

# 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
- » [Buy IoT Devices & IoT Hardware | Azure Certified Device Catalog](#)

## Specifications

Form factor	
SBC Form Factor	» CPU: Intel 7th Gen Core CPU & Intel® Core™ i7-6700TE (2.4 GHz, quad-core, TDP=35W) Intel® Core™ i5-6500TE (2.3 GHz, quad-core, TDP=35W) » Chipset: Intel® Q170 » System Memory: 2 x 260-pin DDR4 SO-DIMM, pre-installed one 4GB (system max: 32GB) » Power: Input - DC Jack: 9 V~36 V DC, Terminal Block: 9 V~36 V DC Consumption: 19 V@3.68 A (Intel® Core™ i7-6700TE with 8 GB memory) Internal Connector: 5V@3A or 12V@3A » Reliability: Operating Shock - Half-sine wave shock 5G; 11ms; 100 shocks per axis Operating Vibration - MIL-STD-810G 514.6 C-1 (with SSD) Safety/EMC - CE/FCC » IPMI: 1 x iRIS-2400 (optional)
I/O Interface	
I/O Ports	» USB: 4 x USB 3.0, 4 x USB 2.0 » Ethernet: 2 x RJ-45 LAN1 (iRIS): Intel® I210 PCIe controller LAN2: Intel® I219LM PCIe controller » COM Port: 4 x RS-232 (2 x RJ-45, 2 x DB-9 w/2.5KV isolation protection) 2 x RS-232/422/485 (DB-9) » Digital I/O: 8 bit Digital I/O, 4 bit input / 4 bit output » Display: 1 x VGA (Up to 1920 x 1200@60Hz)

	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-Q170i-i7/4G/4A-R11	Ruggedized Fanless embedded system with Intel® Core i7-6700TE 2.4GHz, (up to 3.4 GHz, Quad Core, TDP 35W), 4GB DDR4 pre-installed memory, 2 x PCIe by 8 & 2 x PCI expansion, VGA/HDMI™+DP/iDP, iRIS-2400 optional, 9~36V DC, RoHS
TANK-870-Q170i-i7/4G/2B-R11	Ruggedized Fanless embedded system with Intel® Core i7-6700TE 2.4GHz, (up to 3.4 GHz, Quad Core, TDP 35W), 4GB DDR4 pre-installed memory, 1 x PCIe by 16 & 1 x PCI expansion, VGA/HDMI™+DP/iDP, iRIS-2400 optional, 9~36V DC, RoHS
TANK-870-Q170i-i7/4G/2A-R11	Ruggedized Fanless embedded system with Intel® Core i7-6700TE 2.4GHz, (up to 3.4 GHz, Quad Core, TDP 35W), 4GB DDR4 pre-installed memory, 2 x PCIe by 8 expansion, VGA/HDMI™+DP/iDP, iRIS-2400 optional, 9~36V DC, RoHS
TANK-870-Q170i-i5/4G/4A-R11	Ruggedized Fanless embedded system with Intel® Core i5-6500TE 2.3GHz, (up to 3.3 GHz, Quad Core, TDP 35W), 4GB DDR4 pre-installed memory, 2 x PCIe by 8 & 2 x PCI expansion, VGA/HDMI™+DP/iDP, iRIS-2400 optional, 9~36V DC, RoHS
TANK-870-Q170i-i5/4G/2B-R11	Ruggedized Fanless embedded system with Intel® Core i5-6500TE 2.3GHz, (up to 3.3 GHz, Quad Core, TDP 35W), 4GB DDR4 pre-installed memory, 1 x PCIe by 16 & 1 x PCI expansion, VGA/HDMI™+DP/iDP, iRIS-2400 optional, 9~36V DC, RoHS
TANK-870-Q170i-i5/4G/2A-R11	Ruggedized Fanless embedded system with Intel® Core i5-6500TE 2.3GHz, (up to 3.3 GHz, Quad Core, TDP 35W), 4GB DDR4 pre-installed memory, 2 x PCIe by 8 expansion, VGA/HDMI™+DP/iDP, iRIS-2400 optional, 9~36V DC, RoHS

## Packing List

---

1 x Chassis Screw	1 x Mounting Bracket
-------------------	----------------------