

MIC-7500

Compact Fanless System with 6th Gen Intel® Core™ i Processor



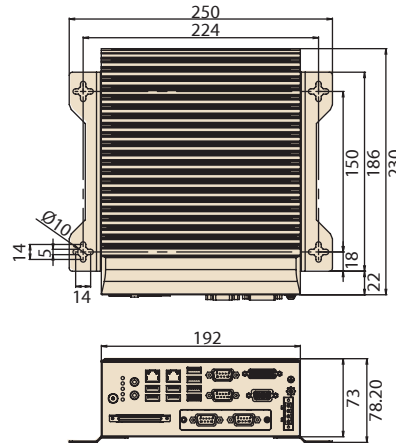
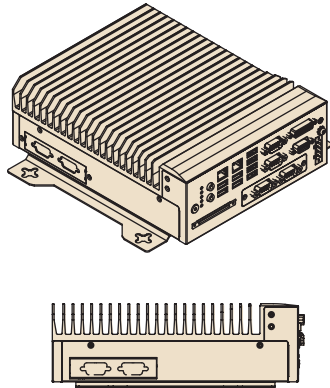
Features

- Intel® 6th Gen Core™ i7/i5/i3/Celeron® (BGA-type) processor with Intel® QM170 chipset
- Wide operating temperature (-20 ~ 60 °C)
- 9 ~ 36 V DC input power range
- 2 x RS-232/422/485 and 4 x RS232 serial ports (with expansion cable)
- 1 x 2.5" HDD/SSD, 1 x CFast, and 1 x mSATA
- Supports isolation COM and 32-bit GPIO modules
- 2 x GigaLAN and 8 x USB 3.0
- VGA and DVI output
- Supports Advantech i-Modules, SUSIAccess, and embedded software APIs

Specifications

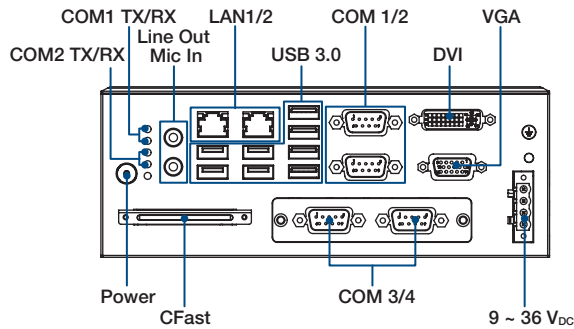
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|----------------|------------------------|--|---------------------------------|------------------------|-----------------------|------------------------|
| System Chipset | CPU | Intel® Core™ i7-6820EQ | Intel® Core™ i7-6822EQ | Intel® Core™ i5-6442EQ | Intel® Core™ i3-6102E | Intel® Celeron® G3900E |
| | Core Numbers | 4 | 4 | 4 | 2 | 2 |
| | Base Frequency | 2.8 GHz | 2.0 GHz | 1.9GHz | 1.9 GHz | 2.4 GHz |
| | Max Turbo Frequency | 3.5 GHz | 2.8 GHz | 2.7 GHz | | |
| | L3 Cache | 8 MB | 8 MB | 6 MB | 3 MB | 2 MB |
| | Chipset | Intel® QM170 | | | | |
| Memory | BIOS | AMI® SPI 64 Mb | | | | |
| | Technology | Dual-channel DDR4 2133/2400 MHz (without ECC) | | | | |
| | Socket | 2 x 260-pin DDR4 SODIMM (up to 16 GB per socket) | | | | |
| Display | Maximum Capacity | 32GB | | | | |
| | Chipset | Intel® HD Graphics 530, supports DirectX 12 | | | | |
| | VGA | 1 x DB15, up to 2048 x 1536 maximum resolution | | | | |
| | DVI | 1 x DVI, up to 1920 x 1080 maximum resolution @ 30Mhz (with optional expansion cable for second DVI connector, or 1 x HDMI connector) | | | | |
| Ethernet | Multiple Display | Supports 3 x independent displays | | | | |
| | Controller | LAN1: Intel® i219-LM LAN2: Intel® i210 (supports wake-on-LAN) | | | | |
| | Interface | 2 x RJ45 | | | | |
| Storage | HDD/SSD | 1 x 2.5" HDD/SSD | | | | |
| | CFast | 1 | | | | |
| | mSATA | 1 | | | | |
| I/O | RAID | 0/1/5/10 | | | | |
| | USB | 8 x USB 3.0 and 1 x internal USB 2.0 | | | | |
| | Serial Port | 2 x DB9, RS232/422/485 with automatic flow control and 4 x RS-232 (with expansion cable) | | | | |
| Expansion | Audio | 2 (1 x line out and 1 x mic in) | | | | |
| | Module | Supports Advantech i-Modules | | | | |
| LED and Switch | Mini PCIe | 1 x mini PCIe (via USIM), 1 x mini PCIe/mSATA | | | | |
| | LED | 2 x TX, 2 x RX, and 1 x Storage | | | | |
| Power | Button | 1 x Power on/off switch | | | | |
| | Type | ATX/AT | | | | |
| | Input Voltage | 9 ~ 36 V _{DC} | | | | |
| Watchdog Timer | Power consumption | Typical: 21.956W Maximum: 51.072W | | | | |
| | Output Interval | System reset Programmable 1 ~ 255 sec/min | | | | |
| Environment | Temperature | i7-6820EQ Operating (with industrial SSD only) -20 ~ 50 °C with 0.7 m/s air flow Note: MIC-7500 i7-6820EQ system support SSD only. | Operating (with industrial SSD) | Operating (with HDD) | Non-operating | |
| | Humidity | 95% @ 40 °C (non-condensing) | | | | |
| | Vibration | With SSD: 3 Grms @ 5 ~ 500 Hz, random, 1 hr/axis With 2.5" HDD: 1 Grms @ 5 ~ 500 Hz, random, 1 hr/axis | | | 2G | |
| | Shock | With SSD: 20G, IEC-68-2-27, half-sine wave, 11 ms duration | | | 50G 11 ms | |
| Mechanical | Dimensions (W x H x D) | 73 x 192 x 230 mm (2.91" x 7.55" x 9.05") | | | | |
| | Weight | 2.9 kg (6.39 lbs) | | | | |
| | Installation | Desktop/wall mount | | | | |
| Certifications | EMC | CE/FCC Class A, CCC, BSMI | | | | |
| | Safety | UL, CCC, BSMI | | | | |

Dimensions

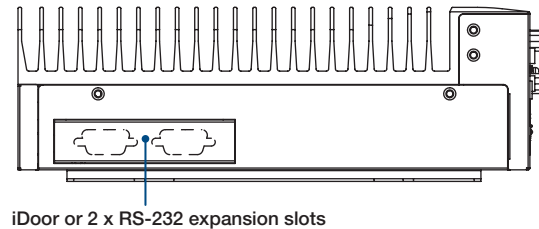


Unit: mm

Front View



Side View



Ordering Information

| Part Number | CPU | VGA | DVI | 2.5" HDD/SSD | CFast | mSATA | USB 3.0 | GbE | COM | PCIe | Power |
|-----------------|-----------------|-----|-----|--------------|-------|-------|---------|-----|----------------------|---------------------|-----------------------|
| MIC-7500B-U8A1E | i7-6820EQ (45W) | 1 | 1 | 1 | 1 | 1 | 8 | 2 | 4, up to 6 via cable | i-Module (optional) | 9 ~ 36V _{DC} |
| MIC-7500B-U0A1E | i7-6822EQ | 1 | 1 | 1 | 1 | 1 | 8 | 2 | 4, up to 6 via cable | i-Module (optional) | 9 ~ 36V _{DC} |
| MIC-7500B-S9A1E | i5-6442EQ | 1 | 1 | 1 | 1 | 1 | 8 | 2 | 4, up to 6 via cable | i-Module (optional) | 9 ~ 36V _{DC} |
| MIC-7500B-19A1E | i3-6102E | 1 | 1 | 1 | 1 | 1 | 8 | 2 | 4, up to 6 via cable | i-Module (optional) | 9 ~ 36V _{DC} |
| MIC-7500B-U4A1E | G3900E (45W) | 1 | 1 | 1 | 1 | 1 | 8 | 2 | 4, up to 6 via cable | i-Module (optional) | 9 ~ 36V _{DC} |

Packing List

| Part Number | Description | Quantity |
|----------------|--|----------|
| MIC-7500 | Fanless system with 6 th Gen Intel® Core™ i processor | 1 |
| 2061750000 | CD-ROM | 1 |
| 2001750000 | Startup manual | 1 |
| 1652003234 | 4-pin Phoenix power connector | 1 |
| 1960070543T001 | Mounting bracket | 2 |
| 1700019445 | SATA cable | 1 |
| 1700024372-01 | SATA power cable | 1 |
| 1701200220 | Dual DB9 port cable (for COM5/COM6 expansion) | 1 |
| 1990019498N000 | RAM thermal pad | 2 |

Optional Accessories

| Part Number | Description |
|---------------------|--|
| 96PSA-A220W24P4-1* | Adaptor A/D, 100-240V, 220W, 24V |
| 96PSA-A150W19P4-1** | Adaptor A/D, 100-240V, 150W, 19V |
| 1702002600 | Power cord (USA) UL/CSA, 3-pin, 10A, 125V, 1.83 M, 180 D |
| 1700022940-01 | Power cord PSE, 3-pin, 7A, 125V, 3 m, DAC-ST01 |
| 1702002605 | Power cord (EU) 2-pin, 10/16A, 220V, 1.83 M, 90 D |
| AIIS-DIO32-00A1E | DIO module, 32-CH, 9-pin USB interface |
| PCA-TPM-00B1E | TPM 2.0 module |
| 98R1750000E | Secondary DVI accessory kit |
| 98R1750010E | HDMI/Remote switch accessory kit |
| 98R1750030E | HDMI accessory kit |
| 98R1750040E | Remote switch accessory kit |
| 98R1750020E | MIC-7000 series DIN rail accessory |

Note:

* Suggest to use for MIC-7500 with i-Module added.

** Suggest to use for MIC-7500 without i-Module added.

- MIC-7500 supports Advantech's iDoor modules (both MOS and PCM series). Visit the Advantech website for more information.
- The PCM series module requires a bracket (P/N: 1960065854N001) that must be ordered separately.

Optional i-Modules*

| Part Number | Description |
|--------------|---|
| MIC-75M40 | 4-slot expansion module (4 x PCIe slots) |
| MIC-75M13 | 4-slot expansion module (1 x PCIe and 3 x PCI slots) |
| MIC-75M20 | 2-slot expansion module (2 x PCIe slots) |
| MIC-75M20-01 | 2-slot expansion module (2xPCIe slots) |
| MIC-75M11 | 2-slot expansion module (1 x PCIe and 1 x PCI slots) |
| MIC-75M10 | 1-slot expansion module (1xPCIe16) |
| MIC-75S20 | 2-slot expansion and storage module (2 x PCIe and 2 removable 2.5" storage bay) |
| MIC-75G20 | GPU card expansion i-Module (2 x PCIe, 2 x removable 2.5" storage bay) |

*Additional i-module details provided on the following page.

Embedded OS

| Part Number | Description |
|-------------|---------------------------------------|
| 2070014106 | WES7P MIC-7500 x64 V5.6.6 10MUI image |
| 2070014584 | WES7P MIC-7500 x32 V5.3.0 10MUI image |