



# RTSO-6003/6003E Carrier Board Datasheet

PN: RTSO-6003/RTSO-6003E

Powered by NVIDIA Jetson Nano/Xavier NX/TX2 NX/Orin NX

Hardware Vertion: V1.1



The RTSO 6003/6003E board is an industrial-grade board for Nano/Xavier NX/TX2 NX/Orin NX. It has abundant interfaces, low power consumption, and high security level, which can meet various harsh conditions.

NVIDIA Jetson Nano/Xavier NX/TX2 NX/Orin NX module is a processor for machine deep learning launched by Nvidia. It has powerful computing power and the module area is only the size of a credit card. Mainly targeted at the rapid development of artificial intelligence market in recent years, such as unmanned aerial vehicle, automatic driving system, etc., has a relatively broad application prospect.

RTSO-6003/6003E board and NVIDIA Jetson Nano/Xavier NX/TX2 NX/Orin NX modules, under the Realtime RTS Linux4Tegra software support package drive, can form a power-on board system solution. Easy to integrate into the overall design of the project, rapid development.

## Features

- Compatible with NVIDIA Jetson Nano/Xavier NX/TX2 NX/Orin NX modules
- Rich I/O ports, high-speed expansion ports, and POE power supply ports
- 1 x Gigabit Ethernet (10/100/1000 BASE-T), 4 x Gigabit Ethernet (POE 802.3af/at PSE)
- M.2 key M port supports large-capacity and high-speed SSD storage expansion
- M.2 key E port for wifi/BT module access

## Product Specifications

### Features Interface

Interface \ Type	6003		6003E	
Core Module	Orin NX		Xavier NX/TX2 NX/Nano	
USB	1 x USB3.0 Type-A port, supporting USB3.0 signals, providing 1A output current; 1 x Micro USB2.0 OTG port, supporting USB host and USB device modes, providing 1A output current			
Display	1 x HDMI 2.0 interface, 1 x Mini HDMI 2.0 interface			
Network	1 x Gigabit Ethernet (10/100/1000 BASE-T); 4 x Gigabit Ethernet connectors (POE) (Four integrated network ports share one network adapter and one MAC address)			
POE interface	1 x POE power port (4 Integrated Network port)			
Communication	1 x Isolated communication port (485, CAN, 4 I/O ports) (with Nano core without CAN function)			
High speed connector	1 x High-speed connector (6003T1/6003T2 functional expansion board)			
M.2 interface	1 x M.2 KEY M 2280 interface, 1 x M.2 KEY E 2230 interface			
RTC interface	1 x RTC interface			
Multi-function interface	1 x Multi-function pin			
Storage	Without	1 x Micro SD	1 x 128GB eMMC	
FAN interface	1 x Fan control interface			

## Weight



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Hardware Version: V1.1

About 165g

## Requirement

Type	6003	6003E
Power Requirement	+9~+20V	
Temperature	0~+70°C	

## Order List

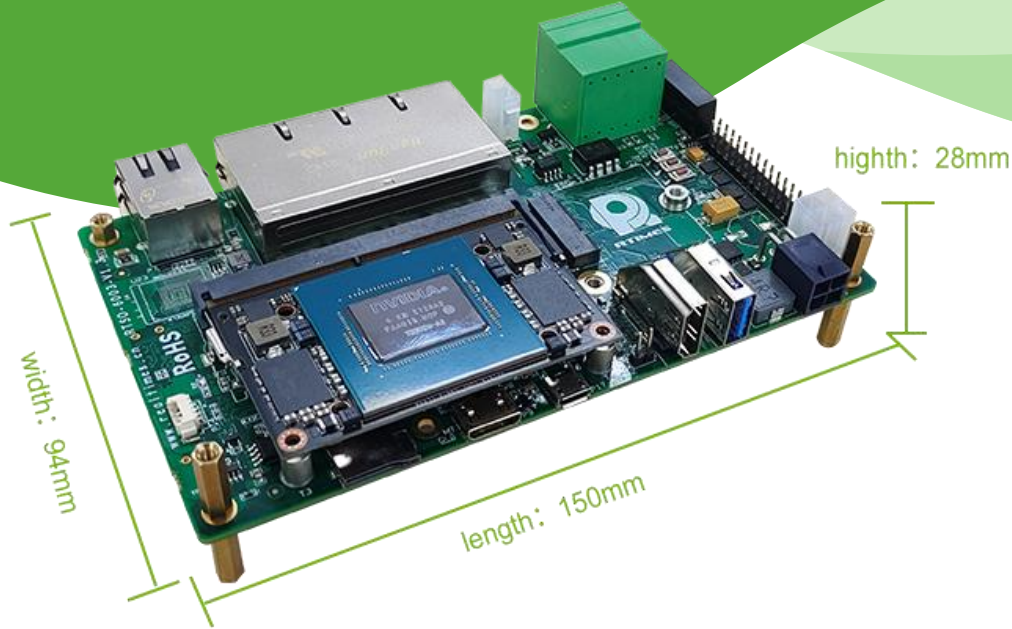
Product Model	List
RTSO-6003	RTSO-6003 Carrier Board *1
RTSO-6003E	RTSO-6003E Carrier Board *1

## Optional Products

Product Model	List
8265ac(Optional)	M.2 WIFI/ Bluetooth module *1 (including antenna)
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)
Eco Capture SDI 4K Plus M.2(Optional)	Eco Capture SDI 4K Plus M.2*1(Single channel M.2 4K SDI video input)



## Size Drawing



## Product Appearance

