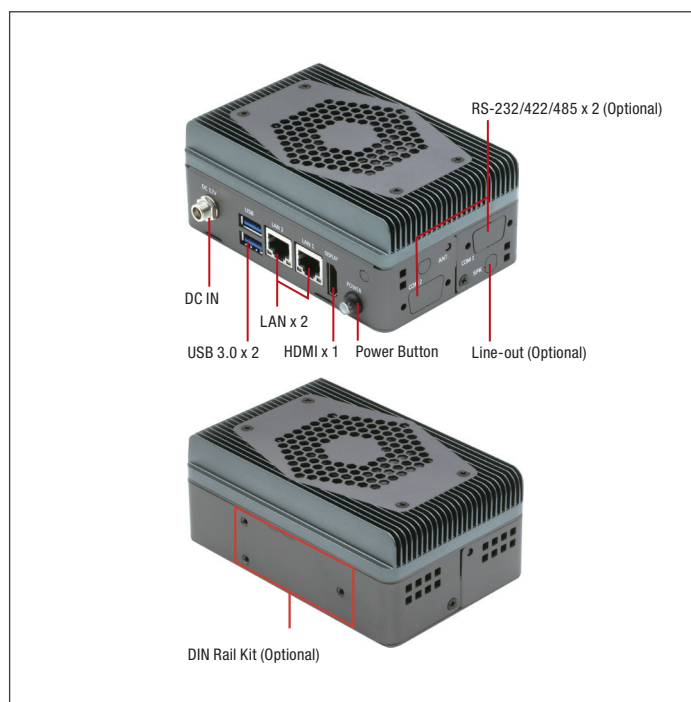


# PICO-KBU4-SEMI

Pico-SEMI TurnKit with 7th Generation Intel® Core™ i7/i5/i3/Celeron® U-Series Processor SoC



## Specifications

SYSTEM	
FORM FACTOR	PICO-SEMI
CPU	7th Generation Intel® Core™/Celeron® Processors: Intel® Core™ i7-7600U (2C/4T, 2.80GHz, 15W) Intel® Core™ i5-7300U (2C/4T, 2.60GHz, 15W) Intel® Core™ i3-7100U (2C/4T, 2.40GHz, 15W) Intel® Celeron® Processor 3965U (2C/2T, 2.20GHz, 15W)
CHIPSET	Integrated with Intel® SoC
MEMORY TYPE	DDR4 2133, SODIMM x 1, Non-ECC (Max. 16GB)
BIOS	UEFI
WAKE ON LAN	Yes
WATCHDOG TIMER	255 Levels
SECURITY	—
RTC Battery	Lithium Battery 3V/240mAh
DIMENSION	4.80" x 3.18" x 1.98" (122 mm x 80.8 mm x 50.4 mm)
Gross Weight	0.88 lb (0.4 kg)
OS Support	Windows 10 (64 bit) Linux Ubuntu 16.04.3/Kernel 4.10.0
POWER	
POWER REQUIREMENT	+12V
POWER SUPPLY TYPE	ATX
CONNECTOR	Lockable DC Jack Connector
POWER CONSUMPTION	Intel® i7-7600, DDR4 16GB, 1.53A@ +12V(TYPICAL)
DISPLAY	
CONTROLLER	Intel® HD Graphics 510/620
LVDS/eDP	—
Display Interface	HDMI 1.4 x 1, 3840 x 2160 @30Hz
Multiple Display	1 Simultaneous Display
AUDIO	
CODEC	Realtek ALC269 (Optional)
AUDIO INTERFACE	Line-out (Optional)
Speaker	—
EXTERNAL I/O	
ETHERNET	Realtek 8111 1GbE, RJ45 x 2
USB	USB 3.2 Gen1 x 2
SERIAL PORT	COM1 (RS232, Optional) COM2 (RS232/422/485, support 5V/12V/RI, Optional)
VIDEO	HDMI 1.4 x 1

## Features

- Lightweight system, easy to deploy
- DDR4 SODIMM Slot x 1, up to 16GB (Non-ECC)
- GbE x 2, HDMI x 1.4
- M.2 2242 B-Key for Storage
- M.2 2230 E-Key for Wireless Module
- COM x 2 (Optional)
- USB 3.2 Gen 1 x 2 (Rear I/O)
- Lockable DC 12V



INTERNAL I/O	
USB	—
SERIAL PORT	—
VIDEO	—
SATA	—
AUDIO	Line-out (Optional)
DIO/GPIO	—
SMBus/I2C	—
FAN	4pins Smart Fan x1
Front Panel	HDD LED, PWR LED, Power Button, Buzzer, Reset
Others	—
EXPANSION	
Mini PCI-E/mSATA	—
M.2	M.2 2242 B-Key x 1 (PCIe 3.0 [x1]/SATA, Default: mSATA, select with BIOS) M.2 2230 E-Key x 1 (PCIe 3.0 [x1] + USB2.0)
Others	—
ENVIRONMENT & CERTIFICATION	
OPERATING TEMP	32°F ~ 122°F (0°C ~ 50°C)
STORAGE TEMP	-40°F ~ 185°F (-40°C ~ 85°C)
OPERATING HUMIDITY	0% ~ 90% relative humidity, non-condensing
MTBF (HOURS)	163,000
EMC	CE/FCC Class A

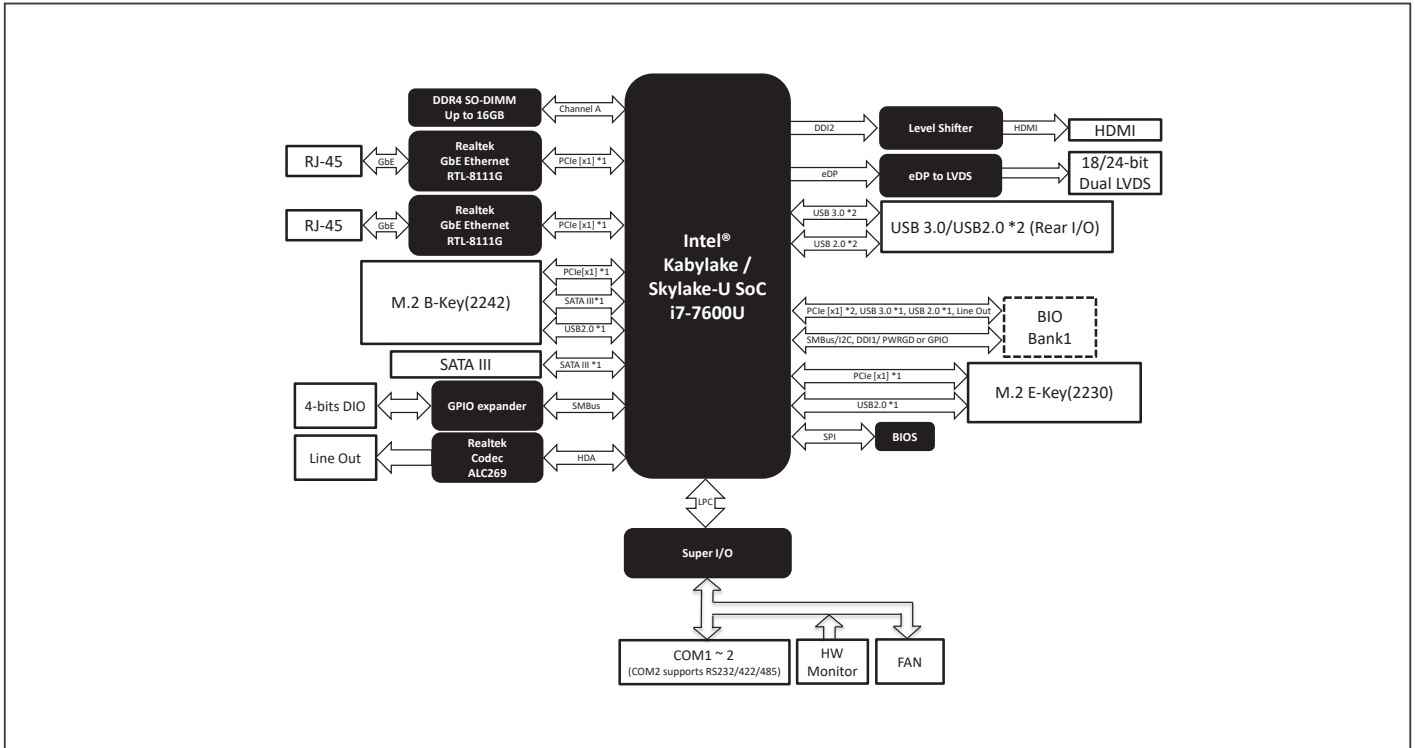
## Packing List

- PICO-KBU4-SEMI

## Optional Accessories

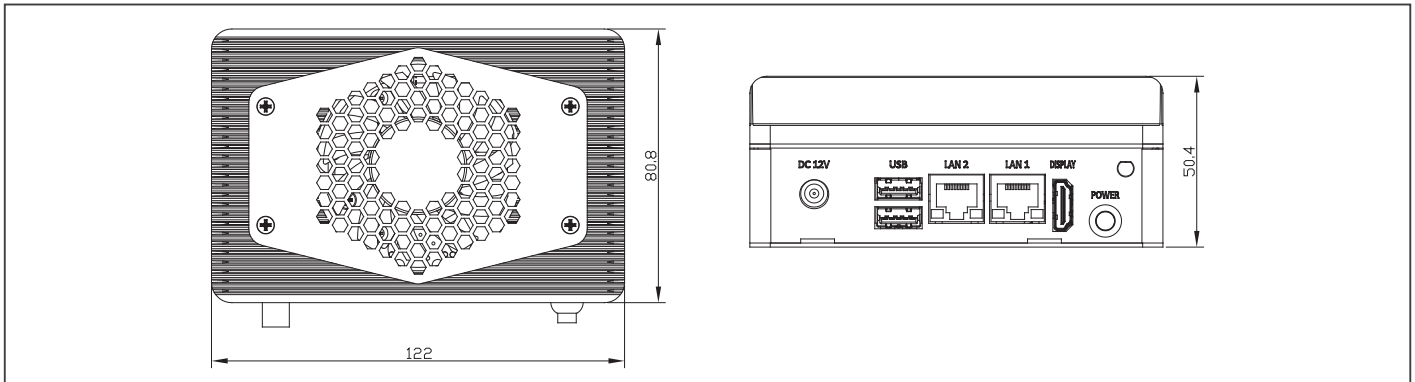
Part Number	Description	Qty.
125530040C	Power Adapter.12V.40W.FSP.FSP040-DHAN3.9NA0406805	1
125530060Z	Power Adapter 12V/5A 60W FSP060-DHAN3	1
1702031802	POWER CORD.3P-125V 10A 180D.1.8M USA (US Type)	1
1702031803	POWER CORD.3P-250V 10A 180D.1.8M.VDE (Europe Type)	1
170203180E	Power cord.3P.125V/7A.1.8M (Japan type)	1
1701200101	COM Port Cable.2ports.100mm	1
9761SEMI01	DIN-RAIL Kits	1
9761SEMI00	WALL MOUNT KITS	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	Operating Temp	Others
PICO-KBU4-SEMI-A10-B001	Intel® Celeron® Processor 3965U	DDR4 Socket	w/Cooler	HDMI x 1	SATAIII x 1	GbE x 2	USB 3.2 Gen 1 x 2 (Rear)	—	—	M.2 2230 E-Key x 1 M.2 2242 B-Key x 1	+12V (ATX)	0°C ~ 50°C	DIO 4 bit
PICO-KBU4-SEMI-A10-B002	Intel® Core™ i3-7100U	DDR4 Socket	w/Cooler	HDMI x 1	SATAIII x 1	GbE x 2	USB 3.2 Gen 1 x 2 (Rear)	—	—	M.2 2230 E-Key x 1 M.2 2242 B-Key x 1	+12V (ATX)	0°C ~ 50°C	DIO 4 bit
PICO-KBU4-SEMI-A10-B003	Intel® Core™ i5-7300U	DDR4 Socket	w/Cooler	HDMI x 1	SATAIII x 1	GbE x 2	USB 3.2 Gen 1 x 2 (Rear)	—	—	M.2 2230 E-Key x 1 M.2 2242 B-Key x 1	+12V (ATX)	0°C ~ 50°C	DIO 4 bit
PICO-KBU4-SEMI-A10-B004	Intel® Core™ i7-7600U	DDR4 Socket	w/Cooler	HDMI x 1	SATAIII x 1	GbE x 2	USB 3.2 Gen 1 x 2 (Rear)	—	—	M.2 2230 E-Key x 1 M.2 2242 B-Key x 1	+12V (ATX)	0°C ~ 50°C	DIO 4 bit
PICO-KBU4-SEMI-A10-B005 (6th Gen)	Intel® Celeron® Processor 3965U	DDR4 Socket	w/Cooler	HDMI x 1	SATAIII x 1	GbE x 2	USB 3.2 Gen 1 x 2 (Rear)	—	—	M.2 2230 E-Key x 1 M.2 2242 B-Key x 1	+12V (ATX)	0°C ~ 50°C	DIO 4 bit