

# CEM501

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

## Features

- 6th gen Intel® Core™ i7/i5/i3 and Celeron® processors (Skylake-U)
- 2 DDR4-2133 SO-DIMM, up to 32GB
- Max. up to 6 lanes of PCI Express
- 3 SATA-600
- 4 USB 3.0 and 8 USB 2.0
- AXView 2.0 intelligent remote management software
- TPM 1.2 supported

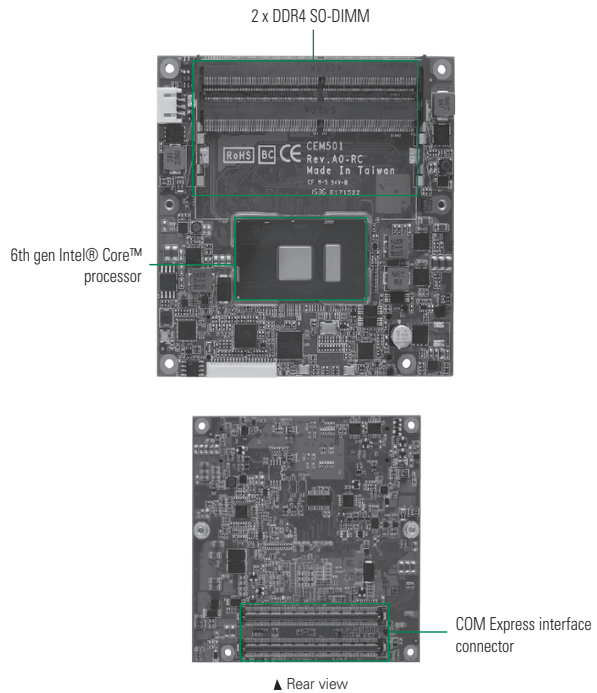


### Core System

CPU	6th gen Intel® Core™ processor: i7-6600U 2.6 GHz, i5-6300U 2.4 GHz, i3-6100U 2.3 GHz, Celeron®-3955U 2.0 GHz (Skylake-U) onboard
System Memory	2 x 260-pin DDR4-2133 SO-DIMM, up to 32GB
Chipset	SoC integrated
BIOS	AMI uEFI (Legacy free)
SSD	N/A
Watchdog Timer	65536 levels, 0 ~ 65535 sec.
Expansion Interface	6 lanes of PCI Express Gen. 3.0
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
Vibration	3.5 Grms

### I/O

MIO	1 x LPC interface 1 x SPI interface 2 x Serial TX/RX 1 x I <sup>2</sup> C interface
SATA	3 x SATA-600
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 and 8 x USB 2.0
TPM	TPM 1.2
SMBus	Yes
Digital I/O	4 channels IN & 4 channels OUT (SDIO optional)
Battery Support	Yes



### Display

Chipset	Intel® Gen 9 Graphics Engine support Gfx - DX12.0, OCL2.0, OGL4.3
Display Interface	2 x DDI (DP/HDMI/DVI). The 2nd DDI could be configured to VGA (optional) 1 x LVDS; 18/24-bit dual channel (eDP optional)

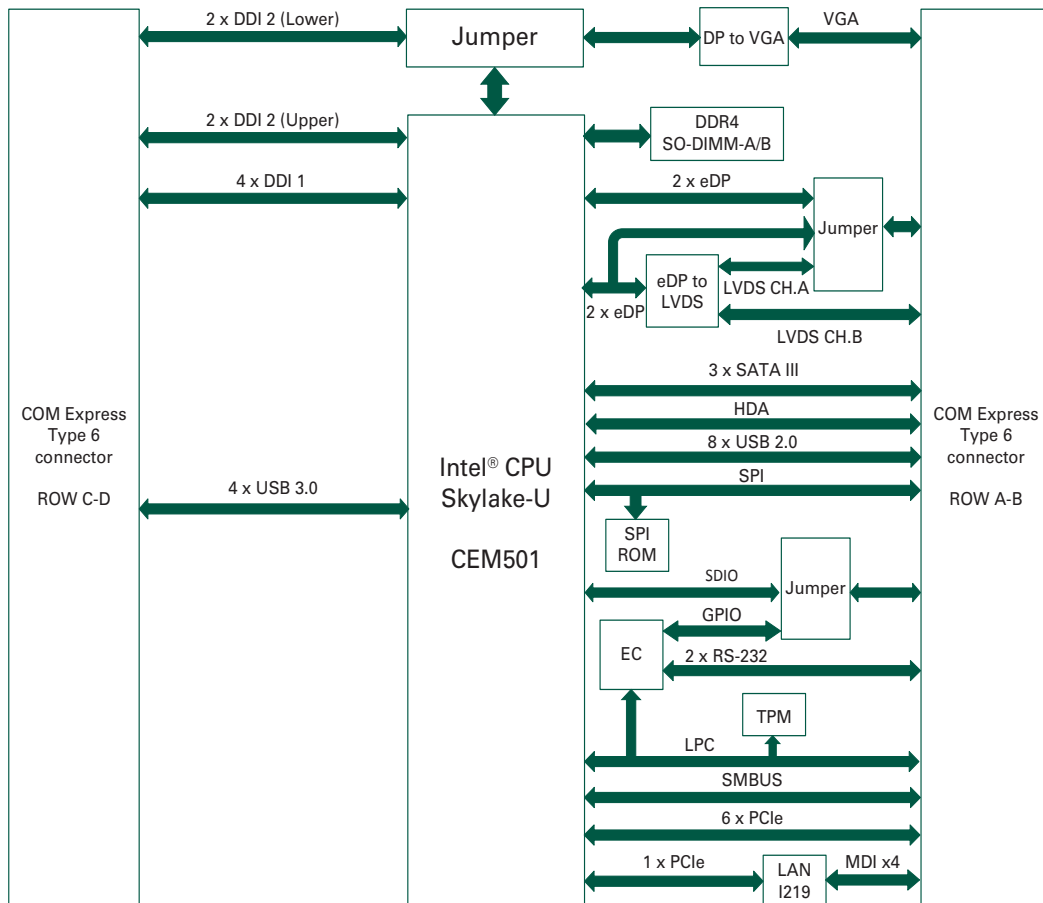
### Packing List

Quick installation guide

### Ordering Information

Standard	
CEM501PG-CEL-3955U (P/N : E38D501100)	COM Express Type 6 compact module Intel® Celeron® 3955U (2.0 GHz), DDI/LVDS, GbE LAN, USB 3.0 and TPM
CEM501PG-i7-6600U (P/N: E38D501102)	COM Express Type 6 compact module with Intel® Core™ i7-6600U (2.6 GHz), DDI/LVDS, GbE LAN, USB 3.0 and TPM
CEM501PG-i5-6300U (P/N: E38D501103)	COM Express Type 6 compact module with Intel® Core™ i5-6300U (2.4 GHz), DDI/LVDS, GbE LAN, USB 3.0 and TPM
CEM501PG-i3-6100U (P/N: E38D501101)	COM Express Type 6 compact module with Intel® Core™ i3-6100U (2.3 GHz), DDI/LVDS, GbE LAN, USB 3.0 and TPM
Optional	
CEB94011 (P/N: E394011100)	CEB94011 COM Express Type 6 evaluation board
TS007-CEM501 (P/N: E39J007100)	CEM501 heat sink with fan
5078D501200E	CEM501 heat spreader

**Block Diagram**



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## 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.

### US

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +1 347 719 4508  
Support: +1 347 719 4508

1309 Coffeen Ave  
Ste 1200  
Sheridan  
WY 82801  
USA

### EMEA

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +44 (0)1785 879 050  
Support: +44 (0)1785 879 050

Unit A5 Douglas Park  
Stone Business Park  
Stone  
ST15 0YJ  
United Kingdom

VAT Number: 120 9546 28  
Business Registration Number: 07699660