PPC-A72-215-C

User Manual

Release 1.0

Chipsee Products Naming Rules

CS19108R215P-C111	
CS	Chipsee Product Abbreviations

19	**Horizontal Resolution** **80** Means 800 Pixel **10** Means 1024 Pixel **12** Means 1280 Pixel **14** Means 1440 Pixel **19** Means 1920 Pixel
108	**Vertical Resolution** **480** Means 480 Pixel **600** Means 600 Pixel **768** Means 768 Pixel **800** Means 800 Pixel **900** Means 900 Pixel **102** Means 1024 Pixel **108** Means 1080 Pixel
R(T/F)	**Product based on Rockchip (TI/Freescale) CPU**
215	**LCD Dimension** **050** Means 5.0 Inch **070** Means 7.0 Inch **080** Means 8.0 Inch **097** Means 9.7 Inch **101** Means 10.1 Inch **104** Means 10.4 Inch **120** Means 12.0 Inch **125** Means 12.5 Inch **150** Means 15.0 Inch **156** Means 15.6 Inch **170** Means 17.0 Inch **190** Means 19.0 Inch **215** Means 21.5 Inch
P	**Means Embedded PC or Panel PC** **E** Means Embedded PC without Case **P** Means Panel PC with Case
C	**Means Touch Type** **R** Means Resistive Touch **C** Means Capacitive Touch

1	**Means LCD Brightness** • Means Common Brightness • Means High Brightness
1	**PCB Version** Baseboard PCB Version Number
1	**PCB Version** SOM Module PCB Version Number

Hardware Features

Key Features:	
CPU	Rokchip RK3399, Dual-core Cortex-A72 (1.8GHz), Quad-core Cortex-A53 (1.4GHz)
RAM	4GB DDR3
eMMC	16GB
Storage	TF card supports up to 32GB SDHC
Display	21.5 Inch LCD, 1920*1080 Pixel Resolution
Touch	Ten-Point Capacitive Touch
USB	4 x USB 2.0 Host, 1x USB 3.0 Host, 1x Type-C
LAN	1 Channel 1000M LAN
Audio	3.5mm Audio In/Out Connector, 2W Speaker Internal
Buzzer	1
RTC	Yes
RS232+RS485	7 Channels (4 x RS485 at most, 1 debug port)
GPIO	Optional
WiFi/BT	On-Board WIFI/BT

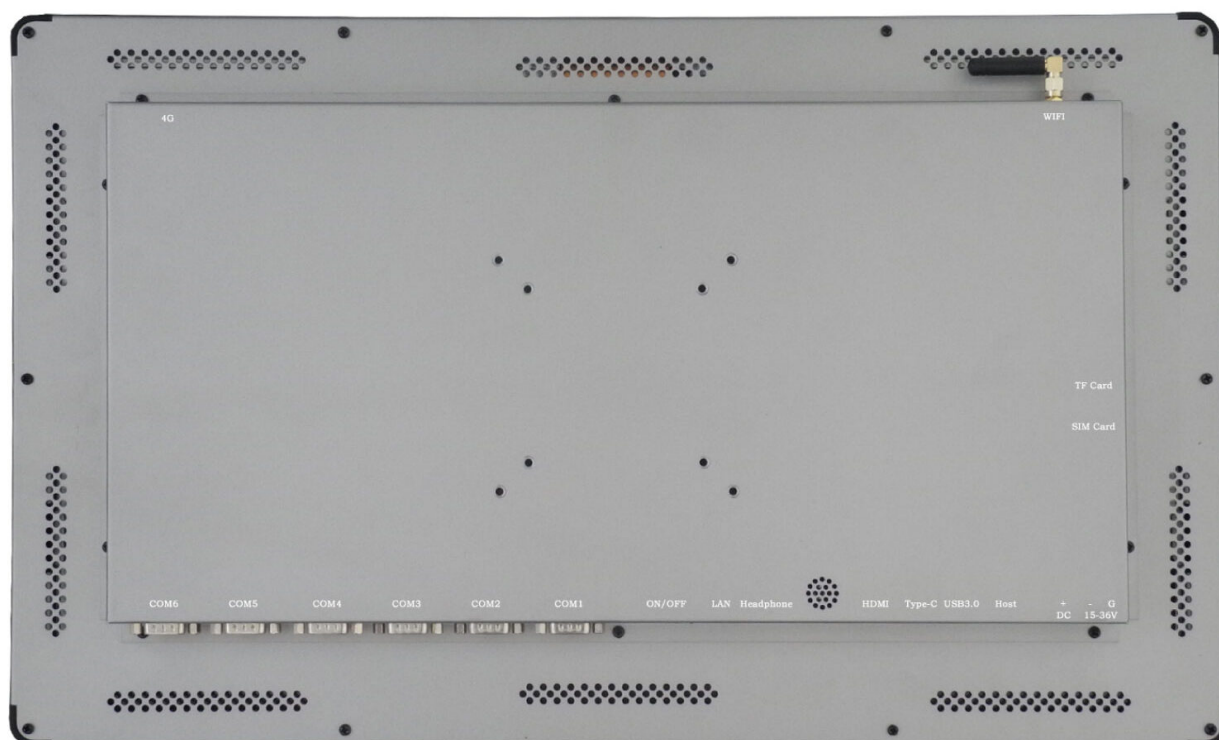| HDMI	1 Channel
4G/LTE	Optional
Power Input	15~36V DC
Current @ 15V	1A max
Power Consumption	15W Typical
Working Temperature	0°C to +70°C
OS	Android 7.1, Android 9.0
Dimension	530*322*45mm
Weight	6000g

CS19108R215P-C111

Figure 1: Front View

Figure 2: Back View

Power Input Connector

The product CS19108R215P uses a wide-range power input DC 15~36V. The total power consumption is normally about 15W. The power input connector is a 3 pin 3.81mm screw terminal connector, as shown in Figure 3.

A detailed description of the power input connector pins is provided in Table 1.
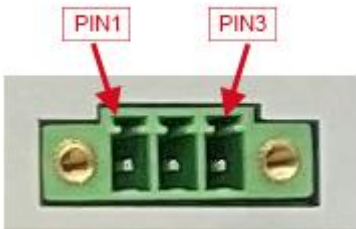

Figure 3: Power Input Connector

Table 1

Power Input Pin Definition:		
Pin Number	Definition	Description
Pin 1	Positive Input	Connect to DC Power **Positive Terminal**
Pin 2	Negative Input	Connect to DC Power **Negative Terminal**
Pin 3	Ground	Connect to **Power System Ground**

ATTENTION:

The system ground "G" has been connected to power negative "-" on board.

Capacitive Touch

The product uses a ten-point capacitive touch screen.

ATTENTION:

Capacitive touch screens are very sensitive to power noise. Ripple voltage/current from the power adapter can cause the LCD ripples, as well as the capacitive touch malfunction. If you use the APK Multi-Touch under Android to test it, you can find the touchpoint float. There are several ways to solve this problem:

1) Use a high-quality power adapter. Or a battery to provide power like a cell phone or tablet PC.

2)   If the power adapter isn't good enough, make sure the power input connector Pin 3 is connected to the Ground. This method can eliminate the problem totally. You can test it by touching the GND with one hand, while the other hand operates on the capacitive touch screen. In this case, the user's body acts as the Power System Ground.

DB9 Connector

There are six serial ports available with DB9 connector, all configured in RS232 mode by default (COM1 to COM6). You can set COM3 to COM6 in RS485 mode. If you need a different configuration, please contact us.

Figure 4: DB9 Connector

USB 2.0 Connector

There are four USB 2.0 connectors, as Figure 5 shows. Each can provide 500mA of current.

Figure 5: USB 2.0 Connector

USB 3.0 Connector

And one USB 3.0 connector, as shown in Figure.

Figure 6: USB 3.0 Connector

USB Type-C

As well as one USB Type-C connector, as shown in Figure 7.

Figure 7: USB Type-C Connector

LAN Connector

The product has one channel 1000Mbit Ethernet connector, as shown in Figure 8.

Figure 8: LAN Connector

TF Card

The product has one TF (uSD) card connector, as shown in Figure 9, that supports a TF (uSD) card up to 32GB.

Figure 9 TF Card Connector

ATTENTION:

A TF card does not come with the product.

SIM Card Holder

There is one SIM card holder, as shown in Figure 10. To read the SIM card data, you need a 4G/LTE module. The product has a mini-PCIe connector inside that enables a 4G/LTE module to be mounted. Otherwise, the holder has no usage.

Figure 10: SIM Card Holder

ATTENTION:

The 4G/LTE module is not provided by default, but can be ordered along with the product.

Audio Connector

The CS19108R215P-C111 has one audio connector, as Figure 11 shows, as well as an internal 2W speaker.

Figure 11: Audio Connector

WiFi+BT

There is one WiFi+BT module, based on the Realtech RTL8723BU,

which integrates WiFi and BT. There is a connector on the backside of the case that is used to connect an external WiFi and BT antenna, as shown in Figure 12.
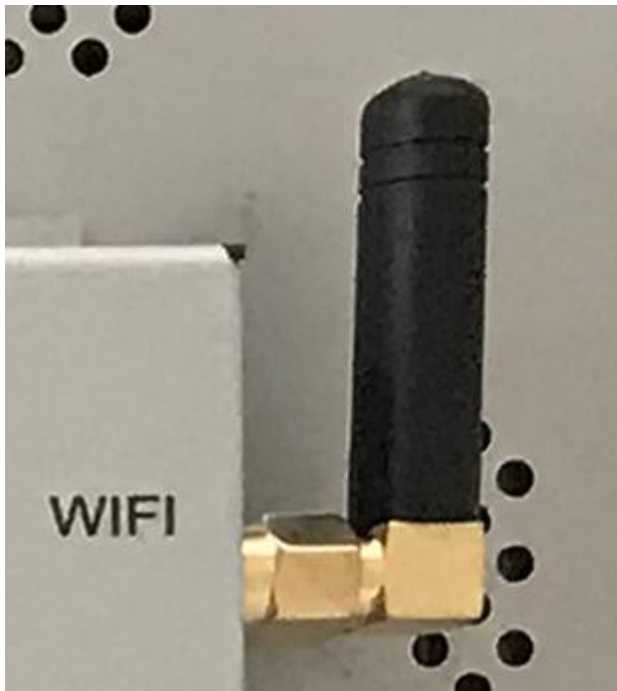

Figure 12: WiFi+BT Antenna Connector

HDMI Connector

The product has one HDMI connector, as shown in Figure 13. The HDMI output resolution can be configured by software.

Figure 13: HDMI Connector

Power Button

You can see the power button in Figure 14.

Figure 14: Power Button

Dimensions and Mounting
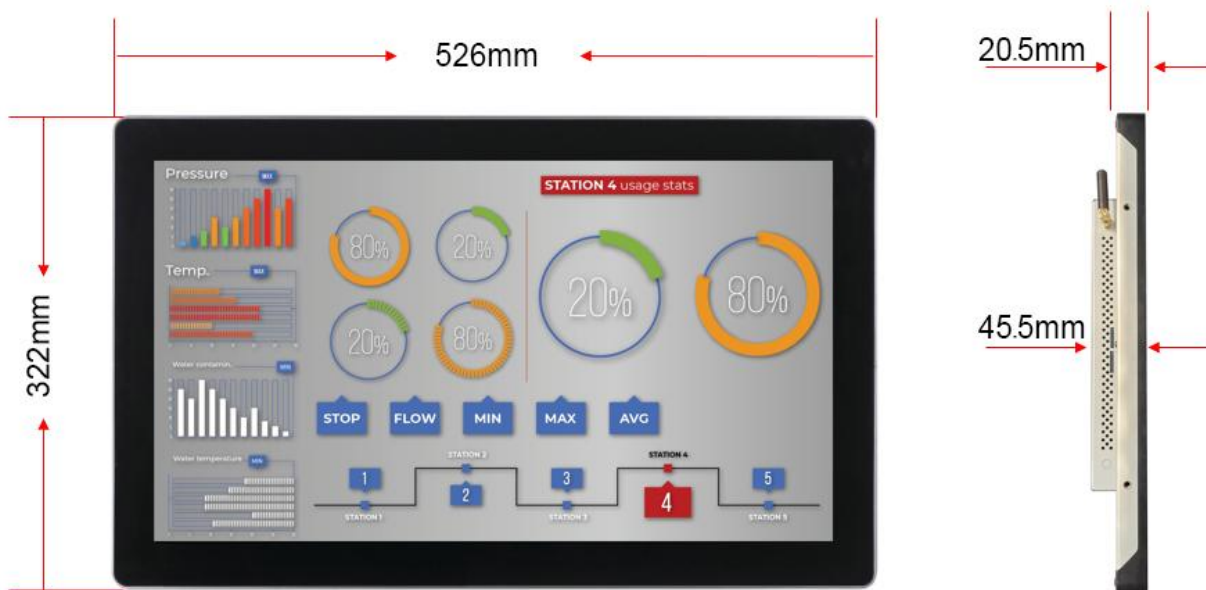
The dimensions of CS19108R215P-C111 are 530*322*45mm.

Figure 15: Dimensions

Mounting Method

This product CS19108R215P-C111 can be mounted by screw holes (Vesa mount) on the back or the side (rear mount). Please make

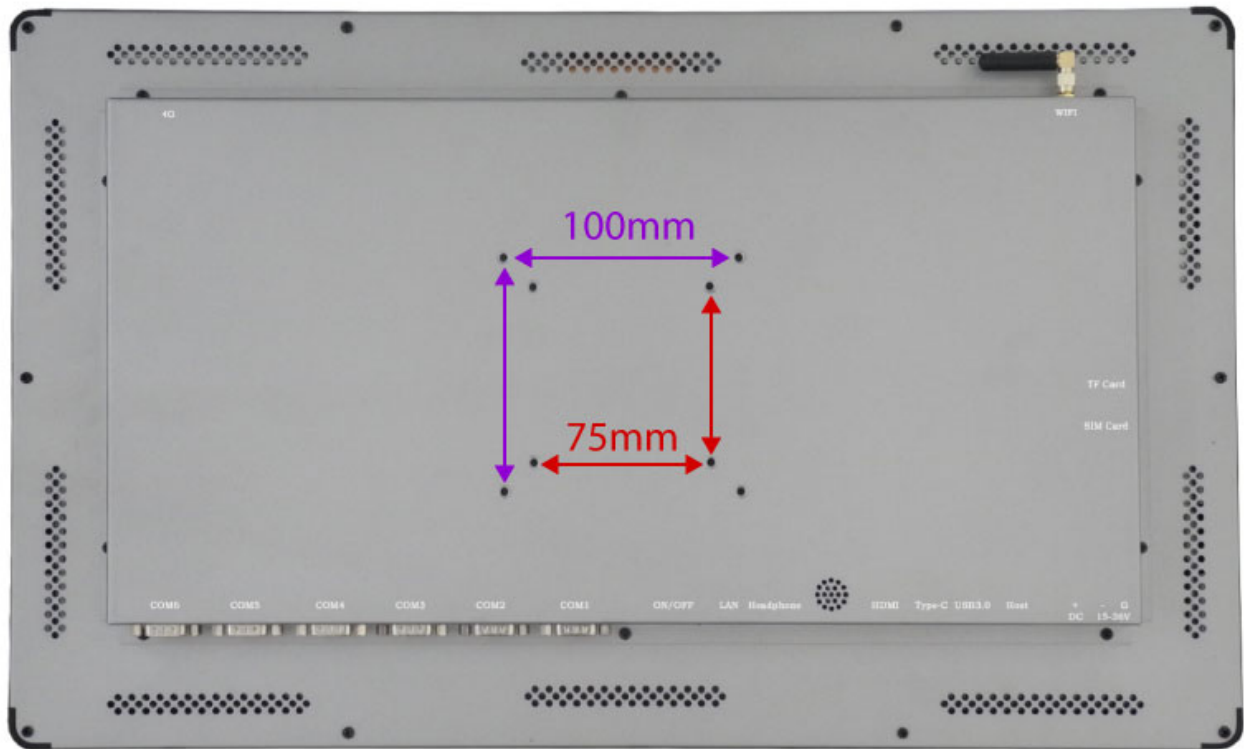sure the display is not exposed to high pressure when mounting into an enclosure.

Figure 16: Vesa Mounting

How to Get Support

Please feel free to contact us with any questions, queries or suggestions.

If your question is about technical support or troubleshooting for one of our products, we kindly ask you to first check our documentation for a possible solution.

If you cannot find the solution you are looking for then please write to service@chipsee.com providing all possible details.

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