axis with SSD
<b>Vibration Operating</b>	MIL-STD-810G, Method 514.6, Procedure I, Category 4
<b>Shock</b>	Operating: MIL-STD-810G, Method 516.6, Procedure I, Trucks and semi-trailers=15G (11ms) with SSD
<b>Certifications</b>	CE, FCC Class A, E13

## Mechanical

<b>Construction</b>	Aluminum Alloy
<b>Mounting</b>	Wall-mount
<b>Weight</b>	3860g (Barebone)
<b>Dimensions</b>	260(L) x 226(W) x 89(H) mm

## Ordering Information

<b>Part Number</b>	ABOX-5100G1-V1807 ABOX-5100 PG1-V1807 (with PoE)
<b>Description</b>	AMD Ryzen™ Embedded V1000 Processor w/ 8 GbE/ 2 COM/ NVIDIA® GeForce GTX 1050 GPU/ 9-48V/ AI GPU Computing