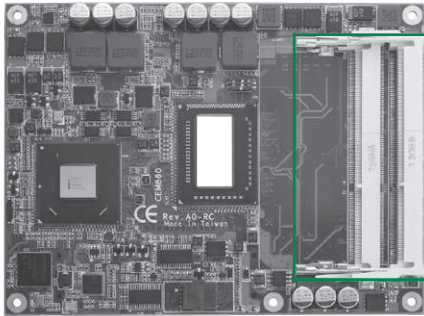
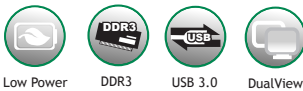


# CEM860

Intel® Core™ i7/ i5/ i3 COM Express™ Type 6 Module with Intel® QM67 PCH



Double deck  
DDR3 SO-DIMM



## System

CPU	2nd Generation Intel® Quad/ Dual Core™ i7/ i5/ i3/ Celeron™ processors
System Memory	2 x 204-pin SO-DIMMs support DDR3-1066/1333 max. up to 16 GB
Chipset	Intel® QM67 PCH
BIOS	AMI
SSD	N/A
Watchdog Timer	255 levels, 1~255 sec.
Expansion Interface	1 x PCIe x16 graphics port 6 x PCIe lanes support for 6 x PCIe x1 or 1 x PCIe x4 + 2 x PCIe x1 devices
Battery	N/A
Power Requirements	Differentiate by onboard processor
Size	125 x 95 mm
Board Thickness	1.6 mm
Temperature	0° ~ +60°C (32°F ~ 140°F), operation
Operation Humidity	10% ~ 95% relative humidity, non-condensing

## I/O

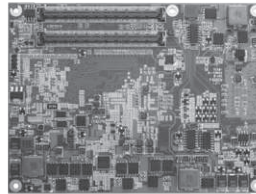
MIO	1 x LPC interface 1 x SPI interface
SATA	2 x SATA-600, 2 x SATA-300
Hardware Monitoring	N/A
Ethernet	1 port as 10/100/1000Mbps supports Wake-on-LAN, RPL/PXE Boot ROM with Intel® 82579LM
Audio	HD link interface to baseboard for external Codec
USB	8 x USB 2.0, 2 x USB 3.0 (optional)
TPM 1.2	Infineon SLB9635 for trusted platform (optional)
SMBus	Yes
Digital I/O	4 channels IN & 4 channels OUT

## Display

Chipset	Intel® HD graphics 3000 code
Memory Size	Depending on integrtd GPU
Display Interface	1 x VGA 1 x LVDS; 18/24-bit single/dual channel 3 x DDI (SDVO, DP, HDMI, DVI)

## Features

- 2nd Generation Intel® Core™ processors
- Intel® QM67 PCH
- 2 DDR3-1066/1333 SO-DIMMs max. up to 16 GB
- 22 lanes of PCIe Gen 2 at 5GT/s
- 2 SATA-600 & 2 SATA-300
- 8 USB 2.0 ports
- 2 USB 3.0 ports (optional)
- TPM 1.2 supported (optional)



▲ Rear view

## Packing List

Quick installation guide, user's manual/utility CD

## Ordering Information

Standard	
CEM860DG-i5-2515E (P/N: E380860101)	COM Express type 6 module with Intel® Core™ i5-2515E 3.1 GHz, VGA/LVDS, 10/100/1000Mbps Ethernet, USB 3.0 and TPM (recommended cooler P/N: E39J000101)
CEM860DG-i3-2340UE (P/N: E380860103)	COM Express type 6 module with Intel® Core™ i3-2340UE 1.3 GHz, VGA/LVDS, 10/100/1000Mbps Ethernet, USB 3.0 and TPM (recommended cooler P/N: E39J000101)
CEM860DG-B810E (P/N: E380860104)	COM Express type 6 module with Intel® Celeron® B810E 1.6 GHz, VGA/LVDS, 10/100/1000Mbps Ethernet, TPM (recommended cooler P/N: E39J000102)
CEM860DG-i7-2715QE (P/N: E380860100)	COM Express type 6 module with Intel® Core™ i7-2715QE 3 GHz, VGA/LVDS, 10/100/1000Mbps Ethernet, USB 3.0 and TPM (recommended cooler P/N: E39J000100)
CEM860DG-i7-2610UE (P/N: E380860102)	COM Express type 6 module with Intel® Core™ i7-2610UE 2.4 GHz, VGA/LVDS, 10/100/1000Mbps Ethernet and TPM (recommended cooler P/N: E39J000101)
CEM860DG-i7-2610UE WT	COM Express type 6 module with Intel® i7-2610UE 2.4 GHz, VGA/LVDS, 10/100/1000Mbps Ethernet, TPM and W.T. (-40° ~ +80°C) (recommended cooler P/N: E39J000101)

## Cooler with heatspreader

CEB94006	ATX form factor type 6 baseboard
E39J000100	TS000-CEM860-i7 with fan RC (up to 45W Core i CPU)
E39J000101	TS000-CEM860-i5/ i3 with fan RC (up to 35W Core i CPU)
E39J000102	TS000-CEM860-celeron with fan RC (up to 35W Core i CPU)

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Modules

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SBCs  
>Nano-ITX

Embedded  
SBCs  
>PC-ITX

Embedded  
SBCs  
>PC/104

Industrial  
Mother-  
boards

Slot  
CPU  
Cards

Accessories

Appendix