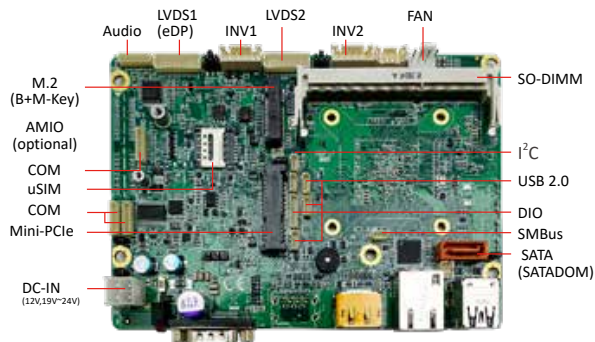


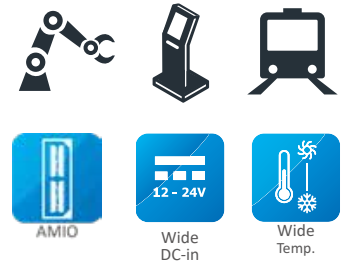
AECX-APL7

Intel® Atom®/ Pentium®/ Celeron® Series SoC based 3.5" Embedded Board with DP (HDMI)/2 LVDS, SATA III, 4 COM, 5 USB, AMIO, Intel® GbE LAN.



Product Specification

System Processor/Chipset	
Processor	Intel® Apollo Lake series SoC onboard Atom® x7-E3950 (1.6GHz/2.0GHz, QC, 18EU, 12W) Atom® x5-E3940 (1.6GHz/1.8GHz, QC, 12EU, 9.5W) Atom® x5-E3930 (1.3GHz/1.8GHz, DC, 12EU, 6.5W) Pentium® N4200 (1.1GHz/2.5GHz, QC, 18EU, 6W) Celeron® N3350 (1.1GHz/2.4GHz, DC, 12EU, 6W) Celeron® J3455 (1.5GHz/2.3GHz, QC, 12EU, 10W) Celeron® J3355 (2.0GHz/2.5GHz, DC, 12EU, 10W)
Chipset	Intel® Apollo Lake SoC integrated
BIOS	AMI® UEFI Flash ROM
Memory	
Technology	DDR3L SDRAM up to 1866 MT/s
Max. capacity	Up to 8GB
Socket	1 x 204-pin SO-DIMM
Display	
Graphics	Intel® HD Gen 9-LP Graphics integrated
Display interface	2 x DP v1.2 (HDMI v1.4b, optional) 2 x LVDS 2-channel 18/24-bit (1 eDP, optional) 1 x eDP v1.3 (optional) 1 x AMIO (DP v1.2 interface, optional)
Multi-display	Up to three independent displays
Resolution	DP: Up to 4096 x 2160 @ 60Hz (max.) HDMI: Up to 3840 x 2160 @ 30Hz (max.) LVDS: Up to 1920 x 1200 @ 60Hz (max.) eDP: Up to 3840 x 2160 @ 60Hz (max.)
Ethernet	
Interface	10/100/1000 Mbps
Controller	Intel® I211 GbE / Intel® I210 GbE (optional)
Connector	1 x RJ45 (rear I/O)
Audio	
Interface	Line-in, Line-out, Mic-in
CODEC	Realtek® ALC662 HD Audio Codec
Expansion Slot	
AMIO (optional)	1 x DP, 2 x GPIO, 1 x Line-out, 1 x LPC, 1 x PCIe (x1), 1 x SMBus, 1 x UART, 1 x USB 3.0 interface
Mini-PCle	1 x Mini-PCle (Full-size)
M.2	1 x M.2 B+M-Key 3042 (WWAN, w/ uSIM) / 2242 (SSD)
SATA	
Max. Data Rate	6.0GB/s
Port	1 x SATA III support SATADOM
I/O	
Audio	Line-in, Line-out, Mic-in (box-header)
COM	1 x RS-232/422/485 (rear I/O) 3 x RS-232 (box-header)
FAN	1 x CPUFAN 4-pin PWM (wafer-header)
GPIO	1 x 8-bit Programmable GPIO (box-header)

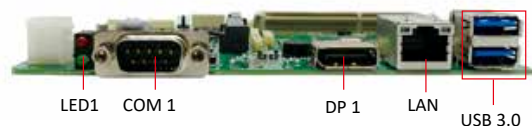


Key Features

- Intel® Apollo Lake Atom®/ Pentium®/ Celeron® series SoC onboard
- One 204-pin SO-DIMM up to 8GB DDR3L 1866MT/s SDRAM
- Multi-Display : DP (HDMI) / 2 LVDS / AMIO (DP interface)
- One Intel® Gigabit Ethernet port
- 1 Mini PCIe (full-size), 1 M.2 B+M-key 3042 (WWAN w/ Micro-SIM) / 2242 (SSD), 1 AMIO expansion slots
- 1 SATA III (w/ SATADOM), 2 USB 3.0 and 3 USB 2.0 ports
- Supports 4K/2K Resolution Display
- DC-IN 12V or 19V ~ 24V, EuP/ErP 2013 ReadyEuP/ErP 2013 Ready

I ² C	2 x I ² C (box-header)
SMBus	1 x SMBus (box-header)
USB	2 x USB 3.0 (rear I/O), 3 x USB 2.0 (box-header)
Power Requirement	
Power connector	ATX 2x2-pin for Standard, Wafer 1x2-pin for AMIO, DC-Jack ϕ 2.5mm screw type (optional)
Power type	DC-IN 12V or DC-IN 19V~24V (by jumper selection)
Power mode	AT / ATX (by jumper selection)
Watchdog Timer	
Interval	Programmable 1 ~ 255 sec/min
Output	System reset
Environment	
Operating temperature	0°C ~ 60°C (32°F ~ 140°F) -20°C ~ 70°C (-4°F ~ 158°F) optional -40°C ~ 70°C (-40°F ~ 158°F) optional
Storage temperature	-40°C ~ 80°C (-40°F ~ 176°F)
Relative humidity	0% ~ 95% (non-condensing)
Form Factor	
Dimensions (L x W)	3.5" Embedded Board 146mm x 102mm (5.75" x 4.01")

Rear I/O



Dimensions



Ordering Information

Part Number	Description
AECX-APL7-3950	3.5", Intel Atom x7-E3950 12W, DP/2LVDS, SATA/4COM/5USB/LAN/AMIO, DC(12V, 19V~24V)/WF1X2P
AECX-APL7-4200	3.5", Intel Pentium N4200 6W, DP/2LVDS, SATA/4COM/5USB/LAN, DC(12V, 19V~24V)/ATX4P
AECX-APL7-3350	3.5", Intel Celeron N3350 6W, DP/2LVDS, SATA/4COM/5USB/LAN, DC(12V, 19V~24V)/ATX4P

Option Accessories

Part Number	Description
800702005001	Audio cable
801202205002	COM port cable
801302204502	SATA + SATA power cable
113310706602	Heat Spreader

Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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