THOR200

Intel® Broadwell Fanless Rugged System Computer

Power Automation Computer

- Intel® Core™ i7-5650U
- NVIDIA 1050Ti CUDA 768 GDDR5-4GB/ GTX 1650 CUDA896 GDDR5-4GB/ GTX 1660S CUDA1408 GDDR6-6GB
- 2 x XR-DIMM up to 16GB
- 2 x mPCIe expansion slot
- 1 x 2.5" HDD/ SSD
- Amphenol M12 connector applied
- IP65 classify

Specifications

System	
Low Power Processor	Intel® Broadwell-U Core™ i7-5650U Processor (4M Cache, up to 3.20 GHz) Turbo Boost Technology 2.0 , VPro and Hyper-Threading support.
Memory type	2 x XR-DIMM up to 16GB
Expansion Slot	2 x miniPCIe (1 with mSATA supported)
Display	
VGA	Resolution up to 2048 x 1536
Storage	
HDD/SDD	1 x 2.5" HDD/SSD HDD – up to 2TB Capacity SSD – up to 1TB Capacity
mSATA	Full-size mSATA- up to 512GB Capacity Rugged Industrial NAND Flash mSATA Storage w/ Rugged -40/+85°C High Capacity, optional Pre-loaded with Linux or Windows OS. 8 to 512GB Innodisk mSATA MLC SATA III 6Gb/s Flash SSD, Rated for 400 MB/sec Sequential Read ; 200 MB/sec Write Max. Vibration: 20G @7~2000Hz, Shock: 1500G @ 0.5m, MTBF: 3 million hours. 8 to 512GB Apacer mSATA MLC SATA III 6Gb/s Flash SSD, Rated for 505 MB/sec Sequential Read ; 360 MB/sec Write Max. Vibration: 15G @7~2000Hz, Shock: 50G @ 0.5m.
Ethernet	
Ethernet	1 x Intel I210-IT, 1 x Intel I218-LM Gigabit LAN Interfaces (10/100/1000Mbps)
Front I/O	
Button	Water Resistive Power Button with dual-color LED Backlight
X1 (COM)	12-Pin A-code Female M12 Connector (Amphenol M12A-12PMMS-SF8001)
X2 (VGA)	12-Pin A-code Female M12 Connector (Amphenol M12A-12PMMS-SF8001)
X3 (LAN)	8-Pin A-code Female M12 Connector (Amphenol M12S-04BFFB-SL7001)
X4 (LAN)	8-Pin A-code Female M12 Connector (Amphenol M12S-04BFFB-SL7001)
X5 (USB 2.0 x 2)	8-Pin A-code Female M12 Connector (Amphenol M12S-04BFFB-SL7001)
Rear I/O	

DC-IN	4-Pin S-code Male M12 Connector (Amphenol M12S-04PMMS-SF8001)
Power Requirement	
Power Input	9V to 36V DC-in
Power Type	AT/ATX Mode Select by Jumper
Applications, Operating System	
Applications	Commercial and Military Platforms Requiring Compliance to MIL-STD-810G Embedded Computing, Process Control, Intelligent Automation and manufactur-ing applications where Harsh Temperature, Shock, Vibration, Altitude, Dust and EMI Conditions. Used in all aspects of the military.
Operating System	Windows 7 , Windows 8 , Windows 8.1, Windows 10 Ubuntu13.04, Ubuntu13.10, Ubuntu14.04, Fedora 20.
Physical	
Dimension (W x D x H)	220 x 380 x 56 mm
Weight	7.5 Kg (16.52 lbs)
Chassis	Aluminum AL6061
Heatsink	Aluminum Alloy, Corrosion Resistant.
Finish	Anodic aluminum oxide (Color)
Cooling	Natural Passive Convection/Conduction. No Moving Parts.
Environmental	
MIL-STD-810G Test	Method 507.5, Procedure II (Temperature & Humidity) Method 516.6 Shock-Procedure V Non-Operating (Mechanical Shock) Method 516.6 Shock-Procedure I Operating (Mechanical Shock) Method 514.6 Vibration Category 24/Non-Operating (Category 20 & 24, Vibration) Method 514.6 Vibration Category 20/Operating (Category 20 & 24, Vibration) Method 501.5, Procedure I (Storage/High Temperature) Method 501.5, Procedure II (Operation/High Temperature) Method 502.5, Procedure I (Storage/Low Temperature) Method 502.5, Procedure II (Operation/Low Temperature) Method 503.5, Procedure I (Temperature shock)
Reliability	No Moving Parts; Passive Cooling. Designed & Manufactured using ISO 9001/2000 Certified Quality Program.

EMC	CE and FCC compliance
Green Product	RoHS, WEEE compliance

Environmental

Operating Temp	-40 to 70°C (ambient with air flow)
Storage Temp.	-40 to 85°C
Relative Humidity	5% to 95%, non-condensing.

Ordering Information

THOR200
IP65 MIL-STD-810G Rugged Computer with Intel® i7-5650U, NVIDIA 1050Ti CUDA 768 GDDR5-4GB/GTX 1650 CUDA896 GDDR5-4GB/GTX 1660S CUDA1408 GDDR6-6GB
9V to 36V DC-in, Extended Temp -40 to 70°C

Drawing

Unit: mm