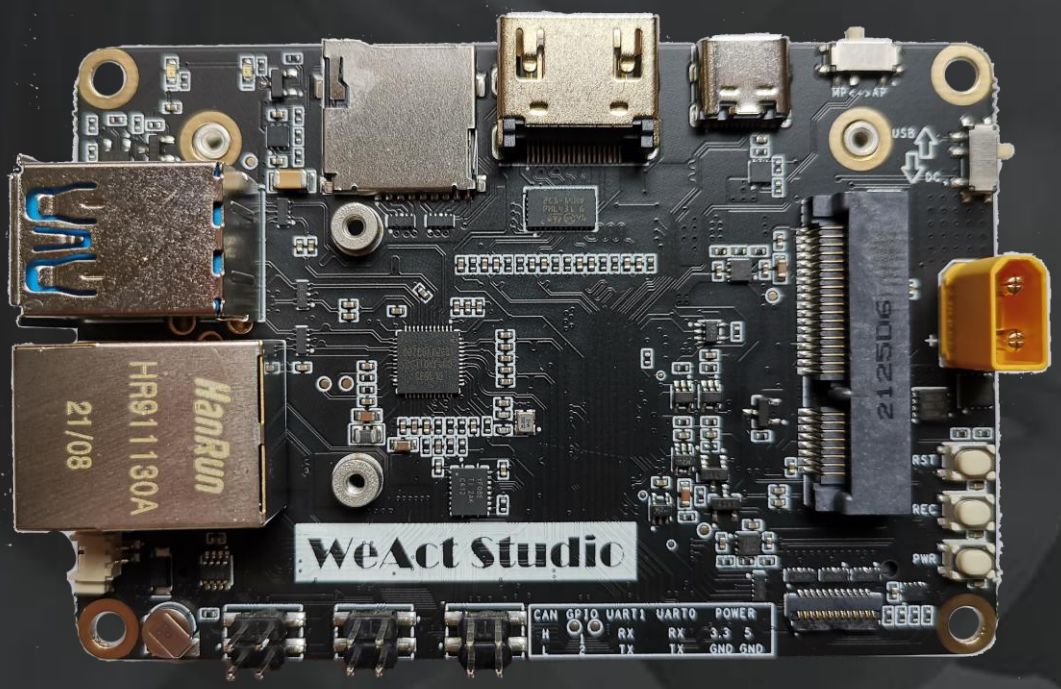

WeAct Studio

NANO&XAVIER TX2 NX CB

Manual

WeAct Studio

Catalog

REVISION HISTORY

Draft Date	Revision	Description	Hardware
2021.9.20	V1.0	1. Initial	A5

1. PARAMETERS

- This product is the carrier of NVIDIA Jetson nano & xaviernx & tx2nx series core board;
- The power on sequence of the full page power supply is designed in strict accordance with NVIDIA recommendations, with discharge circuit;
- Support DC xt30 (7-26v) [support 6S battery] and USB power supply, more power supply options;
- The power inlet is equipped with undervoltage, overvoltage, overcurrent and anti reverse connection protection, which makes it more safe to use;
- Support one Gigabit adaptive network port for network debugging, data communication, etc;
- Support 2-way USB3.0 for data transmission, output by usb3.1 hub and share usb3.1 bandwidth;
- Support 3 channels of USB2.0, of which 1 channel of OTG is used for system burning and data transmission, and the other 2 channels are host for data transmission;
- Support 1 channel HDMI (1080p) for screen display;
- Support 1-way mircosd card for external TF card and data storage (not supported by nano SD version);
- Support 1-channel can, 2-channel UART, 2-channel IO and other interfaces to provide more convenient data transmission;
- Support 1-way minipcie interface, which can be connected to wireless network card or 4G network card to connect to the Internet;
- Support 2-channel Mipi CSI camera interface, which can collect binocular camera data at the same time for binocular recognition;
- You can choose to press the button to start or power on automatically to meet more application scenarios;

- All interfaces are equipped with ESD protection to prevent damage to the carrier plate caused by static electricity;
- The small carrier plate has compact structure, and the size is only 60mm * 90mm;
- Regularly update the device trees of different versions to be compatible with different Tegra kernel versions;

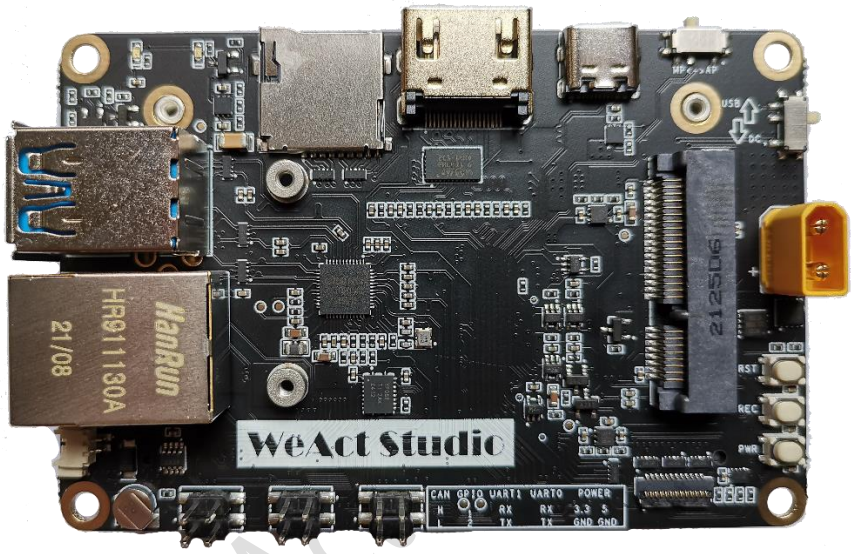

Figure 1 Carrier Board Top

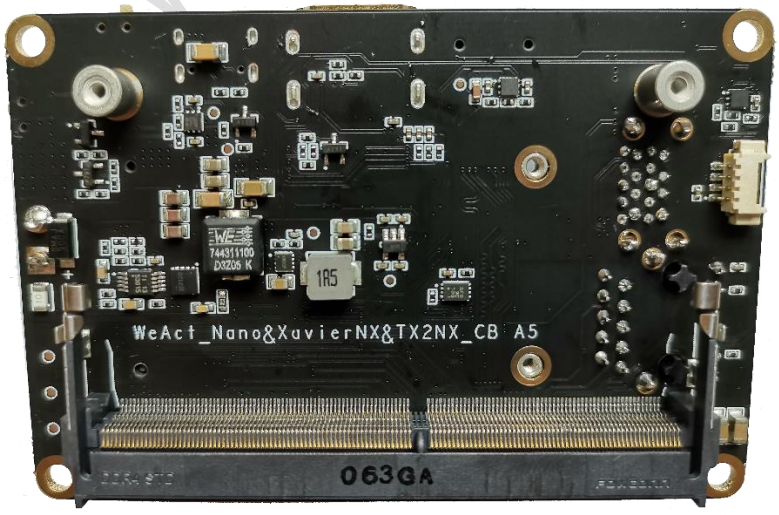

Figure 2 Carrier Board Bottom

2. APPLICATION SCENARIO

√ Deep Learning

√ Machine Vision

√ Laboratory

√ Robot Competition

√ UAV

√ Driverless

√ AGV Navigation

3. HARDWARE

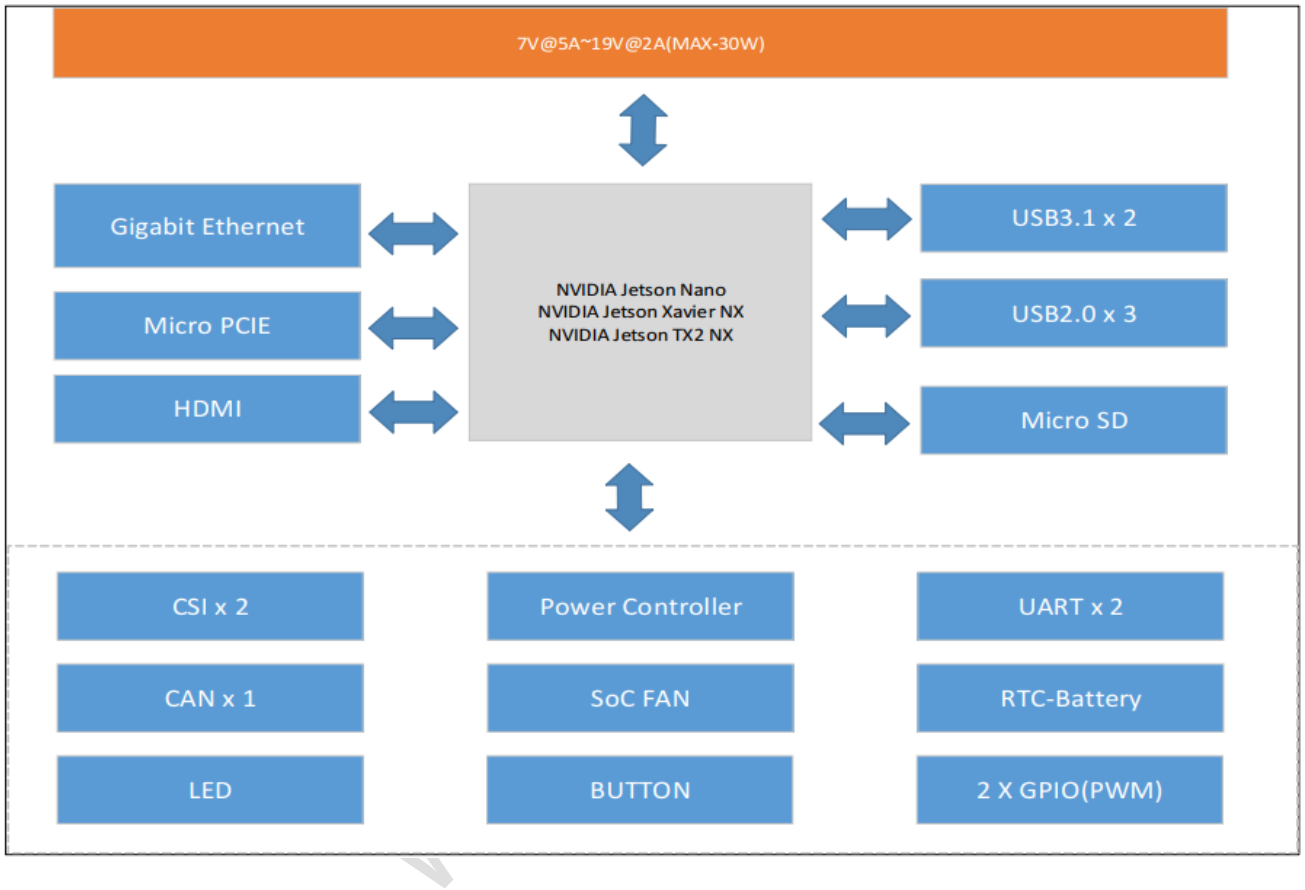

Figure 3 Carrier Board Hardware

4. HARDWARE RESOURCE DIAGRAM

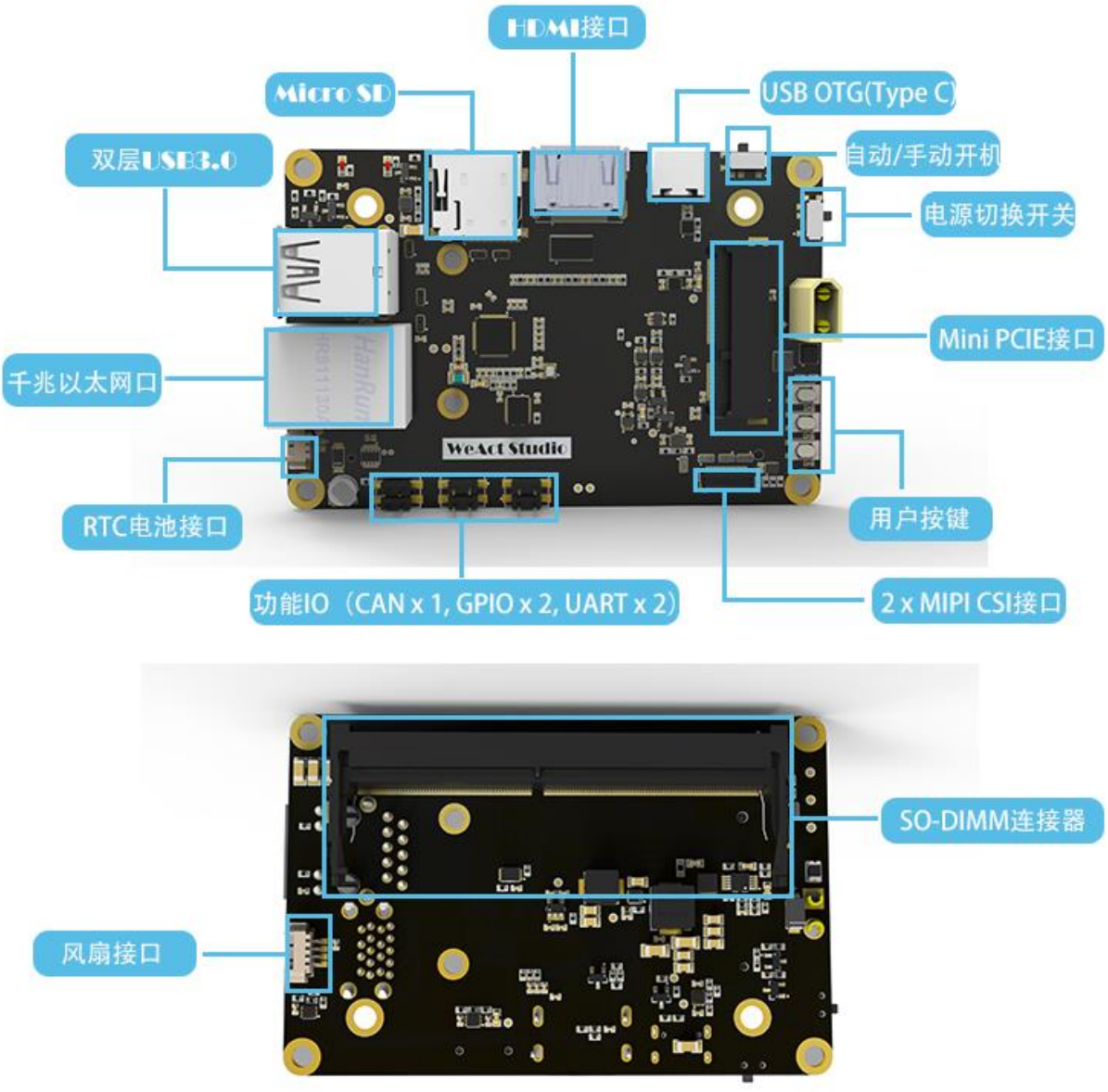

Figure 4

5. HARDWARE PARAMETERS

KEY	1 x power on button 1 x Recovery button 1 x Reset button
LED	1 x power LED(Red) 1 x system status LED(Green)
SD	1 x Mirco SD
USB	1 x USB3.0*2 Double 1 x USB2,0 OTG TypeC 2 x USB2.0 HOST
CSI	2 x MIPI CSI
PCIE	1 x Mini PCIE
HDMI	HDMI Type-A
Ethernet	1 x 1000M RJ45
CAN	1，1 x 2P HDR
UART	2，2 x 2P HDR
GPIO	2，1 x 2P HDR
FAN	1 x TX1.25
Auto Power On	1 x Switch
POWER	1 x XT30 1 x Switch
RTC	1 x SuperCap
	1 x RTC

6. ELECTRICAL CHARACTERISTICS

	Min	Typical	Max
Temperature	0℃	/	70℃
Voltage	7V	12V	27V

7. SIZE

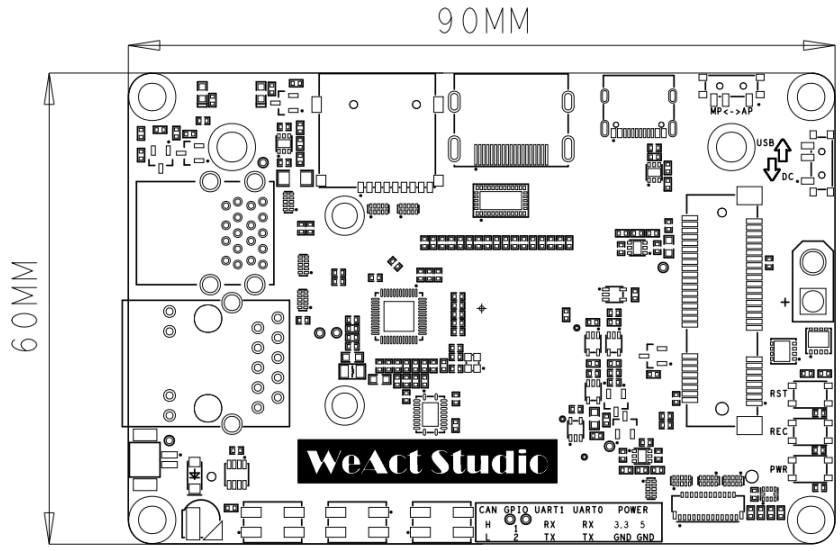

Figure 6 Top

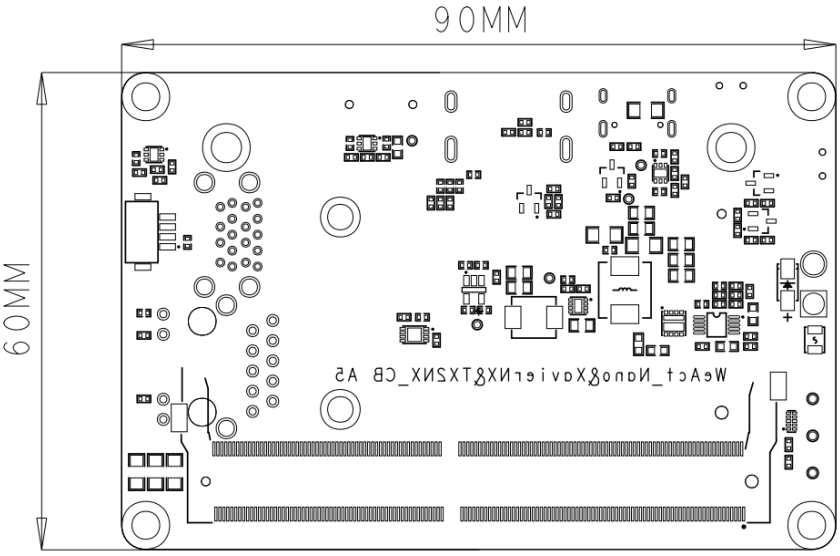

Figure 7 Bottom