

# CEM881

COM Express Type 6 Compact Module with 5th/4th Gen Intel® Core™ i7/i5/i3 & Celeron® Processor

## Features

- 5th/4th gen Intel® Core™ i7/i5/i3 & Celeron® processor (Broadwell/Haswell)
- Onboard 4GB DDR3L (optional) and one SO-DIMM up to 8GB
- Max. up to 4 lanes of PCIe
- 4 SATA-600 ports
- 6 USB 2.0 and 2 USB 3.0
- TPM support
- LVDS and two DDI (DisplayPort/HDMI/DVI) with triple-view supported



### Core System

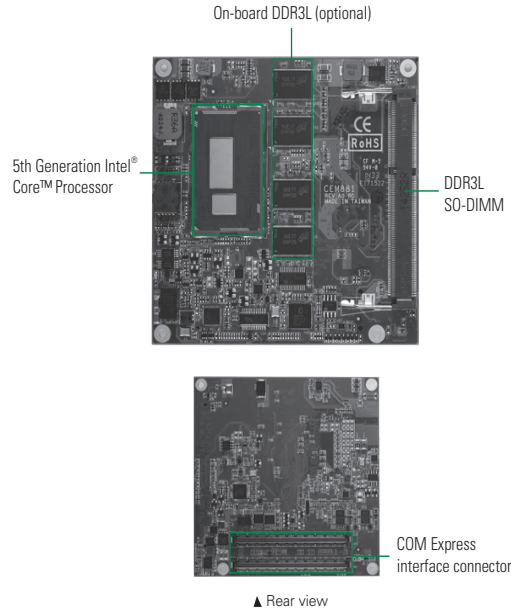
CPU	5th/4th generation Intel® Core™ i7/i5/i3 & Celeron® processor (Broadwell/Haswell)
System Memory	1st bank as onboard extended temperature non-ECC DDR3L up to 4GB (optional) 2nd bank as non-ECC DDR3L SO-DIMM, up to 8GB
Chipset	SoC integrated
BIOS	AMI uEFI
SSD	N/A
Watchdog Timer	255 levels, 1 ~ 255 sec. or min.
Expansion Interface	4 lanes of PCIe
Battery Lithium	N/A
Power Input	ATX: +12V, +5VSB AT: +12V
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 1 x I <sup>2</sup> C interface
SATA	4 x SATA-600 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 6 x USB 2.0
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 compact module with Intel® Core™ i7-4650U 1.7 GHz, DDI/LVDS, GbE LAN, USB 3.0 and TPM
CEM881PG-i5-4300U (P/N: E38D881109)	COM Express Type 6 compact module with Intel® Core™ i5-4300U 1.9 GHz, DDI/LVDS, GbE LAN, USB 3.0 and TPM
CEM881PG-i3-4010U (P/N: E38D881110)	COM Express Type 6 compact module with Intel® Core™ i3-4010U 1.7 GHz, DDI/LVDS, GbE LAN, USB 3.0 and TPM
CEM881PG-CEL-2980U (P/N: E38D881111)	COM Express Type 6 compact module with Intel® Celeron® 2980U 1.6 GHz, DDI/LVDS, GbE LAN, USB 3.0 and TPM
CEM881PG-i7-5650U (P/N: E38D881112)	COM Express Type 6 compact module with Intel® Core™ i7-5650U 2.2 GHz, DDI/LVDS, GbE LAN, USB 3.0 and TPM
CEM881PG-i5-5350U (P/N: E38D881113)	COM Express Type 6 compact module with Intel® Core™ i5-5350U 1.8 GHz, DDI/LVDS, GbE LAN, USB 3.0 and TPM
CEM881PG-i3-5010U (P/N: E38D881114)	COM Express Type 6 compact module with Intel® Core™ i3-5010U 2.1 GHz, DDI/LVDS, GbE LAN, 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)
5078D881210E	CEM881 BDW low profile heatsink w/fan (L=95 mm, W=95 mm, H=20 mm)
5078D881310E	CEM881 BDW heatspreader (L=95 mm, W=95 mm, H=11 mm)

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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