

AI GPU Computing

# ABOX-5210G4

Taiwan Patent No. M447854, M565941, M592609

Intel Gen 10th 10 Cores Xeon, i9 CPU w/ 10 x GbE (Optional 8 x PoE)/ 3 x COM/ 3 x DP/ 2 x HDMI/ 4 x USB 3.2 Gen 1x1/  
NVIDIA® GeForce GTX 1060 GPU/ 9-48V Input AI GPU Computing

## Features

- Intel GEN 10th 10 Cores Xeon W-1290TE / i9-10900TE
- NVIDIA® GeForce GTX 1060 GPU
- Support 1280 CUDA Cores
- 8 x DI, and 4 x DO and 3 x RS-232/422/485
- 1 x M.2 B key, 1 x M.2 A-E key & 3 x MiniPCle expansion slots
- Dual Hot Swappable SATA Storage RAID 0,1,5
- 9-48V DC Input and Operating Temp.: -40~60°C
- 10 x GbE RJ45 (Optional 8 x PoE and 8 x M12 X coded connectors)
- Rolling Stock EN 50155 and EN 50121-3-2 certified



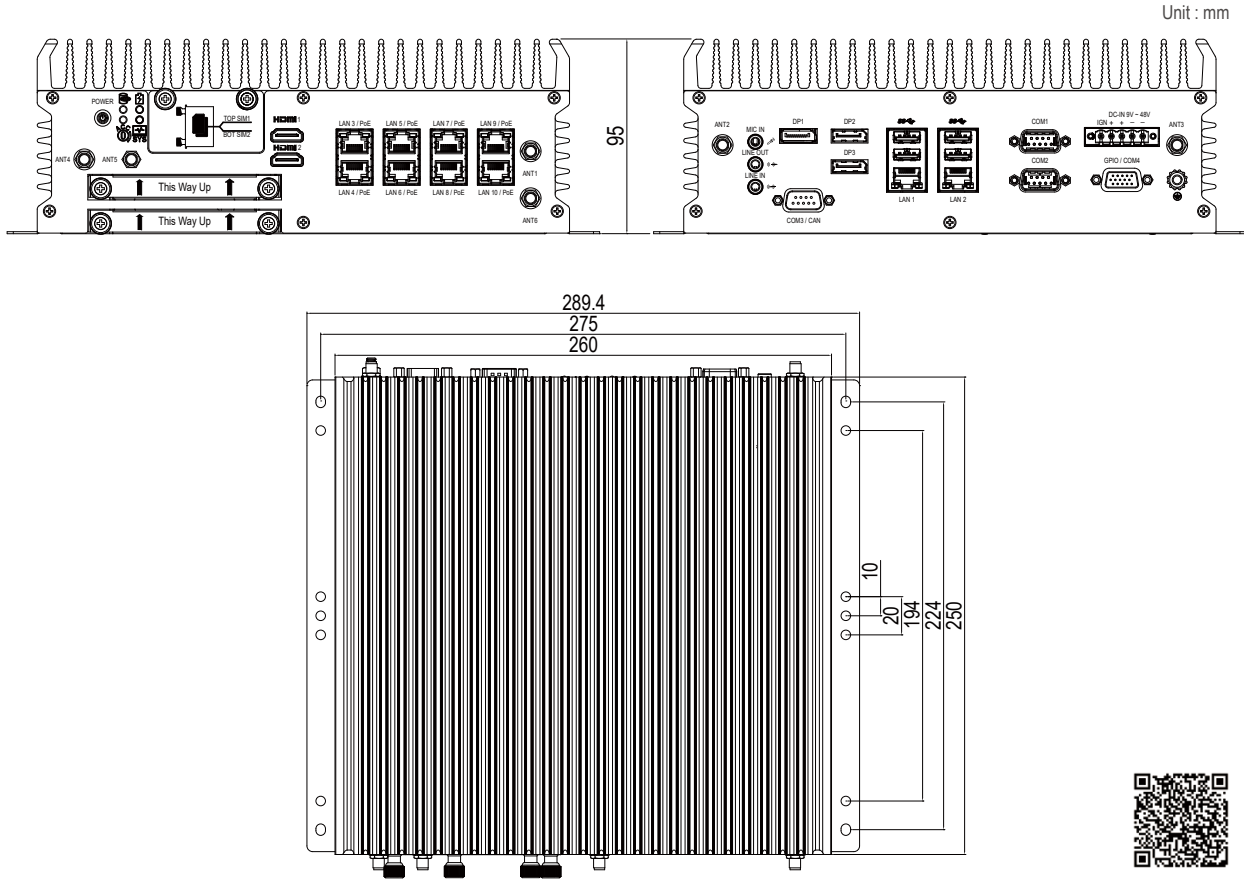
## Specifications

System	
CPU	Intel Gen10 Xeon W-1290TE (20M Cache 2.0GHz up to 4.6GHz)*
	Intel Gen10 Core i9-10900TE (20M Cache 2.0GHz up to 4.5GHz)
	Intel Gen10 Core i7-10700TE (16M Cache 2.0GHz up to 4.4GHz)
	Intel Gen10 Core i5-10500TE (12M Cache 2.3GHz up to 3.7GHz)
	Intel Gen10 Core i3-10100TE (6M Cache 2.3GHz up to 3.6GHz)
	Intel Gen10 Core G5900TE (4M Cache 3.0GHz)
	* Use only with Intel W480E
Chipset	Q470E / W480E
Memory	2 x DDR4 2666/2933 MHz SO-DIMM up to 64GB (Optional ECC support with Xeon W-1290TE)
LAN Chipset	9 x Intel i210-AT and 1 x i219LM (support iAMT) Gb/s Ethernet Controllers Onboard Support PXE and WOL
Watchdog	1 ~ 255 Level Reset
TPM	2.0
I/O	
Serial Port	3 x RS 232/422/485 (option additional 1 x RS 232/422/485)
USB Port	4 x USB 3.2 Gen 1x1 Ports
LAN	10 x RJ45 Ports for GbE (Optional 8 with M12 X coded connectors and 8 x POE total Max.120W)
Video Port	3 x DP (Intel built-in GPU), 2 x HDMI Ports (MXM graphics)
DIO Port	8 xDI (5~48VDC) and 4 x DO (5VDC, 100mA)
Audio	1 x Line-out, 1 x Line-in and 1 x Mic-in
Expansion Bus	2 x Full Mini-PCle Slots and 1 x Full Mini-PCle Slot w/ USB interface only for WWAN sharing 2 x SIM Card Sockets with M.2 B Key 3042 slot
	1x M.2 A-E Key 2230 slot, 1 x M.2 B Key 3042 slot w/ 2 x SIM Card Sockets for WWAN Patent No. : M592609 - Automatic SIM Card Detection
Storage	
Type	2 x 2.5" Drive Bay for SATA Type HDD/SSD RAID 0, 1, 5
	1x M.2 A-E Key 2230 slot, 1 x M.2 B Key 3042 slot w/ 2 x SIM Card Sockets for WWAN * Thermal heatsink is required for M.2 storage. Please contact sales window for more information.

Graphics	
Built-in Graphics	Intel® UHD Graphics 630 for z9/i9/i7/i5/i3, Intel® UHD Graphics 610 for G5900TE
	Max Resolution (DP 1.2) : 4096 x 2340 @ 60Hz
MXM Graphics	NVIDIA® GeForce GTX 1060 GPU (1280 CUDA Cores) w/6GB GDDR5
	Max Resolution (HDMI 2.0b) : 4096 x 2160 @ 60Hz
Environmental	
Operating Temp.	-40°C ~ 60°C w/GTX1060 w/0.6 m/S airflow Patent No. : M565941 - Thermal Cooling
Storage Temp.	-40°C ~ 80°C
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, EN50155
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 Backup (Option)	Internal Battery Kit for 10 Mins Operating (P/N: BAT-5200 kit, Operating Temp. -20 ~ 60°C) Patent No. : M447854 - Build-in Battery
Mechanical	
Construction	Aluminum Alloy
Mounting	Wall-mount
Weight	5300g (Barebone)
Dimensions	260(L) x 250(W) x 95(H) mm

All specifications are subject to change without notice.

## Dimensions



Please Scan The QR Code For More Information

## Ordering Information

<b>Part Number</b>	ABOX-5210xyy-zz (x= P= w/PoE, x= Empty= w/o PoE, yy=G4=GTX 1060, zz=Z9= W-1290TE, zz= i9= i9-10900TE, zz= i7= i7-10700TE, zz= i5= i5-10500TE, zz= i3= i3-10100TE, zz= C1= G5900TE)
<b>Description</b>	Intel Gen 10th 10 Cores Xeon, i9 CPU w/ 10 x GbE (Optional 8 x PoE)/3 x COM/ 3 x DP/ 2 x HDMI/4 x USB 3.2 Gen 1/ NVIDIA® GeForce GTX 1060 GPU/ 9-48V Input AI GPU Computing
<b>State of Origin</b>	Made in Taiwan

## Optional Accessories

<b>DRAM</b>	DDR4-2933 MHz SO-DIMM, 4GB-32GB, 0-70°C/40-85°C
<b>SSD</b>	M.2 2280 B-M key NVMe TLC -40-85°C 64GB-1TB w/ Heatsink M.2 2280 B-M key SATA TLC -40-85°C 64GB-1TB w/ Heatsink 2.5 inch SATA TLC -40-85°C 64GB-2TB
<b>Wifi</b>	M.2 2230 A-E key 802.3 a/b/g/n/ac
<b>Modem</b>	M.2 3042 B key 5G&LTE module
<b>GPS</b>	MiniPCIe GPS module
<b>CANBUS</b>	MiniPCIe CANBUS module
<b>Battery backup kit</b>	BAT-5200 Battery Kit, 5200m/h, -30-60°C, discharge -20-60°C, operating about 10 mins
<b>Power adaptor</b>	AC/DC 220W/24V or 280W/24V power adaptor

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## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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