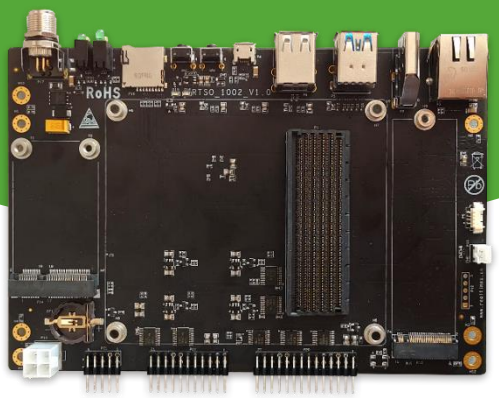
RTSO-1002 Carrier Board Datasheet

PN: RTSO-1002

Powered by NVIDIA Jetson AGX Xavier/AGX Xavier industrial/ AGX Orin/AGX Orin industry

Hardware Vertion: V1.1



RTSO-1002 is an industrial-grade carrier board for AGX Xavier/AGX Xavier industrial/AGX Orin/AGX Orin industry, with an operating temperature of -20℃—+85℃, low power consumption, high security level, and can meet various harsh conditions.

NVIDIA® Jetson AGX Xavier™/AGX Xavier industrial /AGX Orin/AGX Orin industry module is a processor suitable for machine deep learning launched by NVIDIA, with powerful computing power and small module area. It is mainly aimed at the fast-developing artificial intelligence market in recent years, such as unmanned aerial vehicles, automatic driving systems, etc., which have relatively broad application prospects.

RTSO-1002 carrier board with NVIDIA Jetson AGX Xavier /AGX Xavier industry/AGX Orin/AGX Orin industry module, driven by Realtimes RTS Linux4Tegra software support package, can form a power-on board system solution. Easy to integrate into the overall design of the project, rapid development.

Features

- Support NVIDIA Jetson AGX Xavier/AGX Xavier industry/AGX Orin/AGX Orin industry modules
- 4 USB ports, independent Gigabit Ethernet ports, and HDMI ports meet the requirements for basic functions of the system
- Hardened power port
- M. 2 key M port supports large-capacity and high-speed SSD storage expansion
- Mini-PCIe port for 4G or digital video capture card
- Four MIPI camera ports, supporting multi-channel video

Specifications

Features Interface

Type / Interface	RTSO-1002	
Core Module	AGX Xavier/ AGX Xavier industry	AGX Orin/AGX Orin industry
Pre-installed System	Ubuntu18.04 and Ubuntu20.04	
Display	1 x HDMI TYPE A interface	
USB	2 x USB TYPE A 3.1 ports GEN1, support usb2.0, usb3.1 signals, 1A output current;2 x USB TYPE A 2.0 ports, support usb2.0 signal, 1A output current;1 x Micro USB 2.0 interface, used as a slave interface;	1 x USB TYPE A 3.1 ports GEN1, support usb2.0, usb3.1 signals, 1A output current;3 x USB TYPE A 2.0 ports, support usb2.0 signal, 1A output current;1 x Micro USB 2.0 interface, used as a slave interface;
Network	1 x GbE（10/100/1000 BASE-T）	
SD	1 x Micro SD card slot	
SIM	1 x Micro SIM card slot	
PCIe	1 x Mini-PCIe interface	
M.2	1 x M.2 KEY M interface	
Camera interface	4 x MIPI interface（2LANE）	
Multi-function	3 x Multi -functional double -row pins interfaces (Support 2 x I2C, 1 x SPI, 3 x UART, 1 x I2S, 1 x	

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interface	USB 2.0, 5 x GPIO, 1 x PWM, 1 x MCLK, 2 x CAN)
RTC	1 x RTC battery holder
Fan interface	1 x Fan control interface
Button	1 x Reset Button；1 x Recovery Button

Weight

About 160g

Requirement

Type	RTSO-1002
Power Requirement	+9V---+20V
Temperature	-20~+85℃

Authentication

RoHS

Order List

Product Model	List
RTSO-1002	RTSO-1002 Carrier Board *1

Optional Products

Product Model	List
RTSV-6911i(Optional)	RTSV-6911i*1（8-channel mini PCIe D1 NTSC/PAL video input）
Pro Capture Mini SDI(Optional)	Pro Capture Mini SDI*1（Single-channel mini PCIe SDI video input）
Pro Capture Mini HDMI(Optional)	Pro Capture Mini HDMI*1（Single-channel mini PCIe HDMI video input）
Mini PCIe to M.2.M(Optional)	Mini PCIe to M.2 Key The M interface card*1
Eco Capture Dual SDI M.2(Optional)	Eco Capture Dual SDI M.2*1（Dual-channel M.2 SDI video input）
Eco Capture Quad SDI M.2(Optional)	Eco Capture Quad SDI M.2*1（Four-channel M.2 SDI video input）
ME909S-821(Optional)	Mini PCIe full network 4G module *1

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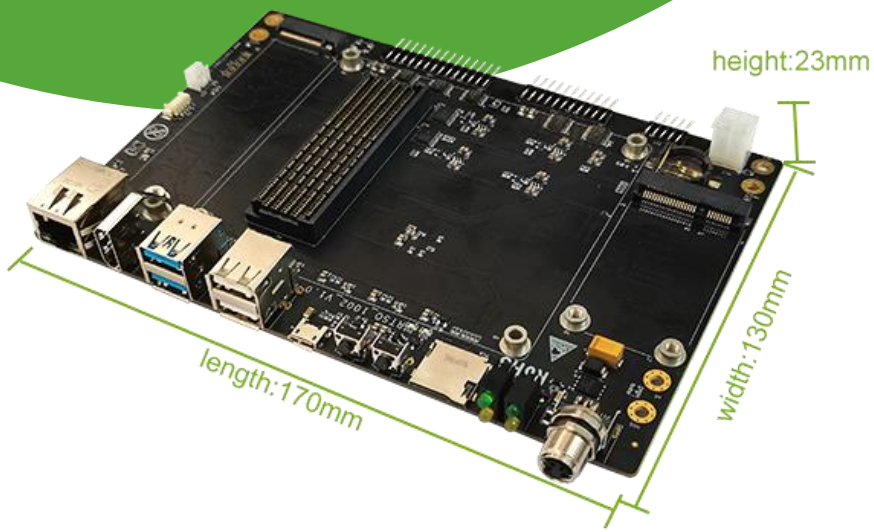
Size Drawing



Product Appearance

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