ARM6000-CXXX-C5-3399-T

V1.1

Industrial Panel Computer

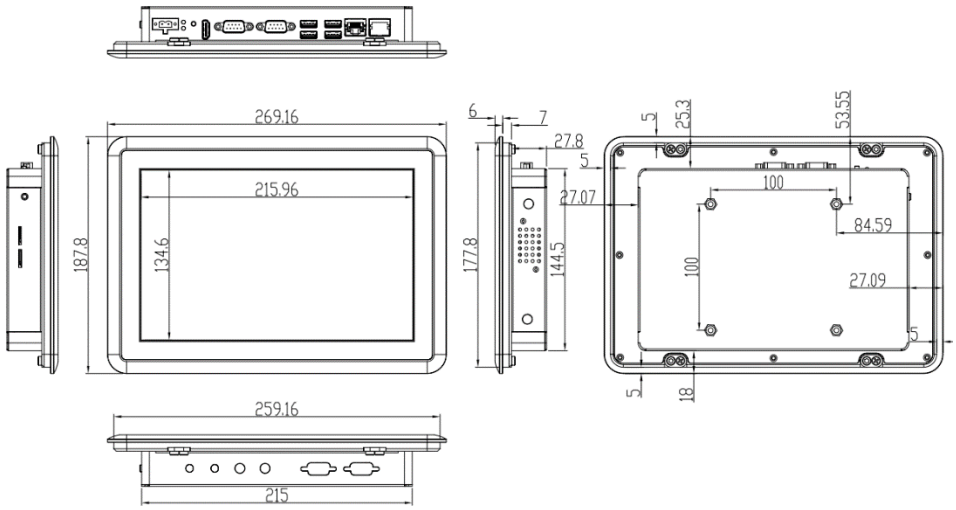
- Rockchip RK3399
- Rich I / O interfaces
- Powerful system customization function

Specifications :

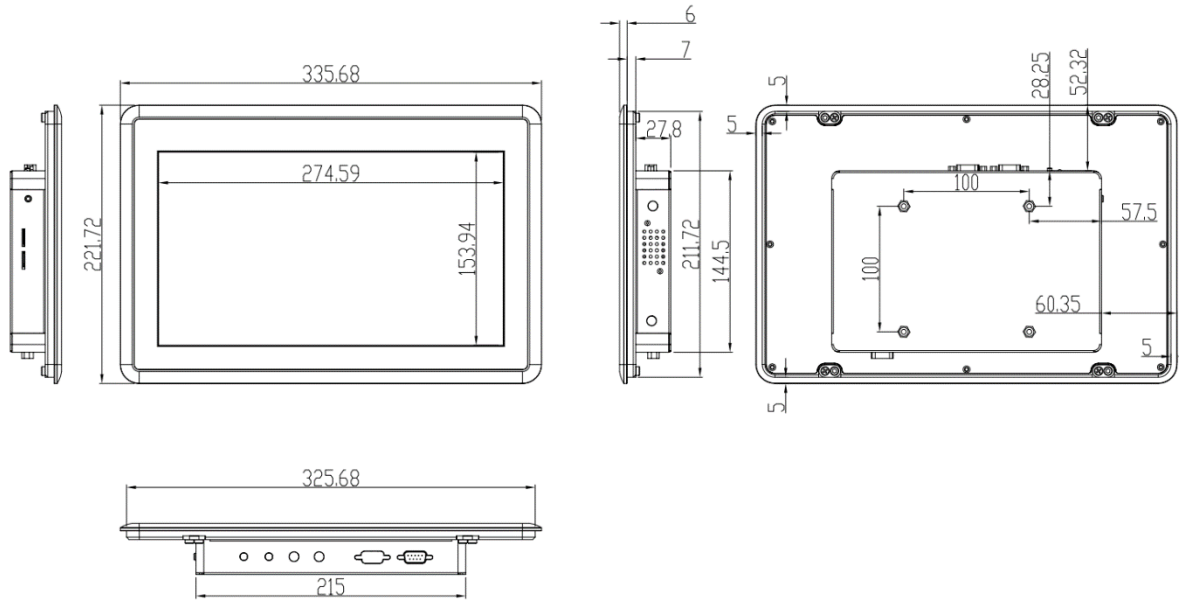
CPU	Provides CPU	Rockchip RK3399 6-core processor, 2 * A72 (up to 1.8GHz) + 4 * A53 (up to 1.4GHz)			
	GPU	Mail-T860 GPU MP4 four core GPU, supports OpenGL ES1.1/2.0/3.0/3.1, OpenVG1.1, OpenCL, DX11,			
Memory	Type capacity	Onborad DDR4 4GB			
Storage	eMMC	Onborad eMMC 16GB			
	TF	1*TF，Max Support 128GB			
I/O	Ethernet	1 * 10/100/1000Mbps RJ-45 Ethernet Interface 1 * 10/100/1000Mbps RJ-45 Ethernet Interface （Reserved）			
		On board WiFi, support 2.4G WiFi, support Wi Fi 802.11b/g/n protocol, Support Bluetooth 5.0			
	Audio	2 * 3.5 phonejack speaker interface (8Ω,6W) 1* 4Ω/1.5W Inner Speaker (Reserved) 1*MIC IN （optiona）			
	USB	3*USB2.0 ， 1*USB3.0			
	MiniPCIE	Support 4G LTE4 / 5G module ((Reserved)			
	COM	4*RS232 (DB9) , ttyXRUSB1~ttyXRUSB4 ; COM1/2 can set RS485, COM1 default RS485 , COM2 default RS232；COM4 can set TTL , default RS232			
	Display	1×HDMI , Support 4K 60Hz display and HDCP 1.4 / 2.2			
	OTG	1*USB3.0（USB-A)			
	Key	1*Return			
Physical	Product size	10.1″	12.5″	15.6″	21.45″
	Dimensions（W x H x D）	269.16mm x 187.8mm x 40.8mm	335.68mm x 221.72mmmm x 40.8mm	400.2mm x 257.2 x 40.8mm	548.4 mm x 340.3mm x 51mm
	Drill Hole Size (W x H)	261.16mm x 179.8mm	327.68mm x 213.72mm	392.2mm x 249.2mm	540.4mm x 332.3mm
	Installation mode	1.17kg	1.7kg	2.0kg	5.88kg
	NW	10.1″	12.5″	15.6″	21.45″
OS	Operating system	Android 7.1.2、ubuntu 18.04			
Power Supply	Input voltage	DC 12V~24V			
	Maximum Power	20 Watt	15 Watt	15 Watt	30 Watt
LCD	LCD Size	10.1″ TFT-LCD	12.5″ TFT-LCD	15.6″ a-SI TFT-LCD	21.45″ TFT-LCD
	Resolution	1280 x 800	1366 x 768	1920 x1080	1920 x1080
	Support Color	16.7MB	16.7MB	16.7MB	16.7MB
	Active Area (W x H)	215.96mm x 134.60mm	274.59mm x 153.94mm	343.16mm x 192.59mm	477.66mm x 259.28mm
	Backlight	LED	LED	LED	LED
	Backlight MTBF	30000hrs	25000hrs	15000hrs	30000hrs
	Pixel Pitch(H x V)	0.1695 ×0.1695	0.2018 ×0.2018	0.17925 × 0.17925	0.0831 × 0.241
	Luminance	350cd/㎡	300 cd/㎡	250 cd/㎡	250 cd/㎡
	Contrast Ratio	800:1	800:1	800:1	3000:1
	Viewing Angle	(L) 85/(R)85/ (T) 85/(B)85	(L) 85/(R)85/ (T) 85/(B)85	（L） 85/(R)85/ （T） 85/(B)85	(L) 89/(R)89/ (T) 89/(B)89
Touchscreen	Touh Type	Multipoint Capacitive Touch Screen			
	Transmittance	>75%			
	Touch Interface	USB			
	Driver Support	Windows 7, Windows 8， Windows 10，Linux、Android			
	Detectable Touch Points	10 Points			
	Surface Hardness	Mohs' Number 7			
	Touch life	100 million times of touch			
Environmental	Product size	10.1″	12.5″	15.6″	21.45″
	Operating temperature	-20 ~ 60°C	0 ~ 60°C	0 ~ 60°C	-20 ~ 60°C
	Storage Temperature	-30 ~ 80℃ (-22~ 176℉)			
	Humidity	5~95% (no condensing)			
	Shake	SSD applied: 1.5 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis			
	Shock	SSD applied: 10 G, IEC 60068-2-64, Half-sine wave, 11ms duration			
	EMC	Class B			
	Water-proof	Front panel IP65			

Dimensions: Unit: mm

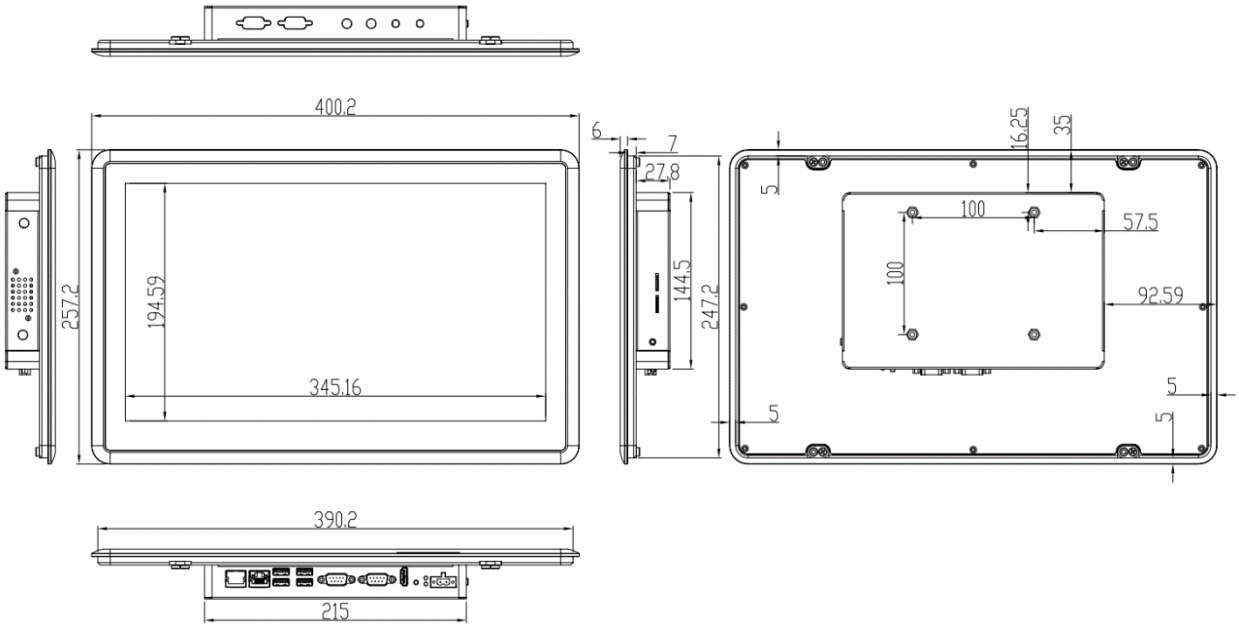
10.1" / ARM6000-C101-C5-3399-TH



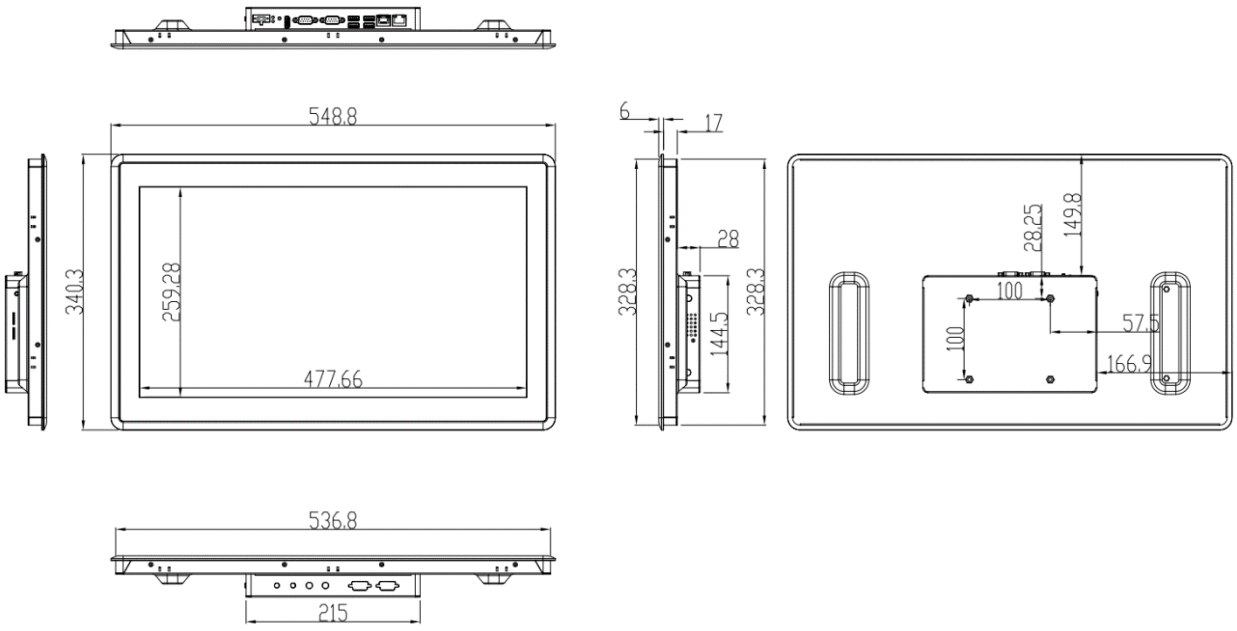
12.5" / ARM6000-C125-C5-3399-T



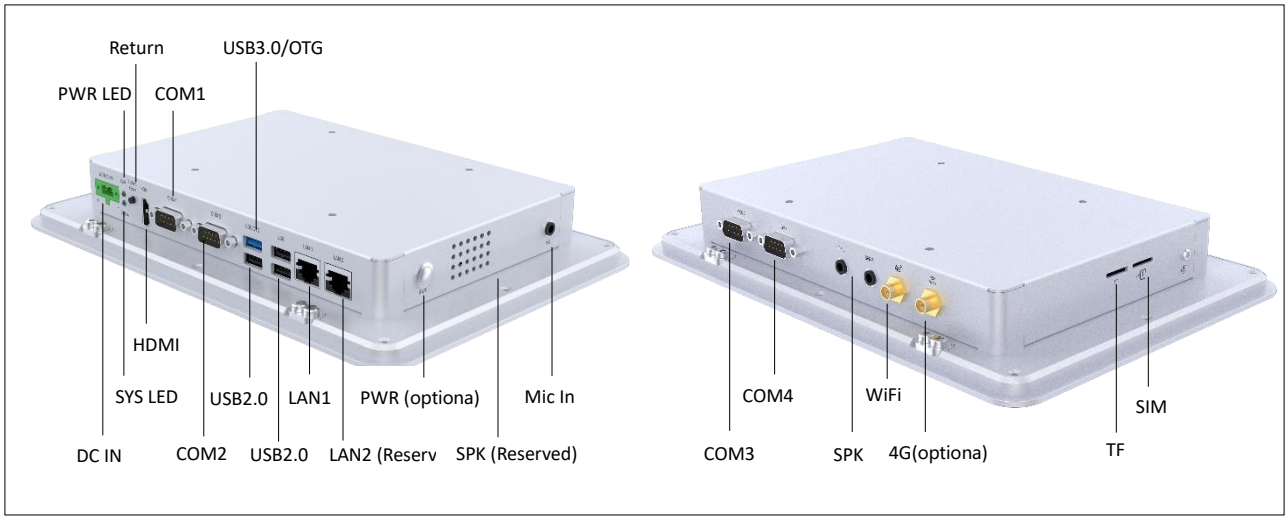
15.6″ / ARM6000-C156-C5-3399-T



21.45″ / ARM6000-C2145-C5-3399-T



Interface diagram:



Embedded installation steps:

Among them, 10.1-15.6 inch models are shown as follows:

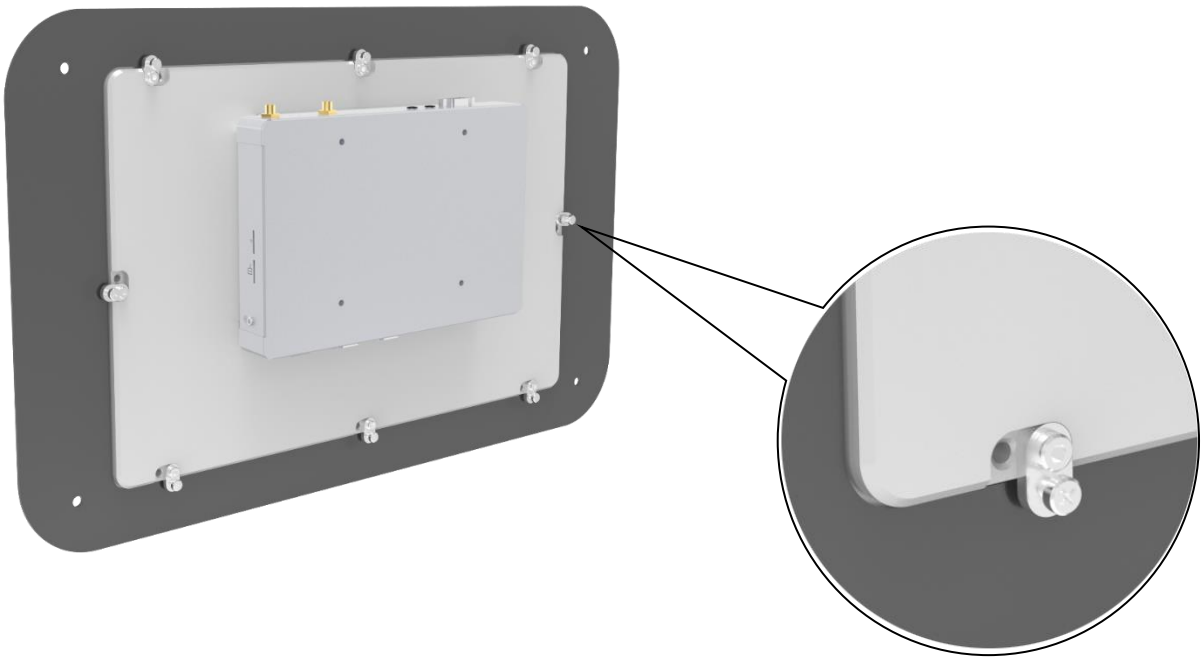
Step 1: select the location where the tablet needs to be installed on the panel.

Step 2: open the hole at the selected position according to the opening size of the tablet.

Step 3: slide the tablet through the opening until the frame is flush with the panel.

Step 4: loosen the hook cross screw along the edge of the panel, and rotate the elliptical hook card by 90 degrees.

Step 5: tighten the hook cross screws until all screw caps at the front are firmly fixed to the panel.



Ordering Information:

Number	Product Code	Description
6061500001	ARM6000-C101-C5-2G16-3399-TH	Rockchip RK3399 6-core /2G Memory/16G eMMC/1*TF/1*SIM/1*OTG/1*LAN/3*USB2.0 1*USB3.0/4*COM/HDMI /2* speaker /10.1" Capacitive touch /1280*800/DC IN 12V~24V
6061500016	ARM6000-C101-C5-4G16-3399-TH	Rockchip RK3399 6-core /4G Memory/16G eMMC/1*TF/1*SIM/1*OTG/1*LAN/3*USB2.0 1*USB3.0/4*COM/HDMI /2* speaker /10.1" Capacitive touch /1280*800/DC IN 12V~24V
6061500004	ARM6000-C125-C5-4G16-3399-T	Rockchip RK3399 6-core /2G Memory/16G eMMC/1*TF/1*SIM/1*OTG/1*LAN/3*USB2.0 1*USB3.0/4*COM/HDMI /2* speaker /12.5" Capacitive touch /1366*768/DC IN 12V~24V
6061500020	ARM6000-C125-C5-4G16-3399-T	Rockchip RK3399 6-core /4G Memory/16G eMMC/1*TF/1*SIM/1*OTG/1*LAN/3*USB2.0 1*USB3.0/4*COM/HDMI /2* speaker /12.5" Capacitive touch /1366*768/DC IN 12V~24V
6061500005	ARM6000-C156-C5-2G16-3399-T	Rockchip RK3399 6-core /2G Memory/16G eMMC/1*TF/1*SIM/1*OTG/1*LAN/3*USB2.0 1*USB3.0/4*COM/HDMI /2* speaker /15.6" Capacitive touch /1920*1080/DC IN 12V~24V
6061500021	ARM6000-C156-C5-4G16-3399-T	Rockchip RK3399 6-core /4G Memory/16G eMMC/1*TF/1*SIM/1*OTG/1*LAN/3*USB2.0 1*USB3.0/4*COM/HDMI /2* speaker /15.6" Capacitive touch /1920*1080/DC IN 12V~24V
6061500028	ARM6000-C2145-C5-2G16-3399-T	Rockchip RK3399 6-core /2G Memory/16G eMMC/1*TF/1*SIM/1*OTG/1*LAN/3*USB2.0 1*USB3.0/4*COM/HDMI /2* speaker/21.45" Capacitive touch/1920*1080/DC IN 12V~24V
6061500029	ARM6000-C2145-C5-4G16-3399-T	Rockchip RK3399 6-core /4G Memory/16G eMMC/1*TF/1*SIM/1*OTG/1*LAN/3*USB2.0 1*USB3.0/4*COM/HDMI /2* speaker/21.45" Capacitive touch/1920*1080/DC IN 12V~24V

Optional Equipment:

Number	Specifications
5109900013	Qiaowei KPL-040F-v1 40W adapter kit, DC out 12V, with national standard power cord
2081900014	H31box08-09, ϕ 31 cavity horn Pu side 8 Ω 5W, 38 * 72 * 18.7mm
5040100017	Fibocom L716 4G kit, sucker antenna
5040100018	Fibocom L716 4G kit, paddle antenna
2030700017	External antenna-2.4G/5.8G suction cup wifi antenna, l = 3M internal pin

Nodka Android features

- Support multiple 4G/5G modules
- Support 4G/5G routing, with network heartbeat, permanent online
- Rich system customization functions
- Hardware watchdog app call
- Upgrade Android system online, so easy, support remote upgrade
- Log supports network upload and remote operation
- Built in software test tool
- Roo permission function
- Support screen rotation
- Support status bar navigation bar on off

System API: // Client APP can call the following interfaces to quickly implement functions.

Timing switch

The system is equipped with timing switch app. At the same time, the customer app can directly call the following code to realize timing restart.

```
Intent it = new Intent();
        it.setAction("android.intent.action.auto_power_shut");   // Broadcast name
        it.putExtra("effective", true);   // Start or cancel a scheduled operation
        it.putExtra("power_type", 4);   // 1: timmediate restart   2 : t immediate shutdown   3:   timed shutdown   4 : timed restart
        it.putExtra("power_time", (String) null);   // Turn on time
        it.putExtra("shut_time", "5:00:00");          // Turn off time
        sendBroadcast(it);
```

Hardware watchdog app call

The Android layer of the system has its own hardware watchdog. At the same time, the client application can also call the hardware watchdog. If the hardware or software fails, the hardware watchdog will automatically restart and reset.

```
android.intent.action.NDJ_APP_ALIVE
// App sends broadcast to the system and begins to take over dog feeding. If the broadcast is not sent within 10 minutes, the system app stops dog feeding and automatically restarts.
eg :   the app starts and sends android.intent.action.NDJ_APP_ALIVE , once every 1min.
```

System online upgrade remote broadcast

The system is attached with the online upgrade application. If there is a version update, click online upgrade to update the system and support the background broadcast interface. You can call the operation remotely and realize the remote online upgrade of the system.

```
android.intent.action.NDJ_REQUEST_VERSION   // After receiving this broadcast, return to this broadcast. The name is "current_version" to get the client version number.
android.intent.action.NDJ_SYSUPDATE         // After receiving this broadcast, automatically compare, download and upgrade the system
```

Infrared screen firmware online upgrade remote broadcast

The system is equipped with online upgrade app, click upgrade button to update the infrared screen firmware; meanwhile, it supports background broadcast upgrade, remote call operation and remote online firmware upgrade.

```
com.pqlabs.getdevice   // After receiving, return the broadcast "com.pqlabs.getdeviceresult", with the string type parameter version, which is the version number of the current firmware
com.pqlabs.updatefirmwareaction   //After receiving, it will automatically find the corresponding firmware from the FTP server and update it
```

Remote log upload broadcast

The system comes with toolbox log. Click the log upload button to upload the log to the server. At the same time, it supports background broadcast upload and can call the operation remotely.

```
android.intent.action.NDJ_LOG_UPLOAD        //After receiving, upload the current log to the network server
```

Root authority

The system default APP has Root permission

Open status bar, navigation bar

```
adb shell am broadcast -a action.SHOW_STATUSBAR
```

Permanently hide status bar, navigation bar

```
adb shell am broadcast -a action.HIDE_STATUSBAR
```

Revision information:

Edition	Date	Modified by	Content
V1.0	2022.08.09	XuFeng.Wu	First release
V1.1	2022.09.27	XuFeng.Wu	The serial port is adjusted to 4, and the function description of open auto start setting is added