

Features

- Onboard Intel® Atom™ N450/N455 Processor
- Onboard DDR2 667 Memory, Max. 1GB (A1.0/B1.0)
- Onboard DDR3 667 Memory, Max. 2GB (C1.0/D1.0)
- Gigabit Ethernet
- CRT Connector, 18-bit Single-channel LVDS LCD
- High Definition Audio Interface
- PATA SSD (Up to 4GB, Optional) x 1, SATA 3.0Gb/s x2
- USB2.0 x 8
- PCI-Express [x1] x 4
- LPC Bus x 1
- +5V Only Operation



Specifications

System	
Form Factor	Qseven
Processor	Onboard Intel® Atom™ N450/N455 processor
System Memory	Onboard DDR2 667 Memory, Max. 1GB (A1.0/B1.0) Onboard DDR3 667 Memory, Max. 2GB (C1.0/D1.0)
Chipset	Intel® ICH8M
Ethernet	Intel® 82567V, Gigabit Ethernet
BIOS	AMI ROM SPI type, 4MB
Wake on LAN	YES
Watchdog Timer	Generates a time-out system reset
H/W Status Monitoring	Supports power supply voltages, fan speed and temperature monitoring
Expansion Interface	PCI-Express [x1] x 4 LPC bus x 1 SMBus x 1
Battery	Lithium battery
Power Requirement	+5V DC
Power Consumption (Typical)	Intel® Atom™ N450 1.66 GHz, DDR2 667 1GB 2.43A@+5V with TF-ECB-930G-A10 Intel® Atom™ N455 1.66 GHz, DDR3 667 2GB 2.20A@+5V with TF-ECB-930G-A10
Board Size	2.75" (L) x 2.75" (W) (70mm x 70mm): Without SSD, TF-AQ7-LN-A10/C10 3.35" (L) x 2.75" (W) (85mm x 70mm): With SSD, TF-AQ7-LN-B10/D10
Gross Weight	0.44 lb (0.2kg)
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	—
Display	Supports CRT/LCD Dual Simultaneous/ Dual Independent Displays
Chipset	Intel® Atom™ N450/N455 integrated Integrates hardware MPEG2 decoder
Memory	Shared system memory up to 384MB/ DVMT 4.0
Resolution	Up to 1400 x 1050 (SXGA) @ 60Hz for CRT Up to 1366 x 768 or 1280 x 800 (WXGA) @ 60Hz for LCD
LCD Interface	18-bit single-channel LVDS
SDVO	—
CRT	One CRT connector on the module
I/O	
Storage	PATA SSD on board, Max. 4GB (B1.0). SATA 3.0Gb/s x 2 (A1.0 / B1.0) SATA SSD on board, Max. 8GB (D1.0). SATA 3.0Gb/s x 2 (C1.0 / D1.0)
USB	USB 2.0 x 8
Audio	High definition audio interface

Packing List

- M2.5 Screw x 4
- Product CD
- AQ7-LN

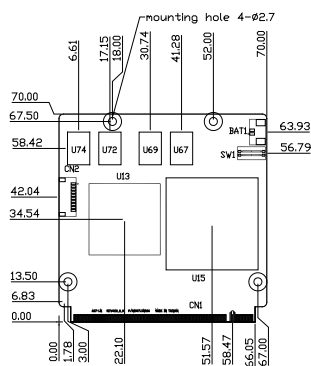
AQ7-LN

Dimension

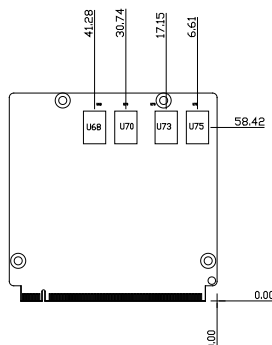
Unit: mm

AQ7-LN-B10

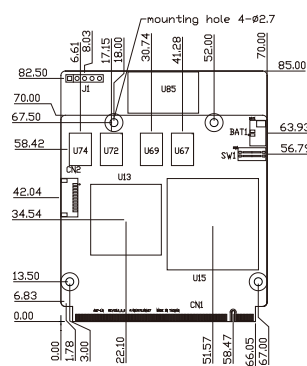
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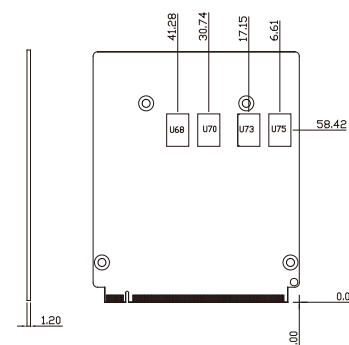
Component Side



Solder Side



Component Side



Solder Side

Ordering Information

Part Number	CPU	Memory	Display	LVDS	Storage	LAN	USB2.0	Expansion Slot	Power	Temp
AQ7-LN-A10	Intel® Atom™ N455/1.66G	Onboard 1GB DDR2	CRT, LVDS	18-bit Single Channel	SATA2 x 2	GbE x 1	8	PCI-E[1] x 4	5V	0°C-60°C
AQ7-LN-B10	Intel® Atom™ N455/1.66G	Onboard 1GB DDR2	CRT, LVDS	18-bit Single Channel	4GB SSD SATA2 x 2	GbE x 1	8	PCI-E[1] x 4	5V	0°C-60°C
AQ7-LN-C10	Intel® Atom™ N455/1.66G	Onboard 1GB DDR3	CRT, LVDS	18-bit Single Channel	SATA2 x 2	GbE x 1	8	PCI-E[1] x 4	5V	0°C-60°C
AQ7-LN-D10	Intel® Atom™ N455/1.66G	Onboard 1GB DDR3	CRT, LVDS	18-bit Single Channel	4GB SSD SATA2 x 2	GbE x 1	8	PCI-E[1] x 4	5V	0°C-60°C

Optional Accessories

- **TF-ECB-930G-A10**
Qseven Carrier Board, 3.5", Dual Gigabit Ethernet, 2CH Audio, 2 COM, USB, Mini Card, DC, Rev.A1.0
- **TF-PER-A096**
Active Cooler, For AQ7 CPU Module, Onboard CPU
- **TF-PER-A097**
Heat Spreader Kit, For AQ7-LN, Onboard CPU