

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

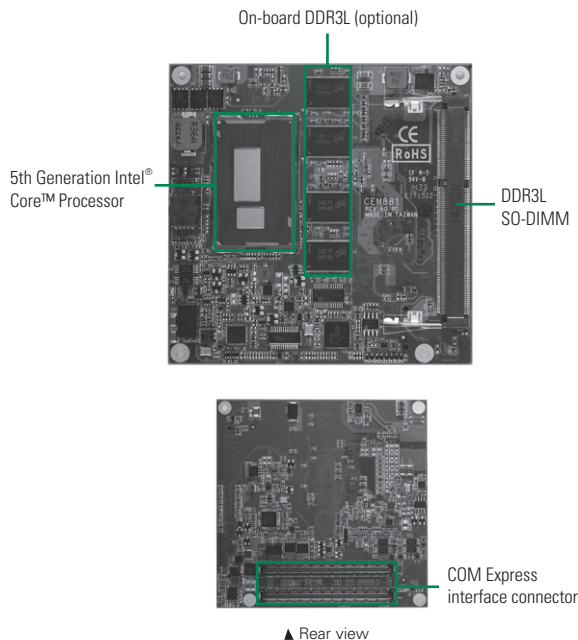
| | |
|---------------------|---|
| CPU | 5th/4th generation Intel® Core™ i7/i5/i3 & Celeron® processor (Broadwell/Haswell) |
| System Memory | 1st bank as onboard extended temperature non-ECC DDR3L up to 4GB (optional) 2nd bank as non-ECC DDR3L SO-DIMM, up to 8GB |
| Chipset | SoC integrated |
| BIOS | 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 ² 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 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 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 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 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 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 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 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) |