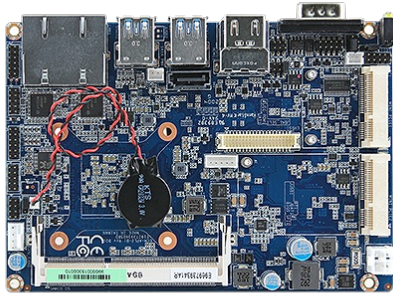




## ECM-APL2-B

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



- > Bottom layer soldered
- > Intel® Pentium®/Celeron®/Atom™ BGA Processor
- > Intel® HD Graphics 500/505
- > Single DRAM Socket, Max. Up to 8GB DDR3L 1866MHz
- > Triple Display: Dual HDMI, LVDS
- > Dual mPCIe Expansion Slot
- > Dual Gigabit Ethernet, HD Audio Code
- > 0~60°C for N & J Series, -40~85°C for E Series
- > TPM 2.0

### + Spec

System	
<b>Processor</b>	Intel® Pentium®/Celeron®/Atom™ BGA Processor
<b>System Memory</b>	1 x 204-Pin DDR3L 1866MTs SO-DIMM up to 8GB
<b>I/O Chip</b>	EC (IT8528VG)
<b>BIOS</b>	AMI uEFI BIOS, 128Mbit SPI Flash ROM
Expansion	
<b>Expansion</b>	1 x Full size Mini PCIe Supports mSATA 1 x Half size Mini PCIe
Storage	
<b>Storage</b>	1 x mSATA support from Mini PCIe
I/O	
<b>USB</b>	4 x USB 3.1 (Gen1 5Gbps) 2 x USB 2.0
<b>SATA</b>	1 x SATA III
<b>COM Port</b>	1 x RS-232 1 x RS232 (Default)(JCOM2) or 1 x RS422/485 by GPIO (J422_485)
<b>DIO</b>	1 x 8bit GPIO
<b>MIO</b>	1 x LPC 1 x SPI
<b>Other</b>	1 x LVDS 2 x LAN
Display	
<b>Chipset</b>	Intel® Apollo Lake SoC Processor integrated Gen9 LP graphics
<b>Resolution</b>	HDMI: Max. Resolution 3840 x 2160 @ 30Hz LVDS: Max. Resolution 1920 x 1080 @ 60Hz 2 x HDMI (1.4b)
<b>LVDS</b>	1 x LVDS
<b>Multiple Display</b>	Triple Display: Dual HDMI, LVDS
Audio	
<b>Chipset</b>	Realtek ALC892, supports 5.1-CH
<b>Audio Interface</b>	1 x Mic-In 1 x Line-In 1 x Line-Out
Ethernet	
<b>Chipset</b>	1 x Intel® I211AT 1 x Intel® I210IT
<b>Ethernet Interface</b>	10/100/1000 Base-Tx GbE compatible
<b>LAN Port</b>	2 x RJ-45
Mechanical & Environmental	
<b>Power Requirement</b>	+12V ~ +26V
<b>ACPI</b>	Single Power ATX Support S0, S3, S4, S5 ACPI 5.0 Compliant
<b>Power Type</b>	AT/ATX
<b>Operating Temperature</b>	0°C ~ 60°C (32°F ~ 140°F) for N & J series -40°C ~ 85°C (-40°F ~ 185°F) for E-series CPU (Optional)
<b>Storage Temperature</b>	-40°C ~ 75°C (-40°F ~ 167°F)
<b>Operating Humidity</b>	40°C @ 95% Relative Humidity, Non-condensing
<b>Dimension (L x W)</b>	5.7" x 4" (146mm x 101mm)
<b>Weight</b>	0.041lbs (0.03kg)



<b>Vibration Protection</b>	With SSD: 5Gms, IEC 60068-2-64, Random, 10 ~ 500Hz, 30min/Axis, 3 Axis
<b>Shock Protection</b>	With SDD : 50G, IEC 60068-2-27, Half Sine, 11ms, Z Axis
<b>Drop</b>	ISTA 2A, IEC-60068-2-32 Test : Ed, 1 Corner, 3 Edges, 6 Faces
<b>Certifications</b>	
<b>Certification Information</b>	CE FCC Class B
<b>Software Support</b>	
<b>OS Information</b>	Win 10 Linux

### + Ordering

ECM-APL2-J3455-B1R  
3.5" W/F1 J3455/6USB/2COM/2LAN/LVDS/B1

ECM-APL2-N4200-B1R  
ECM-APL2/F1 N4200/6USB/LVDS/2COM/B1

ECM-APL2-N3350-B1R  
ECM-APL2/F1 N3350/6USB/LVDS/2COM/B1

ECM-APL2-E50-B1R(Wide Temp. -40~85C)  
ECM-APL2/F1 E3950/WT/6USB/LVDS/2COM/B1

ECM-APL2-E40-B1R(Wide Temp. -40~85C)  
ECM-APL2/F1 E3940/WT/6USB/LVDS/2COM/B1

ECM-APL2-E30-B1R(Wide Temp. -40~85C)  
ECM-APL2/F1 E3930/WT/6USB/LVDS/2COM/B1

ACC-ECMAPL2-SD-2R  
Heat spreader for ECM-APL2 N/J series