DATASHEET

AIV1605

AMD[®] Ryzen[™] Quad Core Processor-V1605B Based Mini PC with 4 DisplayPort



Features

- ■CPU: Ryzen[™] Embedded V1605B
- Memory: Dual channel SO-DIMM DDR4 (max 32 GB)
- Display: Up to 4 DP displays
- Ethernet: Support dual 1GbE ethernet cards
- Rich I/O Ports: 4xDP, 2xUSB3.0, 6xUSB2.0, 2xLAN, Mic-in, Line-out
- Power: 12V DC input
- Security: TPM 2.0 supported (optional)





Introduction

The new Maxtang Mini PC AIV1605 is based on the AMD Ryzen[™] V1605B (quad-core) and provides a complete PC platform with high performance. Coming from the embedded V1000 processor family family, this CPU combines the incredible performance of the pioneering "Zen" architecture and "Vega" GPU in a single chip with thermal design power (TDP) as low as 15W. Four independent 4K+ DP ports are supported in addition to dual-channel DDR4 SO-DIMM memory, dual 1-Gigabit Ethernet controllers, and M.2 expansion for Wi-Fi and SSD modules. The TPM module for added security is also optional. The AIV1605 also has rich interfaces as 6 x USB2.0, 2 x USB3.0, 1 x Mic-in, 1 x Line-out and 2 x LAN, catering to most requirements in the market.

The 4xDP interfaces can support the Eyefinity technology, including tiled display SLS (4x1,3x1,2x1etc..) & mixed Tiled display (2x2 etc...). Thus the AIV1605 is an ideal solution for applications requiring high-resolution and multi-display products, like electronic gaming machines, medical imaging, interactive digital signage, thin clients, or PDS terminals. The AIV1605 can also act as a high speed communications front-end like a mini-server.



H/W Monitor Watchdog

I/O Interfaces



Technical Specifications

Processor	CPU	V1605B (quad-core)
	Max boost clock	3.6 GHz
	Base clock	2.0 GHz
	Cache	2MB L2
	BIOS	AMI 64MB SPI
Memory	Туре	2 x SO-DIMM DDR4
	Max capacity	32GB
Display	GPU	AMD Radeon Vega 8 Graphics
	Display Port	4 x DP1.3, resolution up to 7680 x4320 (for 2x2 display)
	Eyefinity	Suported
	Eyefinity category	Tiled display SLS (4x1,3x1,2x1etc) & Mixed Tiled display (2x2 etc)
Ethernet	Speed	1 GbE
	Controller	RTL8111H
	Interface	RJ-45
Audio	Audio codec	Realtek HD ALC662 (Line-out, Mic-in)
	Interface	Line-out, mic-in, audio header, amplifier header
Hardware		CPU system temperature, onboard voltage, watchdog
Wireless connectivity	M.2	1xM.2 for Wi-Fi
Storage	M.2	1xM.2 for 4G/2280 SSD
	SATA	1xSATA (2.5inch)
External I/O	DP	4
	USB	6 x USB2.0 + 2 x USB3.0
	LAN	2
	Audio	1 x line-out + 1 x mic-in
	DC-in	1
Security	TPM	Onboard, optional
Dimension	Weight	TBD
	Size	182 mm x 180 mm x 37 mm
Power	Standard port	12V DC-in
Temperature	Operating Temp.	-20°C-60°C
	Storage Temp.	-40°C-80°C
Operating System		Windows 10 64bit, Linux 64bit

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

Block Diagram



Mounting Bracket

There are two mounting options available to fit different installation scinarios. By default only one type of mounting bracket will be included in the accessories of each device.







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