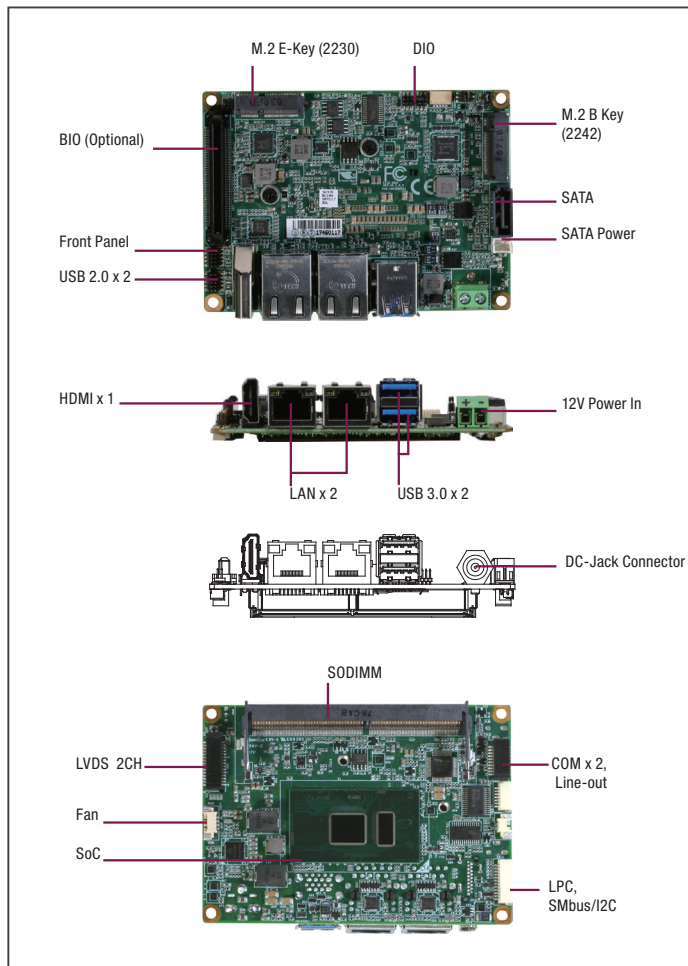


## Pico-ITX Board with 7th Generation Intel® Core™ i7/i5/i3/Celeron® U-Series Processor SoC



## Specifications

System	
Form Factor	Pico-ITX
CPU	7th Generation Intel® Core™ i processor U series, Intel® i7-7600U, i5-7300U, i3-7100U series & Celeron® 3965U
CPU Frequency	Up to 3.9/2.8 GHz
Chipset	7th Generation Intel® Core™ i processor U series, Intel® i7-7600U, i5-7300U, i3-7100U series & Celeron® 3965U
Memory Type	DDR4 1866/2133MHz SODIMM x 1, Max. 16 GB
Max. Memory Capacity	Up to 16 GB
BIOS	AMI/SPI
Wake On LAN	Yes
Watchdog Timer	255 Levels
Power Requirement	+12V AT/ATX (default)
Power Supply Type	AT/ATX (default)
Power Consumption (Typical)	—
System Cooling	Heat-spreader, heatsink & cooler optional
Dimension	3.94" x 2.84" (100mm x 72mm)
Gross Weight	—
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	—
Certification	CE, FCC

## Features

- 7th Generation Intel® Core™ i7/i5/i3/Celeron® Processor SoC
- DDR4 SODIMM Slot x 1, up to 16 GB
- Dual Gigabit Ethernet Support
- HDMI 1.4b, LVDS 2CH Display
- USB 3.0 x 2, USB 2.0 x 2, SATA 6.0Gb/s x 1
- COM1: RS-232; COM2: RS-232/422/485
- M.2 B Key (2242) x 1, M.2 E Key (2230) x 1
- BIO (Optional)



Display	
Chipset	7th Generation Intel® Core™ i processor U series, Intel® i7-7600U, i5-7300U, i3-7100U series & Celeron® 3965U
Resolution	LVDS (18/24-bit 2CH) 1920 x 1200 HDMI 1.4b up to 4096 x 2304 (4K) DDI (BIO)
LCD Interface	18/24-bit 2CH LVDS
I/O	
Storage/SSD	SATA 6.0Gb/s x 1, M.2 B-key (2242)
Ethernet	Realtek 8111G Gigabit Ethernet 10/100/1000Base-TX, RJ-45 x 2
USB Port	USB 3.0 x 2 Rear I/O, USB 2.0 x 2 Pin header
Serial Port	COM1: RS-232 x 1, COM2: RS-232/422/485 x 1 (Ring/ +5V/ +12V)
Audio	Line-out x1
DIO	4-bit (2-in, 2-out)
Expansion Slot	M.2 E-Key (2230), BIO ( optional), I2C x1 or Smbus x 1
SIM	—
TPM	—
Touch	—

## Packing List

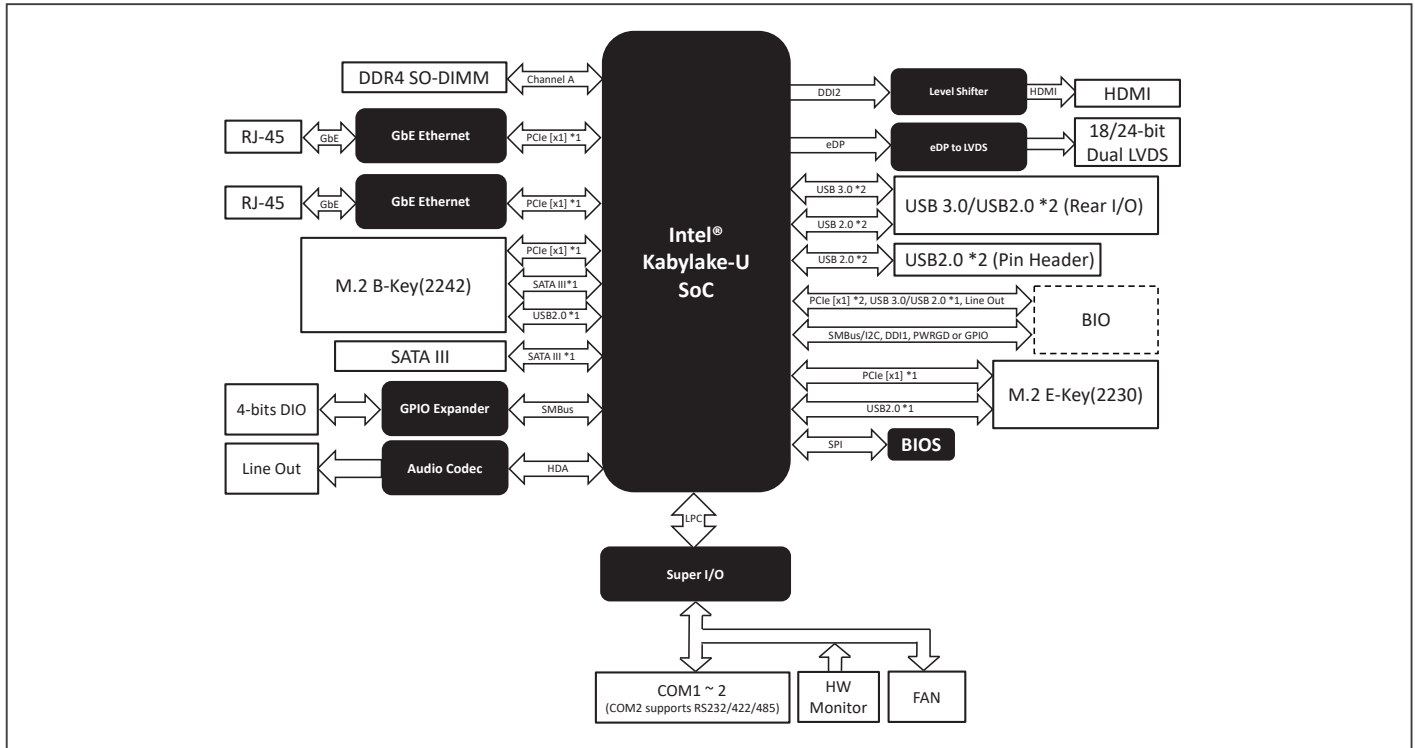
- Cable for COM x 2 & Line-out
- Product DVD
- PICO-KBU4

## Optional Accessories

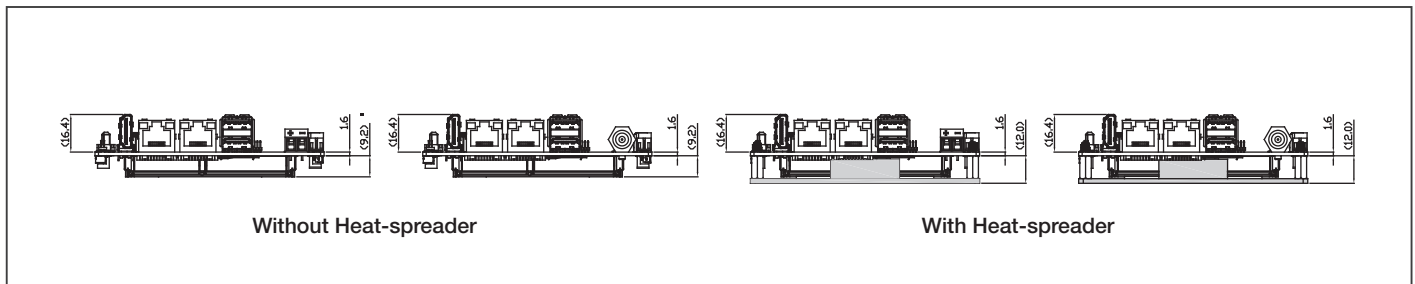
Part Number	Description	Qty.
1709070500	SATA CABLE.7P Pitch .27mm. 50cm	1
1702150155	SATA Power Cable	1
TBD	USB 2.0 cable	2
TBD	Cable for COMx2 & line-out	—
PICO-KBU4-HSP01	Heat-spreader for PICO-KBU4	1
PICO-KBU4-FAN01	Integrated Cooler for PICO-KBU4	1
BIO-ST05-C14D32*	BIO Board w/ LAN,14COM, 32DIO	1

\* Customized BIOS is required

## Block Diagram



## Dimension Unit: mm



## Ordering Information

Part Number	CPU	Fan/Fanless	Display	LVDS	Storage	LAN	USB	RS-232	RS-232/422/485	Expansion Slot	Power	Power Temp	Others
PICO-KBU4-A10-0002	i5-7300U	w/o Heat-spreader & Cooler	HDMI/ LVDS	24bit, 2CH	SATA 3.0 x 1, M.2 B Key (2242)	GbE x 2	USB3.0 x 2, USB2.0 x 2	1	1	M.2 E-Key (2230)	12V	0°C ~ 60°C	DIO x 4, Line-out, BIO
PICO-KBU4-A10-0003	i3-7100U	w/o Heat-spreader & Cooler	HDMI/ LVDS	24bit, 2CH	SATA 3.0 x 1, M.2 B Key (2242)	GbE x 2	USB3.0 x 2, USB2.0 x 2	1	1	M.2 E-Key (2230)	12V	0°C ~ 60°C	DIO x 4, Line-out

Remark: PICO-KBU4-A10-0003 Power connector type is TBD (DC-Jack or Phoenix Terminal). Power Connector Default is Phoenix terminal in PICO series.

Remark2: Heatspreader and cooler is recommended as thermal solution.