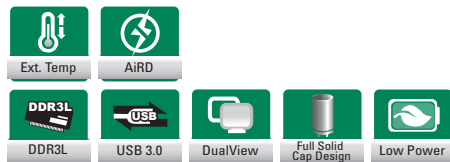


# Q7M310

Qseven Module with Intel® Atom® x5 and x7 Processors

## Features

- Intel® Atom® x5 and x7 processor (Apollo Lake)
- 8GB DDR3L memory onboard
- 4 lanes of PCI Express slot
- 2 SATA-600
- 3 USB 3.0 and 4 USB 2.0 or 2 USB 3.0 and 6 USB 2.0 (optional)

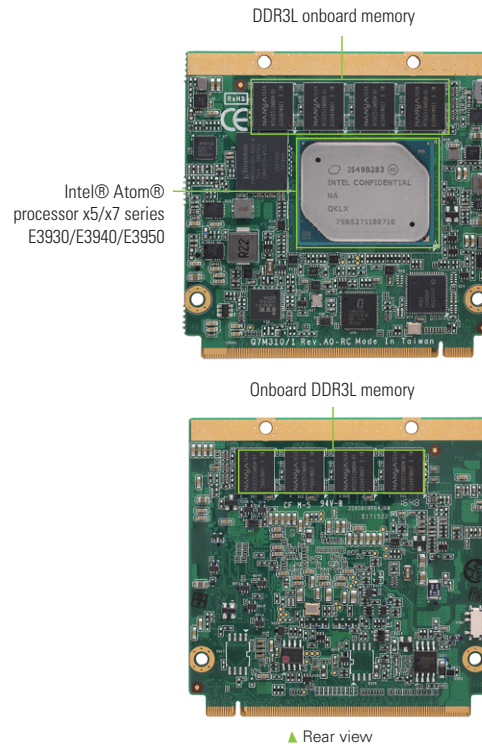


### Core System

CPU	Intel® Atom® x7-E3950 (2.0 GHz) Intel® Atom® x5-E3940 (1.8 GHz) Intel® Atom® x5-E3930 (1.8 GHz)
System Memory	Onboard DDR3L, up to 8GB
Chipset	SoC integrated
BIOS	AMI uEFI
SSD	eMMC 32GB (optional)
Watchdog Timer	65536 levels, 0 ~ 65535 sec.
Expansion Interface	4 x PCIe x1 (3 x PCIe x1 if onboard LAN is supported)
Battery Lithium	N/A
Power Input	ATX: 5V, +5VSB AT: 5V
Size	70 x 70 mm
Board Thickness	1.2 mm
Temperature	-40°C to +85°C (-40°F ~ +185°F), operation
Operation Humidity	10% - 95% relative humidity, non-condensing

### I/O

SATA	2 x SATA-600
Hardware Monitoring	Yes
Ethernet	1 x 10/100/1000 Mbps Ethernet with Intel® i210-IT; supports Wake-on-LAN, PXE Boot ROM
Audio	HD link interface to baseboard for Codec
USB	2 x USB 3.0 4 x USB 2.0
Serial	1 x LPC interface (optional w/GPIO) 1 x SPI interface 1 x Serial TX/RX
TPM	N/A
SMBus	Yes
Others	1 x I <sup>2</sup> C
Digital I/O	8 x GPIO
SDIO	Yes
Smart Battery	Yes



### Display

Chipset	Intel® Gen 9 Graphics Engine Support Gfx - DX11.1, OCL1.2, OGL 4.2
Display Interface	1 x DDI (DisplayPort, HDMI, DVI) 1 x LVDS; 18/24-bit dual channel (eDP optional)

### Packing List

Quick installation guide

### Ordering Information

Standard	
Q7M310PG-E3950-4G (Ind.)	Qseven module with Intel® Atom® x7-E3950, 4GB DRAM, DDI, LVDS, USB 3.0 and GbE LAN (Industrial temperature)
Q7M310PG-E3940-4G (Ind.)	Qseven module with Intel® Atom® x5-E3940, 4GB DRAM, DDI, LVDS, USB 3.0 and GbE LAN (Industrial temperature)
Q7M310PG-E3930-4G (Ind.)	Qseven module with Intel® Atom® x5-E3930, 4GB DRAM, DDI, LVDS, USB 3.0 and GbE LAN (Industrial temperature)
Q7M310-E3930+4GB	Qseven module with Intel® Atom® x7-E3950, 4GB DRAM, DDI, LVDS, USB 3.0 and GbE LAN
Q7M310-E3940+4GB	Qseven module with Intel® Atom® x5-E3940, 4GB DRAM, DDI, LVDS, USB 3.0 and GbE LAN
Q7M310-E3950+4GB	Qseven module with Intel® Atom® x5-E3930, 4GB DRAM, DDI, LVDS, USB 3.0 and GbE LAN
7128Q310000E	Q7M310 heat spreader
7118Q310000E	Q7M310 heatsink without fan