

CEM311

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
- Max. up to 4 lanes of PCI Express
- 2 SATA-600
- 2 USB 3.0 and 8 USB 2.0

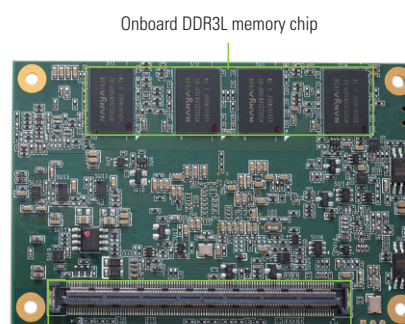
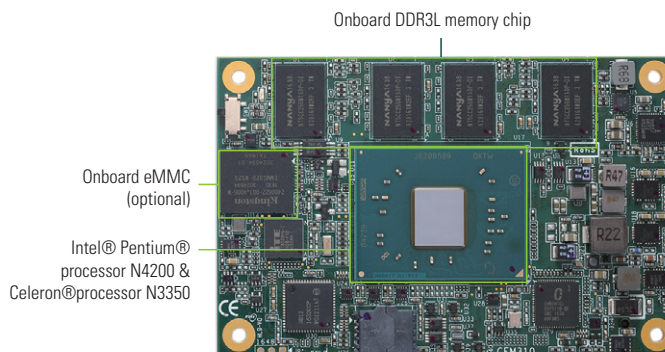


Core System

CPU	Intel® Pentium® processor N4200 & Celeron® processor N3350 (Apollo Lake) onboard
System Memory	Onboard 4GB DDR3L memory
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



▲ 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

