



## EMX-APLP

### Intel® Celeron® & Pentium® Processor Thin Mini ITX Motherboard

- › Intel® Celeron® J3455 & Pentium® N4200 Processor (2M Cache, up to 2.30/2.50GHz)
- › 2 x 204-pin DDR3L 1600 & 1333MHz SO-DIMM supports up to 16GB
- › DP++, HDMI/DP, Dual channel 18/24-bits LVDS/co-lay eDP
- › 2 x Intel® i211AT Gigabit Ethernet
- › Realtek ALC662 Audio Codec
- › Realtek ALC105 Stereo Class-D 3W x 2 Audio Amplifier
- › 1 x full size Mini PCI-e support mSATA(SATAIII and mSATA by auto switch IC) with 1 x SIM card slot
- › 2 x SATA III, 2 x SATA Power, 5 x USB 2.0 by pin header, 4 x USB 3.0 at I/O
- › 5 x RS232, 1 x RS232/422/485, 16-bit GPIO
- › Mic-in, Line-out, 1 S/PIDF, Optional Infineon SLB9665 TPM 2.0

#### + Spec

System	
<b>Processor</b>	Intel®Celeron®J3455 / Pentium® N4200 Processor
<b>System Memory</b>	2 x 204-pin DDR3L 1600 & 1333 MHz SO-DIMM supports up to 16GB
<b>I/O Chip</b>	EC iTE IT8528
<b>BIOS</b>	AMI 128Mbit SPI BIOS
<b>Watchdog Timer</b>	H/W Reset: 1sec. ~ 65535sec./min. and 1sec. or 1min./step
<b>H/W Status Monitor</b>	Monitoring System Temperature and Voltage with Auto Throttling Control
Expansion	
<b>Expansion</b>	1 x full size Mini PCI-e support mSATA (SATA III and mSATA By auto switch IC) with 1 x SIM card slot 1 x M.2 (2230) A-Key, support WiFi module
I/O	
<b>USB</b>	6 x USB 2.0 4 x USB 3.0
<b>SATA</b>	2 x SATA Power 2 x SATA III
<b>COM Port</b>	5 x RS232(pin9 without power), 1 x RS232/RS/422/485
<b>DIO</b>	1 x 16-bit GPIO
Display	
<b>Chipset</b>	Intel® SoC integrated Graphics
<b>Resolution</b>	HDMI/DP: 3840 x 2160 @ 30Hz, 2560 x 1600 @ 30Hz LVDS: 1920 x 1080 @ 60Hz
<b>LVDS</b>	2CH 18/24bits LVDS 1920 x 1080 Chrontel. CH7511B eDP to LVDS Converter
Audio	
<b>Chipset</b>	Realtek ALC662 supports 2-CH
<b>Audio Interface</b>	Mic-in, Line-out
<b>Audio Amplifier</b>	2 x Stereo Class-D 3W Audio Amplifier
Ethernet	
<b>Chipset</b>	2 x Intel I211AT Gigabit Ethernet
<b>Ethernet Interface</b>	10/100/1000 Base-Tx GbE compatible
<b>LAN Port</b>	2 x RJ45
Mechanical & Environmental	
<b>Power Requirement</b>	+12V~24V
<b>Power Type</b>	AT/ATX
<b>Operating Temperature</b>	0 ~ 60°C (32 ~ 140°F)
<b>Storage Temperature</b>	-40 ~ 75°C (-40 ~ 167°F)
<b>Operating Humidity</b>	0 ~ 90% Relative Humidity, Non-condensing
<b>Dimension (L x W)</b>	6.69" x 6.69" (170mm x 170mm)
<b>Weight</b>	0.88lbs (0.4Kgs)

#### + Ordering

EMX-APLP-3455-A1R  
 EMX-APLP-4200-A1R  
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