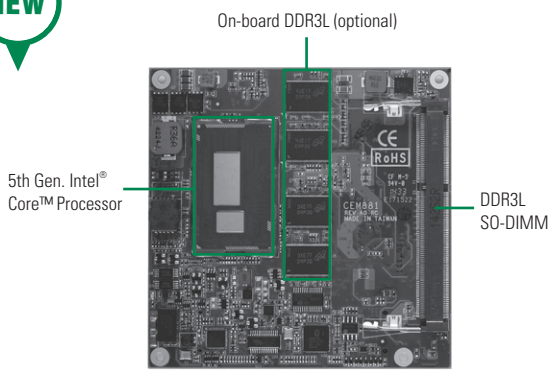
CEM881

5th/4th Generation Intel® Core™ COM Express Type 6 Compact Module

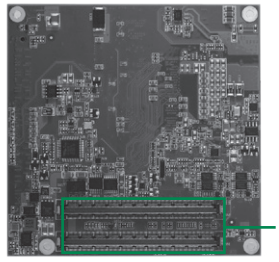
NEW



DDR3L | USB 3.0 | TripleView | Full Solid Cap Design | AiRD | Ext. Temp | Low Power

Features

- 5th/4th Generation Intel® Core™ i7/i5/i3 and Celeron® processor (Broadwell/Haswell)
- On-board 4 GB DDR3L (optional) and one SO-DIMM up to 8 GB
- Max. up to 4 lanes of PCIe
- 4 SATA-600 interfaces
- 6 USB 2.0 and 2 USB 3.0 ports
- TPM support
- 3 independent displays support through DDI and LVDS



▲ Rear view

System

CPU	5th/4th Generation Intel® Core™ i7/i5/i3 and Celeron® processor (Broadwell/Haswell)
System Memory	1st bank as on-board extended temperature non-ECC DDR3L chips up to 4 GB (optional) 2nd bank as non-ECC DDR3L SO-DIMM supports up to 8 GB
Chipset	SoC integrated
BIOS	AMI uEFI
SSD	N/A
Watchdog Timer	255 levels, 1~255 sec. or min.
Expansion Interface	4 lanes of PCI Express
Battery Lithium	N/A
Power Requirements	TBD
Size	95 x 95 mm
Board Thickness	2.0 mm
Temperature	-40°C ~ +85°C (-40°F ~ +185°F), operation
Operation Humidity	10% ~ 95% relative humidity, non-condensing

I/O

MIO	1 x LPC interface 1 x SPI interface 2 x TX/RX UARTs
SATA	4 x SATA-600, support Intel® Rapid Start Technology Intel® Smart Response Technology
Hardware Monitoring	Yes
Ethernet	1 port as 10/100/1000Mbps supports Wake_on_LAN and PXE Boot ROM with Intel® i218LM
Audio	HD link interface to baseboard for Codec
USB	2 x USB 3.0 ports and 6 x USB 2.0 ports
TPM	ST for trusted platform
SMBus	Yes
Digital I/O	4 channels IN & 4 channels OUT

Display

Chipset	Intel® HD Graphics Gen 8 Gfx APIs-DX11.1, OGL 4.2 3 independent displays
Display Interface	1 x LVDS; 18/24-bit single/dual channel 2 x DDI (DP, HDMI, DVI)

Packing List

Quick installation guide, user's manual/utility CD

Ordering Information

Standard	
CEM881PG-i7-4650U (P/N: E38D881108)	COM Express type 6 module with Intel® Core™ i7-4650U 1.7GHz, DP/LVDS, 10/100/1000Mbps Ethernet, USB3.0 and TPM
CEM881PG-i5-4300U (P/N: E38D881109)	COM Express type 6 module with Intel® Core™ i5-4300U 1.9GHz, DP/LVDS, 10/100/1000Mbps Ethernet, USB 3.0 and TPM
CEM881PG-i3-4010U (P/N: E38D881110)	COM Express type 6 module with Intel® Core™ i3-4010U 1.7GHz, DP/LVDS, 10/100/1000Mbps Ethernet, USB 3.0 and TPM
CEM881PG-CEL-2980U (P/N: E38D881111)	COM Express type 6 module with Intel® Celeron® 2980U 1.6GHz, DP/LVDS, 10/100/1000Mbps Ethernet, USB 3.0 and TPM

Optional	
CEM94006 (P/N: E394006100)	ATX from factor type 6 evaluation board
5078D881000E	Low profile heatsink (L=95 mm, W=95 mm, H=20 mm)
5078D881100E	Heatspreader for CEM881 (L=95 mm, W=95 mm, H=11 mm)

* All specifications and photos are subject to change without notice.