H101R1W

10.1 inch Linux HMI
Smart Touch Display Terminal

Product Specification

（RK3568 Series）

Brief

H101R1W series，an industrial Android touch display intelligent terminal designed for the ARM A53 architecture, equipped with Linux 4.19 operating system and a powerful human-machine interaction system with a 10.1 inch full-view LCD and capacitive touch screen. The product has a light,thin and flat appearance, high overall fit and easy installation, and can be used in indoor and semi-outdoor environments.

Advantages

☑ Linux 4.19 operating system, compatible with 99% of the industry applications, support independent design APK program installation

☑ Support WIFI/4G/Ethernet and other networking methods to enable remote data transmission, upgrade and update

☑ Supports RS232, RS485, CAN and other communication interfaces for exchanging information with external devices

☑ Support 1080P language calls and 2 million dual camera

☑ Support voice and video play

☑ Industrial-grade capacitive touch solution, stronger anti-interference, widely used in a variety of complex industrial scenarios

☑ Industrial embedded installation design for various industries

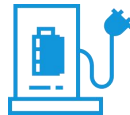☑ Passed CE/ROHS certifications and has stable and reliable guarantee

Industry Applications

Industrial control	Power device	New Energy Charging & Switching	Medical device	Industrial handheld

Security equipment	Vending machines	Smart Home	Government Smart Terminal	Access Control System

Instrumentation	Robots	3D Printing

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Product illustration

Product diagram

Product Parameters

| Screen and size parameters	Data	Description
Screen size type	10.1 inches	Screen ratio 16:9
Resolution	1024*600 pixels	260,000 true color display
Color	260,000 colors	-
Display size (A.A.）	222.9（L）*125.5(W) *27.8(T)mm	-
Size of the whole machine	258 (W)*148.2(H)*27.8(T)mm	Total height from the touch screen to the highest RJ45 network port
Backlight brightness	350 nit	Screen brightness adjustment
Perspective (CR>10)	Full perspective	Panel type：IPS
Backlight life (hours)	30000Hrs	LED backlight

Motherboard core parameters	Data	Description
CPU processor	Rockchip RK3568	4-core A53 1.6GHz
Operating system	4.19	Linux
Running memory	4GB	1*4GB, LPDDR4
EMMC	32GB	EMMC5.1
Touch form	5-point capacitive type and single-point optional	-
TP surface hardness	7	Mohs hardness
TP light transmittance	> 85	-
Operating voltage and current	12V（Typical value）700mA	Minimum 8V, maximum 24V, recommend 12V 1A or more DC regulated power supply
Power interface	DC005；	

Interface parameters	Data	Description
Interface	Default first interface：RS232	Interface 0, port number：USBttyS0
	Default second interface：RS232	Interface 2,
	Default first interface:RS485	Interface 3,
	Default second interface：RS485	Interface 0,
	Maximum baud rate:115200	
USB	HOST*4, OTG*1	Supports 2 megapixels if connected to a USB
Audio	1 channel mono MIC/dual channel HPO (3.5mm earphone), 2 channels mono SPK (4Rx3W)	
TF card	1 road	Maximum 64G
Ethernet	1 road	10/100M adaptive network interface
WIFI	1 road	IEEE 802.11Bb/g/n,
Blue tooth	1 road	V4.0
4G module	Full Netcom	*Optional*
CAN	1 road，CANH, CANL	*Optional*
GPIO port	5 road, default 3.3V supply, 3.3V level bidirectional IO	

Environmental parameters

Type	Category	Parameters
Working temperature test parameters	Storage temperature	-30 ~ 80℃
	Working temperature	-20 ~ 70°C
	Relative humidity	10~90% RH
Reliability parameters	EMC	Class B，EN55032
	ESD	Level 3

Hardware Diagram
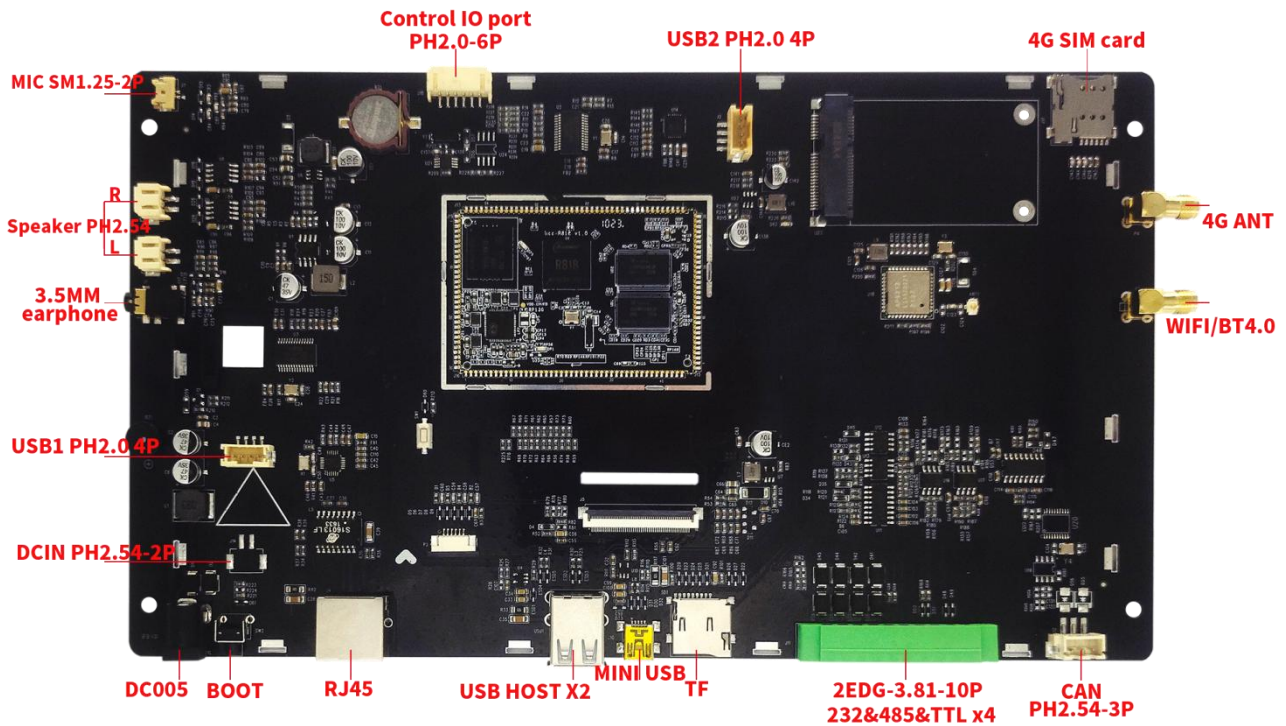
Terminal	Terminal Screen Printing	Definition	Description	Remarks
DC005	DCIN	-	Min 8V, Max 24V, Typical 12V 700mA	
2EDG-3.81-10P	RS232-TX0	TX0	Software Identification Port：ttys0	Default interface 0 output at RS232 level; can also be changed to RS485 level by
	RS232-RX0	RX0		
	GND	GND	Place of external export	
	RS232-TX3	TX3	Software Identification Port：ttys3	Default interface 3 output at RS232 level; can also be changed to RS485 level by
	RS232-RX3	RX3		
	GND	GND	External 12V ground output	
	RS232-TX2	TX2	Software Identification Port：ttys2	Default interface 3 output at RS232 level; can also be changed to RS485 level by
	RS232-RX2	RX2		
	RS232-USBTX0	USB-TX0	Software Identification Port：USBTTL0	Default interface USBTTL0 is output at RS232 level; it can also be changed to RS485
	RS232-USBRX0	USB-RX0		
CAN Terminal	CANH	CAN High		-
	CANL	CAN Low		-
	GND	GND		
Control IO terminals	GND	GND	Interface	
	DIO	D10	3.3V level bidirectional IO	
	DI1	D11	3.3V level bidirectional IO	
	DI2	D12	3.3V level bidirectional IO	
	DI3	D13	3.3V level bidirectional IO	
	DI4	D14	3.3V level bidirectional IO	

Audio Part

Terminal	Terminal Screen Printing	Definition	Description	Remarks
Horn left	L	Left channel horn positive	4 ohm 3W horn	PH2.0MM-2P Terminal
	L	Left channel horn positive		
Horn left	R	Right channel horn positive	4 ohm 3W horn	PH2.0MM-2P Terminal
	R	Right channel horn positive		

4G SIM Card Holder

Terminal	Terminal Screen Printing	Definition	Description	Remarks
4G Card Holder	-	Standard large card	Flip-top	Can support

Burning Key

| Terminal	Terminal Screen Printing	Definition	Description
Burning Key	BOOT	-	After installing the Phoenix tool on your computer and installing the driver with 360 Mobile Assistant; press and hold the BOOT button, plug in the power and power on, release the button after 3 seconds; plug in the MINI USB burner cable, then the firmware can be burned

MIC Interface

Terminal	Terminal Screen Printing	Definition	Description	Remarks
Microphone Interface	MIC	-	Condenser electret microphone	SH1.25MM-2P Terminal

USB

Terminal	Terminal Screen Printing	Definition	Description	Remarks
Double Layer USB port	USB	USB-A	USB2.0 Interface	-
		USB-A	USB2.0 Interface	-
PH2.0-4P		USB1-PH2.0-4P	USB2.0 Interface	
PH2.0-4P		USB1-PH2.0-4P	USB2.0 Interface	

Product Size Diagram

Front view   Long side view

Back view
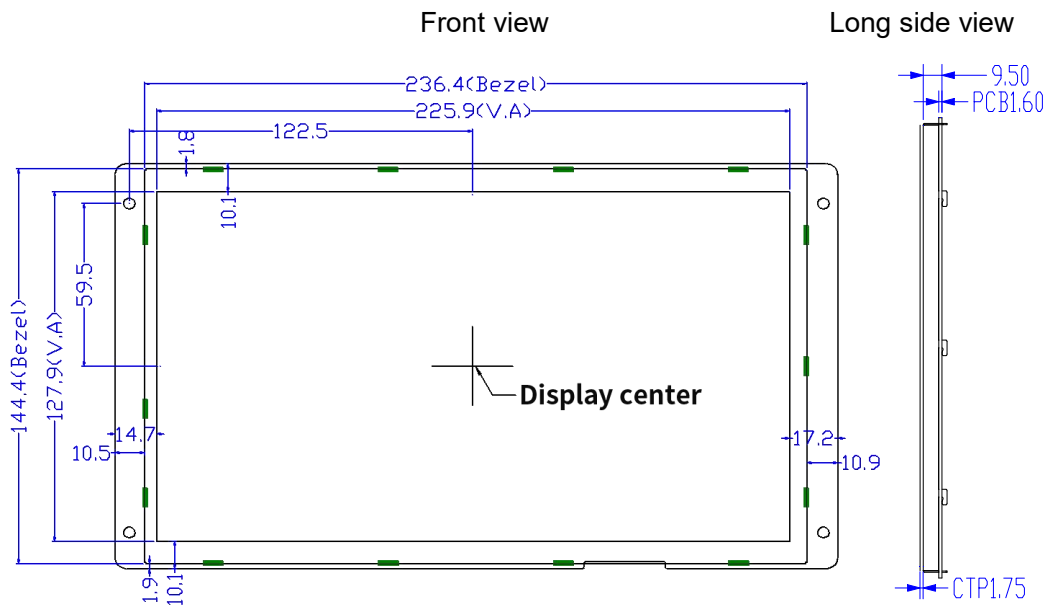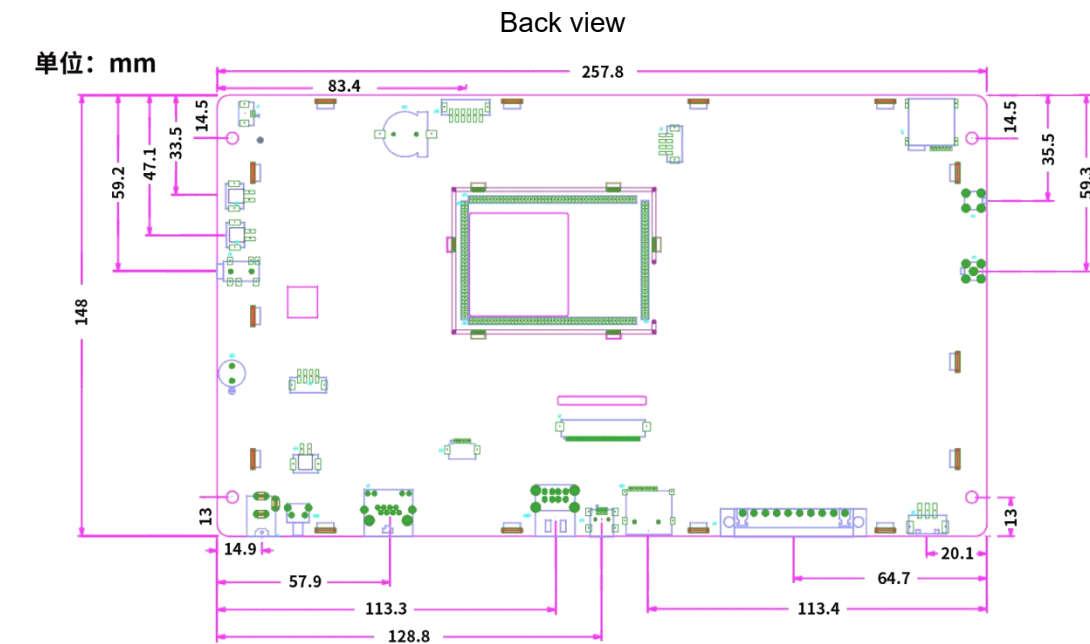
Technical support

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