



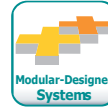
# EC510/EC511-SD

Q170

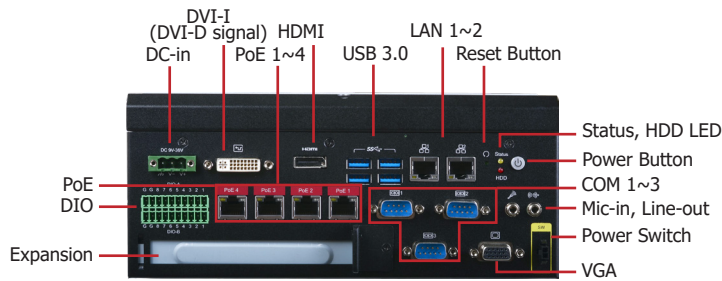


### ► Features

- Supports DDR4 SODIMM up to 32GB
- Three independent displays: 1 VGA + 1 DVI/HDMI + 1 HDMI/DP
- Compact and cost-effective solution
- Supports 4 PoE GLAN ports and one expansion slot
- 2 Mini PCIe slots support mSATA and Wi-Fi modules

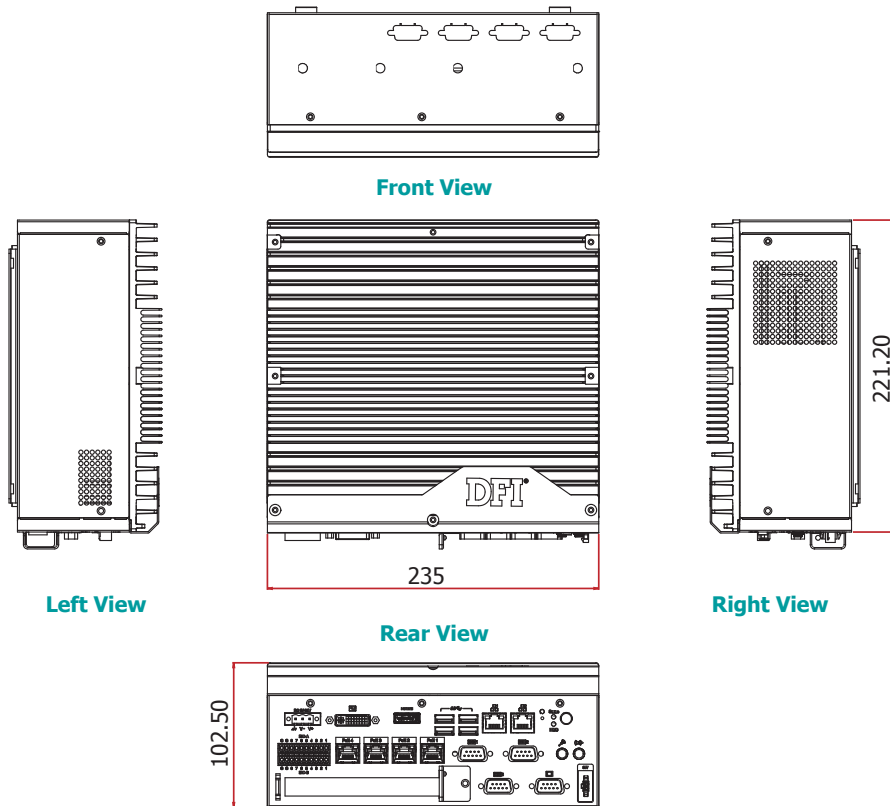


### ► Panel



Rear View

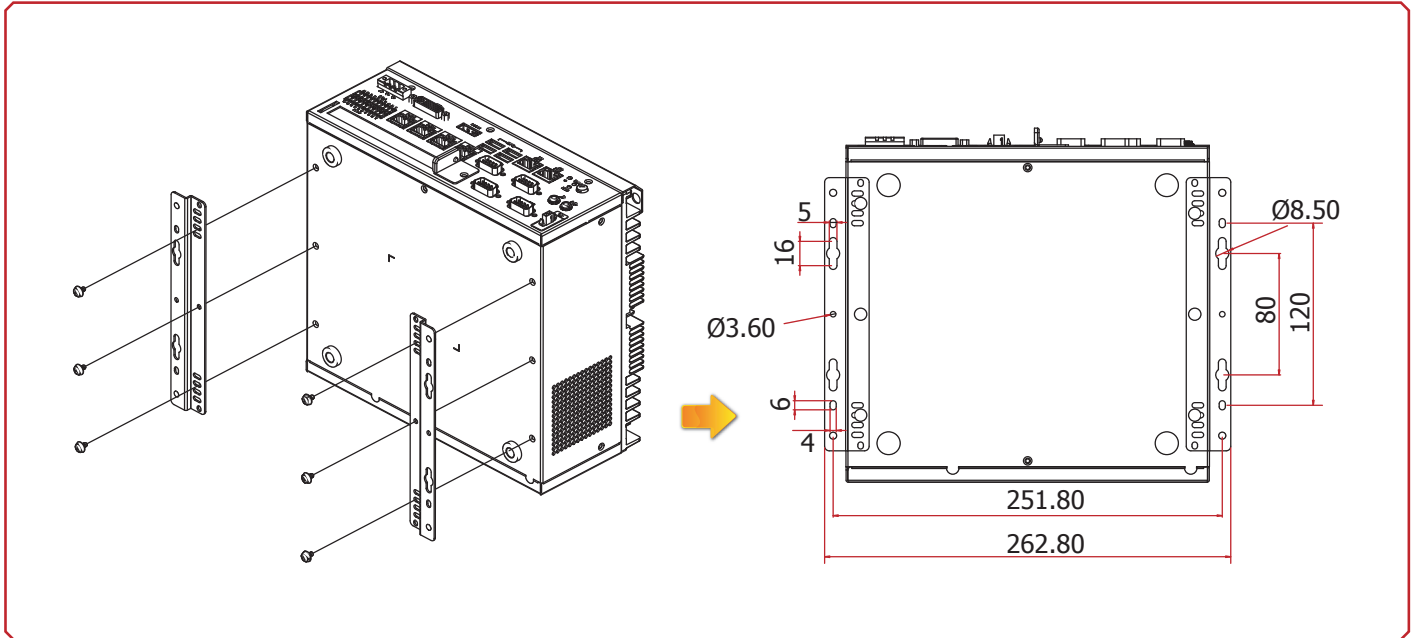
### ► Dimensions



## ► Specifications

|                                     |                               |   |  |
|-------------------------------------|-------------------------------|---|--|
| <b>SYSTEM</b>                       | <b>Processor</b>              | 6th/7th Generation Intel® Core™ Processors, LGA 1151 Socket<br>Intel® Core™ i7-6700TE, Quad Core, 8M Cache, 2.4GHz (3.4GHz), 35W<br>Intel® Core™ i5-6500TE, Quad Core, 6M Cache, 2.3GHz (3.3GHz), 35W<br>Intel® Core™ i3-6100TE, Dual Core, 4M Cache, 2.7GHz, 35W<br>Intel® Core™ i7-7700T, Quad Core, 8M Cache, 2.9GHz (3.8GHz), 35W<br>Intel® Core™ i5-7500T, Quad Core, 6M Cache, 2.7GHz (3.5GHz), 35W<br>Intel® Core™ i3-7101TE, Dual Core, 3M Cache, 3.4GHz, 35W |  |
|                                     | <b>Chipset</b>                | Intel® Q170 Chipset   |  |
|                                     | <b>Memory</b>                 | Two 260-pin SODIMM up to 32GB   | Dual Channel DDR4 1866/2133MHz   |
|                                     | <b>BIOS</b>                   | Insyde SPI 128Mbit  |  |
|                                     | <b>GRAPHICS</b>               | <b>Controller</b>   | Intel® HD Gen 9 Graphics   |
| <b>Feature</b>                      |                               | OpenGL 5.0, DirectX 12, OpenCL 2.1<br>HW Decode: AVC/H.264, MPEG2, VC1/WMV9, JPEG/MJPEG, HEVC/H265, VP8, VP9<br>HW Encode: MPEG2, AVC/H264, JPEG, HEVC/H265, VP8, VP9   |  |
| <b>Display</b>                      |                               | 1 x VGA<br>1 x DVI (DVI-D signal)/HDMI (HDMI available upon request)<br>1 x HDMI/DP (DP available upon request)   | VGA: resolution up to 1920x1200 @ 60Hz<br>DVI: resolution up to 2560x1600 @ 60Hz<br>HDMI: resolution up to 4096x2160 @ 24Hz or 2560x1600 @ 60Hz<br>DP: resolution up to 4096x2304 @ 60Hz |
| <b>Triple Displays</b>              |                               | VGA + DVI (DVI-D signal) + HDMI<br>VGA + DVI (DVI-D signal) + DP<br>VGA + 2 HDMI<br>VGA + HDMI + DP   |  |
| <b>STORAGE</b>                      | <b>External</b>               | 2 x 2.5" SATA 3.0 Drive Bay (RAID 0/1)  |  |
| <b>EXPANSION</b>                    | <b>Interface</b>              | 1 x Full-size Mini PCIe (PCIe/USB)  | 1 x PCI (EC510-SD)   |
|                                     |                               | 1 x Half-size Mini PCIe (USB/mSATA)   | 1 x PCIe x16 (EC511-SD)  |
| <b>ETHERNET</b>                     | <b>Controller</b>             | 1 x Intel® I211AT PCIe (10/100/1000Mbps)<br>4 x Intel® I210IT PCIe (10/100/1000Mbps)<br>1 x Intel® I219LM with iAMT11.0 PCIe (10/100/1000Mbps) (only Core i7/i5 supports iAMT)  |  |
| <b>LED</b>                          | <b>Indicators</b>             | 1 x Power LED<br>1 x HDD LED  |  |
| <b>REAR I/O</b>                     | <b>Ethernet</b>               | 6 x GbE (RJ-45) or<br>2 x GbE (RJ-45) + 4 x PoE GbE (RJ-45) (supports IEEE 802.3af, 15.4W per port)   |  |
|                                     | <b>Serial</b>                 | 2 x RS-232/422/485 (DB-9) (RS-232 with power)<br>1 x RS-232/422/485 (DB-9)  |  |
|                                     | <b>USB</b>                    | 4 x USB 3.0 (type A)  |  |
|                                     | <b>Display</b>                | 1 x VGA<br>1 x DVI (DVI-D signal)/HDMI (HDMI available upon request)<br>1 x HDMI/DP (DP available upon request)   |  |
|                                     | <b>Audio</b>                  | 1 x Line-out<br>1 x Mic-in  |  |
|                                     | <b>DIO</b>                    | 1 x 16-bit DIO  |  |
|                                     | <b>Buttons</b>                | 1 x Power Button<br>1 x Reset Button  |  |
| <b>WATCHDOG TIMER</b>               | <b>Output &amp; Interval</b>  | System Reset, Programmable via Software from 1 to 255 Seconds   |  |
| <b>POWER</b>                        | <b>Type</b>                   | Wide Range 9~36V  |  |
|                                     | <b>Connector</b>              | 3-pole Terminal Block   |  |
| <b>OS SUPPORT</b>                   |                               | Windows 7 (32/64-bit)<br>Windows 10   | Windows 8.1 (64-bit)   |
| <b>MECHANISM</b>                    | <b>Construction</b>           | Aluminum + SGCC   |  |
|                                     | <b>Mounting</b>               | Wall Mount  |  |
|                                     | <b>Dimensions (W x H x D)</b> | 235mm x 102.5mm x 222mm (W x H x D)   |  |
|                                     | <b>Weight</b>                 | 4.1 kg  |  |
| <b>ENVIRONMENT</b>                  | <b>Operating Temperature</b>  | 0 to 50°C (SSD or mSATA-mini, with 0.7m/s air flow)   |  |
|                                     | <b>Storage Temperature</b>    | -20 to 85°C   |  |
|                                     | <b>Relative Humidity</b>      | 5 to 95% RH (non-condensing)  |  |
| <b>STANDARDS AND CERTIFICATIONS</b> | <b>Shock</b>                  | Half sine wave 3G, 11ms, 3 shock per axis   |  |
|                                     | <b>Vibration</b>              | IEC68-2-64  |  |
|                                     | <b>Certification</b>          | CE, FCC Class A, RoHS   |  |

Wall Mounting



### ► Ordering Information

| Model Name           | Part Number     | Description   |
|----------------------|-----------------|---|
| <b>EC510-SD3G46E</b> | 750-EC5101-000G | Fanless, Q170, 1 VGA, 1 DVI, 1 HDMI, 2 LAN, 4 PoE, 3 COM, 4 USB, 1 PCI, RoHS      |
| <b>EC510-SD3G46</b>  | 750-EC5101-100G | Fanless, Q170, 1 VGA, 1 DVI, 1 HDMI, 6 LAN, 3 COM, 4 USB, 1 PCI, RoHS             |
| <b>EC511-SD3G46E</b> | 750-EC5111-000G | Fanless, Q170, 1 VGA, 1 DVI, 1 HDMI, 2 LAN, 4 PoE, 3 COM, 4 USB, 1 PCIe x16, RoHS |
| <b>EC511-SD3G46</b>  | 750-EC5111-100G | Fanless, Q170, 1 VGA, 1 DVI, 1 HDMI, 6 LAN, 3 COM, 4 USB, 1 PCIe x16, RoHS        |

### ► Optional Items

| Optional Items       | Part Number     | Description   |
|----------------------|-----------------|---|
| <b>CPU</b>           | 143-102402-500G | Intel® Core™ i7-6700TE, Quad Core, 8M Cache, 2.4GHz (3.4GHz), 35W, RoHS |
|                      | 143-102303-500G | Intel® Core™ i5-6500TE, Quad Core, 6M Cache, 2.3GHz (3.3GHz), 35W, RoHS |
|                      | 143-102701-500G | Intel® Core™ i3-6100TE, Dual Core, 4M Cache, 2.7GHz, 35W, RoHS          |
| <b>Memory</b>        | 785-RSOD416G    | SODIMM, DDR4 Module, 16GB, RoHS   |
|                      | 785-RSOD48G     | SODIMM, DDR4 Module, 8GB, RoHS  |
|                      | 785-RSOD44G     | SODIMM, DDR4 Module, 4GB, RoHS  |
| <b>mSATA-mini</b>    | 785-MS128GMF    | mSATA Card, 128GB MLC, RoHS   |
|                      | 785-MS64GMF     | mSATA Card, 64GB MLC, RoHS  |
|                      | 785-MS32GMF     | mSATA Card, 32GB MLC, RoHS  |
|                      | 785-MS16GMF     | mSATA Card, 16GB MLC, RoHS  |
|                      | 785-MS08GMF     | mSATA Card, 8GB MLC, RoHS   |
|                      | 785-MS04GMF     | mSATA Card, 4GB MLC, RoHS   |
| <b>Wi-Fi</b>         | 761-110091-000G | Wi-Fi Kit, RoHS   |
| <b>Power Cord</b>    | 785-PWRD        | Power Cord, Standards (USA/EUR/CH), 1.8m, RoHS                          |
| <b>Power Adapter</b> | 671-110002-100G | 100W, 12V, Level 6, RoHS  |
|                      | 671-110003-100G | 120W, 19V, Level 6, RoHS  |
|                      | 671-116003-000G | 160W, 19V/8.4A, Level 6, RoHS   |
| <b>Wall Mount</b>    | 761-EC5410-000G | Wall Mount Kit, RoHS  |

### ► Packing List

|                                |
|--------------------------------|
| • 1 EC510/EC511-SD system unit |
| • 1 Quick Installation Guide   |