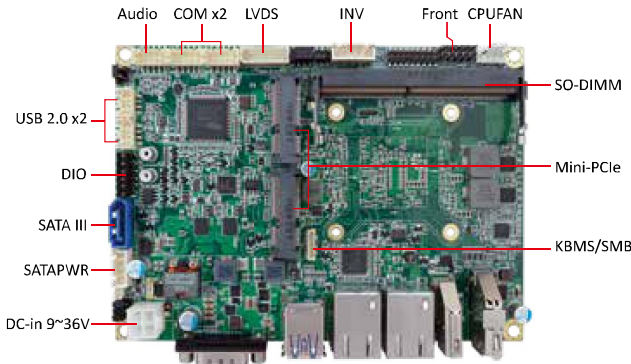


# AECX-KBL2

Intel® Kaby Lake -U Series based 3.5" Embedded Board supports Intel® 7th Gen Core™ i7/i5/i3/ Celeron® Processors with DP/HDMI/LVDS, SATA III, 3 COM, 6 USB, Dual Intel® GbE LAN.



## Key Features

- Intel® 7th Gen Core™ i7/i5/i3 / Celeron® series processor onboard
- One 260-pin SO-DIMM up to 16GB DDR4 2133MHz SDRAM
- Multi-Display: HDMI/DP/LVDS(eDP)
- Two Intel® Gigabit Ethernet ports
- 2 Mini-PCIe (1 w/ mSATA; 1 w/ Micro SIM) expansion slots
- 1 SATA III, 3 COM, 2 USB 3.0 and 4 USB 2.0
- Supports 4K/2K Resolution Display
- DC-in 9V ~ 36V
- EuP/ErP 2013 Ready
- Support Intel® AMT v11.0 (w/ Core™ i7/i5 processors)

## Product Specification

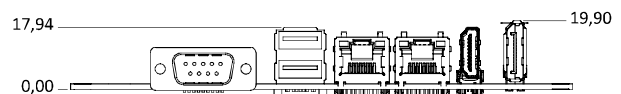
System Processor/Chipset	
Processor	Intel® 7th KabyLake-U series processor onboard Core™ i7-7600U (2.8GHz/3.9GHz, 2C/4T, 25W) Core™ i5-7300U (2.6GHz/3.5GHz, 2C/4T, 25W) Core™ i3-7100U (2.4GHz, 2C/4T, 15W) Celeron® 3965U (2.2GHz, 2C/2T, 15W)
Chipset	Intel® KabyLake-U Processor integrated
BIOS	AMI UEFI Flash ROM
Memory	
Technology	DDR4 SDRAM up to 2133 MHz
Max. capacity	Up to 16GB
Socket	1 x 260-pin SO-DIMM
Display	
Graphics	Intel® HD Gen9-LP Graphics integrated
Display interface	1 x HDMI v1.4, 1 x DP v1.2 1 x LVDS(eDP) 2ch 18/24-bit (co-layout eDP) 1 x eDP v1.3 (optional)
Multi-display	Up to three independent displays (Celeron® processor only support Dual-display)
Resolution	DP: 3840 x 2160 @ 60Hz (max) HDMI: 4096 x 2160 @ 24Hz (max) LVDS: 1920 x 1200 @ 60Hz (max) eDP: 1920 x 1080 @ 60Hz (max)
Ethernet	
Interface	10/100/1000 Mbps
Controller	LAN1: Intel® I210 GbE PHY w/ AMT v11.0 (only Core™ i7/i5 processor supports) LAN2: Intel® I219LM GbE
Connector	2 x RJ45 (rear I/O)
Audio	
Interface	Line-out, Mic-in, Line-in
CODEC	Realtek ALC662 HD Audio Codec
Expansion Slot	
Mini-PCIe	2 x Full size (1 w/ Micro-SIM, 1 combo mSATA)
SATA	
Max. data transfer rate	6.0 Gb/s
Port	1 x SATA III
I/O	
Audio	Line-out, Mic-in, Line-in (box-header)
USB	2 x USB 3.0 (rear I/O) 4 x USB 2.0 (box-header)
COM	2 x RS-232 (box-header) 1 x RS-232/422/485 (rear I/O) All ports with 5V selection
HDMI/VGA/DVI/DP/LVDS	1 x HDMI (rear I/O), 1 x DP (rear I/O) 1 x LVDS (box-header, co-layout eDP, optional)
DIO	4-in / 4-out (box-header)
SMBus	1 x SMBus (box-header)

Power Requirement	
Power connector	1 x ATX (2x2-pin) or Wafer 1x2P (optional) 1 x DC-Jack screw type (optional)
Power type	DC-in 9V ~ 36V
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) standard -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-KBL2-7600	3.5", Intel Core i7-7600U 25W, HDMI/DP/LVDS, SATA/3COM/6USB/2LAN, DC(9V~36V)/ATX4P
AECX-KBL2-7300	3.5", Intel Core i5-7300U 25W, HDMI/DP/LVDS, SATA/3COM/6USB/2LAN, DC(9V~36V)/ATX4P
AECX-KBL2-7100	3.5", Intel Core i3-6100U 15W, HDMI/DP/LVDS, SATA/3COM/6USB/2LAN, DC(9V~36V)/ATX4P
AECX-KBL2-3965	3.5", Intel Celeron 3955U 15W, HDMI/DP/LVDS, SATA/3COM/6USB/2LAN, DC(9V~36V)/ATX4P

## Optional Accessories

Part Number	Description
VK00000700A9	SATA cable
VK00002600A9	SATA power cable
NAAA000700LQ	Heatsink
113310506601	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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