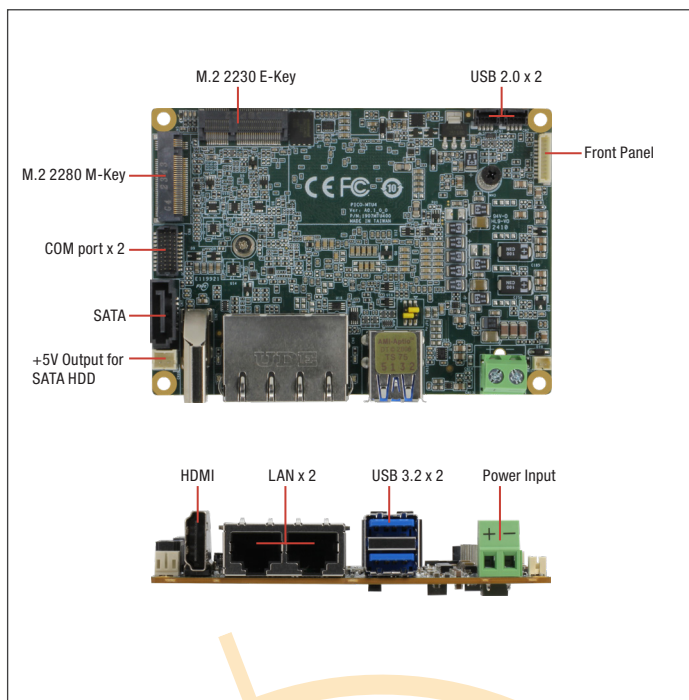


PICO-ARU4

Pico-ITX Board with Intel® Core™ Ultra Processors (Series 2)



Specifications

System	
Form Factor	PICO-ITX
CPU	Intel® Core™ Ultra 7 Processor 255U (2PC+10EC/14T, P-core 2.00 GHz, E-core 1.70 GHz, 15W) Intel® Core™ Ultra 5 Processor 225U (2PC+10EC/14T, P-core 1.50 GHz, E-core 1.30 GHz, 15W)
Chipset	Integrated with Intel® SoC
Memory Type	Single-Channel LPDDR5 6400, up to 32GB
BIOS	UEFI
Wake on LAN	Yes
Watchdog Timer	255 Levels
Security	TPM 2.0
RTC Battery	Lithium Battery 3V/240mAh
Dimension	3.94" x 2.84" (100mm x 72mm)
Gross Weight	0.18 lb (0.08 kg)
OS Support	Windows 10/11 (64bit) Linux Ubuntu 22.04.2 kernel 5.19.0 32 generic
Power	
Power Requirement	12V only
Power Supply Type	AT/ATX
Connector	Phoenix 2-pin Connector (Default) Lockable DC Jack Connector (Optional)
Power Consumption	Intel® Core™ Ultra 7 Processor 255U, DDR5 32GB x 1, 2.85A @+12V (Typical) Intel® Core™ Ultra 7 Processor 255U, DDR5 32GB x 1, 6.96A @+12V (Max)
Display	
Controller	Intel® Graphics
LVDS/eDP	eDP 1.4 x 1
Display Interface	HDMI 1.4 x 1, 3840 x 2160 @30Hz
Multiple Display	Up to 2 Simultaneous Displays
Audio	
Codec	—
Audio Interface	—
Speaker	—
External I/O	
Ethernet	Intel® Ethernet Controller I226, 2.5GbE, RJ-45 x 1 Intel® Ethernet Connection I219, 1GbE RJ-45 x 1
USB	USB 3.2 Gen 2 x 2 ports
Serial Port	—
Video	HDMI 1.4 x 1

Features

- Intel® Core™ Ultra Processors (Series 2) SoC
- Onboard LPDDR5, up to 32GB
- 2.5GbE + 1GbE
- HDMI 1.4 + eDP 1.4
- M.2 2280 M-Key x 1 (PCIe 4.0 [x4]/SATA)
- M.2 2230 E-Key x 1 (PCIe 4.0 [x1] + USB 2.0)
- USB 3.2 Gen 2 x 2 + USB 2.0 x 2
- RS-232/422/485 x 2
- TPM, GPIO 4-bit, SATA 6Gb/s x 1
- SMBus/I2C (Default: SMBus)
- Intel® AMT Support



Internal I/O	
USB	USB 2.0 x 2
Serial Port	COM 1 ~ 2 (RS-232/422/485, supports 5V/12V/RI)
Video	—
SATA	SATA 6Gb/s x 1 +5V SATA Power Connector x 1
Audio	—
DIO/GPIO	GPIO 4-bit
SMBus/I2C	I2C/SMBus (Default: SMBus)
Fan	4pins Smart Fan x1
Front Panel	HDD LED, PWR LED, Power Button, Buzzer, Reset
Others	—
Expansion	
Mini PCIe/mSATA	—
M.2	M.2 2280 M-Key x 1 (PCIe 4.0 [x4] / SATA, Default: PCIe [x4], select by BOM) M.2 2230 E-Key x 1 (PCIe 4.0 [x1] + USB 2.0)
Others	—
Environment & Certification	
Operating Temp	32°F ~ 140°F (0°C ~ 60°C)
Storage Temp	-40°F ~ 185°F (-40°C ~ 85°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	1,063,716
EMC	CE/FCC Class A

Packing List

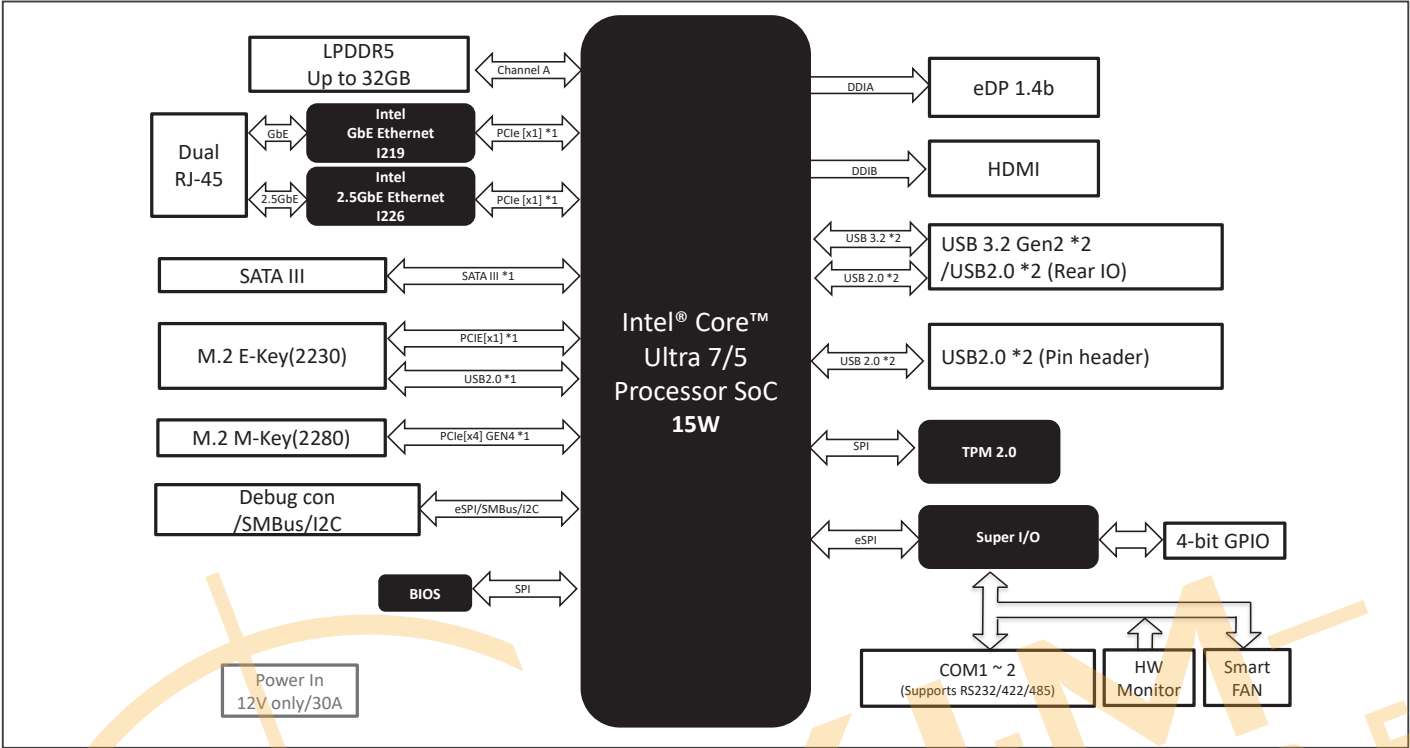
- PICO-ARU4

Optional Accessories

Part Number	Description	Qty.
170X000603	Front Panel cable.10cm	1
170X000231	Dual COM cable.30cm	1
170X000880	Single USB 2.0 lockable cable.20cm	2
1709070500	SATA cable.50cm	1
1702150155	SATA power cable.15cm	1
1702030200	Power cable (Phoenix type to DC Jack).20cm	1
PICO-MTU4-FAN01	Cooler.100*72*14mm.5200rpm.for PICO-MTU4	1
PER-P30D-A11-0001	120W, DC-DC Converter, 9~36V input, 12V output, Rev A1.1, 30 x 72mm	1

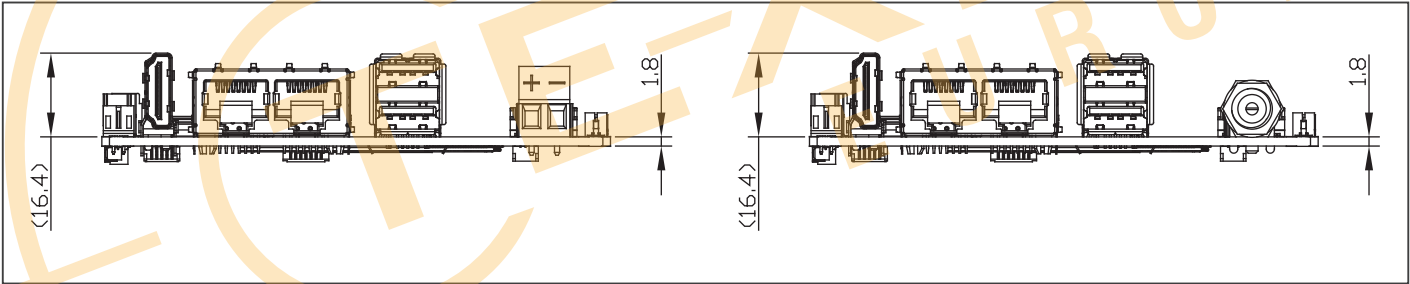


Block Diagram



Dimension

Unit: mm



Ordering Information

Part number	CPU	Memory	Display	Storage	LAN	USB	COM	Expansion slot	Power	Operating Temp	Audio	Others
PICO-ARU4-A10-0002	Intel® Core™ Ultra 5 Processor 225U	LPDDR5 16GB	HDMI x 1 eDP x 1	SATA 6Gb/s x 1	GbE x 1 2.5GbE x 1	USB 2.0 x 2 USB3.2 Gen 2 x 2	RS232/422/485 x 2	M.2 2230 E-key x 1 M.2 2280 M-key x 1	+12V (Terminal block)	0°C ~ 60°C	—	SMBus x 1, TPM2.0, GPIO
PICO-ARU4-A10-0003	Intel® Core™ Ultra 5 Processor 225U	LPDDR5 32GB	HDMI x 1 eDP x 1	SATA 6Gb/s x 1	GbE x 1 2.5GbE x 1	USB 2.0 x 2 USB3.2 Gen 2 x 2	RS232/422/485 x 2	M.2 2230 E-key x 1 M.2 2280 M-key x 1	+12V (Terminal block)	0°C ~ 60°C	—	SMBus x 1, TPM2.0, GPIO
PICO-ARU4-A10-0004	Intel® Core™ Ultra 7 Processor 255U	LPDDR5 32GB	HDMI x 1 eDP x 1	SATA 6Gb/s x 1	GbE x 1 2.5GbE x 1	USB 2.0 x 2 USB3.2 Gen 2 x 2	RS232/422/485 x 2	M.2 2230 E-key x 1 M.2 2280 M-key x 1	+12V (Terminal block)	0°C ~ 60°C	—	SMBus x 1, TPM2.0, GPIO

Disclaimer

ALL PRODUCTS, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Texim Europe B.V. its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Texim"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Texim makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product.

It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application.

Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time.

All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.

Please contact us if you have any questions about the contents of the datasheet.

This may not be the latest version of the datasheet. Please check with us if a later version is available.





Headquarters & Warehouse

Elektrostraat 17
NL-7483 PG Haaksbergen
The Netherlands

T: +31 (0)53 573 33 33
E: info@texim-europe.com
Homepage: www.texim-europe.com



The Netherlands

Elektrostraat 17
NL-7483 PG Haaksbergen

T: +31 (0)53 573 33 33
E: nl@texim-europe.com



Belgium

Zuiderlaan 14, box 10
B-1731 Zellik

T: +32 (0)2 462 01 00
E: belgium@texim-europe.com



UK & Ireland

St Mary's House, Church Lane
Carlton Le Moorland
Lincoln LN5 9HS

T: +44 (0)1522 789 555
E: uk@texim-europe.com



Germany

Bahnhofstrasse 92
D-25451 Quickborn

T: +49 (0)4106 627 07-0
E: germany@texim-europe.com



Germany

Martin-Kollar-Strasse 9
D-81829 München

T: +49 (0)89 436 086-0
E: muenchen@texim-europe.com



Austria

Martin-Kollar-Strasse 9
D-81829 München

T: +49 (0)89 436 086-0
E: austria@texim-europe.com



Nordic

Stockholmsgade 45
2100 Copenhagen

T: +45 88 20 26 30
E: nordic@texim-europe.com



Italy

Martin-Kollar-Strasse 9
D-81829 München

T: +49 (0)89 436 086-0
E: italy@texim-europe.com