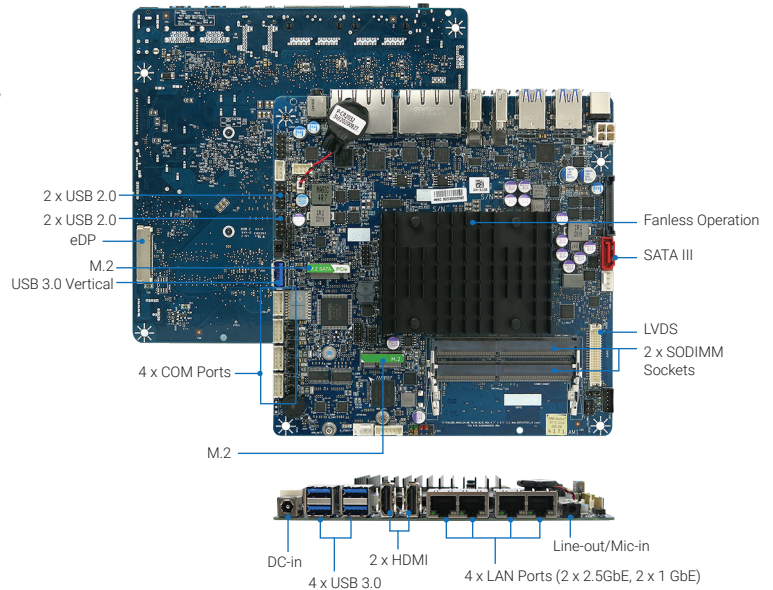


Features

- Intel® Celeron J6412 Quad Core SoC up to 2.6GHz Burst Frequency, Elkhart Lake Platform
- 4 x RJ45 LAN Ports, 2 x 2.5GbE, 2 x 1GbE
- Supports Three Independent Displays
- 5 x USB 3.0 and 4 x USB 2.0
- 1 x M.2 E Key, 1 x M.2 NVMe
- 4 x COM Ports, 1 x SATA III, GPIO, I²C
- TPM 2.0
- Fanless Operation
- 12-24V DC-in

Specifications

System	
CPU	Intel® Celeron J6412 Quad Core SoC, 1.2 GHz up to 2.6GHz Burst Frequency, Elkhart Lake Platform
System Memory	2 x 260-pin SODIMM DDR4 Memory Slots, support up to 32GB
BIOS	AMI® 128Mb SPI BIOS
Audio	Realtek HD Audio support 7.1 channel sound playback
Ethernet	LAN 1: Intel® I225-LM (2.5GbE) Ethernet Controller LAN 2: Intel® I225-LM (2.5GbE) Ethernet Controller LAN 3: Intel® I211-AT (1GbE) Ethernet Controller LAN 4: Intel® I211-AT (1GbE) Ethernet Controller
Expansion	1 x 2230 M.2 E Key (with PCIe x1 & USB 2.0 Signal) 1 x 2280 & 2242 M.2 M Key (with PCIe x2 & SATA III Signal)
Storage	Onboard eMMC (Optional)
Watchdog Timer	1 Sec ~ 255 Sec
H/W Status Monitor	Monitoring System Temperature and Voltage with Auto Throttling Control
TPM	Infineon® SLB 9670VQ2.0 TPM 2.0
Supported OS	Win 10 64-bit
Display	
Chipset	Intel® UHD Gen 11 LP
Resolution	2 x HDMI: Max. Resolution 4096x2160 @ 30Hz
Multiple Display	Supports Three Independent Display
External I/O	
Display	2 x HDMI
USB	4 x USB 3.0
LAN	4 x RJ45
Audio	Line-out/Mic-in
DC-in	1 x Barrel Type DC-In Connector



Internal I/O	
COM Port	2 x RS-232/422/485 Header 2 x RS-232 Header
USB	2 x USB 2.0 header (4 x USB 2.0 Ports) 1 x USB 3.0 Vertical Type A Connector
I ² C	1 x I ² C Header
LVDS/eDP	1 x LVDS/eDP Header, 1 x Backlight Header
GPIO	1 x 8-bits GPIO Headers (4 In/4 Out)
SATA	1 x SATA III Connectors (Red) 1 x 15-pin SATA Power Connector
DC-in	1 x Mini-Fit Jr 4-Pin DC-In Connector
MIO	1 x Cable Type Battery, 1 x Amplifier Locking Type Header, 1 x Front Panel, 1 x Front Audio, 1 x 4-Pin CPU Fan, 1 x 4-Pin System Fan Header, 1 x Onboard Buzzer, 1 x Horizontal Socket Type Battery

Mechanical & Environment	
Power Requirement	12V - 24V DC-In
Operating Temp.	0°C to 60°C (32°F ~ 140°F)
Storage Temp.	-10°C to 60°C (-14°F ~ 140°F)
Operating Humidity	5% to 85% Non-condensing
Dimensions	6.7" x 6.7"
Form Factor	Mini-ITX

Ordering Info	
MX6412J	Intel Celeron J6412 Quad Core Mini ITX Motherboard

* All product specifications and images are subject to change without notice. Last update: 2021/05/20

