

CEM311 NEW

COM Express Type 10 Mini Module with Intel® Pentium® Processor N4200 & Celeron® Processor N3350

Features

- Intel® Pentium® processor N4200 & Celeron® processor N3350 (Apollo Lake)
- Onboard 4GB DDR3L memory, up to 8GB
- Max. up to 4 lanes of PCI Express
- 2 SATA-600
- 2 USB 3.0 and 8 USB 2.0

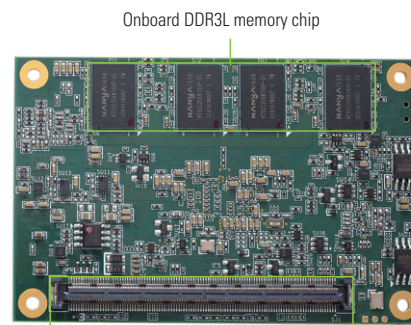
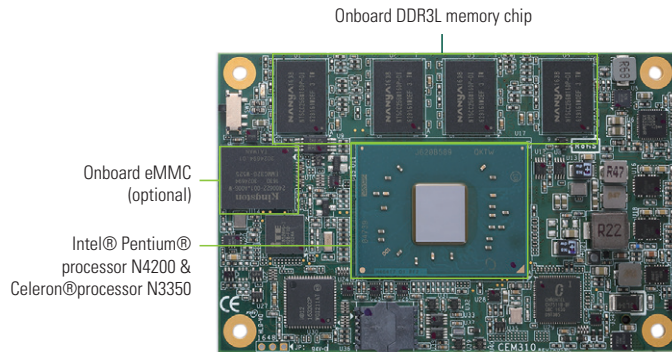


Core System

CPU	Intel® Pentium® processor N4200 & Celeron® processor N3350 (Apollo Lake) onboard
System Memory	Onboard 4GB DDR3L memory, up to 8GB (optional)
Chipset	SoC integrated
BIOS	AMI uEFI (Legacy free)
Storage	eMMC 5.0 upto 64GB (optional)
Watchdog Timer	65536 levels, 0 ~ 65535 sec.
Expansion Interface	4 x PCIe x1 devices (3 x1 while internal LAN is connected)
Battery Lithium	N/A
Power Input	ATX: +12V, +5VSB AT: +12V Wide range input: +4.75V ~ +20V
Size	84 x 55 mm
Board Thickness	2.0 mm
Temperature	-20°C ~ +70°C (-4°F ~ +158°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 ² C
SATA	2 x SATA-600
Hardware Monitoring	Yes
Ethernet	1 port as 10/100/1000 Mbps supports Wake-on-LAN, PXE Boot ROM with Intel® i211AT
Audio	HD link interface to baseboard for Codec
USB	2 x USB 3.0 8 x USB 2.0
TPM	N/A
SMBus	Yes
Digital I/O	4 channels IN & 4 channels OUT
Smart Battery	Yes



COM Express interface connector

▲ Rear view

Display

Chipset	Intel® Gen 9 Graphics Engine Support Gfx-DX12.0, OCL2.0, OGL 4.3
Display Interface	1 x DDI (DP, HDMI, DVI) 1 x LVDS; 18/24-bit single channel (eDP optional)

Packing List

Quick installation guide

Ordering Information

Standard	
CEM311PG-N4200 (P/N: E38D311103)	COM Express Type 10 compact module with Intel® Pentium® N4200, DDI/LVDS, USB 3.0 and GbE LAN
CEM311PG-N3350 (P/N: E38D311100)	COM Express Type 10 compact module with Intel® Celeron® N3350, DDI/LVDS, USB 3.0 and GbE LAN
7128D311000E	7128D311000E CEM311 heat spreader
E39J011100	CEM311 heat sink without fan

Block Diagram

