

ABOX-5210G6

Taiwan Patent No. M447854, M565941, M592609

Powerful Edge AI Fanless Computer System with Intel® 10th Gen Xeon® / Core™ i9 Processor and supports NVIDIA® Quadro® RTX 3000 GPU

Features

- Intel® GEN 10th 10 Cores™ Xeon® W-1290TE / i9-10900TE
- NVIDIA® Quadro® RTX 3000 GPU
- Supports 1920 CUDA cores and 240 Tensor 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



Introduction

The ABOX-5210G6 is powered by Intel® Gen 10th 10 Cores™ Xeon®, i9 CPU with 10 x GbE and NVIDIA® Quadro® RTX 3000 GPU for AI GPU Computing. Features 1920 CUDA cores, a superior GPU specification in the fanless computer realm and 240 Tensor cores to accelerate deep learning processes. Longevity support from NVIDIA® is also included. It is equipped with dual hot swappable SATA Storage RAID 0,1 and 5, 9-48V DC input and can withstand operating temperatures from -40 to 60°C.

Specifications

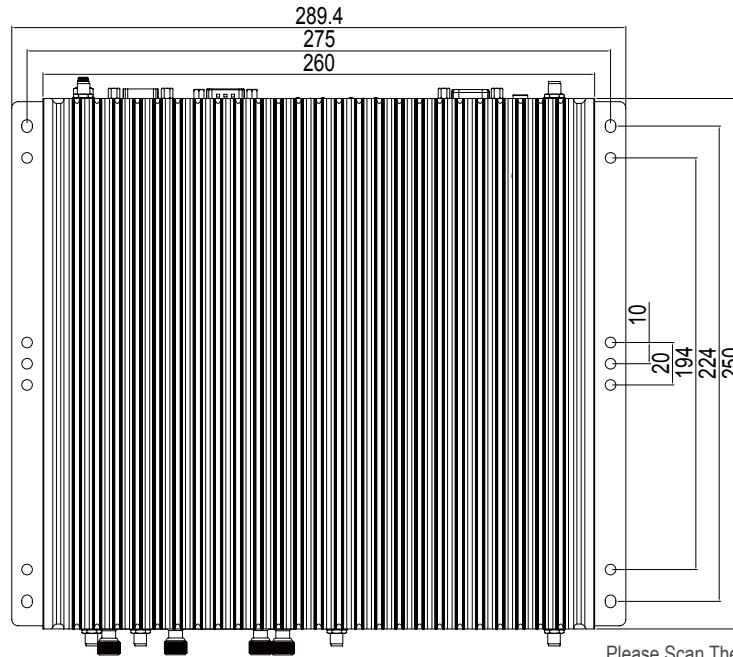
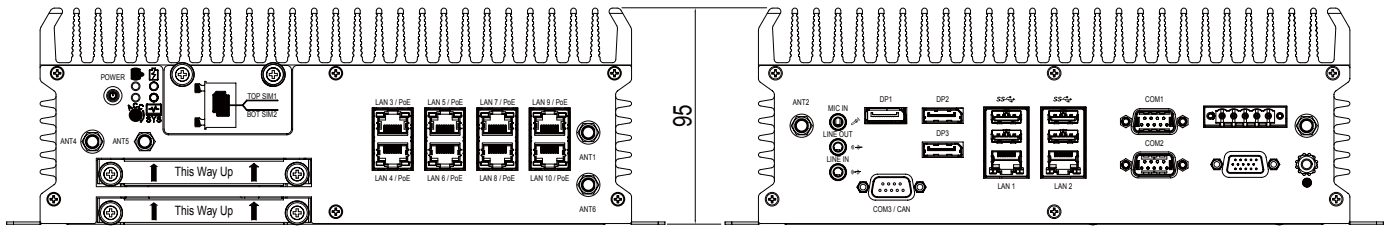
| System | |
|---------------|---|
| CPU | Intel® Gen10 Xeon® W-1290TE (20M Cache 2.0GHz up to 4.6GHz)* |
| | Intel® Gen10 Core™ i9-10900TE (20M Cache 2.0GHz up to 4.5GHz) |
| | Intel® Gen10 Core™ i7-10700TE (16M Cache 2.0GHz up to 4.4GHz) |
| | Intel® Gen10 Core™ i5-10500TE (12M Cache 2.3GHz up to 3.7GHz) |
| | 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, 2 x HDMI Ports |
| DIO Port | 8 x DI (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 |
| | 1 x M.2 M key 2280 slot supports NVMe and SATA SSD * Thermal heatsink is required for M.2 storage. Please contact sales window for more information. |

| Graphics | |
|-------------------------|--|
| CPU 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® Quadro® RTX 3000 GPU (1920 CUDA cores & 240 Tensor cores) w/6GB GDDR6 Max Resolution :1920 x 1080 @ 60Hz w/o HDMI audio |
| Environmental | |
| Operating Temp. | -40°C ~ 60°C 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) * 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 | 5300g (Barebone) |
| Dimensions | 260(L) x 250(W) x 95(H) mm |

All specifications are subject to change without notice.

Dimensions

Unit : mm



Please Scan The QR Code For More Information

Ordering Information

| | |
|------------------------|---|
| Part Number | ABOX-5210xyy-zz (x= P= w/PoE, x= Empty= w/o PoE, yy=G6=RTX 3000, zz= i9= i9-10900TE, zz= i7= i7-10700TE, zz= i5= i5-10500TE, zz= i3= i3-10100TE, zz= C1= G5900TE) |
| Description | 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® Quadro® RTX 3000 GPU/ 9-48V Input AI GPU Computing |
| State of Origin | Made in Taiwan |

Optional Accessories

| | |
|---------------------------|--|
| DRAM | DDR4-2933 MHz SO-DIMM, 4GB~32GB, 0~70°C/-40~85°C |
| SSD | 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 |
| Wifi | M.2 2230 A-E key 802.3 a/b/g/n/ac |
| Modem | M.2 3042 B key 5G<E module |
| GPS | MiniPCIe GPS module |
| CANBUS | MiniPCIe CANBUS module |
| Battery backup kit | BAT-5200 Battery Kit, 5200m/h, -30~60°C, discharge -20~60°C, operating about 10 mins |
| Power adapter | AC/DC 220W/24V or 280W/24V power adapter |

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