



ECM-APL

Intel® Pentium®/Celeron® SoC Processor 3.5" Micro Module

- > Onboard Intel® Pentium®/Celeron® SoC BGA Processor
- > 1 x 204-Pin DDR3L 1866MHz SO-DIMM, supports 4G/8G & up to 8GB DDR3L 1866MTs SDRAM (Non-ECC)
- > Triple Display (Dual HDMI, LVDS)
- > 1 x SATA III, 4 x USB3.0, 1 x USB2.0, 6 COM, 1x Mini-PCle, 1x M.2, 8-bit GPIO
- > +12 ~ 26V Wide Power Range
- > TPM 2.0 (Optional)
- > Support Wide temp. -40~+85 degrees (Optional)

+ Spec

System	
Processor	Intel® Pentium®/Celeron® /Atom™ SoC BGA Processor
System Chipset	Apollo SoC integrated
System Memory	1 x 204-Pin DDR3L 1866MHz SO-DIMM, supports 4G/8G & up to 8GB DDR3L 1866MTs SDRAM (Non-ECC)
I/O Chip	EC(IT8528E), I-series CPU use EC (IT8528I) for WT
BIOS	AMI uEFI BIOS, 128Mbit SPI Flash ROM
Watchdog Timer	H/W Reset, 1sec. ~ 65535sec. and 1sec./step
H/W Status Monitor	Monitoring System Temperature, Voltage and FAN Status with Auto Throttling Control
Expansion	
Expansion	1 x Mini PCIe (for PCIe & USB2.0) 1 x M.2 (B-Key, 2242) (M.2 support SATA/PClex1/USB interface & with Micro SIM card connector) for SSD/3G/4G
Storage	
Storage	1 x M.2
Touch Screen	
Built-in Touch controller(optional)	EETI ETP-CP-MER4485XRU 1 x 5-pin 2.54mm Pin Header
I/O	
USB	1 x USB 2.0 4 x USB 3.0
SATA	1 x SATA3
COM Port	1 x RS-232/422/485 5 x RS-232
MIO	1 x LPC 1 x SPI
SIM	1 x Micro SIM Card Slot
GPIO	1 x 8bit GPIO
Display	
Chipset	Intel® Apollo Lake SoC integrated Gen9 LP Graphics
Resolution	2 x HDMI: Max. Resolution 3840x2160 @ 30Hz 1 x LVDS: Max. Resolution 1920x1080 @ 60Hz
Multiple Display	Triple Display
Audio	
Chipset	Realtek ALC892 supports 5.1-CH
Audio Interface	Mic-In, Line-In, Line-Out
Ethernet	
Chipset	2 x Intel® I211AT Intel I210IT for WT
Ethernet Interface	10/100/1000 Base-Tx GbE compatible
LAN Port	2 x RJ-45
Mechanical & Environmental	
Power Requirement	+12V ~ +26V
Power Type	AT/ATX
Operating Temp	0°C ~ 60°C (32°F ~ 140°F)(N4200/N3350) -40°C ~ 85°C (-40°F ~ 185°F)(E3900 Series)(Optional for Wide Temperature Model)
Storage Temp	-40°C ~ 75°C (-40°F ~ 167°F)
Operating Humidity	0% ~ 90% Relative Humidity, Non-condensing
Dimension (L x W)	5.7" x 4" (146mm x 101mm)
Weight	0.44lbs (0.2kg)
Certifications	



Certification Information	CE,FCC Class B
Software Support	
OS Information	Win 10, Linux

+ Ordering

ECM-APL-N4200-A1R
3.5" W/N4200/5USB/6COM/2LAN/A1

ECM-APL-N3350-A1R
3.5" W/N3350/5USB/6COM/2LAN/A1