

AECX-V1K1/R1K1

AMD® Ryzen™ Embedded V1000/R1000 Series APU based 3.5" Embedded Board with 4 DP (HDMI)/LVDS, SATA III, COM, 5 USB, Intel® GbE LAN.



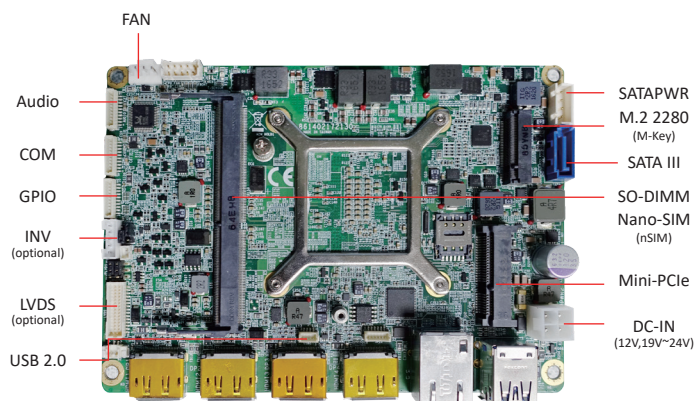
Quad Display



HIGH Performance



Wide DC-in



Key Features

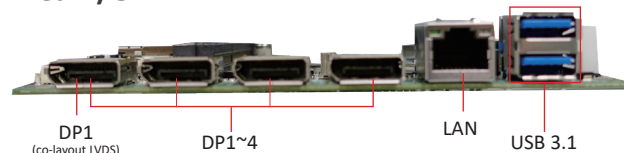
- AMD® Ryzen™ Embedded V1000/R1000 series APU onboard
- High Performance “Zen” Core CPU + “VEGA” Graphics GPU
- Two 260-pin SO-DIMMs up to 32GB DDR4 3200MT/s SDRAM
- Multi-Display : 4 DP (HDMI) / LVDS (optional)
- One Intel® Gigabit Ethernet port
- 1 Mini PCIe (full-size, w/ Nano-SIM), 1 M.2 M-key 2280 (SSD) expansion slots
- 1 SATA III, 2 USB 3.1 and 3 USB 2.0 ports
- Supports 4K/2K Resolution Display
- DC-IN 12V or 19V ~ 24V, EuP/ErP 2013 Ready

Product Specification

System Processor/Chipset	
Processor	AMD® Ryzen™ Embedded V1000/R1000 series APU onboard V1807B (3.35GHz/3.8GHz, QC, 11CU, 35-54W) V1756B (3.25GHz/3.6GHz, QC, 8CU, 35-54W) V1605B (2.0GHz/3.6GHz, QC, 8CU, 12-25W) R1606G (2.6GHz/3.5GHz, DC, 3CU, 12-25W) R1505G (2.4GHz/3.3GHz, DC, 3CU, 12-25W) R1305G (1.5GHz/2.8GHz, DC, 3CU, 8-10W)
Chipset	AMD® Ryzen™ Embedded V1000 APU integrated
BIOS	AMI® UEFI Flash ROM
Memory	
Technology	DDR4 SDRAM support ECC, up to 3200 MT/s
Max. capacity	Up to 32GB
Socket	2 x 260-pin SO-DIMMs
Display	
Graphics	AMD® VEGA graphics integrated
Display interface	4 x DP v1.4 (co-layout HDMI v1.4, 1 w/ co-layout LVDS) 1 x LVDS 2-channel 18/24-bit (co-layout DP1, optional)
Multi-display	Up to four independent displays
Resolution	DP: Up to 3840 x 2160 @ 60Hz (max.) HDMI: Up to 3840 x 2160 @ 30Hz (max.) LVDS: Up to 1920 x 1200 @ 60Hz (max.)
Ethernet	
Interface	10/100/1000 Mbps
Controller	Intel® I211 GbE
Connector	1 x RJ45 (rear I/O)
Audio	
Interface	Line-in, Line-out, Mic-in
CODEC	Realtek® ALC662 HD Audio Codec
Expansion Slot	
Mini-PCIe	1 x Mini-PCIe (Full-size, w/ Nano-SIM)
M.2	1 x M.2 M-Key 2280 (SSD)
SATA	
Max. Data Rate	6.0Gb/s
Port	1 x SATA III
I/O	
Audio	Line-in, Line-out, Mic-in (box-header)
COM	1 x RS-232/422/485 (box-header) 1 x UART (combo GPIO, box-header)
FAN	1 x CPUFAN 4-pin PWM (wafer-header)
GPIO	1 x 8-bit Programmable GPIO (combo UART, box-header)
SMBus	1 x SMBus (box-header)
USB	2 x USB 3.1 (rear I/O), 3 x USB 2.0 (box-header)
HDMI/DP/LVDS	4 x DP (rear I/O, co-layout HDMI, optional) 1 x LVDS (box-header, co-layout DP1, optional)
Power Requirement	
Power connector	ATX 2x2-pin for Standard or ATX 2x2-Pin R/A (optional)

Power type	DC-IN 12V or DC-IN 19V~24V
Power mode	AT / ATX (by jumper selection)
Watchdog Timer	
Interval	Programmable 1 ~ 255 sec/min
Output	System reset
Environment	
Operating temperature	0°C ~ 60°C (32°F ~ 140°F) -20°C ~ 70°C (-4°F ~ 158°F) optional -40°C ~ 70°C (-40°F ~ 158°F) optional
Storage temperature	-40°C ~ 80°C (-40°F ~ 176°F)
Relative humidity	0% ~ 95% (non-condensing)
Form Factor	
Dimensions (L x W)	3.5" Embedded Board 146mm x 102mm (5.75" x 4.01")

Rear I/O



Dimensions



Ordering Information

Part Number	Description
AECX-V1K1-1807	3.5",AMD V1000 1807B 54W.4DP/LVDS,SATA/COM/5USB/LAN.DC(12V,18V~24V)/ATX4P,SAMPLE
AECX-V1K1-1756	3.5",AMD V1000 1756B 54W.4HDMI/LVDS,SATA/COM/5USB/LAN.DC(12V,18V~24V)/ATX4P,SAMPLE
AECX-V1K1-1605	3.5",AMD V1000 1605B 25W.4DP/LVDS,SATA/COM/5USB/LAN.DC(12V,18V~24V)/ATX4P,SAMPLE
AECX-R1K1-1606	3.5",AMD R1000 1606G 25W.3DP/LVDS,SATA/COM/5USB/LAN.DC(12V,18V~24V)/ATX4P,SAMPLE
AECX-R1K1-1505	3.5",AMD R1000 1505G 25W.3HDMI/LVDS,SATA/COM/5USB/LAN.DC(12V,18V~24V)/ATX4P,SAMPLE
AECX-R1-1305	3.5",AMD R1000 1305G 10W.2DP/LVDS,SATA/COM/5USB/LAN.DC(12V,18V~24V)/ATX4P,SAMPLE

Optional Accessories

Part Number	Description
TBD	I/O Shield
VK00000700A9	SATA cable
VK00000700A9	SATA Power cable
473800000101	Cooler w/FAN for AMD FP5

*All specifications and photos are subject to change without prior notice