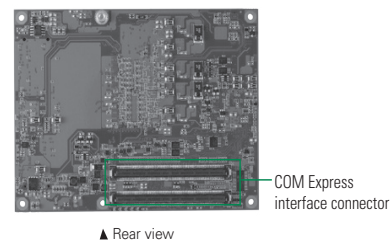
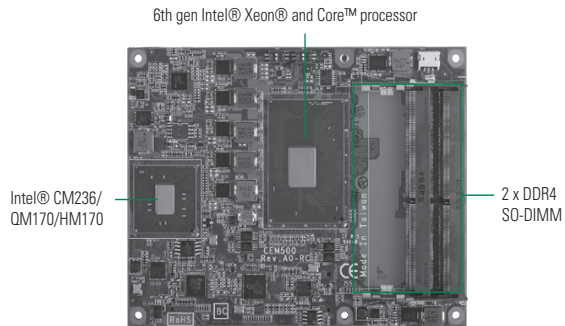


# CEM500

COM Express Type 6 Basic Module with Intel® Xeon® and 6th Gen Intel® Core™ i7/i5/i3 Processor, Intel® CM236/QM170/HM170

## Features

- 6th gen Intel® Xeon® and Core™ i7/i5/i3 processors (Skylake-H)
- Intel® CM236/QM170/HM170 chipset
- 2 DDR4-2133 SO-DIMM, up to 32GB ECC or non-ECC
- 1 x PCIe x16 and 8 x PCIe x1 Gen. 3
- 4 SATA-600 with RAID 0/1/5/10
- 4 USB 3.0 and 8 USB 2.0
- Intel® AMT 11.0 and TPM 1.2 supported
- AXView 2.0 intelligent remote management software



### Core System

CPU	Intel® Xeon® and 6th gen Intel® Core™ processor (Skylake H): E3-1505M v5 (45 W), i7-6820EQ (45 W), i7-6822EQ (25 W), i5-6440EQ (45 W), i3-6100E (35 W)
System Memory	2 x DDR4-2133 SO-DIMM, up to 32GB ECC or non-ECC
Chipset	Intel® CM236/QM170/HM170
BIOS	AMI uEFI (Legacy free)
SSD	N/A
Watchdog Timer	65536 levels, 0 ~ 65535 sec.
Expansion Interface	1 x PCIe x16 v3.0 8 x PCIe x1 v3.0
Battery Lithium	N/A
Power Input	ATX: +12V, +5VSB; AT: +12V
Size	125 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
Vibration	3.5 Grms

### I/O

MIO	1 x LPC interface 1 x SPI interface 1 x I <sup>2</sup> C interface 2 x TX/RX serial interface
SATA	4 x SATA-600 with RAID 0/1/5/10
Hardware Monitoring	Yes
Ethernet	1 port as 10/100/1000 Mbps supports Wake-on-LAN, PXE Boot ROM with Intel® i219LM
Audio	HD link interface to baseboard for Codec
USB	4 x USB 3.0 8 x USB 2.0
TPM	TPM 1.2
SMBus	Yes
Digital I/O	4 channels IN & 4 channels OUT
Smart Battery	Yes

### Display

Chipset	Intel® Gen 9 HD Graphic Gfx APIs - DX11/12, OCL2.x, OGL 4.3/4.4 3 independent displays
Display Interface	1 x LVDS ;18/24-bit single/dual channel (default), optional with eDP. 1 x VGA upto 1920 x 1200 @60Hz (default) 2 x DDI (DP / HDMI / DVI)

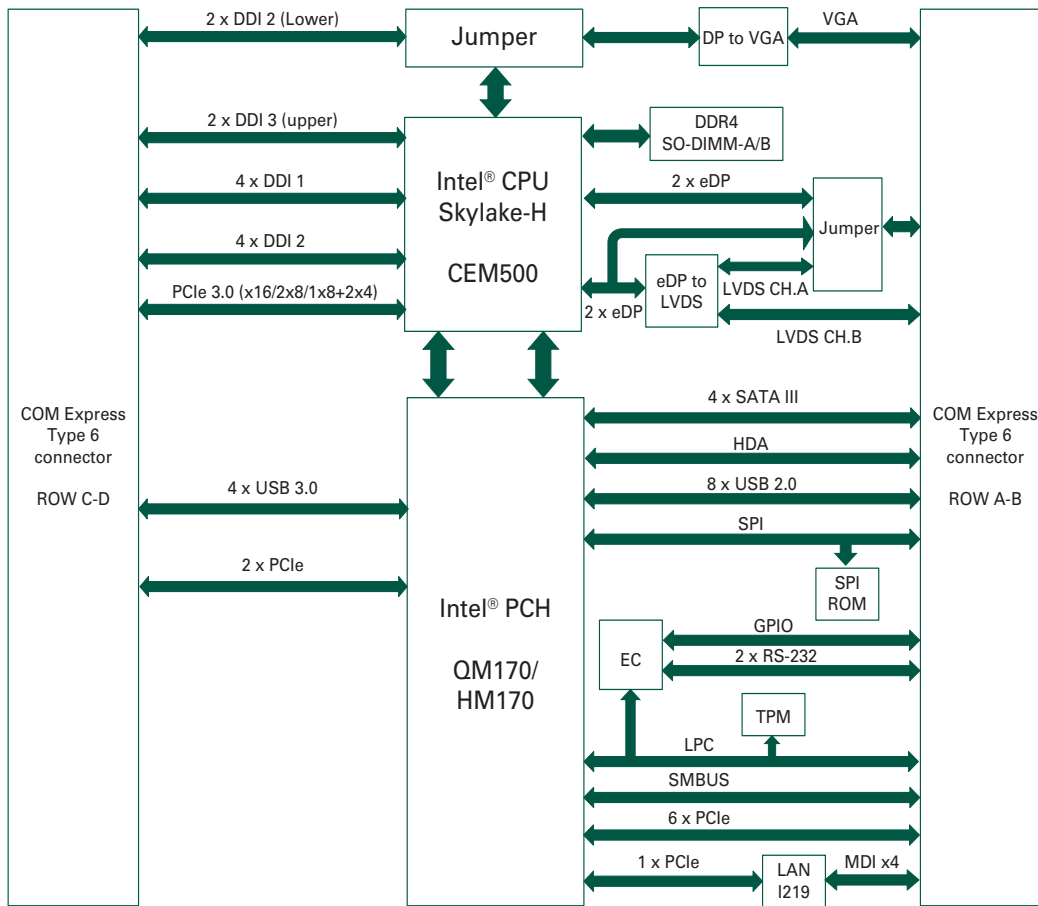
### Packing List

Quick installation guide, user's manual/utility CD

### Ordering Information

Standard	
CEM500PG-E3-1505M+CM236 (P/N: E38D500109)	COM Express Type 6 basic module with Intel® Xeon® E3-1505M v5 2.8 GHz, CM236, ECC, DDI/LVDS, GbE LAN, USB 3.0 and TPM
CEM500PG-i3-6100E+CM236 (P/N: E38D500105)	COM Express Type 6 basic module with Intel® Core™ i3-6100E 2.7 GHz, CM236, ECC, DDI/LVDS, GbE LAN, USB 3.0 and TPM
CEM500PG-i7-6822EQ+QM170 (P/N: E38D500106)	COM Express Type 6 basic module with Intel® Core™ i7-6822EQ 2.0 GHz, QM170, DDI/LVDS, GbE LAN, USB 3.0 and TPM
CEM500PG-i7-6820EQ+QM170 (P/N: E38D500100)	COM Express Type 6 basic module with Intel® Core™ i7-6820EQ 2.8 GHz, QM170 DDI/LVDS, GbE LAN, USB 3.0 and TPM
CEM500PG-i5-6440EQ+QM170 (P/N: E38D500101)	COM Express Type 6 basic module with Intel® Core™ i5-6440EQ 2.7 GHz, QM170 DDI/LVDS, GbE LAN, USB 3.0 and TPM
CEM500PG-i3-6100E+QM170 (P/N: E38D500108)	COM Express Type 6 basic module with Intel® Core™ i3-6100E 2.7 GHz, QM170 DDI/LVDS, GbE LAN, USB 3.0 and TPM
Optional	
CEB94011 (P/N: E394011100)	ATX form factor Type 6 evaluation board
TS008-CEM500 (P/N: E39J008100)	CEM500 heat sink with fan
TS006-CEM500 (P/N: E39J006100)	CEM500 heat spreader

**Block Diagram**



## 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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