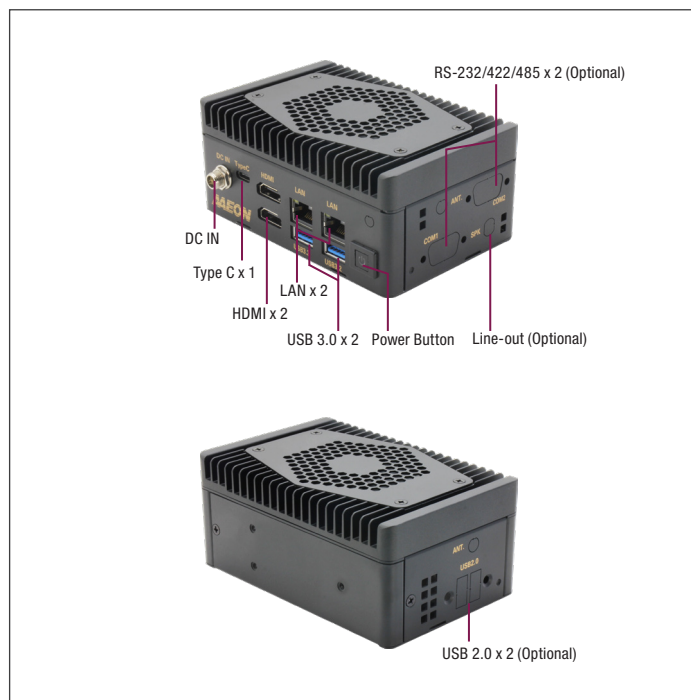


PICO-V2K4-SEMI

PICO-SEMI with AMD RYZEN™ V2000 embedded Processor Family



Features

- AMD RYZEN™ V2000 embedded Processor Family (V2718/V2516)
- Onboard NVME SSD 64GB
- LPDDR4x onboard memory, up to 32 GB
- Intel® i226, 10/100/2500Base x 1
- Intel® i210, 10/100/1000Base x 1
- HDMI x 2 (4Kx2K, 2.0b x 1, 1.4 x 1), Type C to DP 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 2(Optional)
- RS-232/422/485 x 2 (Optional)



Serial Port	COM1~2 (RS232/422/485, support 5V/12V/RI, Optional)
Video	DP x 1 (Via Type C) HDMI 2.0 x 1, HDMI 1.4 x 1
Internal I/O	
USB	—
Serial Port	—
Video	—
SATA	Onboard NVME SSD (Optional, up to 128GB, PCIe[x2])
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 PCIe/mSATA	Full-Size mSATA/mPCIe x 1 (Default: mPCIe, select with HW BOM)
M.2	M.2 2280 M-Key x 1 (PCIe 4.0 [x4]/SATA, Default: PCIe [x4], select with BIOS)
Others	—
Environment & Certification	
Operating Temp	32°F ~ 122°F (0°C ~ 50°C) with 0.2 m/s airflow
Storage Temp	-40°F ~ 185°F (-40°C ~ 85°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	407,784
EMC	CE/FCC Class A

Specifications

System	
Form Factor	PICO-SEMI
CPU	AMD RYZEN™ V2000 embedded Processor Family V2718 (8C/16T, 1.70GHz, 25W) V2516 (6C/12T, 2.10GHz, 25W)
Chipset	Integrated with AMD RYZEN™ V2000 embedded Processor
Memory Type	Onboard LPDDR4x 3733, Dual Channel, Non-ECC (Max.32GB)
BIOS	UEFI
Wake on LAN	Yes
Watchdog Timer	255 Levels
Security	TPM2.0
RTC Battery	Lithium Battery 3V/240mAh
Dimension	4.80" x 3.18" x 2.13" (122mm x 80.8mm x 54 mm)
Gross Weight	0.84 lbs (0.38 kg)
OS Support	Windows 10 (64 bit) Linux Ubuntu 20.04.3/Kernel 5.18.0-4449-amd+
Power	
Power Requirement	+12V
Power Supply Type	ATX
Connector	DC Jack Connector
Power Consumption	V2718, LPDDR4x 32GB, NVMe64GB 4.24A @ +12V(TYPICAL) V2718, LPDDR4x 32GB, NVMe64GB, 4.82A @ +12V(MAX)
Display	
Controller	AMD Radeon 6, 7 Graphics (Renoir)
LVDS/eDP	—
Display Interface	Type C to DP x 1, 3480 x 2160 @60Hz HDMI 2.0 x 1, 3480 x 2160 @60Hz HDMI 1.4 x 1, 3480 x 2160 @30Hz
Multiple Display	Up to 3 Simultaneous Displays
Audio	
Codec	Realtek ALC269 (Optional)
Audio Interface	Line-out (Optional)
Speaker	—
External I/O	
Ethernet	Intel® i225/i226 2.5GbE, RJ-45 x 1 Intel® i210 1GbE, RJ-45 x 1
USB	USB3.2 Gen2 Type C x 1 USB3.2 Gen2 x 2 USB2.0 x 2 (Optional)

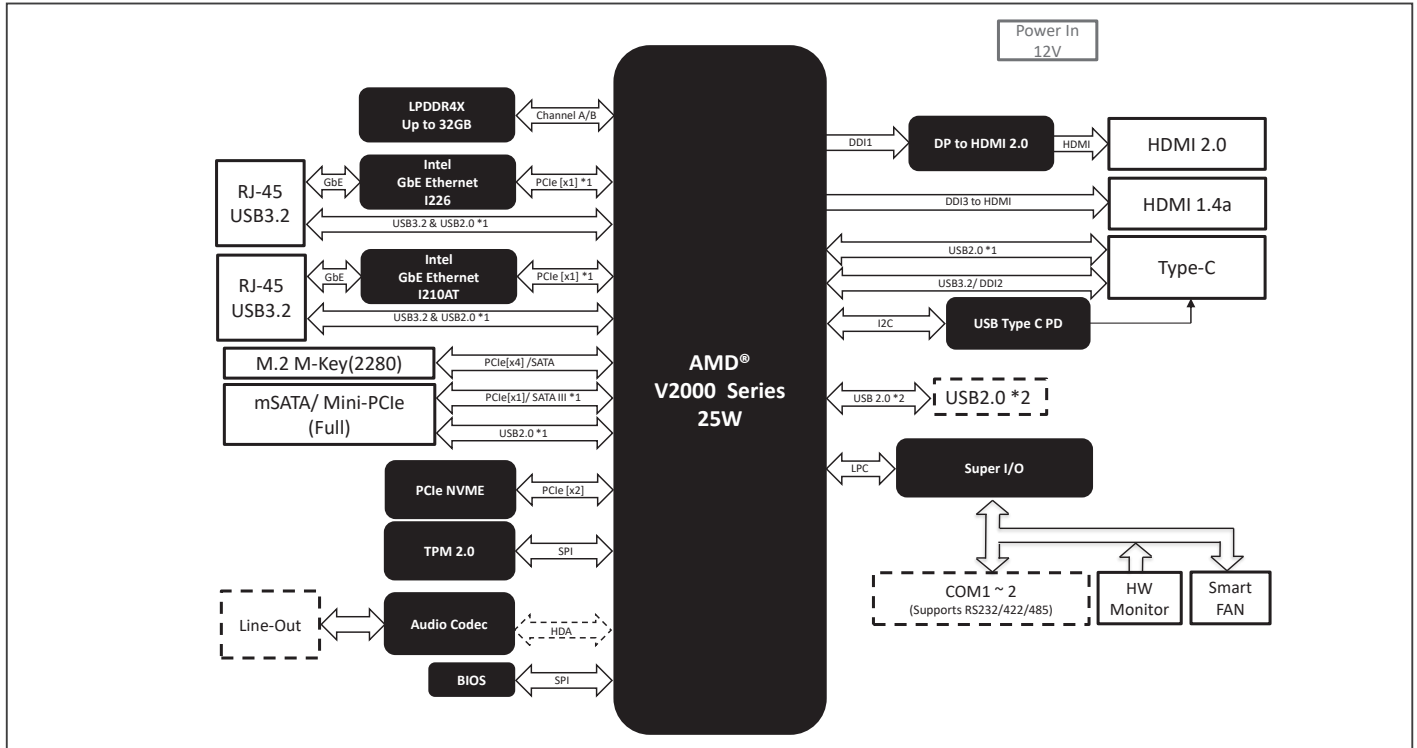
Packing List

- PICO-V2K4-SEMI

Optional Accessories

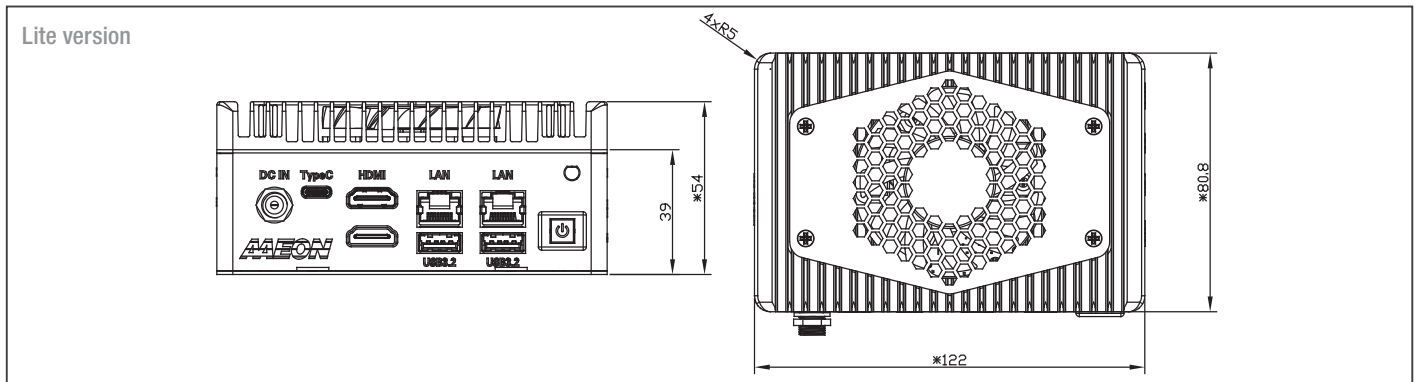
Part Number	Description	Qty.
1702031802	POWER CORD.3P-125V 10A 180D.1.8M.(US Type)	1
1702031803	POWER CORD.3P-250V 10A 180D.1.8M.VDE. (Europe Type)	1
170203180E	Power cord.3P.125V/7A.1.8M.(Japan type)	1
1255201200	Power Adapter 12W/10A 120W FSP120-AHAN3 w/o Lock	1
1255X00063	AC/DC Adapter.100-240V.150W.12V/12.5A.AC C14 DC JACK W/ Lock 180D.DELTA.DPS-150AB-15 J	1
170X000568	COM Cable.2ports.150mm	1
170X000576	USB2.0 Cable.2ports.100mm	1
170X000482	Audio cable.50mm	1
PICO-V2K4-SEMI-VESA1	VESA bracket kit	1
PICO-V2K4-SEMI-WMT1	Wallmount bracket kit	1
PICO-V2K4-SEMI-DIN1	Din rail kit	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-SEMI-A11-S001	V2516	8GB	Type C to DP x 1 HDMI x 2	Onboard NVME SSD 64GB x 1	GbE x 1 2.5GbE x 1	USB 3.2 Gen 2 x 2 USB 3.2 Gen 2 Type C x 1	—	M.2 2280 M-key x 1 mini-PCle(Full) x 1	+12V (ATX)	0~50°C	—	SMBUS x 1 (I2C Optional) TPM2.0
PICO-V2K4-SEMI-A11-S002	V2718	16GB	Type C to DP x 1 HDMI x 2	Onboard NVME SSD 64GB x 1	GbE x 1 2.5GbE x 1	USB 3.2 Gen 2 x 2 USB 3.2 Gen 2 Type C x 1	—	M.2 2280 M-key x 1 mini-PCle(Full) x 1	+12V (ATX)	0~50°C	—	SMBUS x 1 (I2C Optional) TPM2.0
PICO-V2K4-SEMI-A11-S003	V2718	32GB	Type C to DP x 1 HDMI x 2	Onboard NVME SSD 64GB x 1	GbE x 1 2.5GbE x 1	USB 3.2 Gen 2 x 2 USB 3.2 Gen 2 Type C x 1	—	M.2 2280 M-key x 1 mini-PCle(Full) x 1	+12V (ATX)	0~50°C	—	SMBUS x 1 (I2C Optional) TPM2.0