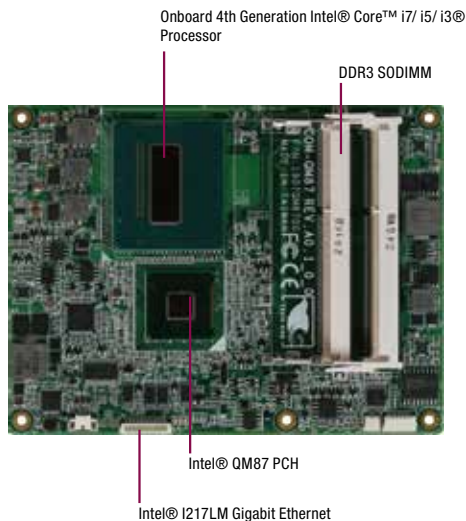


# COM-QM87 Rev. A

COM Express CPU Type 6 Module, Intel® Haswell BGA1364, QM87, Dual DDR3, GbE, Rev. A1.0

06

COM Express CPU Modules



## 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/ i3 Processor
System Memory	Dual-channel SODIMM DDR3L 1333/1600 Memory, Max. 16 GB
Chipset	Intel® QM87
I/O Chipset	Intel® QM87
Ethernet	Intel® I217LM for 10/1000/1000Base-TX
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 x1
Power Requirement	Normal: +12V
Power Consumption (Typical)	Intel® i5-4400E 2.7GHz, DDR3L 16GB 3.31A@+12V (w/ ECB-920A)
Board Size	125mm x 95mm (4.92" x 3.75")
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)	—
Display	
	LVDS, eDP, VGA, DDI
Chipset	Intel® QM87 PCH
Memory	Shared system memory up to 512MB
Resolution	Up to 2560 x 2048 for CRT (two display), 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	USB 2.0 x 8
PS/2 Port	—
IrDA	—
Audio	High definition audio
GPIO	Up to 4 in and 4 out

• Note: All specifications are subject to change without notice.

## Features

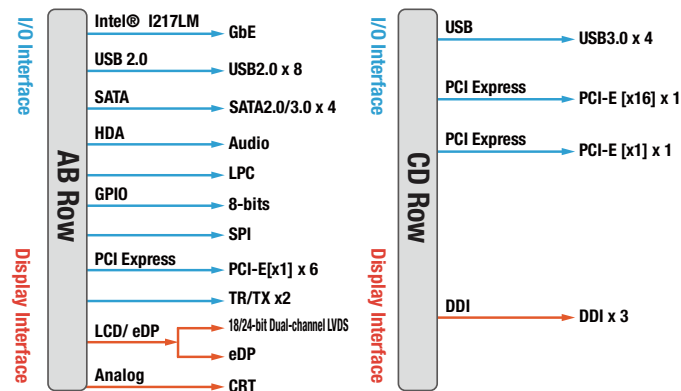
- Onboard 4th Generation Intel® Core™ i7/ i5/ i3 Processor
- Intel® QM87 PCH
- Dual-channel SODIMM DDR3L 1333/1600 Memory, Max. 16 GB
- Gigabit Ethernet (iAMT 9.0 Support)
- CRT, 18/24-bit Dual-channel LVDS LCD, eDP
- SATA 6.0Gb/s x 4 (Compatible with 3.0Gb/s)
- USB3.0 x 4, USB2.0 x 8
- PCI-Express [x16] x 1, PCI-Express [x1] x 7
- COM Express Basic Module, Pin-out Type 6, COM.0 Rev. 2.1



## Packing List

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

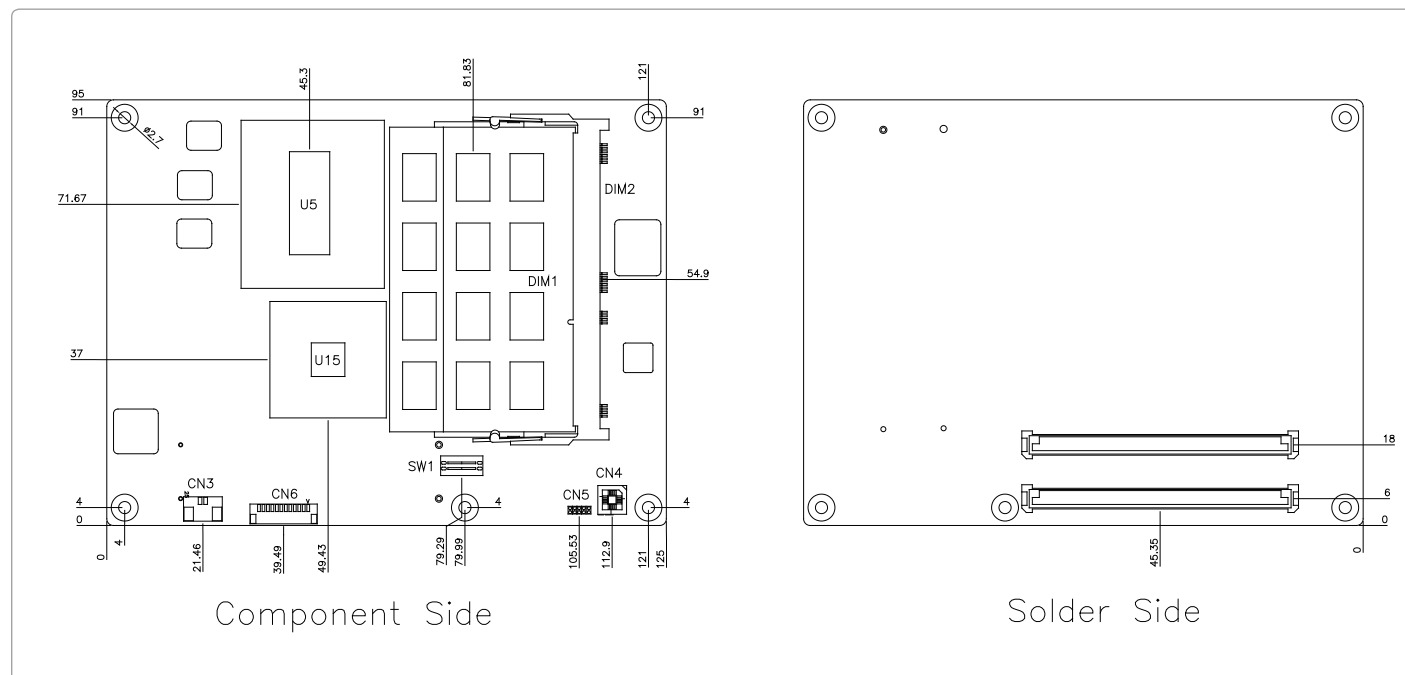
## Block Diagram



# COM-QM87 Rev. A

## Dimension

Unit: mm



## Ordering Information

Part Number	COM Express Type	CPU	Memory	Display	LVDS	Storage	LAN	USB	URAT	Expansion Slot	Power	Temp
COM-QM87-A10	6 (COM.0 Rev.2.1)	4th Generation Intel® Core™ i5-4400E/2.7GHz (BGA1364)	DDR3 SODIMM x 2 Max.16GB	CRT, LVDS, DDI, eDP/LVDS	18/24-bits Dual Channel (LVDS share between eDP)	SATA3 x 4	GbE x 1	USB3.0 x 4 USB2.0 x 8	2 (TX/RX)	PCI-E [16] x 1, PCI-E [1] x 7	12V	0°C ~ 60°C

## Optional Accessories

- ECB-920A-A10**  
 COM Express Type 6 Carrier Board, ATX, DP, Gigabit Ethernet, USB, PCI-Express, 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