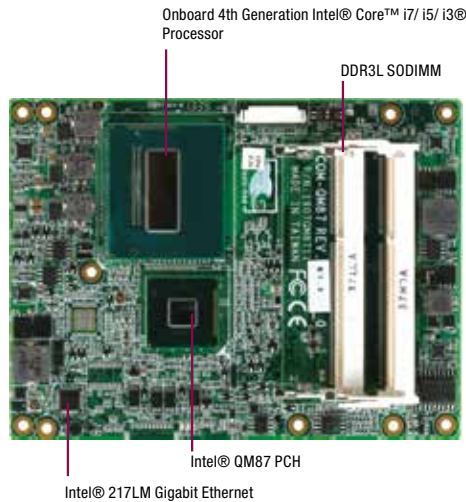


# COM-QM87

COM Express CPU Type 6 Module with Intel® Core™ i7/i5 Processor, BGA1364

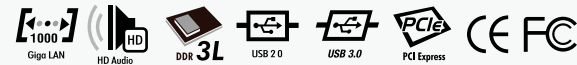


## Features

- Onboard 4th Generation Intel® Core™ i7/i5 Processor
- Intel® QM87 PCH
- Dual-Channel DDR3L 1333/1600 MHz SODIMM, Up to 16 GB
- Gigabit Ethernet (iAMT 9.0 Support)
- CRT, eDP, 18/24-bit Dual-Channel LVDS
- USB3.0 x 4, USB2.0 x 8, SATA x 4
- PCI-Express [x16] x 1, PCI-Express [x1] x 7
- COM Express Basic Module, Pin-out Type 6, COM.0 Rev. 2.1
- IEEE 1588 Compatible

## Specifications

System	
Form Factor	COM Express Basic module, Pin-out Type 6, COM. 0 Rev. 2.1
Processor	Onboard 4th Generation Intel® Core™ i7/i5 Processor
System Memory	Dual-Channel DDR3L 1333/1600 MHz SODIMM, up to 16 GB
Chipset	Intel® QM87
I/O Chipset	Intel® QM87
Ethernet	Intel® I217LM for 10/1000/1000Base-TX
TPM	v1.2 (optional)
BIOS	AMI BIOS
Wake On LAN	Yes
Watchdog Timer	iTE8518E-L, 255 levels
H/W Status Monitoring	Supports CPU Temperature Monitoring.
Expansion Interface	PCI-Express [x1] x 7, LPC Bus x 1, SMBus x 1
Power Requirement	Normal: +12V
Power Consumption (Typical)	Intel® i5-4400E 2.7 GHz, DDR3L 16 GB 3.31A@+12V (w/ ECB-920A)
Board Size	4.92" x 3.75" (125mm x 95mm)
Gross Weight	0.66 lb (0.3 kg)
Operation Temperature	32 °F ~ 140 °F (0 °C ~ 60 °C)
Storage Temperature	-40 °F ~ 176 °F (-40 °C ~ 80 °C)
Operation Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	150,000
Display	
Chipset	Intel® QM87 PCH
Memory	Shared system memory up to 512 MB
Resolution	Up to 2560 x 2048 for CRT (two displays), 2048 x 1536 for three displays Up to 1920 x 1200 (UXGA) for LCD/HDMI Up to 2560 x 1600 for DP Up to 2548 x 1536 for DVI
LCD Interface	18/24-bit dual-channel LVDS
I/O	
Storage	SATA x 4
Serial Port	Tx/Rx x 2
Parallel Port	—
USB	USB2.0 x 8
PS/2 Port	—
IrDA	—
Audio	High definition audio
GPIO	Up to 4 in and 4 out



## Packing List

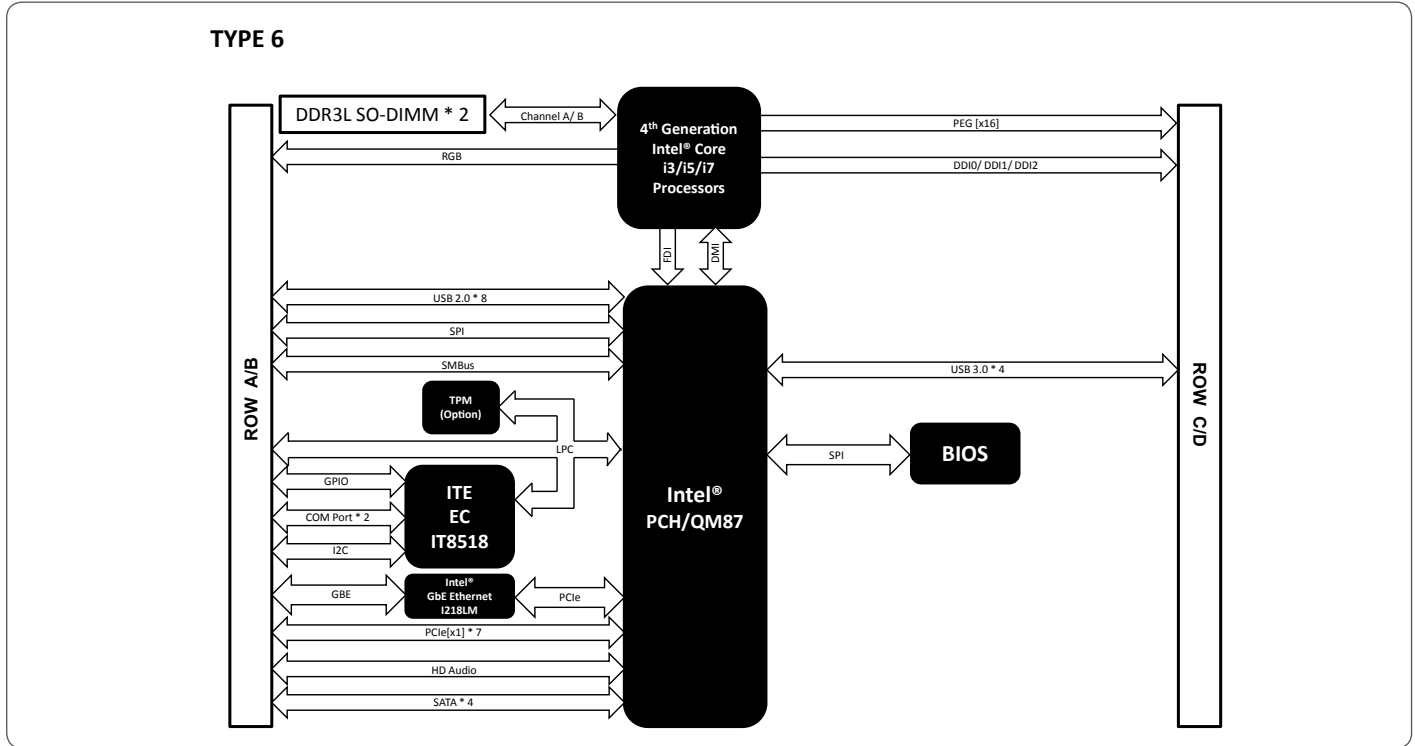
- M2.5 Screw x 5
- Product CD
- COM-QM87

## Optional Accessories

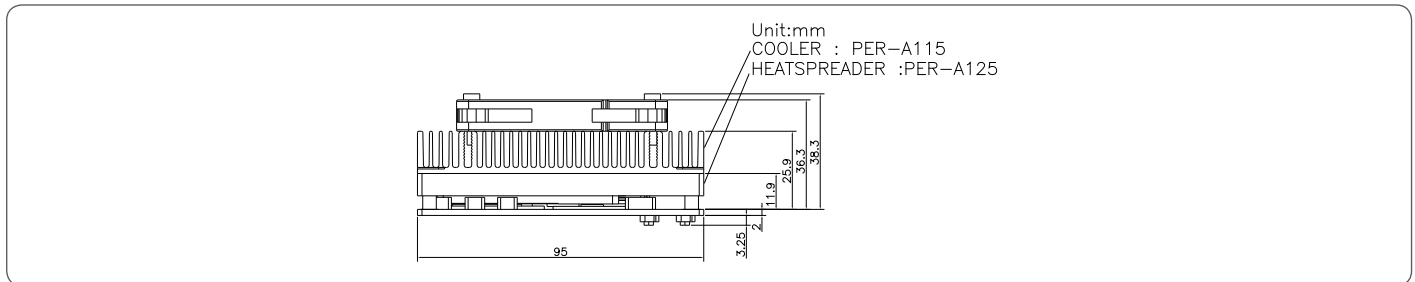
- **ECB-920A-A10**  
COM Express Type 1/6/10 Carrier Board, Gigabit Ethernet, USB, 2 COM, 4 SATA, PCIe, AT/ATX, Legacy Free, Rev. A1.0
- **PER-A125**  
Heat Spreader, For COM-QM87, Onboard CPU
- **PER-A115**  
CPU Cooler, 45W, for COM Express Basic Size, to be used with Heat Spreader

# COM-QM87

## Block Diagram Unit: mm



## Dimension Unit: mm



## Ordering Information

Part Number	COM Express Type	CPU	Memory	Display	LVDS	Storage	LAN	USB	UART	Expansion Slot	Power	Power Temp	Others
COM-QM87-A10	6 (COM.0 Rev 2.1)	4th Gen. Intel® Core™ i5-4400E/2.7 GHz (BGA1364)	DDR3L SODIMM x 2 up to 16 GB	CRT, LVDS, DDI, eDP/LVDS	18/24b 2CH (LVDS shared with eDP)	SATA x 4	GbE x 1	USB3.0 x 4 USB2.0 x 8	2 (Tx/Rx)	PCI-E[x1] x 7 PCI-E[x16] x 1	12V	0°C~60°C	—
COM-QM87-A10-0001	6 (COM.0 Rev 2.1)	4th Gen. Intel® Core™ i5-4402E/1.6 GHz (BGA1364)	DDR3L SODIMM x 2 up to 16 GB	CRT, LVDS, DDI, eDP/LVDS	18/24b 2CH (LVDS shared with eDP)	SATA x 4	GbE x 1	USB3.0 x 4 USB2.0 x 8	2 (Tx/Rx)	PCI-E[x1] x 7 PCI-E[x16] x 1	12V	0°C~60°C	—
COM-QM87-A10-0002	6 (COM.0 Rev 2.1)	4th Gen. Intel® Core™ i7-4700EQ/2.4 GHz (BGA1364)	DDR3L SODIMM x 2 up to 16 GB	CRT, LVDS, DDI, eDP/LVDS	18/24b 2CH (LVDS shared with eDP)	SATA x 4	GbE x 1	USB3.0 x 4 USB2.0 x 8	2 (Tx/Rx)	PCI-E[x1] x 7 PCI-E[x16] x 1	12V	0°C~60°C	—