

Embedded Single Board for OEM/ODM

ONYX PICO-KBU4

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



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 3.2 Gen 1 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)



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
Memory Capacity	Up to 16GB
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	i7-7600@DDR4 16GB, 12V@2.3A
System Cooling	Heat-spreader, heatsink & cooler (Smart FAN) optional
Dimension (L x W)	3.94" x 2.84" (100 mm x 72 mm)
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
MFTB (Hours)	163,000
Certification	CE / FCC

Display

Chipset	7th Generation Intel® Core™ 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

I/O

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 3.2 Gen 1 x 2 Rear I/O, USB 2.0 x 2 Pin header
Serial Port	COM1: RS-232 x 1, COM2: RS-232/422/485 x1 (Ring/ +5V/ +12V)
Audio	Line-out x 1
DIO	4-bit (2-in, 2-out)
Expansion Slot	M.2 E-Key (2230), BIO (optional), I2C x 1 or Smbus x 1