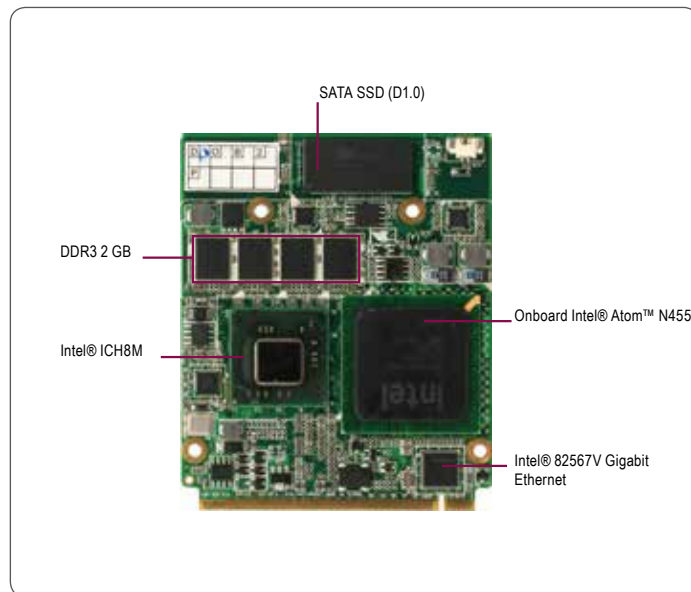


Qseven CPU Module with Onboard Intel® Atom™ N455 Processor



## Features

- Onboard Intel® Atom™ N455 Processor
- Onboard DDR3 667 MHz Memory, Up to 2 GB
- Gigabit Ethernet
- CRT Connector, 18-bit Single Channel LVDS LCD
- High Definition Audio Interface
- SATA SSD (Up to 4 GB) x 1, SATA 3.0 Gb/s x 2
- USB2.0 x 8
- PCI-Express [x1] x 4
- LPC Bus x 1
- +5V Only Operation
- Qseven Module Size, 85mm x 70mm, Qseven Rev. 1.2



## Specifications

System	
Form Factor	Qseven
Processor	Onboard Intel® Atom™ N455 processor
System Memory	Onboard DDR3 667 MHz Memory, up to 2 GB
Chipset	Intel® ICH8M
Ethernet	Intel® 82567V, Gigabit Ethernet
BIOS	AMI ROM SPI type, 4 MB
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™ N455 1.66 GHz, DDR3 667 2 GB 2.20A@+5V with TF-ECB-930G-A10
Board Size	3.35" (L) x 2.75" (W) (85mm x 70mm)
Gross Weight	0.44 lb (0.2 kg)
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)	110,000
Display	
Supports CRT/LCD Dual Simultaneous/ Dual Independent Displays	
Chipset	Intel® Atom™ N455 integrated Integrates hardware MPEG2 decoder
Memory	Shared system memory up to 256 MB/ DVMT 4.0
Resolution	Up to 1400 x 1050 (SXGA) @ 60 Hz for CRT Up to 1366 x 768 or 1280 x 800 (WXGA) @ 60 Hz for LCD
LCD Interface	18-bit Single Channel LVDS
SDVO	—
CRT	One CRT connector on the module
I/O	
Storage	SATA SSD onboard, Max. 8 GB (D1.0)(optional), SATA 3.0 Gb/s x 2
USB	USB 2.0 x 8
Audio	High definition audio interface

## Packing List

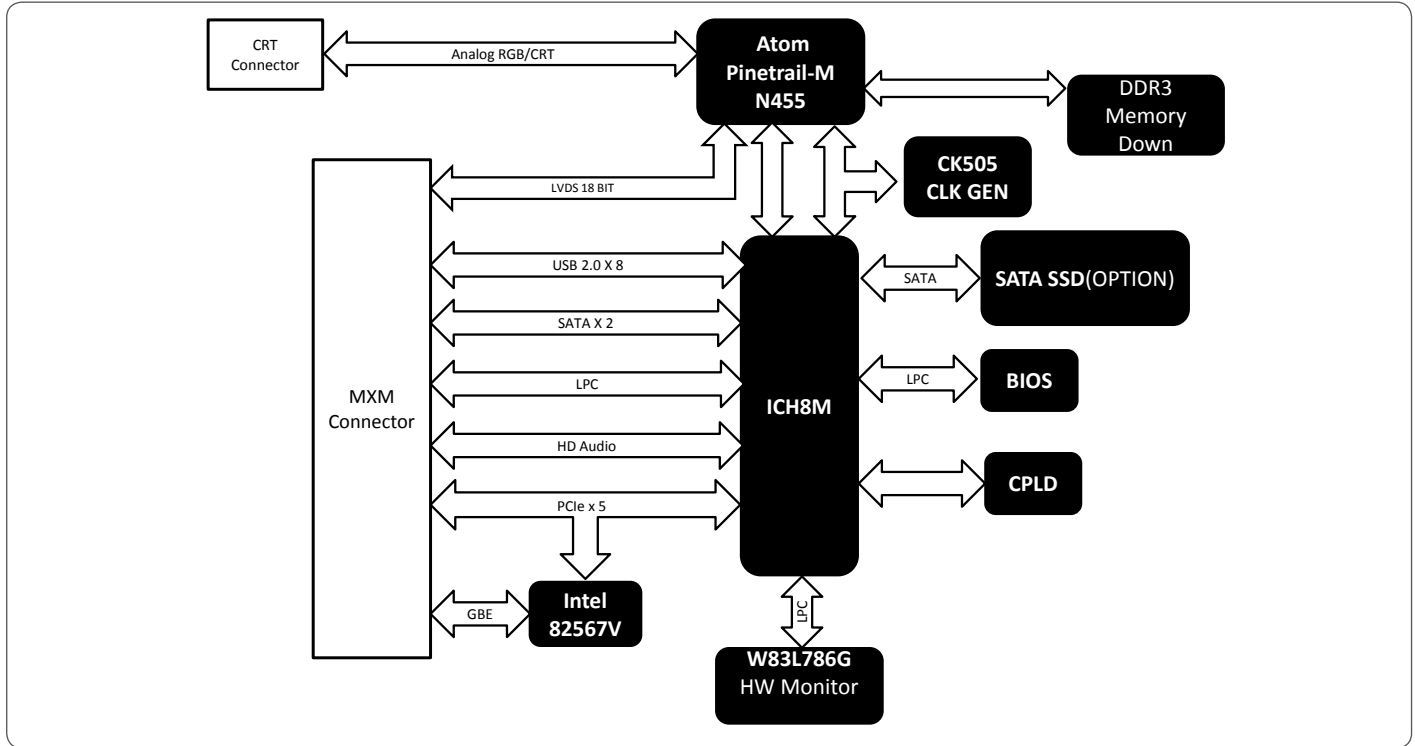
- M2.5 Screw x 4
- Product CD
- AQ7-LN

## Optional Accessories

- **ECB-970-A10**  
Qseven Rev. 2.0 Carrier Board for x86 Solution
- **TF-PER-A096**  
Active Cooler, For AQ7 CPU Module, Onboard CPU
- **TF-PER-A097**  
Heat Spreader Kit, For AQ7-LN, Onboard CPU

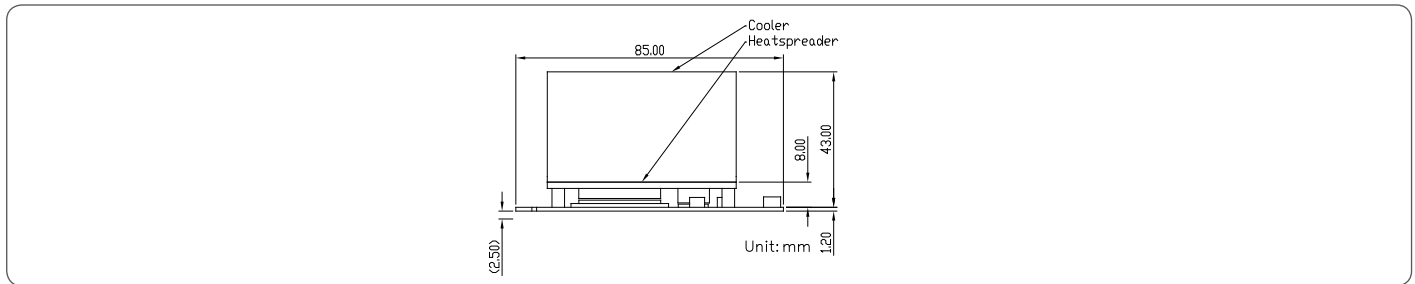
# AQ7-LN

## Block Diagram



## Dimension

Unit: mm



## Ordering Information

Part Number	CPU	Memory	Display	LVDS	Storage	LAN	USB2.0	Expansion Slot	Power	Temp
AQ7-LN-D10-01	Intel® Atom™ N455/1.66 GHz	Onboard 2 GB DDR3	CRT, LVDS	18b, 1CH	4 GB SSD SATA2 x 2	GbE x 1	8	PCI-E [x1] x 4	5V	0°C~60°C
AQ7-LN-D10-02	Intel® Atom™ N455/1.66 GHz	Onboard 2 GB DDR3	CRT, LVDS	18b, 1CH	SATA2 x 2	GbE x 1	8	PCI-E [x1] x 4	5V	0°C~60°C