



## ESM-APLM

Intel® Celeron®/ Pentium® SoC Processor COM Express Mini Size Type 10 Module

- > COM Express™ 3.0 Mini Type 10 module with Intel® Celeron®N3350 / Pentium® N4200 SoC BGA Processor
- > Onboard DDR3L memory support for up to 8 GByte at 1600&1333MHz
- > Newest Intel® Gen9 Low Power graphics, up to 4K resolution and H.265 codec
- > 1 PCIe 4 (Supports x1, x2, x4, optional 1 PCIe4 while removing Ethernet) compliant to PCIe Gen2 5.0 GT/s
- > 2 x SATAIII 6 Gb/s, 2 x USB 3.1 (Gen1) and 8 x USB 2.0,
- > eMMC 5.1 (optional)

+ Spec	
<b>-System Information-</b>	
<b>Processor</b>	Intel® Pentium® N4200 2.50 GHz (Burst)   1.1 GHz Clock Quad Core L2 cache 2MB 6W TDP Intel® Celeron® N3350 2.40 GHz (Burst)   1.1 GHz Clock Dual Core L2 cache 1MB 6W TDP
<b>Platform Controller Hub</b>	Integrated in SoC
<b>System Memory</b>	Onboard DDR3L memory support for up to 8 GByte at 1600&1333MT/s
<b>I/O Chipset</b>	IT8528
<b>BIOS Information</b>	AMI UEFI BIOS, 128Mbit SPI Flash ROM
<b>Watchdog Timer</b>	N/A
<b>SSD</b>	eMMC 5.1 up to 128G (optional)
<b>Expansion</b>	
<b>Expansion</b>	1 PCIe 4 (Supports x1, x2, x4, optional 1 PCIe4 while removing Ethernet) compliant to PCIe Gen2 5.0 GT/s
<b>I/O</b>	
<b>USB Port</b>	2 x USB 3.1 (Gen1) and 8 x USB 2.0
<b>GPIO</b>	1 x 8bit GPIO
<b>SATA</b>	2 x SATA 3.0 (6 Gb/s)
<b>MIO</b>	1 x SMBus 1 x LPC
<b>Display</b>	
<b>Graphic Chipset</b>	Intel® Atom™ SoC Integrated
<b>LVDS</b>	Single channel 18/24-bit LVDS from eDP-to-LVDS IC CH7511B LVDS: up to 1920x 1080 @ 60 Hz
<b>Digital Display Interface</b>	DDIO supports DisplayPort/HDMI/DVHD DisplayPort 1.2 up to 4096x2160@60Hz HDMI 1.4b: up to 3840 x 2160 @ 30 Hz
<b>eDP</b>	4 lane support (build option, in place of LVDS) eDP 1.3: up to 3840 x 2160 @ 60 Hz (Optional)
<b>Audio</b>	
<b>Audio Codec</b>	Intel® HD Audio integrated in SoC
<b>Certifications</b>	
<b>Certification Information</b>	CE, FCC Class B
<b>Ethernet</b>	
<b>LAN Chipset</b>	1 x LAN Intel® Ethernet I211AT
<b>Ethernet Interface</b>	10/100/1000 GbE connection
<b>Mechanical &amp; Environmental</b>	
<b>Operating Temperature</b>	Standard: 0°C to 60°C (32°F ~ 140°F)
<b>Storage Temperature</b>	-40°C ~ 75°C (-40°F ~ 167°F)
<b>Operating Humidity</b>	40°C @ 95% Relative Humidity, Non-condensing
<b>Weight</b>	0.44lbs(0.2kg)
<b>Power Requirement</b>	Standard Input ATX: 4.75V~20V, 5Vsb ±5%; AT: 4.75V~20V
<b>Power Mode</b>	ATX/AT
<b>Dimension (L x W)</b>	84 x 55 mm (3.31" x 2.17")
<b>Software Support</b>	
<b>OS Information</b>	Microsoft® Windows 10 Linux (Kernel 4.6 above)
<b>Ordering Information</b>	
<b>Ordering Information</b>	ESM-APLM-N4200-A1R Intel® Pentium® SoC Processor N4200 Type10 COMe Mini Module  ESM-APLM-N3350-A1R Intel® Celeron® SoC Processor N3350 Type10 COMe Mini Module  EEV-EX15-B1R MiniITX Ev. Board for COMe Type 10 A1  ACC-ESMAPLM-SK-1R Heatsink for ESM-APLM W/O FAN H=26 mm

ACC-ESMAPLM-SK-2R  
Heatsink for ESM-APLM W/O FAN H=26 mm with pad for eMMC

ACC-ESMAPLM-SD-1R  
Heatspreader for ESM-APLM W/O FAN H=13 mm

ACC-ESMAPLM-SD-2R  
Heatspreader for ESM-APLM W/O FAN H=13 mm with pad for eMMC

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## Assured Systems

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