

AVerAI EX731-AAH2 Fan Box PC



**PREFERRED
SOLUTION
PROVIDER**

Fully support NVIDIA® Jetson™ TX1/TX2 with 2x HDMI 4Kp30 video capturing



Features

- Fully support NVIDIA® Jetson™ TX1/TX2
- 2x HDMI inputs for 4Kp30 video capturing
- 1x GbE, 1x USB 3.0, 2x 4Kp60 HDMI outputs
- 1x micro USB2.0, 1x internal micro SD
- 40-pin with 1x 3.3V UART0, 1x SPI, 1x I2S, 1x I2C, 7x GPIO
- Operating temperature: -10 °C ~ 70 °C
- Compact chassis with fan
- Chassis dimension: W:117.2mm x L:76.8mm x H:94.1mm

Specifications

Product Name	Family Name	EX731-AAH2	
Product Type	Fanless/Fan/Carrier Board	Fan Box PC	
Core	System on Module (SoM)	NVIDIA® Jetson™ TX1	NVIDIA® Jetson™ TX2
Front I/O	HDMI 2.0 Output	1x HDMI type A maximum resolution: 4096x2160 at 60Hz	2x HDMI type A maximum resolution: 3840x2160 at 60Hz
	HDMI 1.4b input	2x 4Kp30 videos capturing	
	USB 2.0	1x Micro-B OTG for debug console	
	USB 3.0	1x Type-A	
	Ethernet	1x GbE RJ-45	
	Micro SD	1x internal (Support for SD 4.0 specification without UHS-II)	
	SATA Rev. 3.1	1x	
	Expansion Header	40-pin (2x 20 Header) with 1x 3.3V UART0, 1x SPI, 1x I2S, 1x I2C, 7x GPIO	
	Power Button	1x with a RGB 3 color LED	
	Recovery Button	1x with a RGB 3 color LED	
Back I/O	WiFi	IEEE 802.11ac 2x2 (Optional)	IEEE 802.11a/b/g/n/ac dual-band 2x2 MIMO (Optional)
	WiFi Antenna	2x SMA female connector (Optional)	
	Bluetooth	4.0 (Optional)	4.1 (Optional)
Internal PCIe Sockets	M.2 M key 2280	2x M.2 support 2x CN311-HN for 2x HDMI 4Kp30 videos capturing	
MCU	MCU Power Function	Automatically turn on system when the power input is connected	
	Watch Dog	RTC battery life monitor	
Power	Power Input	12V/5A	
	Operating Temperature	-10 °C ~ 70 °C	
Environment	Storage Temperature	-20 °C ~ 85 °C	
	Relative Humidity	40 °C @ 95%, Non-Condensing	
	Vibration During Operation	With Desk/Wall Mount: 3 Grms, IEC 60068-2-64, random vibration, 5 ~ 500 Hz, 1 hr/axis	
	Shock During Operation	30G, IEC60068-2-27, half sine, 11m duration	
Physical Characteristics	Chassis Dimension	W:117.2mm x L:76.8mm x H:94.1mm (W:144.8 mm with mounting ears)	
	Weight	1.03Kg	
	Thermal Solution	Chassis with fan module	
	Mounting	Desk/Wall/DIN-rail	
System on Module (SoM)	Operating System	Linux for Tegra (L4T) Filesystem: Ubuntu 16.04, Kernel version:4.4.38	
	SoM Name	NVIDIA® Jetson™ TX1	NVIDIA® Jetson™ TX2
	SoM Power Consumption	6.5 ~ 15W	7.5W (Max-Q) / 15W (Max-P)
	Memory	4GB 4ch x 16-bit LPDDR4 1600MHz	8GB 4ch x 32-bit LPDDR4 1866MHz
	GPU	Maxwell 256-core	Pascal 256-core
	FLOPS (fp16)	1T	2T
	CPU Complex	ARM® Cortex® -A57 MPCore (Quad-Core) Processor with NEON Technology.	NVIDIA Denver 2 Dual-core CPU ARM Cortex-A57 Quad-core CPU
	Maximum Operating Frequency	1.73GHz	1.12GHz
	Storage	16GB eMMC 5.1	32GB eMMC 5.1
	Video Encode	Maximum Throughput: 2160p30 (H.265) 2160p30 (H.264) 2160p30 (WEBM VP8)	Maximum Throughput: 2160p60 (H.265) 2160p60 (H.264) 2160p30 (WEBM VP9)
Video Decode	Maximum Throughput: 2160p60 (H.265) 2160p60 (H.264) 2160p60 (WEBM VP9)	Maximum Throughput: 2x 2160p60 (H.265) 2x 2160p60 (H.264) 2160p60 (WEBM VP9)	
Regulation	EMC	(TBD) CE/FCC Class B, CCC, BSMI, VCCI	
	Safety	(TBD) CB, UL, CCC, BSMI	

Dimension

