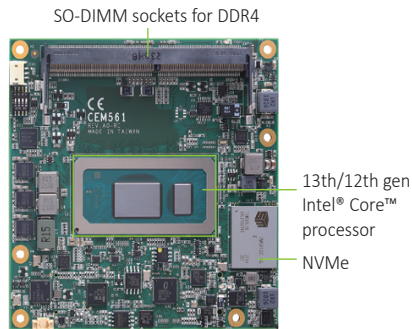
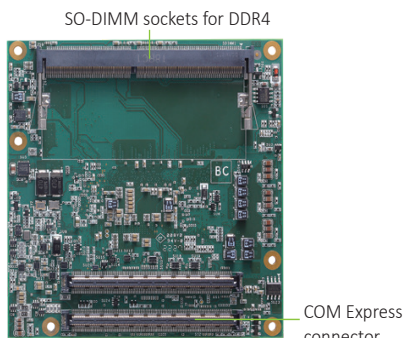


CEM561 NEW

COM Express Type 6 Compact Module with 13th/12th Gen Intel® Core™ or Celeron® Processor



▲ Front view



▲ Rear view

Features

- 13th/12th gen Intel® Core™ i7/i5/i3 or Celeron® processor (Raptor Lake U / Alder Lake U)
- Dual channel DDR4-3200 SO-DIMM for up to 64GB
- Up to 12 lanes of PCI Express
- 2 SATA Gen3
- 4 USB 3.0 and 8 USB 2.0
- Supports NVMe for up to 512GB
- Supports TPM 2.0



Specifications

Core System

CPU	13th & 12th Gen Intel® Core™ Processors (U Series)
System Memory	2 x Dual-channel DDR4-3200 SO-DIMM slot, up to 64GB
Chipset	SoC integrated
BIOS	AMI uEFI (Legacy free)
SSD	NVMe for up to 512GB (optional)
Watchdog Timer	65536 levels, 0 to 65535 sec.
Expansion Interface	1 x PCIe x4 Gen4 (PEG) + 5 x PCIe Gen3 (Default) 1 x PCIe x4 Gen4 (PEG) + 8 x PCIe Gen3 (by request)
Battery Lithium	Yes
Power Input	ATX: +12V, +5VSB AT: +12V

Display

Chipset	Intel® gen 9 Graphics Engine Supports Gfx- DX12.0, OCL2.0, OGL4.3
Display Interface	1 x LVDS; 18/24-bit single/dual channel (optional eDP 1.4b HBR3: 5120 x 3200@60Hz) 1 x VGA; 1920 x 1200 @60Hz (default) 2 x Display Type (with up to 8K supported)

I/O

SATA	2 x SATA Gen3
Hardware Monitoring	Yes
Ethernet	1 x 10/100/1000/2500 Mbps Ethernet with Intel® I226; supports Wake-on-LAN, PXE Boot ROM
Audio	HD link interface to baseboard for Codec
USB	4 x USB 3.0 8 x USB 2.0
Serial	1 x LPC 1 x SPI 2 x TX/RX
TPM	TPM 2.0
SMBus	Yes
Others	1 x I ² C
GPIO	4-CH in & 4-CH out
Smart Battery	Yes

Mechanical and Environmental

Dimensions	95 x 95 mm
Board Thickness	2.0 mm
Operating Temperature	-40°C to +85°C (-40°F to +185°F), operation with system thermal solution
Humidity	10% - 95% relative humidity, non-condensing
Vibration Endurance	3.5 Grms

Packing List

Quick installation guide

Ordering Information

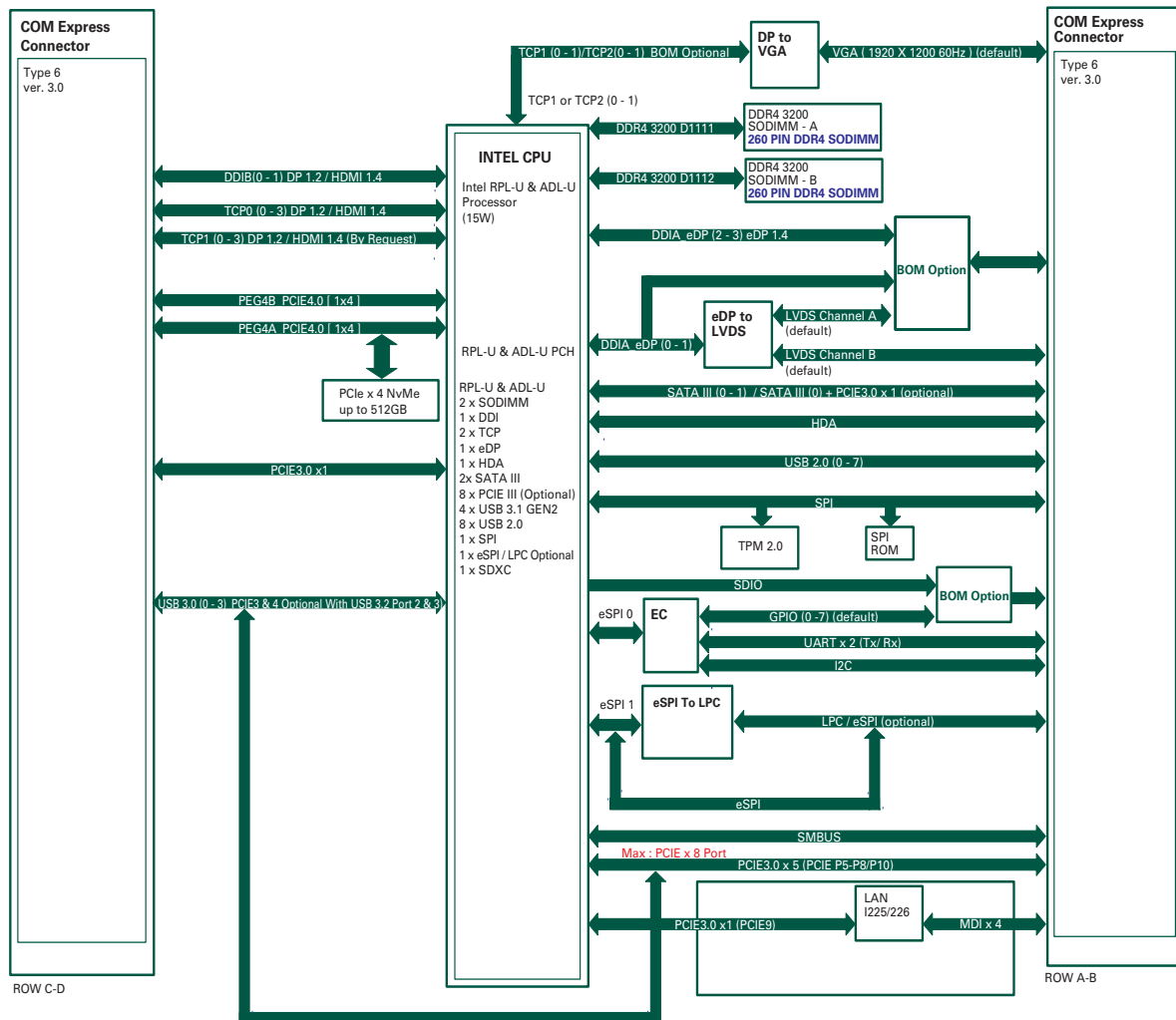
Standard

CEM561-i7-1265UE (P/N: TBD)	COM Express Type 6 Compact module with Intel® Core™ i7-1265UE, DDI, VGA, LVDS, 2.5GbE LAN, 64GB NVMe, and TPM
CEM561-i5-1245UE (P/N: TBD)	COM Express Type 6 Compact module with Intel® Core™ i5-1245UE, DDI, VGA, LVDS, 2.5GbE LAN, 64GB NVMe, and TPM
CEM561-i3-1215UE (P/N: TBD)	COM Express Type 6 Compact module with Intel® Core™ i3-1215UE, DDI, VGA, LVDS, 2.5GbE LAN, 64GB NVMe, and TPM
CEM561-i7-1365URE (P/N: TBD)	COM Express Type 6 Compact module with Intel® Core™ i7-1365URE, DDI, VGA, LVDS, 2.5GbE LAN, 64GB NVMe, and TPM
CEM561-i5-1345URE (P/N: TBD)	COM Express Type 6 Compact module with Intel® Core™ i5-1345URE, DDI, VGA, LVDS, 2.5GbE LAN, 64GB NVMe, and TPM
CEM561-i3-1315URE (P/N: TBD)	COM Express Type 6 Compact module with Intel® Core™ i3-1315URE, DDI, VGA, LVDS, 2.5GbE LAN, 64GB NVMe, and TPM
CEM561-Cel-U300E (P/N: TBD)	COM Express Type 6 Compact module with Intel® Celeron® U300E, DDI, VGA, LVDS, 2.5GbE LAN, and TPM

Optional

CEB94011 (P/N: E394011100)	COM Express Type 6 evaluation board
TBD	CEM561 heat sink with fan
TBD	CEM561 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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