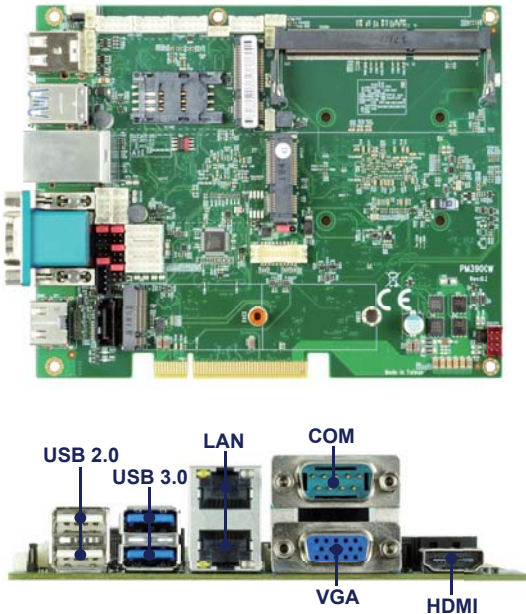


PM390CW

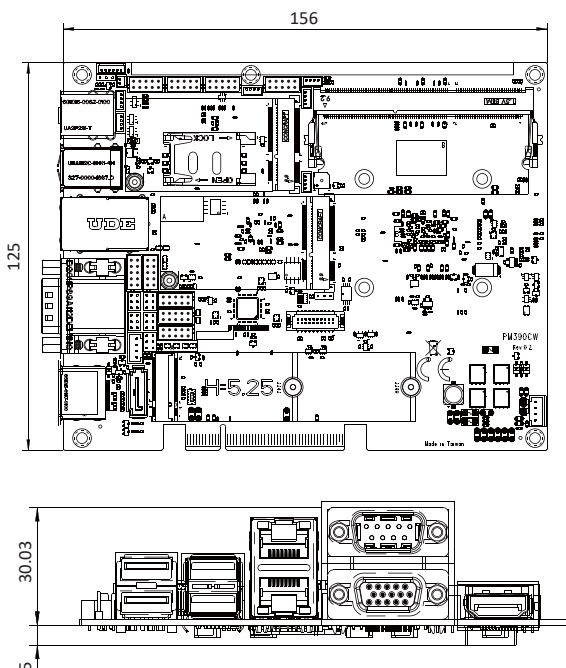
Half size CPU board supports Intel® Apollo Lake Pentium / Celeron / Atom CPU
VGA, HDMI, eDP, 2 x Intel Gb Ethernet, 5 x USB, 8DI / 8DO,
5 x COM, 2 x Mini PCIe, 1 x SIM, 1 x M.2, 1 x PCIe



Features:

- Intel® Apollo Lake Pentium® N4200 2.5 GHz (Quad Core)
Celeron® N3350 2.4 GHz (Dual Core)
Atom™ E3950 2.0 GHz (Quad Core)
- 1 x DDR3L SODIMM socket, Max. 8GB
- Multiple Independent display: VGA, HDMI & eDP
- 2 x Intel GbE, 2 x USB 3.0, 3 x USB 2.0, 5 x COM
- 8DI / 8DO, 2 x Mini PCIe, 1 x M.2, 1 x PCIe
- TPM 2.0 (Optional)

Dimensions: (Unit:mm)



Specifications :

- CPU
 - Intel® Apollo Lake Pentium® N4200 2.5 GHz (Quad Core)
 - Celeron® N3350 2.4 GHz (Dual Core)
 - Atom™ E3950 2.0 GHz (Quad Core)
- MB Chipset
 - Intel® Apollo Lake SoC
- Graphics
 - Intel Gen9 Graphic engine
 - DirectX11, OpenGL3.2, OpenCL1.2, Full HW acceleration, decode: H.264, MPEG 2 / 4, VC-1, WMV9, Encode: H.264, MPEG2
- System Memory
 - 1 x DDR3L 1600 MHz SODIMM, Max. 8GB
- Storage
 - 1 x M.2 B Key, Type 2242 / 2280 (SATA / PCIe)
 - 1 x mini card socket for mSATA
 - 1 x SATA ports 3.0 Data transfer rates up to 6.0 Gb/s (600 MB/s), Share with mSATA
- BIOS
 - Insyde UEFI BIOS
- Display
 - 1 x VGA, 1 x HDMI, eDP
- TPM
 - TPM 2.0 (Option)
- LAN
 - 2 x Intel GbE I210IT (external)
- Audio (OEM)
 - High Definition Audio Specification, Support Line-out / Mic-in / Line-in (Option) Two channel Class D Audio Amplifier
- Expansion Interface
 - 1 x Full size Mini PCIe (PCIe / USB)
 - 1 x Full size Mini PCIe (PCIe / mSATA / USB)
 - 1 x PCIe x 8 golden finger (PCIe x 4 + PCIe x 1 Signal)
 - 1 x M.2 B Key, Type 2242 / 2280 (SATA / PCIe)
 - 1 x SIM

Expansion Module

PCIe Card via riser Card	2 x USB 3.1, 2 x 10 GbE LAN, 4 x PoE, 4 x GbE
Mini Card	GPS, 3G / 4G, Wi-Fi, 2 / 4 x LAN, 4 x COM, CANBus, SDI / AHD Video
By Cable	Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card

- USB
 - 2 x USB 3.0 (external) ; 2 x USB 2.0 (external), 1 x USB 2.0 (internal)
- Serial IO
 - 1 x RS232 / 422 / 485 (external)
 - 4 x RS232 / 422 / 485 (internal)
- GPIO
 - Hardware digital Input & Output, 8 x DI / 8 x DO
- WDT
 - Hardware Watch Dog Timer, 0~255 sec programmable
- Power Input
 - Wide Range +9~36V
- Dimension
 - 156 x 125 mm
- Operation Temperature
 - 20°C~70°C (100 % CPU Usage)
- Operation Humidity
 - 5~95%, non-condensing
- Chassis (OEM I/O Expansion by request)
 - Box PC: APOLLO-Compact
- OS Support
 - Windows® 10 IOT (64bit), Ubuntu 16.04.1 above, Fedora 25 above

Specification are subject to change without prior notice. ODM / OEM is available.