

# TANK-870-Q170

High-Performance 6th/7th Generation Intel® Core™ Processor



## Features

- » 6th/7th Gen Intel® Core™ processor platform with Intel® Q170 chipset and DDR4 memory
- » Triple independent display with high resolution support
- » Rich high-speed I/O interfaces on one side for easy installation
- » On-board internal power connector for providing power to add-on cards
- » Great flexibility for hardware expansion
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## Specifications

| Form factor     |  |
|-----------------|--|
| SBC Form Factor | » CPU:<br>Intel 7th Gen Core CPU &<br>Intel® Core™ i7-6700TE (2.4 GHz, quad-core, TDP=35W)<br>Intel® Core™ i5-6500TE (2.3 GHz, quad-core, TDP=35W)<br>» Chipset: Intel® Q170<br>» System Memory:<br>2 x 260-pin DDR4 SO-DIMM, pre-installed one 4GB (system max: 32GB)<br>» Power:<br>Input - DC Jack: 9 V~36 V DC, Terminal Block: 9 V~36 V DC<br>Consumption: 19 V@3.68 A (Intel® Core™ i7-6700TE with 8 GB memory)<br>Internal Connector: 5V@3A or 12V@3A<br>» Reliability:<br>Operating Shock - Half-sine wave shock 5G; 11ms; 100 shocks per axis<br>Operating Vibration - MIL-STD-810G 514.6 C-1 (with SSD)<br>Safety/EMC - CE/FCC |
| I/O Interface   |  |
| I/O Ports       | » USB: 4 x USB 3.0, 4 x USB 2.0<br>» Ethernet:<br>2 x RJ-45<br>LAN1: Intel® I210 PCIe controller<br>LAN2: Intel® I219LM PCIe controller<br>» COM Port:<br>4 x RS-232 (2 x RJ-45, 2 x DB-9 w/2.5KV isolation protection)<br>2 x RS-232/422/485 (DB-9)<br>» Digital I/O: 8 bit Digital I/O, 4 bit input / 4 bit output<br>» Display:<br>1 x VGA (Up to 1920 x 1200@60Hz)<br>1 x HDMI™/DP (Up to 3840x2160@30Hz / 4096x2304@60Hz)   |

|                                 |  |
|---------------------------------|--|
|                                 | 1 x iDP (optional)   |
|                                 | » Audio: 1 x Line-out, 1 x Mic-in                              |
| <b>Expansion Slots</b>          |  |
| Expansion Slots                 | » PCIe Mini:   |
|                                 | 1 x Half-size PCIe Mini slot                                   |
|                                 | 1 x Full-size PCIe Mini slot (supports mSATA, colay with SATA) |
|                                 | » Backplane:   |
|                                 | 2-slot model: 1 x PCIe x16, 1 x PCI                            |
|                                 | 2-slot model: 2 x PCIe x8                                      |
|                                 | 4-slot model: 2 x PCIe x8, 2 x PCI, 1 x Full-size PCIe Mni     |
| <b>System</b>                   |  |
| Cooling method / System Fan     | Fanless  |
| Drive Bays                      | 2 x 2.5" SATA 6Gb/s HDD/SSD bay (RAID 0/1 support)             |
| <b>Indicator&amp;Buttons</b>    |  |
| Buttons                         | 1 x Power Button   |
|                                 | 1 x Reset Button   |
|                                 | 1 x AT/ATX Switch  |
|                                 | 1 x ACC Mode   |
| <b>Physical Characteristics</b> |  |
| Construction                    | Extruded aluminum alloys                                       |
| <b>Color</b>                    |  |
| Color                           | Black C + Silver   |
| <b>Dimensions</b>               |  |
| Dimensions                      | 2-slot: 121.5 x 255.2 x 205 (WxDxH) (mm)                       |
|                                 | 4-slot: 154.8 x 255.2 x 205 (WxDxH) (mm)                       |
| <b>Weight</b>                   |  |
| Weight                          | 2-slot: 4.2 kg/6.3 kg  |
|                                 | 4-slot: 4.5 kg/6.5 kg  |
| <b>Environment</b>              |  |
| Operating Temperature           | i7-6700TE -20°C ~ 45°C with air flow (SSD)                     |
|                                 | i5-6500TE -20°C ~ 60°C with air flow (SSD)                     |
| Humidity                        | 10% ~ 95%, non-condensing                                      |

## Ordering Information

|                            |  |
|----------------------------|--|
| TANK-870-Q170-i7/4G/4A-R12 | Ruggedized Fanless embedded system with Intel® Core i7-6700TE 2.4GHz, (up to 3.4 GHz, 4-Core, TDP 35W), 4GB DDR4 pre-installed memory, 2 x PCIe by 8 & 2 x PCI expansion, VGA/HDMI+DP/iDP, 9~36V DC, Powder paint, RoHS  |
| TANK-870-Q170-i7/4G/2B-R12 | Ruggedized Fanless embedded system with Intel® Core i7-6700TE 2.4GHz, (up to 3.4 GHz, 4-Core, TDP 35W), 4GB DDR4 pre-installed memory, 1 x PCIe by 16 & 1 x PCI expansion, VGA/HDMI+DP/iDP, 9~36V DC, Powder paint, RoHS |
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Packing List

1 x Mounting Bracket