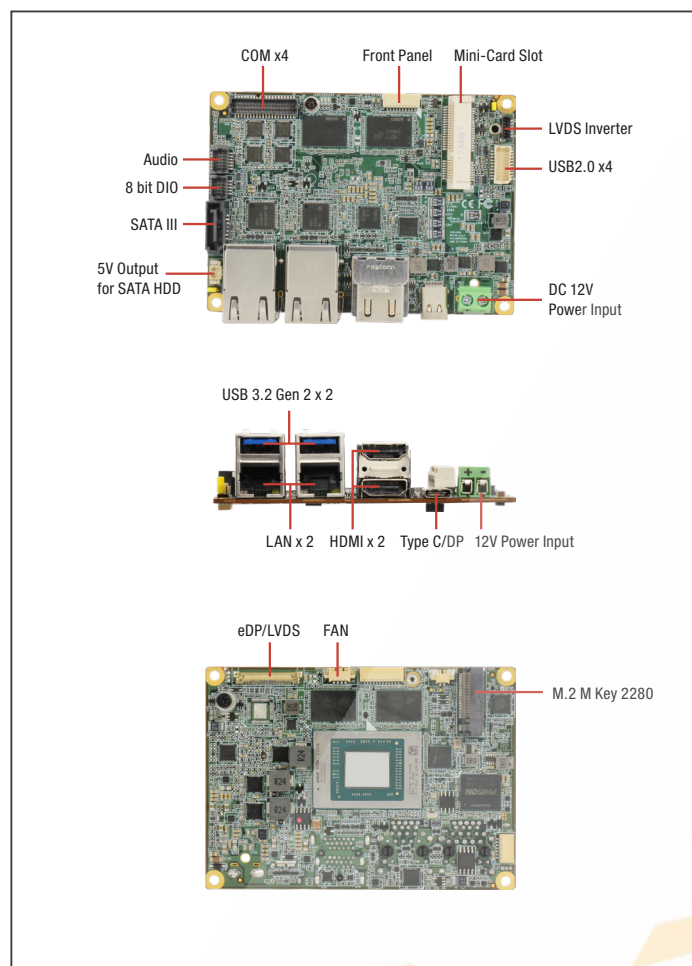


PICO-V2K4

Pico-ITX Board with AMD RYZEN™ V2000 embedded Processor Family



Specifications

System	
Form Factor	PICO-ITX
CPU	AMD RYZEN™ V2000 embedded Processor Family V2718 (8C/16T, 1.7~4.15 GHz, 10-25W) V2516 (6C/12T, 2.1~3.95 GHz, 10-25W)
CPU Frequency	Up to 4.15GHz
Chipset	AMD RYZEN™ V2000 embedded Processor Family
Memory Type	LPDDR4x 3733 MHz on board memory
Max. Memory Capacity	Up to 32GB
BIOS	UEFI
Wake On LAN	Yes
Watchdog Timer	255 Levels
Power Requirement	+12V AT/ATX
Power Supply Type	Phoenix 2-pin Connector (Lockable DC Jack co-lay)
Power Consumption (Typical)	4.24A at +12V, V2718, LPDDR4x on board 32GB
System Cooling	Cooler/Heat-Spreader
Dimension	3.94" x 2.84" (100mm x 72mm)
Gross Weight	0.55 lbs. (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)	407,784
Certification	CE/FCC Class A
OS support	Windows 10 (64 bit), Linux Ubuntu 20.04.3/Kernel 5.11

Features

- AMD RYZEN™ V2000 embedded Processor Family (V2718/V2516)
- LPDDR4x on board memory, up to 32 GB
- Intel® i210, 10/100/1000Base x 2
- HDMI x 2 (4Kx2K, 2.0b x 1, 1.4 x 1)
- Type C to DP x 1, LVDS/eDP x 1
- M.2 2280 M key (PCIe x4 GEN3/SATA) x 1
- Full size mPCIe/mSATA x 1
- USB 3.2 Gen 2 x 2, USB 3.2 Gen 2 Type C x 1, USB 2.0 x 4
- RS-232/422/485 x 4



Display	
Chipset	AMD Radeon 6, 7 Graphics (Renoir)
Resolution	Type C to DP x 1 HDMI 2.0b x 1, 4K x 2K 60Hz HDMI 1.4 x 1, 4K x 2K 30Hz (3840 x 2160) eDP or LVDS x 1 (eDP 1.4: 3840x2160, 60Hz; LVDS: 12V/3.3V, 18-24 bit, single channel)
LCD Interface	—
I/O	
Storage/SSD	On board NVME SSD (up to 64GB, PCIe x2, by BOM) SATA III x 1 +5V SATA Power Connector x 1
Ethernet	Intel® i210, 10/100/1000Base x 2
USB Port	USB3.2 Gen2 Type C x 1 (rear I/O) USB3.2 Gen2 x 2 (rear I/O) USB2.0 x 4 (pin header)
Serial Port	RS232/422/485 x 4
Audio	High Definition Audio Interface, Line-in/Line-out/MIC(Optional)
DIO	8-bit
Expansion Slot	M.2 2280 M-key (PCIe Gen3 x 4 as default, SATA selected by BIOS) x 1 mini-PCIe(Full) x 1 (PCIe [x1] x 1/USB2.0 as default, mSATA selected by HW BOM) SMBUS/I2C x 1 (SMBUS as default, I2C selected by HW BOM)
SIM	—
TPM	2.0

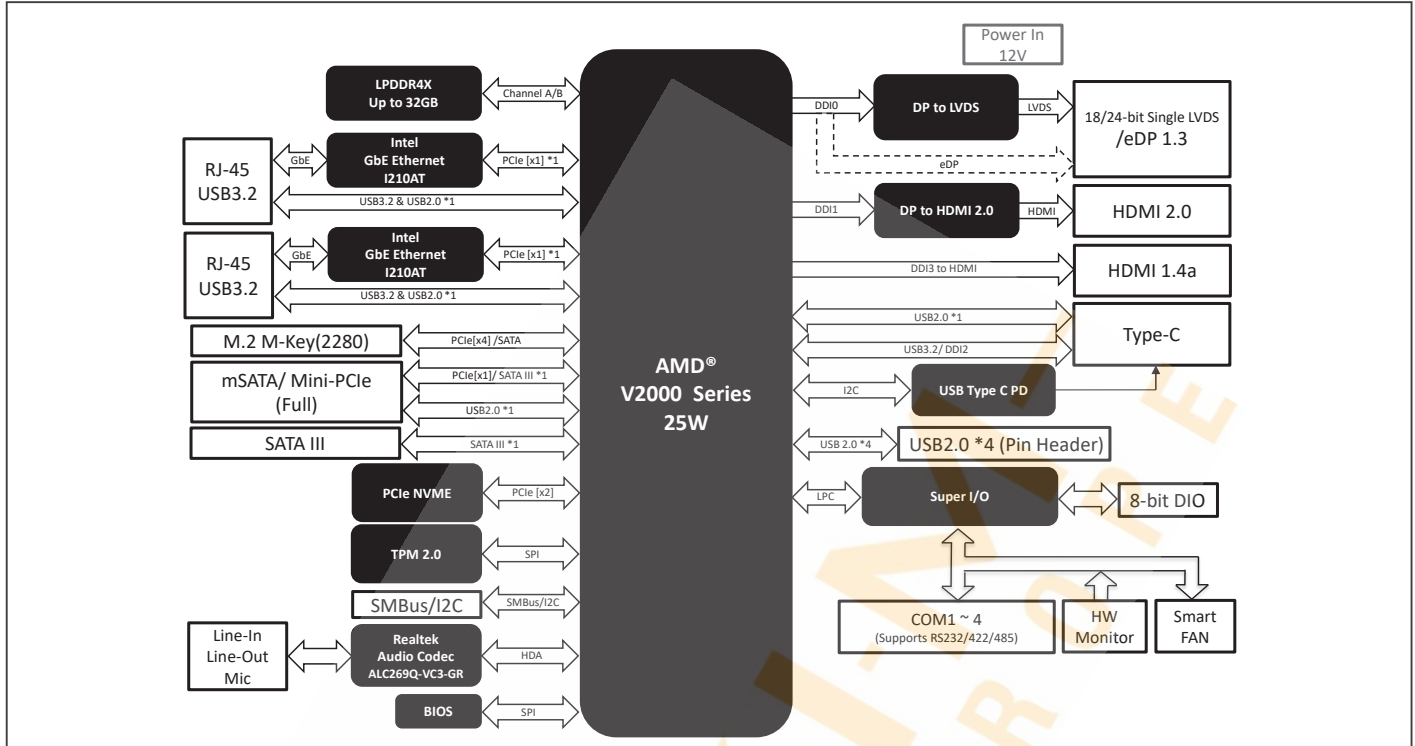
Packing List

- PICO-V2K4

Optional Accessories

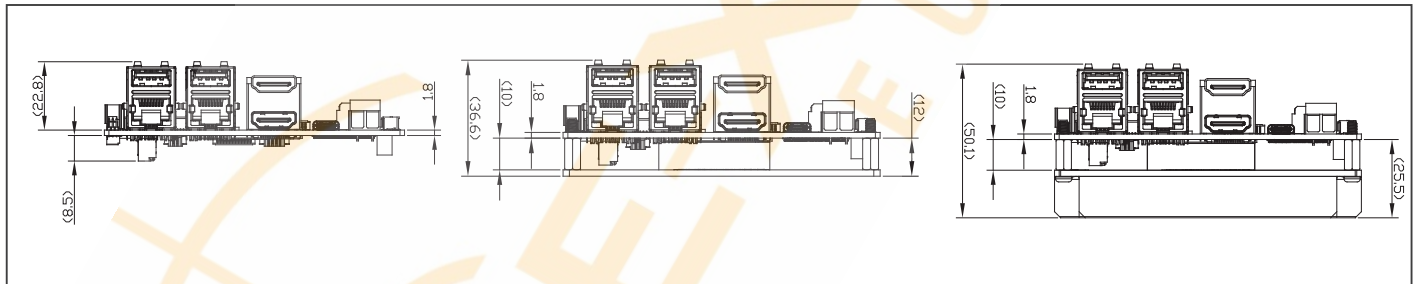
Part Number	Description	Qty.
170X000287	Front Panel cable	1
170X000317	COM *4port cable	1
170X000390	USB2.0 *4port cable	1
170X000446	LVDS cable (LVDS panel model: G101EVN01)	1
170X000445	eDP cable (eDP panel model: B173ZAN01.0)	1
1709070500	(TF)SATA CABLE.7P Pitch 1.27mm.50cm	1
170X000322	SATA power cable	1
170X000156	Audio cable	1
PICO-V2K4-FAN01	Cooler	1
PICO-V2K4-HSP01	Heat Spreader.AL Fin+CU Block.100*72*10.7mm	1

Block Diagram



Dimension

Unit: mm



Ordering Information

Part number	CPU	Memory	Display	Storage	LAN	USB	RS-232/422/485	Expansion slot	Power	Operating Temp	Audio	Others
PICO-V2K4-A10-0002	V2516	4GB	Type C to DP x 1 HDMI x 2 LVDS x 1	SATAIII x 1	GbE x 2	USB 2.0 x 4 USB3.2 Gen 2 x 2 USB 3.2 Gen 2 Type C x 1	4	M.2 2280 M-key x 1 mini-PCIe(Full) x 1	+12V (Terminal block)	0~60°C	—	SMBUS x 1 (I2C Optional) TPM2.0
PICO-V2K4-A10-0003	V2516	8GB	Type C to DP x 1 HDMI x 2 LVDS x 1	SATAIII x 1 On board NVME SSD 64GB x 1	GbE x 2	USB 2.0 x 4 USB3.2 Gen 2 x 2 USB 3.2 Gen 2 Type C x 1	4	M.2 2280 M-key x 1 mini-PCIe(Full) x 1	+12V (Terminal block)	0~60°C	—	SMBUS x 1 (I2C Optional) TPM2.0
PICO-V2K4-A10-0004	V2718	8GB	Type C to DP x 1 HDMI x 2 LVDS x 1	SATAIII x 1	GbE x 2	USB 2.0 x 4 USB3.2 Gen 2 x 2 USB 3.2 Gen 2 Type C x 1	4	M.2 2280 M-key x 1 mini-PCIe(Full) x 1	+12V (Terminal block)	0~60°C	—	SMBUS x 1 (I2C Optional) TPM2.0
PICO-V2K4-A10-0005	V2718	16GB	Type C to DP x 1 HDMI x 2 LVDS x 1	SATAIII x 1	GbE x 2	USB 2.0 x 4 USB3.2 Gen 2 x 2 USB 3.2 Gen 2 Type C x 1	4	M.2 2280 M-key x 1 mini-PCIe(Full) x 1	+12V (Terminal block)	0~60°C	—	SMBUS x 1 (I2C Optional) TPM2.0

