



## Specifications

|                          |                                                                                                                                                                                                                                                                                                                            |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| System Mainboard         | MB220AF with Intel® Q170 PCH<br>MB220EF with Intel® H110 PCH                                                                                                                                                                                                                                                               |
| CPU Type                 | 7th/6th Gen Intel® Core™ i7/i5/i3 Desktop processors                                                                                                                                                                                                                                                                       |
| System Speed             | Up to 3.4GHz                                                                                                                                                                                                                                                                                                               |
| Memory                   | 2x 2GB DDR4-2133 SO-DIMM, Max. 32GB                                                                                                                                                                                                                                                                                        |
| Construction             | Aluminum & steel                                                                                                                                                                                                                                                                                                           |
| Chassis Color            | Sliver & Gray (Aluminum)                                                                                                                                                                                                                                                                                                   |
| Front Panel External I/O | 1x DVI-D + 1x VGA<br>1x Audio jack for MIC-in / Line-out<br>4x USB 2.0 ports<br>1x Red HDD LED<br>1x Power button with green LED indicator<br>1x CFAST socket, 2x SIM card slots<br>1x 2-pin terminal block for external power button<br>1x Front removable drive bay for SSD                                              |
| Rear Panel External I/O  | 1x RS232/RS422/485 port for COM#1<br>5x RS232 port for COM#2/COM#3/COM#4<br>2x DisplayPort connector<br>1x RJ45 Gigabit Ethernet port + 2x USB 3.0 port<br>1x RJ45 Gigabit Ethernet port + 2x USB 3.0 port<br>1x 3-pins DC-in terminal block type for 12V~24V<br>2x USB 2.0 port<br>2x Antenna holes<br>2x expansion slots |
| Expansion slots          | 2x Mini PCI-E sockets + 1x CFAST slot                                                                                                                                                                                                                                                                                      |
| Storage                  | 1x 2.5 SSD<br>2x mSATA (AMI222AF only) & 1x mSATA (AMI222EF only)                                                                                                                                                                                                                                                          |
| Mounting                 | Desktop or wall mount (wall mount kit included)                                                                                                                                                                                                                                                                            |
| Dimensions               | 210mm (W) x 265mm (D) x 128.6mm (H)                                                                                                                                                                                                                                                                                        |
| Operating Temperature    | -10°C to 70°C (14°F~158°F)*With Air flow<br>-10°C to 50°C (14°F~122°F)*without Air flow                                                                                                                                                                                                                                    |
| Storage Temperature      | -20°C ~ 80°C (-4°F~176°F)                                                                                                                                                                                                                                                                                                  |
| Relative Humidity        | 5~90% @ 45°C, (non-condensing)                                                                                                                                                                                                                                                                                             |
| Vibration                | Non-Operating:<br>1.0 grms / 5~500Hz / random operation<br>Operating:<br>0.25 grms / 5~500Hz / random operation                                                                                                                                                                                                            |
| Shock                    | Operating : 20G/ 11ms ;<br>Non-Operating : 40G/ 11ms (MIL-STD-810G)                                                                                                                                                                                                                                                        |
| Certification            | CE / LVD / FCC Class B                                                                                                                                                                                                                                                                                                     |

## Features

- Fanless system with IBASE MB220 customized board
- Supports 7th/6th Gen Intel® Core™ i7/i5/i3 processors
- Operating temperature ranging from -10°C to 50°C
- Dual SIM slot support WWAN redundancy
- 12V to 24V DC wide-range voltage input
- Over/Under/Reverse voltage protection
- iSMART, iAMT (11.6), (TPM 2.0)

## Ordering Information

|          |                                                                                                                                                                                   |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AMI222AF | Fanless Box System with MB220AF, w/ Intel® Core™ i7/i5/i3 Desktop processor, 6x COM, 2x 4GB memory, 1x 2.5" 64GB MLC industrial-grade SSD, w/o power adaptor, optional riser card |
| AMI222EF | Fanless Box System with MB220EF, w/ Intel® Core™ i7/i5/i3 Desktop processor, 6x COM, 2x 4GB memory, 1x 2.5" 64GB MLC industrial-grade SSD, w/o power adaptor, optional riser card |

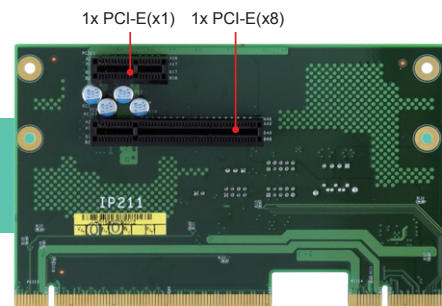
## Recommended Processor list

| Model     | TDP | Base Freq | Turbo Freq | Cache | Cores / Threads |
|-----------|-----|-----------|------------|-------|-----------------|
| i7-7700T  | 35W | 2.9 GHz   | 3.8 GHz    | 8M    | 4/8             |
| i7-6700TE | 35W | 2.4 GHz   | 3.4 GHz    | 8M    | 4/8             |
| i5-7500T  | 35W | 2.7 GHz   | 3.3 GHz    | 6M    | 4/4             |
| i5-6500TE | 35W | 2.3 GHz   | 3.3 GHz    | 6M    | 4/4             |
| i3-7101TE | 35W | 3.4 GHz   | N/A        | 3M    | 2/4             |
| i3-6100TE | 35W | 2.7 GHz   | N/A        | 4M    | 2/4             |
| G4400TE   | 35W | 2.9 GHz   | N/A        | 3M    | 2/2             |
| G3900TE   | 35W | 2.6 GHz   | N/A        | 2M    | 2/2             |

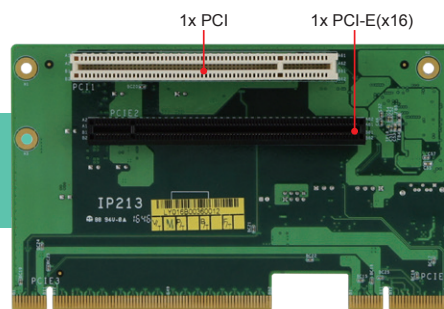
### Expansion Cards



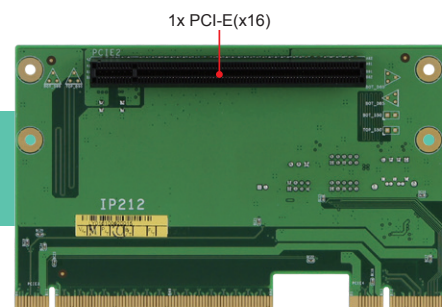
IP211



IP213



IP212



1 Embedded Systems

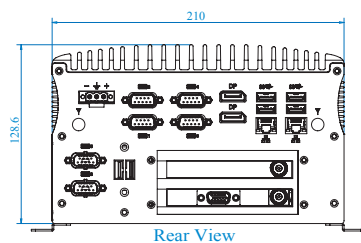
2 CPU Modules

3 Disk-Size SBCs

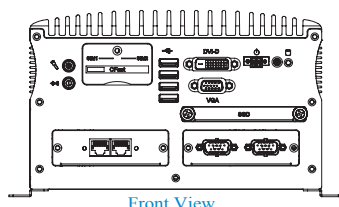
4 Motherboards

5 CPU Cards

### Dimensions and Drawing



Rear View



Front View

