

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

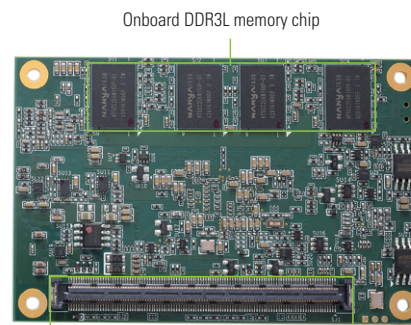
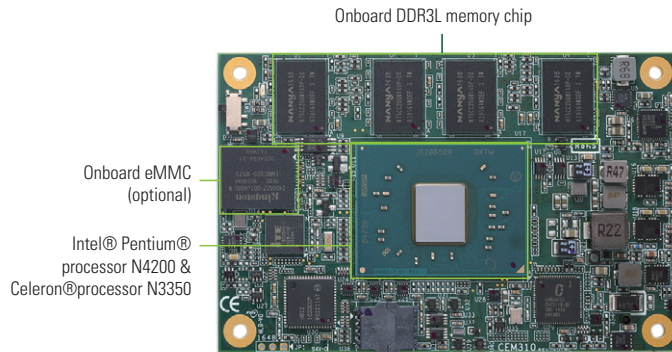


Core System

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|---------------------|--|
| 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) |

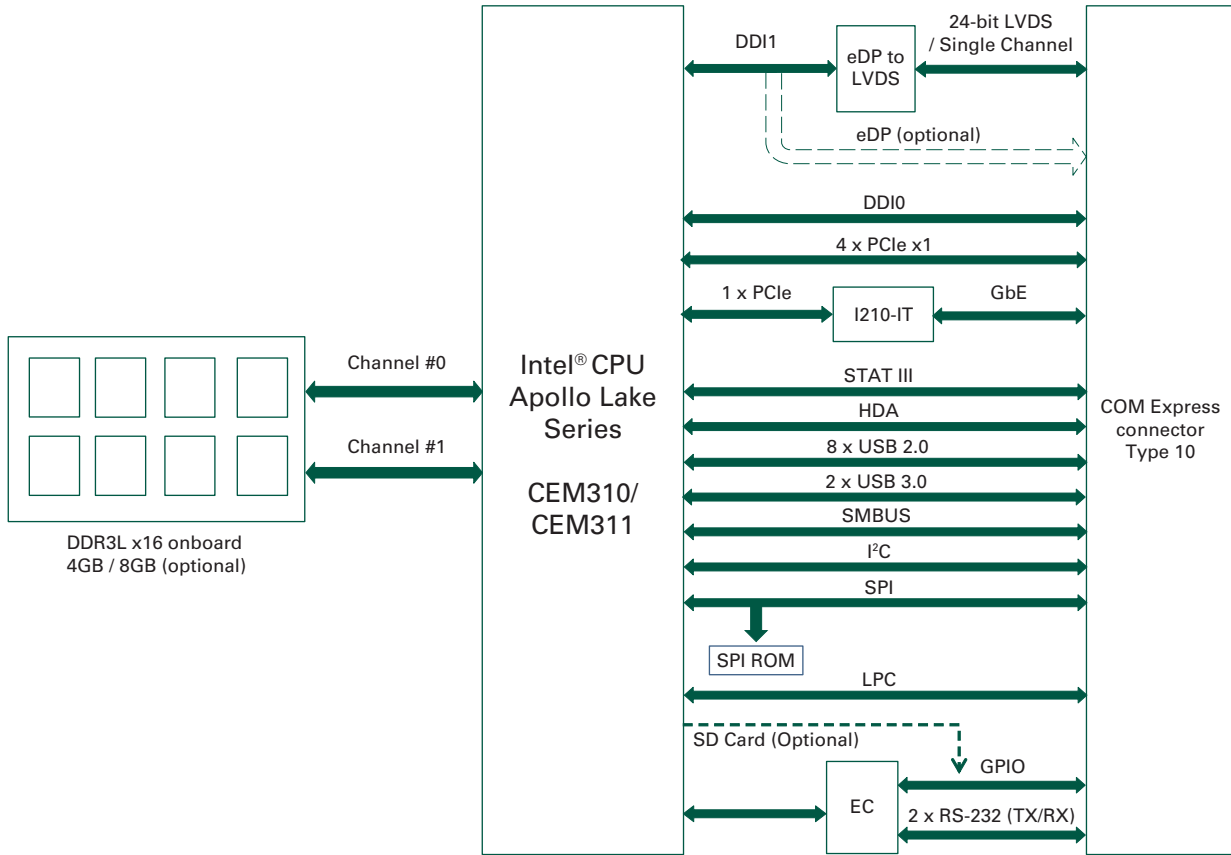
Packing List

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



- System on Modules 1
- 2
- 3
- 4

