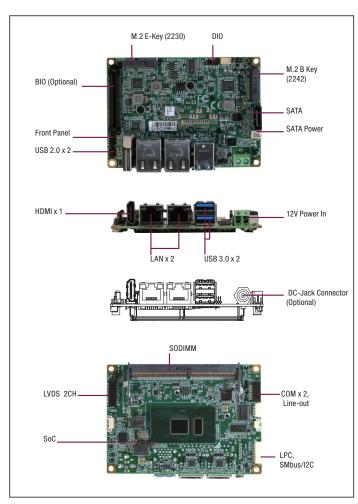


#### Pico-ITX Board with 7th Generation Intel® Core™ i7/i5/i3/Celeron® U-Series Processor SoC



# **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 (optional)					
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 (optional)					
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)	i7-7600@DDR4 16GB, 12V@2.3A					
System Cooling	Heat-spreader, heatsink & cooler (Smart FAN) optional					
Dimension	3.94" x 2.84" (100mm x 72mm)					
Gross Weight	0,55 lb (0.25 Kg)					
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)	163,000					
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 <sup>™</sup> i processor U series, Intel® i7-7600U, i5-7300U, i3-7100U series & Celeron® 3965U (Optional)						
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						
1/0							
Storage/SSD	SATA 6.0 Gb/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 x 1 or Smbus x 1						
SIM	_						
TPM	_						
Touch	_						

### **Packing List**

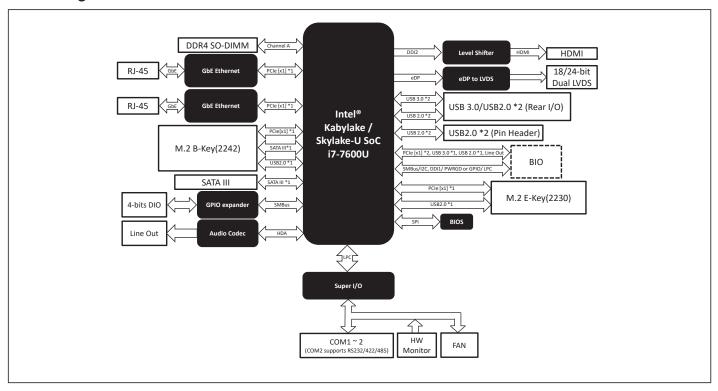
• PICO-KBU4

## **Optional Accessories**

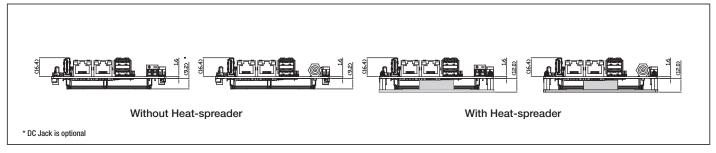
Part Number	Description	Qty.
1709070500	SATA CABLE. 7P Pitch. 27mm. 50cm	1
1702150155	SATA Power Cable, 15cm	1
170010010D	USB cable (2 Port), 10cm	1
1701200101	Cable for COM x 2 & line-out, 10 cm	1
PICO-KBU4-HSP01	Heat-spreader for PICO-KBU4	1
PICO-KBU4-FAN01	Integrated Cooler for PICO-KBU4, assemble with PICO-KBU4 directly.	1



## **Block Diagram**



### **Dimension** Unit: mm



# **Ordering Information**

Part Number	CPU	Memory	Thermal	Display	Storage	LAN	USB	RS-232	RS-232/422/485	Expansion Slot	Power	Power Temp	Others
PICO-KBU4-A10-0002	i3-7100U	DDR4 Socket	optional	HDMI x 1 LVDS x 1	SATAIII x 1 M.2 2242 (B Key) x 1	GbE x 2	USB 3.0 x 2 (Rear) USB 2.0 x 2 (Internal)	1	1	M.2 2230 (E Key) x 1	+12V (Terminal block)	0°C ~ 60°C	DIO x 4 BIO (Optional)
PICO-KBU4-A10-0003	i5-7300U	DDR4 Socket	optional	HDMI x 1 LVDS x 1	SATAIII x 1 M.2 2242 (B Key) x 1	GbE x 2	USB 3.0 x 2 (Rear) USB 2.0 x 2 (Internal)	1	1	M.2 2230 (E Key) x 1 BIO x 1	+12V (Terminal block)	0°C ~ 60°C	DIO 4 bit
PICO-KBU4-A10-0004	i7-7600U	DDR4 Socket	optional	HDMI x 1 LVDS x 1	SATAIII x 1 M.2 2242 (B Key) x 1	GbE x 2	USB 3.0 x 2 (Rear) USB 2.0 x 2 (Internal)	1	1	M.2 2230 (E Key) x 1 BIO x 1	+12V (Terminal block)	0°C ~ 60°C	DIO 4 bit
PICO-KBU4-A10-0005 (6th Gen)	Celeron® 3955	DDR4 Socket	optional	HDMI x 1 LVDS x 1	SATAIII x 1 M.2 2242 (B Key) x 1	GbE x 2	USB 3.0 x 2 (Rear) USB 2.0 x 2 (Internal)	1	1	M.2 2230 (E Key) x 1	+12V (Terminal block)	0°C ~ 60°C	DIO x 4 BIO (Optional)
PICO-KBU4-A10-DC06	I3-7100U	DDR4 Socket	optional	HDMI x 1 LVDS x 1	SATAIII x 1 M.2 2242 (B Key) x 1	GbE x 2	USB 3.0 x 2 (Rear) USB 2.0 x 2 (Internal)	1	1	M.2 2230 (E Key) x 1	+12V (DC Jack)	0°C ~ 60°C	DIO x 4 BIO (Optional)
PICO-KBU4-A10-0007 (6th Gen)	I5-6300U	DDR4 Socket	optional	HDMI x 1 LVDS x 1	SATAIII x 1 M.2 2242 (B Key) x 1	GbE x 2	USB 3.0 x 2 (Rear) USB 2.0 x 2 (Internal)	1	1	M.2 2230 (E Key) x 1 BIO x 1	+12V (Terminal block)	0°C ~ 60°C	DIO 4 bit
PICO-KBU4W1-A10-0004	i7-7600U	DDR4 Socket	optional	HDMI x 1 LVDS x 1	SATAIII x 1 M.2 2242 (B Key) x 1	GbE x 2	USB 3.0 x 2 (Rear) USB 2.0 x 2 (Internal)	1	1	M.2 2230 (E Key) x 1 BIO x 1	+12V (Terminal block)	WiTA 1( -20°C ~ 70°C)	DIO 4 bit