AVerMedia

EX711-AA (Preliminary)

Tegra TX1 Carrier Board with Multiple Video Sources Support



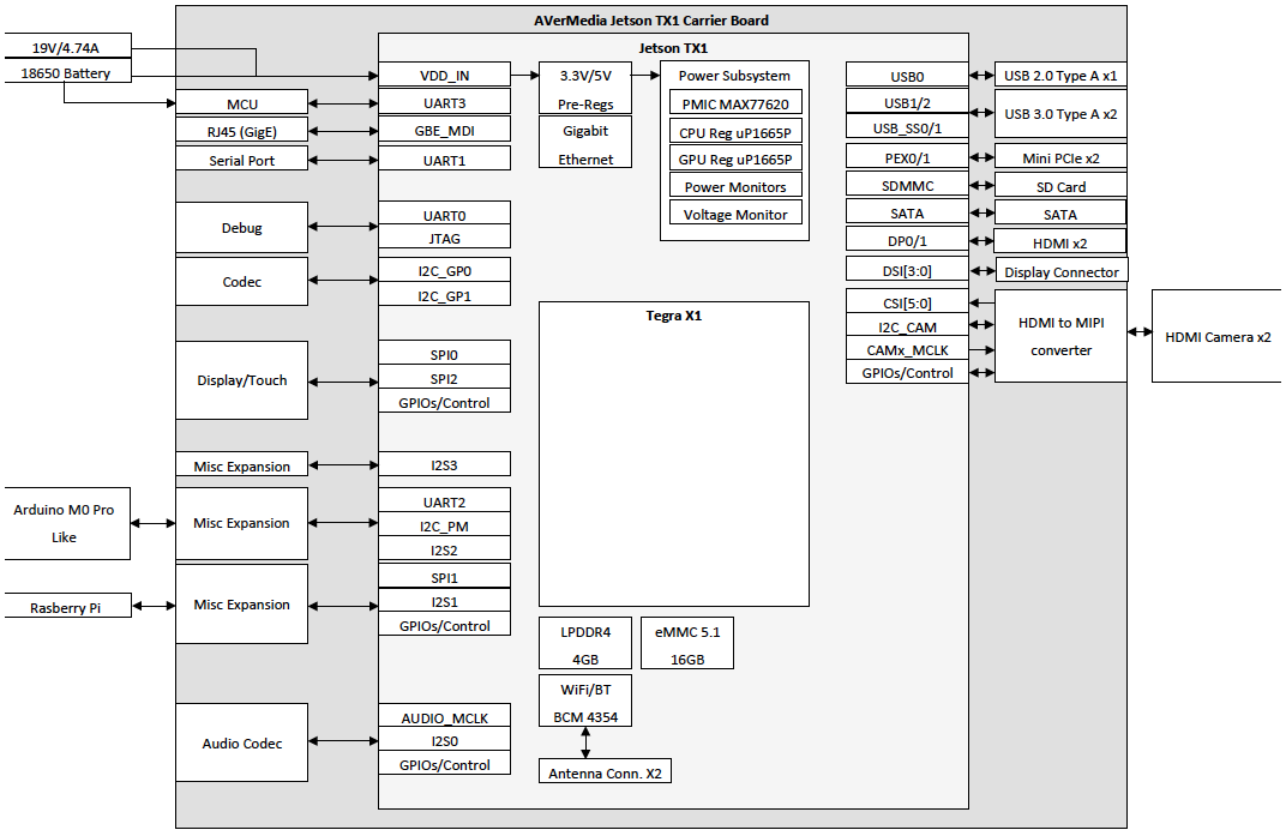
Features

- Operate with NVIDIA Tegra X1 module to build up a high performance Tegra X1 system
- On-board 2 full-height Mini PCIe slots to provide the expandability of connecting AVerMedia Mini-PCIe frame grabbers C353, CM313B, and C351 for audio/video capturing, encoding, and post processing
- Built-in 2 HDMI to MIPI converters and 2 USB 3.0
- Battery power, I^2S, Arduino interface, and Raspberry Pi support
- Design with Mini-ITX (170 mm x 170mm) form factors for flexible system configuration
- Suitable for applications of robotics, UAV, UGV, AOI, medical image, and other video-enabled equipment for automation, AI, and deep learning

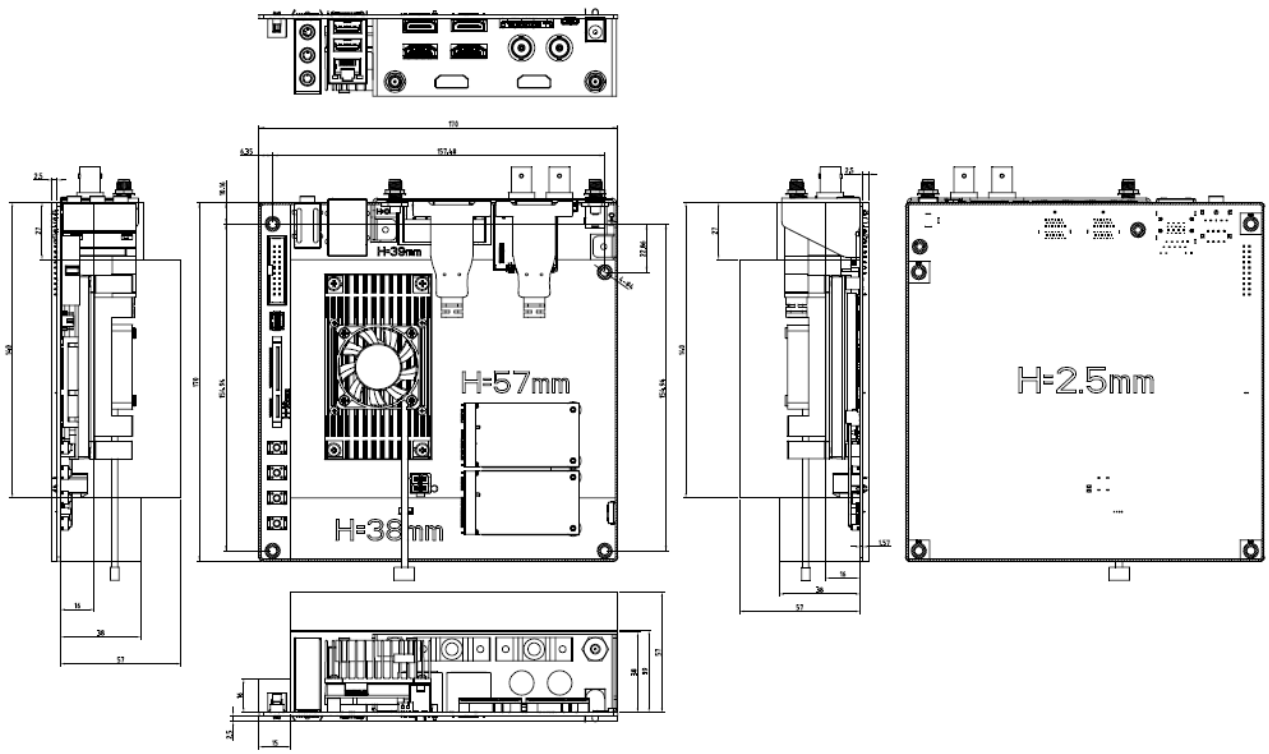
Specifications

Support Module	NVIDIA Tegra X1 Module
Video Interface	2x HDMI in Type A, 4096 x 2160 p24, 3840 x 2160 p30
Audio Interface	1x stereo Mic-in and Speaker-out (1x Realtek ALC5639)
Storage	1x SATA 3Gb/s and SATA Power, 1x SD card
LAN Port	1x RJ-45 for Gigabyte Ethernet
Buttons	Power on/off, Reset, Force Recovery
Multiple PCI Express and USB3.0	2x Full-height Mini-PCI Express and 2x USB3.0 Type A
USB2.0	1x USB2.0 Type A
Camera Connection Supported by AVerMedia frame grabber	HDMI, VGA, 3G-SDI, and Composite
Arduino	I2C and SPI
Other Interface	UART 0 (3.3V TTL) - debug port 6 pin (with RTS and CTS) UART 2 (3.3V TTL) - 4 pin 1x SPI (3.3V) - 9 pin (one SPI bus plus two select lines) 1x SPI-CanBus 1x I2C (3.3V) - 4 pin 1x 4-pin FAN connector JTAG header - 9 pin extra 40 pin connector 4x I^2S
Power Supply	+12VDC/5A
Battery Power	Support with power management
Operating Temperature	0°C ~ +55°C (standard version)
Operating Humidity	10% ~ 90% (RH)
Storage Temperature	-40°C ~ +125°C

Block Diagram



Dimensions



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Perspective View



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