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**ARM Series Products**

Rockchip RK3568 Quad-Core Processor  
Rockchip RK3399 Hexa-Core Processor



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## Based in China, Service all over the world

- There are two manufacturing bases which are located in Suzhou and Anhui. Three R&D centers are located in Suzhou, Kunshan, Shenzheng respectively. 17 sales offices across China.
- We have established sales and service channels in 19 countries in Europe, North America, Japan, South Korea, Southeast Asia, and other regions, as well as sales branches and technical service centers in the Netherlands.
- Committed to building global R&D and supply capabilities.



Headquartered in  
Suzhou, China



Two manufacturing  
bases



Three research and  
development centers



Seventeen  
domestic offices



300 people  
domestic offices  
25% R&D



Nineteen international  
sales service channels  
Coverage in over  
30 countries

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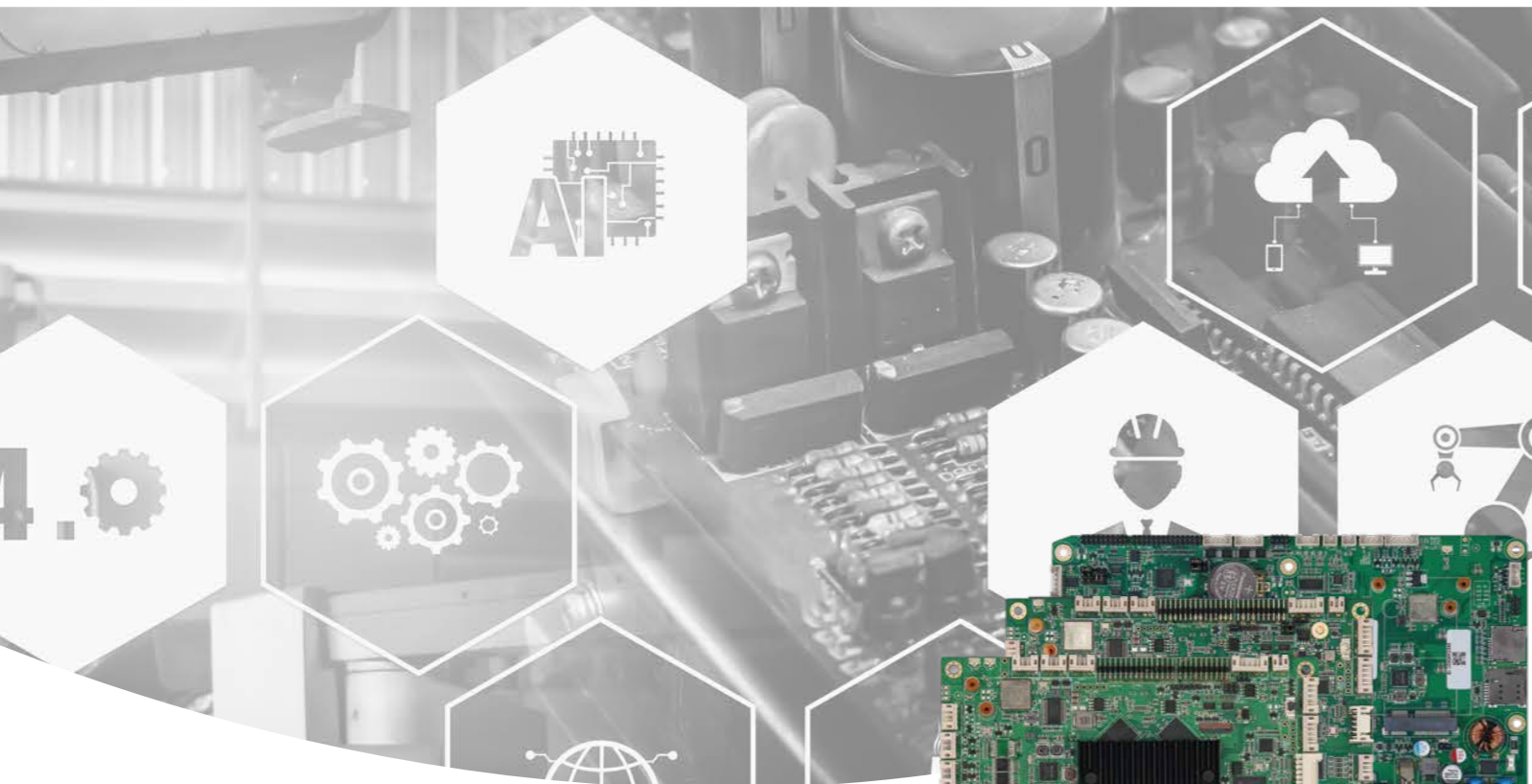
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# ARM Embedded Industrial Motherboard



ARM Industrial Motherboard, equipped with Rockchip processor, is a low-power, high-efficiency open architecture that can be programmed according to requirements. It features abundant interfaces and tools, making it easy to integrate into other systems and reducing development complexity.

## Features

**Rockchip High-Performance Processor**  
High-performance, low-power, feature-rich domestic application processor, suitable for industries such as intelligent cabinets, outdoor unmanned delivery vehicles, AGV service robots, industrial MES, facial payment devices, security, medical, and transportation systems.

**Self-developed Industrial Motherboard**  
Abundant coastline interfaces, meeting the "cable-free" design of the whole system, stable and reliable.

**Supports dual-system Android and Linux**  
Supports multiple 4G modules, supports 4G router functionality; background network heartbeat, automatic reset of 4G/5G for "always online" connectivity; supports features such as screen rotation, permanent hiding of the navigation bar; supports USB OTA upgrade, online upgrade.

**POWER**  
**Wide Voltage Power Supply: DC 12V~24V**  
Wide voltage input of DC 12V ~ 24V, equipped with over-current and reverse connection protection measures, and the interface adopts fastened phoenix terminals.

**Rich I/O Interfaces**  
1000Mbps Ethernet, onboard 2.4/5G WiFi, supports BT5.0, COM, USB2.0, USB3.0 (OTG multiplexing), supports LTE 4G/5G modules (optional), supports speaker output, supports HDMI/EDP/LVDS.



Android



Linux



Model		NK-6A10
Processor System	CPU	Rockchip RK3399 ARM Dual Cortex-A72 and Quad Cortex-A53 1.8 GHz
	GPU	Mali-T860MP4 GPU,OpenGL ES 1.1/2.0/3.1,OpenCL 1.1, DirectX 11
Memory	Memory	Onboard 2/4GB LPDDR4
	eMMC	Onboard 16/32/64GB eMMC
Storage	TF Socket	1 x TF card Socket,Support 128G TF card
	Display	1 x HDMI 2.0, up to 3840x2160@60Hz
Rear I/O	Ethernet	1 x GbE (10/100/1000 Mbps)
	USB	1x Onboard WiFi, Support 2.4G/5G WiFi, Support WiFi802.11b/g/n protocol, Support BT5.0 (2.4G/5G option)
	DC IN	12~24V power input, 2-pin lockable DC-IN phoenix terminal block
	Button	1 x Return Button
	PhoneJack	1 x Ø3.5 PhoneJack
	Display	1 x LVDS 1 x eDP,up to 1920×1080@60Hz 1 x Mipi-DSI,up to 1920x1080@60Hz
	DEBUG	1 x DEBUG for debug
Internal I/O	KEY	1 x KEY ,Supports power on,reset,recovery
	Serial Port	1 x RS485, 4*RS232, 1 x TTL
	USB	3 x USB2.0 pin header
	DC IN 1	1 x DC IN pin header ,12V~24V Power In put
	DC OUT	1 x DC 12V Power Out put
	TP/I <sup>2</sup> C	1xTP/I <sup>2</sup> C
	LED/IR	1xLED/IR
	GPIO&SPI	8 x GPIO, 2 x SPI
	AUDIO	1 x MIC in,and Speaker out via pin header
	GPS	GPS/BD module,Support GPS+ Beidou Function
Expansion Slots	Mini-PCIe slot	1 x MINI-PCIE with USB 3.0 signal for LTE/5G Modules, 1 x SIM card socket
Power	Type	12~24V power input
	Interface	1 x 2-pin phoenix terminal block
	Power Consumption	Boost 15W@12V
O.S Support	OS	Android11,Debian10
Mechanism	Dimensions	(L)146mm x (W)102mm
	Gross Weight	0.6Kg
Environment	Operating	-20°C~60°C
	Storage	-30°C~80°C
	Humidity	5~95% (Non-condensing)
	Vibration	5~500Hz, 3Grms operating



Model		NK-6A12
Processor System	CPU	Rockchip RK3568 ARM Quad Cortex-A55 up to 2.0GHz
	GPU	Mali-G52 support OpenGL ES 1.1/2.0/3.2, Vulkan 1.0/1.1, OpenCL 2.0
	NPU	Up to 1.0 Tops.Supports INT8/INT16 hybrid operation
Memory	Memory	Onboard 2/4/8GB LPDDR4
Storage	eMMC	Onboard 16/32/64GB eMMC
	TF Socket	1 x TF card Socket,Support 128G TF card
Rear I/O	Display	1 x HDMI 2.0, upto 4096x2304@60Hz
	Ethernet	1 x GbE (10/100/1000 Mbps) 1x Onboard AW-NM372IC, Support 2.4G WiFi, support WiFi 802.11b/g/n protocol, Support BT5.0 (2.4G/5G option)
	DC IN	1 x USB3.0, OTG Colay, 2 x USB2.0
	USB	12~24V power input, 2-pin lockable DC-IN phoenix terminal block
	Button	1 x Return Button
	PhoneJack	1 x Ø3.5 PhoneJack
	Internal I/O	Display
DEBUG		1 x DEBUG for debug
KEY		1 x KEY ,Supports power on, reset, recovery
Serial Port		2 x RS485, 3*RS232, 1 x TTL
USB		3 x USB2.0 pin header
DC IN 1		1 x DC IN pin header ,12V~24V Power In put
DC OUT		1 x DC 12V Power Out put
TP/I <sup>2</sup> C		1xTP/I <sup>2</sup> C
LED/IR		1xLED/IR
GPIO&SPI		4 x GPIO, 1 x SPI
AUDIO		1 x MIC in, and Speaker out via pin header
MIPI_CSI		1 x MIPI_CSI, Support MIPI dual-channel camera
Expansion Slots		Mini-PCIe
	M.2	1 x M.2 E Key with PCIE 3.0/PCIE 2.0/USB 2.0 signal for Wi-Fi 5/6 (option)
Power	Type	12~24V power input
	Interface	1 x 2-pin phoenix terminal block
	Power Consumption	Boost 13W
O.S Support	OS	Android11, Debian10
Mechanism	Dimensions	(L)146mm x (W)102mm
	Gross Weight	0.6Kg
Environment	Operating	-20°C~60°C
	Storage	-30°C~80°C
	Humidity	5~95% (Non-condensing)
	Vibration	5~500Hz, 3Grms operating

Model		NK-2A10
Processor System	CPU	Rockchip RK3399 ARM dual Cortex-A72 and quad Cortex-A53 1.8 GHz
	GPU	Mali-T860MP4 GPU, OpenGL ES 1.1/2.0/3.1, OpenCL 1.1, DirectX 11
Memory	Memory	Onboard 2/4GB LPDDR4
Storage	eMMC	Onboard 16/32/64GB eMMC
	TF Socket	1 x TF card Socket, Support 128G TF card
Rear I/O	Display	1 x HDMI 2.0, up to 3840x2160@60Hz
	Ethernet	1 x GbE (10/100/1000 Mbps) 1 x GbE (10/100/1000 Mbps), option 1x Onboard AW-NM372IC, Support 2.4G WiFi, support WiFi 802.11b/g/n protocol, Support BT5.0 (2.4G/5G option)
	DC IN	12~24V power input, 2-pin lockable DC-IN phoenix terminal block
	USB	1 x USB3.0, OTG Colay, 3 x USB2.0
	Button	1 x Return Button
	COM	2 x COM ,COM 1/2 support RS232/485, COM1 default RS485
	Internal I/O	Display
DEBUG		1 x DEBUG for debug
KEY		1 x KEY ,Supports power on, reset, recovery
Serial Port		2 x COM, COM3 Support RS232, COM4 support RS232/TTL
USB		4 x USB2.0 pin header
DC OUT		1 x DC 12V Power Out put
TP/I <sup>2</sup> C		1xTP/I <sup>2</sup> C
GPIO		12 x GPIO
AUDIO		1 x MIC in, and Speaker out via pin header
Expansion Slots		Mini-PCIe slot
Power	Type	12~24V power input
	Interface	1 x 2-pin phoenix terminal block
	Power Consumption	Boost 15W@12V
O.S Support	OS	Android 7.1.2/Android 11, Debian 10
Mechanism	Dimensions	(L)198mm x (W)166mm
	Gross Weight	0.6Kg
Environment	Operating	-20°C~60°C
	Storage	-30°C~80°C
	Humidity	5~95% (Non-condensing)
	Vibration	5~500Hz, 3Grms operating

# ARM6000-CXXX-C6-3568-T Series

Rockchip RK3568 High-Performance ARM Industrial Tablet



ARM6000-CXXX-C6-3568-T series is equipped with Rockchip RK3568 Quad-Core Processor, Cortex-A55 up to 2.0GHz, providing powerful general computing capabilities. It features Gigabit Ethernet, support for 4G/5G (optional), WiFi network, 4 serial ports, 2 USB ports (expandable to 4), and abundant interfaces. It is paired with a 10.1", 12.5", 15", 15.6", or 21.5" high-definition LCD screen with capacitive 10-point touch for precise and sensitive operation.

The lightweight and reliable all-aluminum alloy enclosure offers excellent heat dissipation and EMC performance. The front panel supports IP65 dust and water resistance design. It supports VESA and embedded hook installation (patent design). It can be widely used in industries such as intelligent cabinets, outdoor unmanned delivery vehicles, AGV service robots, industrial MES, facial payment devices, security, medical, and transportation systems.

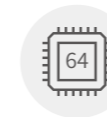


Android11



Debian10

## Features



### Rockchip RK3568 Quad-Core 64-bit High-Performance Processor

It utilizes a Quad-Core 64-bit Cortex-A55 architecture with a high frequency of up to 2.0GHz. It is a high-performance, low-power, and feature-rich domestic application processor suitable for industries such as intelligent cabinets, outdoor unmanned delivery vehicles, AGV service robots, industrial MES, facial payment devices, security, medical, and transportation systems.



### Aluminum-Magnesium Alloy Casing

Good heat dissipation and EMC performance, ensuring stable operation; front panel with IP65 dust and water resistance design; supports VESA and embedded hook installation (patent design).



### Supports dual-system Android and Debian

Supports multiple 4G modules, supports 4G router functionality; background network heartbeat, automatically resets 4G/5G for "always online" connectivity; supports screen rotation, permanent hiding of the navigation bar, and other functions; supports OTA upgrade via USB and online upgrade.



### Flexible Modular Design

The display touch and host adopt a modular design, allowing for compatibility between multiple specifications of hosts in the same series, facilitating on-site maintenance and upgrades.



### Independently Developed Industrial Motherboard

Abundant coastline interfaces, meeting the "wireless cable" design of the entire system, ensuring stability and reliability.



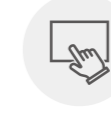
### Mali-G52 Graphics Processor

Supports OpenGL ES 3.2/2.0/1.1, Vulkan 1.1; VPU enables 4K 60fps H.265/H.264/VP9 video decoding and 1080P 60fps H.265/H.264 video encoding. It includes a wide range of display interfaces and camera interfaces, meeting the requirements of complex multimedia applications.



### Abundant I/O Interfaces

1x 1000Mbps Ethernet, onboard 2.4G WiFi, support for BT5.0, 4x COM ports, 2x USB2.0 (expandable to 4 ports), 1x USB3.0 (OTG multiplexing), support for LTE 4G/5G module (optional), support for 2-channel speaker output.



### High-Definition Capacitive Touch

10.1" - 1280x800 / 15" - 1024x768 / 12.5" / 15.6" / 21.5" - 1920x1080 HD display; 10-point high-sensitivity touch, smooth and responsive with no lag or blind spots, high stability.



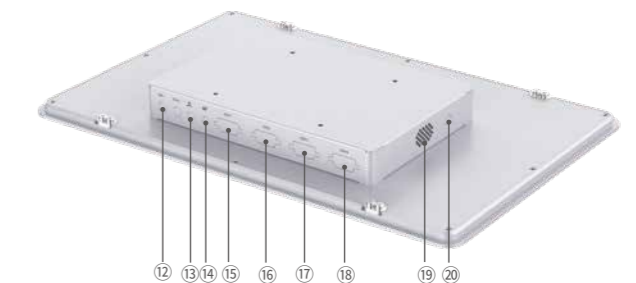
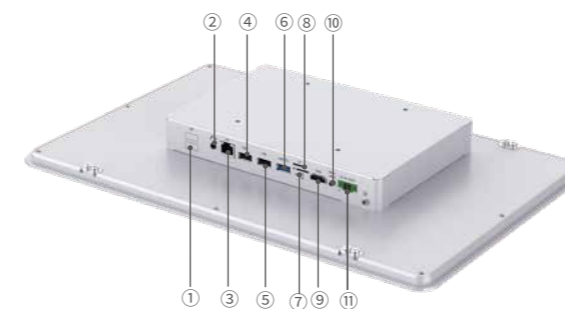
### Wide Voltage Power Supply: DC 12V~24V

Wide Voltage Input: DC 12V~24V, equipped with overcurrent and reverse connection protection measures, uses secure Phoenix terminals for the interfaces.



### Embedded and VESA

Supports Panel Embedded or Various VESA Arm Mount Installations.



ARM6000-CXXX-C6-3568-T Series Interface Diagram

- |                      |                |             |                      |                           |
|----------------------|----------------|-------------|----------------------|---------------------------|
| 1 : USB2.0(Reserved) | 5 : USB2.0     | 9 : HDMI    | 13 : WIFI            | 17 : COM3-RS232           |
| 2 : Headphones       | 6 : USB3.0/OTG | 10 : Return | 14 : 4G/5G(Optional) | 18 : COM4-RS485           |
| 3 : LAN              | 7 : SIM        | 11 : DC IN  | 15 : COM1-RS232      | 19 : Speaker(Optional)    |
| 4 : USB2.0           | 8 : TF         | 12 : SPK    | 16 : COM2-RS232      | 20 : PWR button(Reserved) |



Model		ARM6000-C101-C6-3568-T	ARM6000-C125-C6-3568-T	ARM6000-C150-C6-3568-T
Processor	CPU	Rockchip RK3568 ARM Quad Cortex-A55 up to 2.0GHz		
	GPU	Mali-G52 support OpenGL ES 1.1/2.0/3.2, Vulkan 1.0/1.1, OpenCL 2.0		
	NPU	Up to 1.0 Tops		
Memory	Capacity	Onboard 2/4/8GB LPDDR4		
Storage	eMMC	Onboard 16/32/64GB eMMC		
	TF card expansion	1*TF card interface, max support 128GB		
I/O	Ethernet	1*10/100/1000Mbps rate self-detecting Ethernet Onboard 2.4G WiFi, supports Wi-Fi 802.11b/g/n protocol, supports Bluetooth, Bluetooth 5.0		
	Audio	2*Ø3.5 Power amplifier interface ( 8Ω 10W ) 1*Built-in speaker (reserved) 1* Ø3.5 Headphone plug (FL/FR+MIC IN)		
	USB	2*USB2.0, 1*USB3.0		
	MiniPCIE	Support LTE 4G		
	Serial Port	3*RS232 , 1*RS485		
	Display	1*HDMI, Support 4K 60Hz display		
	OTG	1* USB3.0 (USB-A)		
	Physical properties	Overall	269.16mm x 187.8mm x 40.8mm	335.68mm x 221.72mm x 40.8mm
Hole		261.16mm x 179.8mm	327.68mm x 213.72mm	359.0mm x 283.0mm
Weight		1.17kg	1.5kg	1.95kg
Installation		VESA, Embedded		
OS	OS	Android 11, Debian10		
Power	Input	DC 12V~24V		
	Power consumption	15Watt	15Watt	20Watt
LCD screen	Screen type	10.1" TFT-LCD	12.5" a-Si TFT-LCD	15.0" TFT-LCD
	Resolution	1280 x 800	1920*1080	1024 x 768
	Max color	16.7MB	16.7MB	16.2MB
	Display area	216.96mm x 135.60mm	276.48mm x 155.52mm	304.128mm x 228.096mm
	Backlight	LED	LED	LED
	BacklightMTBF (Hour)	25000hrs	25000hrs	30000hrs
	Pixel pitch	0.1695 × 0.1695	0.144 × 0.144	0.297 x 0.297
	Brightness	350cd/m <sup>2</sup>	300 cd/m <sup>2</sup>	420 cd/m <sup>2</sup>
	Contrast	800:1	1200:1	800:1
	Perspective	(L)85/(R)85/(T)85/(B)85	(L)85/(R)85/(T)85/(B)85	(L) 80/(R)80/(T) 80/(B)80
Touchscreen	Touch screen type	Multi-point capacitive touch screen		
	Transmittance	>86%		
	Controller	USB I/O		
	Driver support	Android		
	Multi-touch	10 point		
	Surface hardness	7H		
Environmental	Operating temperature	-20 ~ 60°C	0 ~ 50°C	-20 ~ 60°C
	Storage temperature	-30 ~ 80°C	-20 ~ 70°C	-30 ~ 80°C
	Relative humidity	0~95% (No condensation)		
	Vibration	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, duration 11ms		
	Water proof	IP65		



Model		ARM6000-C156-C6-3568-T	ARM6000-C215-C6-3568-T	ARM6000-C2145-C6-3568-T
Processor	CPU	Rockchip RK3568 ARM Quad Cortex-A55 up to 2.0GHz		
	GPU	Mali-G52 support OpenGL ES 1.1/2.0/3.2, Vulkan 1.0/1.1, OpenCL 2.0		
	NPU	Up to 1.0 Tops		
Memory	Capacity	Onboard 2/4/8GB LPDDR4		
Storage	eMMC	Onboard 16/32/64GB eMMC		
	TF card expansion	1*TF card interface, max support 128GB		
I/O	Ethernet	1*10/100/1000Mbps rate self-detecting Ethernet onboard 2.4G WiFi, supports Wi-Fi 802.11b/g/n protocol, supports Bluetooth, Bluetooth 5.0		
	Audio	2*Ø3.5Power amplifier interface ( 8Ω 10W ) 1*Built-in speaker (reserved) 1* Ø3.5 Headphone plug (FL/FR+MIC IN)		
	USB	2*USB2.0, 1*USB3.0		
	MiniPCIE	Support LTE 4G		
	Serial Port	3*RS232 , 1*RS485		
	Display	1*HDMI, Support 4K 60Hz display		
	OTG	1* USB3.0 (USB-A)		
	Physical properties	Overall	400.2mm x 257.2mm x 40.8mm	548.80 mm x 340.30mm x 51mm
Hole		392.2mm x 249.2mm	539.8mm x 331.5mm	539.8mm x 331.5mm
Weight		2.0kg	5.88kg	5.88kg
Installation		VESA, Embedded		
OS	OS	Android 11, Debian10		
Power	Input	DC 12V~24V		
	Power consumption	20Watt	30Watt	30Watt
LCD screen	Screen type	15.6" TFT-LCD	21.5" TFT-LCD	21.45" TFT-LCD
	Resolution	1920 x1080	1920 x1080	1920 x1080
	Max color	16.7MB	16.7MB	16.7MB
	Display area	344.16mm x 193.59mm	476.64mm x 268.11mm	476.64mm x 268.11mm
	Backlight	LED	LED	LED
	BacklightMTBF (Hour)	15000hrs	30000hrs	30000hrs
	Pixel pitch	0.17925 × 0.17925	0.24825 × 0.24825	0.0831 × 0.241
	Brightness	250 cd/ m <sup>2</sup>	350 cd/m <sup>2</sup>	250 cd/m <sup>2</sup>
	Contrast	3000:1	1000:1	3000:1
	Perspective	(L)89/(R)89/(T)89/(B)89	(L)89/(R)89/(T)89/(B)89	(L)89/(R)89/(T)89/(B)89
Touchscreen	Touch screen type	Multi-point capacitive touch screen		
	Transmittance	>86%		
	Controller	USB I/O		
	Driver support	Android		
	Multi-touch	10 point		
	Surface hardness	7H		
Environmental	Operating temperature	0~ 50°C	-20~ 60°C	0~ 50°C
	Storage temperature	-20 ~ 70°C	-30 ~ 80°C	-20 ~ 70°C
	Relative humidity	0~95% (No condensation)		
	Vibration	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, duration 11ms		
	Water proof	IP65		

# ARM6000-CXXX-C6-3568-TH-SC Series

Rockchip RK3568 High-Performance ARM Industrial Tablet



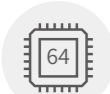
Android 11



Debian10

ARM6000-CXXX-C6-3568-TH-SC series uses Rockchip RK3568 4-core processor, Cortex-A55 up to 2.0GHz; it has super general computing capabilities. Gigabit Ethernet, supports 4G/5G (optional), WiFi network, 4-way serial port, 4-way USB2.0, rich interfaces; equipped with 10.1", 21.5" high-definition LCD screen, capacitive 10-point touch, accurate and sensitive. The front panel supports IP65 dustproof and waterproof design, embedded bracket installation, and optional fan for better heat dissipation. It can be used in various harsh environments indoors and outdoors, and operates stably without interruption. A large number of localization optimizations have been carried out for Android rows, which can meet the unattended and remote maintenance requirements of smart cabinets.

## Features



### Rockchip RK3568 Quad-Core 64-bit High-Performance Processor

It utilizes a Quad-Core 64-bit Cortex-A55 architecture with a high frequency of up to 2.0GHz. It is a high-performance, low-power, and feature-rich domestic application processor suitable for industries such as intelligent cabinets, outdoor unmanned delivery vehicles, AGV service robots, industrial MES, facial payment devices, security, medical, and transportation systems.



### Mali-G52 Graphics Processor

Supports OpenGL ES 3.2/2.0/1.1, Vulkan 1.1; VPU enables 4K 60fps H.265/H.264/VP9 video decoding and 1080P 60fps H.265/H.264 video encoding. It includes a wide range of display interfaces and camera interfaces, meeting the requirements of complex multimedia applications.



### Aluminum-Magnesium Alloy Casing

Good heat dissipation and EMC performance, ensuring stable operation; front panel with IP65 dust and water resistance design; supports VESA and embedded hook installation (patent design).



### Supports dual-system Android and Debian

Supports multiple 4G modules, supports 4G router functionality; background network heartbeat, automatically resets 4G/5G for "always online" connectivity; supports screen rotation, permanent hiding of the navigation bar, and other functions; supports OTA upgrade via USB and online upgrade.



### Flexible Modular Design

The display touch and host adopt a modular design, allowing for compatibility between multiple specifications of hosts in the same series, facilitating on-site maintenance and upgrades.



### Independently Developed Industrial Motherboard

Abundant coastline interfaces, meeting the "wireless cable" design of the entire system, ensuring stability and reliability.



### Abundant I/O Interfaces

1x 1000Mbps Ethernet, onboard 2.4G WiFi, support for BT5.0, 4x COM ports, 2x USB2.0 (expandable to 4 ports), 1x USB3.0 (OTG multiplexing), support for LTE 4G/5G module (optional), support for 2-channel speaker output.



### High-Definition Capacitive Touch

10.1" - 1280×800 / 15" - 1024×768 / 12.5" / 15.6" / 21.5" - 1920×1080 HD display; 10-point high-sensitivity touch, smooth and responsive with no lag or blind spots, high stability.



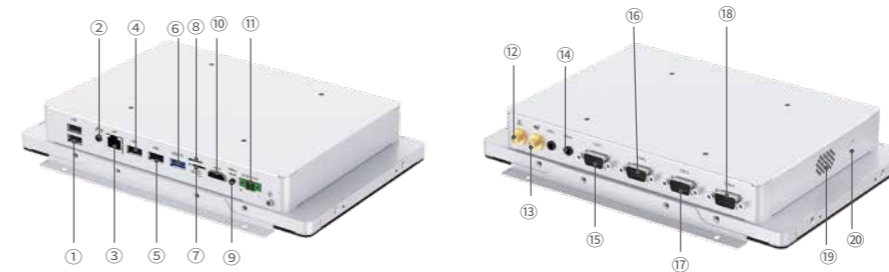
### Wide Voltage Power Supply: DC 12V~24V

Wide Voltage Input: DC 12V~24V, equipped with overcurrent and reverse connection protection measures, uses secure Phoenix terminals for the interfaces.



### Embedded and VESA

Supports Panel Embedded or Various VESA Arm Mount Installations.



ARM6000-CXXX-C6-3568-TH-SC 10.1" Interface Diagram

- |                |                |            |                   |                           |
|----------------|----------------|------------|-------------------|---------------------------|
| 1 : USB2.0     | 5 : USB2.0     | 9 : Return | 13 : 4G(Optional) | 17 : COM3-RS232           |
| 2 : Headphones | 6 : USB3.0/OTG | 10 : HDMI  | 14 : SPK          | 18 : COM4-RS485           |
| 3 : LAN        | 7 : SIM        | 11 : DC IN | 15 : COM1-RS232   | 19 : Speaker(Optional)    |
| 4 : USB2.0     | 8 : TF         | 12 : WIFI  | 16 : COM2-RS232   | 20 : PWR button(Reserved) |



ARM6000-CXXX-C6-3568-TH-SC 21.5" Interface Diagram

- |            |                |                   |                 |                        |                           |
|------------|----------------|-------------------|-----------------|------------------------|---------------------------|
| 1 : USB2.0 | 5 : USB2.0     | 9 : Return        | 13 : Fan        | 17 : SPK               | 21 : PWR button(Reserved) |
| 2 : 耳机     | 6 : USB3.0/OTG | 10 : HDMI         | 14 : COM1-RS232 | 18 : COM2-RS232        |                           |
| 3 : LAN    | 7 : SIM        | 11 : DC IN        | 15 : WIFI       | 19 : COM4-RS485        |                           |
| 4 : USB2.0 | 8 : TF         | 12 : 4G(Optional) | 16 : COM3-RS232 | 20 : Speaker(Optional) |                           |



Model		ARM6000-C101-C6-3568-TH-SC
Processor	CPU	Rockchip RK3568 ARM Quad Cortex-A55 up to 2.0GHz
	GPU	Mali-G52 support OpenGL ES 1.1/2.0/3.2, Vulkan 1.0/1.1, OpenCL 2.0
	NPU	Up to 1.0 Tops
Memory	Capacity	Onboard 2/4/8GB LPDDR4
Storage	eMMC	Onboard 16/32/64GB eMMC
	TF card expansion	1*TF card interface, max support 128GB
I/O	Ethernet	1*10/100/1000Mbps rate self-detecting Ethernet onboard 2.4G WiFi, supports Wi-Fi 802.11b/g/n protocol, supports Bluetooth, Bluetooth 5.0
	Audio	2*Ø3.5Power amplifier interface ( 8Ω 10W ) 1*Built-in speaker (reserved) 1* Ø3.5 Headphone plug (FL/FR+MIC IN)
	USB	2*USB2.0, 1*USB3.0
	MiniPCIE	Support LTE 4G
	Serial Port	3*RS232 , 1*RS485
	Display	1*HDMI, Support 4K 60Hz display
	OTG	1* USB3.0 (USB-A)
	Physical properties	Dimensions
	Overall	256.32mm x 158.88mm x 40mm
	Hole	218.0mm x 137.0mm
	Weight	1.17kg
	Installation	VESA, Embedded
OS	OS	Android 11, Debian10
Power	Input	DC 12V~24V
	Power consumption	15Watt
LCD screen	Screen type	10.1" TFT-LCD
	Resolution	1280 x 800
	Max color	16.7MB
	Display area	216.96mm x 135.60mm
	Backlight	LED
	BacklightMTBF (Hour)	25000hrs
	Pixel pitch	0.1695 × 0.1695
	Brightness	350cd/m <sup>2</sup>
	Contrast	800:1
	Perspective	(L)85/(R)85/(T)85/(B)85
Touch screen	Touch screen type	Multi-point capacitive touch screen
	Transmittance	>86%
	Controller	USB I/O
	Driver support	Android
	Multi-touch	10 point
	Surface hardness	7H
Environmental	Operating temperature	-20 ~ 60°C
	Storage temperature	-30 ~ 80°C
	Relative humidity	0~95% (No condensation)
	Vibration	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, duration 11ms
	Water proof	IP65



Model		ARM6000-C215-C6-3568-TH-SC
Processor	CPU	Rockchip RK3568 ARM Quad Cortex-A55 up to 2.0GHz
	GPU	Mali-G52 support OpenGL ES 1.1/2.0/3.2, Vulkan 1.0/1.1, OpenCL 2.0
	NPU	Up to 1.0 Tops
Memory	Capacity	Onboard 2/4/8GB LPDDR4
Storage	eMMC	Onboard 16/32/64GB eMMC
	TF card expansion	1*TFcard interface, max support 128GB
I/O	Ethernet	1*10/100/1000Mbps rate self-detecting Ethernet onboard 2.4G WiFi, supports Wi-Fi 802.11b/g/n protocol, supports Bluetooth, Bluetooth 5.0
	Audio	2*Ø3.5Power amplifier interface ( 8Ω 10W ) 1*Built-in speaker (reserved) 1* Ø3.5 Headphone plug (FL/FR+MIC IN)
	USB	2*USB2.0, 1*USB3.0
	MiniPCIE	Support LTE 4G
	Serial Port	3*RS232, 1*RS485
	Display	1*HDMI,Support 4K 60Hz display
	OTG	1* USB3.0(USB-A)
	Physical properties	Dimensions
	Overall	526.60 mm x 318.10mm x 50.90mm
	Hole	480mm x 271mm
	Weight	5.88kg
	Installation	VESA, Embedded
OS	OS	Android 11, Debian10
Power	Input	DC 12V~24V
	Power consumption	30Watt
LCD screen	Screen type	21.5" TFT-LCD
	Resolution	1920 x1080
	Max color	16.7MB
	Display area	476.64mm x 268.11mm
	Backlight	LED
	BacklightMTBF (Hour)	30000hrs
	Pixel pitch	0.24825 × 0.24825
	Brightness	350 cd/m <sup>2</sup>
	Contrast	1000:1
	Perspective	(L)89/(R)89/(T)89/(B)89
Touch screen	Touch screen type	Multi-point capacitive touch screen
	Transmittance	>86%
	Controller	USB I/O
	Driver support	Android
	Multi-touch	10 point
	Surface hardness	7H
Environmental	Operating temperature	-20 ~ 60°C
	Storage temperature	-30 ~ 80°C
	Relative humidity	0~95% (No condensation)
	Vibration	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, duration 11ms
	Water proof	IP65



# ARM6000-BXXX-I5-3399-T Series

Rockchip RK3399 High-Performance ARM Industrial Tablet



ARM6000-BXXX-I5-3399-T adopts Rockchip RK3399 6-core processor, 2×A72 (up to 1.8GHz), 4×A53 (up to 1.4GHz); it has super general computing capabilities and can meet the needs of face recognition and other applications; Gigabit Ethernet, supports 4G/5G (optional), WiFi network, 4-way serial port, 4-way USB, rich interfaces to meet the needs of smart cabinet peripherals; uses infrared touch screen, waterproof, dustproof, and light resistance Strong, good heat dissipation, can be used in various harsh environments indoors and outdoors, and operates stably without interruption. A large number of localization optimizations have been carried out for Android rows, which can meet the unattended and remote maintenance requirements of smart cabinets.

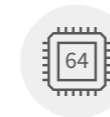


Android 7.1.2



Ubuntu18.04

## Features



### Rockchip RK3399 Quad-Core 64-bit High-Performance Processor

Using a dual "server-grade" core Cortex-A72 + quad-core Cortex-A53 large and small core architecture with a frequency of up to 1.8GHz, the new core can provide up to 100% performance improvement compared to the previous core design.



### Rich system customization functions

Supports a variety of 4G modules, supports routing; background network heartbeat function, automatically resets 4G/5G, "permanently online", supports remote + online upgrade, supports remote log upload, and supports infrared screen firmware online + remote upgrade.



### Wide voltage power supply: DC 12V~24V

DC 12V~24V wide voltage input, with overcurrent and reverse connection protection measures, and the interface adopts fastening Phoenix terminals.



### Independently Developed Industrial Motherboard

Abundant coastline interfaces, meeting the "wireless cable" design of the entire system, ensuring stability and reliability.



### Mali-T860 MP4 quad-core graphics processor

Supports OpenGL ES1.1/2.0/3.0/3.1/3.2, Vulkan 1.0, OpenCL 1.2, DX11, AFBC (frame buffer compression), powerful GPU performance, and can be used for computer vision, machine learning, 4K, 3D rendering and other applications.



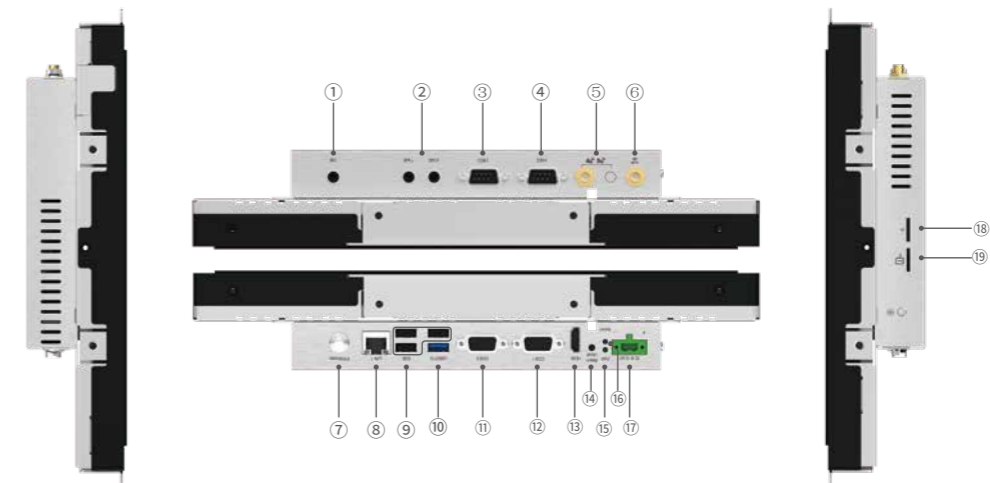
### Abundant I/O Interfaces

1×1000Mbps Ethernet (optional dual Gigabit), onboard 2.4G WiFi supports BT5.0, 4×COM, 3×USB2.0, 1×USB3.0 (OTG multiplexing), supports LTE 4G/5G mode Group (optional), supports 2 speaker outputs.



### Strong ability to adapt to the environment

IP65 waterproof design on the front panel; long infrared touch life and strong anti-interference ability; good heat dissipation design, uninterrupted operation; all-steel frame design, light and durable.



ARM6000-BXXX-I5-3399-T Series Interface Diagram

- |                      |                  |                 |              |            |
|----------------------|------------------|-----------------|--------------|------------|
| 1 : Mic In(Optional) | 5 : 4G(Optional) | 9 : USB2.0      | 13 : HDMI    | 17 : DC IN |
| 2 : SPK(R/L)         | 6 : WiFi         | 10 : USB3.0/OTG | 14 : Return  | 18 : TF    |
| 3 : COM3             | 7 : PWR/Home     | 11 : COM2       | 15 : PWR LED | 19 : SIM   |
| 4 : COM4             | 8 : LAN 1        | 12 : COM1       | 16 : SYS LED |            |



Model		ARM6000-B150-I5-3399-T
Processor	CPU	Rockchip RK3399 6-core processor, 2×A72 (up to 1.8GHz) + 4×A53 (up to 1.4GHz)
	GPU	Mali-T860MP4 GPU, OpenGL ES1.1/2.0/3.0/3.1/3.2, Vulkan 1.0, OpenCL 1.2, DX11
Memory	Capacity	Onboard LPDDR4 2GB/4G
Storage	eMMC	Onboard eMMC 16G/32G
	TF card expansion	1×TF card interface, max support 128GB
I/O	Ethernet	1×10/100/1000Mbps rate self-detecting Ethernet Onboard 2.4G WiFi, supports Wi-Fi 802.11b/g/n protocol, supports Bluetooth, Bluetooth 5.0
	Audio	2×Ø3.5 Power amplifier interface ( 8Ω 6W ) , 1×MIC IN
	USB	3×USB2.0, 1×USB3.0
	MiniPCIE	Support LTE 4G LTE/5G Module (optional)
	Serial Port	4×RS232(DB9), 1×XUSB1-ttyXUSB4, COM1/2 setup RS232/485, COM1 default RS485, COM2 default RS232, COM4 setup TTL, default RS232
	Display	1×HDMI, Support 4K 60Hz display, Support HDCP 1.4/2.2
	OTG	1×USB3.0 (USB-A)
Physical properties	Dimensions	15"
	Overall	337.8mm×265.8mm×57.5mm
	Hole	313mm×237mm
	Weight	2.8kg
	Installation	Embedded
OS	OS	Android 7.1.2. ubuntu18.04
Power	Input	DC 12V~24V
	Power consumption	20 Watt
LCD screen	Screen type	15" XGA TFT
	Resolution	1024×768
	Max color	16.7MB
	Display area	304.13mm×228.10mm ( 11.97"×8.98")
	Backlight	LED
	BacklightMTBF (Hour)	30000hrs
	Pixel pitch	0.297×0.297
	Brightness	420 cd/m <sup>2</sup>
	Contrast	800:1
	Perspective	(L)80/(R)80/(T)80/(B)80
Touchscreen	Touch screen type	Infrared touch screen
	Touch points	4 point
	Physical resolution	32768×32768
	Touch accuracy	<1.5mm(Central region) ; <3.2mm (Edge area)
	Touch diameter	>5mm
	Controller	USB I/O
	Transmittance	>75% ( AG Glass)
	Driver support	Linux. Android
	Response time	<8ms
	Touch activation force	No need for pressure
	Surface hardness	7H
	Touch life	Resistant to scratches and can withstand more than 100 million touches
Environmental	Operating temperature	-20 ~ 60°C
	Storage temperature	-30 ~ 80°C
	Relative humidity	0~95% (No condensation)
	Vibration	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, duration 11ms
	Water proof	IP65



Model		ARM6000-B215-I5-3399-T
Processor	CPU	Rockchip RK3399 6-core processor, 2×A72 ( up to 1.8GHz ) + 4×A53 ( up to 1.4GHz )
	GPU	Mali-T860MP4 GPU, OpenGL ES1.1/2.0/3.0/3.1/3.2, Vulkan 1.0, OpenCL 1.2, DX11
Memory	Capacity	Onboard LPDDR4 2GB/4G
Storage	eMMC	Onboard eMMC 16G/32G
	TF card expansion	1× card interface, max support 128GB
I/O	Ethernet	1×10/100/1000Mbps rate self-detecting Ethernet Onboard 2.4G WiFi, supports Wi-Fi 802.11b/g/n protocol, supports Bluetooth, Bluetooth 5.0
	Audio	2×Ø3.5 PhoneJackPower amplifier interface ( 8Ω 6W ) , 1×MIC IN
	USB	3×USB2.0, 1×USB3.0
	MiniPCIE	Support LTE 4G LTE/5G Module (optional)
	Serial Port	4×RS232(DB9), 1×XUSB1-ttyXUSB4, COM1/2 setup RS232/485, COM1 default RS485, COM2 default RS232, COM4 setup TTL, default RS232
	Display	1×HDMI, Support 4K 60Hz display, Support HDCP 1.4/2.2
	OTG	1×USB3.0 (USB-A)
Physical properties	Dimensions	21.5"
	Overall	522.6mm×353.5mm×57.7mm
	Hole	488mm×280mm
	Weight	5.73kg
	Installation	Embedded
OS	OS	Android 7.1.2. ubuntu18.04
Power	Input	DC 12V~24V
	Power consumption	30 Watt
LCD screen	Screen type	21.5" Full HD TFT
	Resolution	1920×1080
	Max color	16.7MB
	Display area	476.64mm×268.11mm ( 18.77"×10.56")
	Backlight	LED
	BacklightMTBF (Hour)	30000hrs
	Pixel pitch	0.248×0.248
	Brightness	250 cd/m <sup>2</sup>
	Contrast	3000:1
	Perspective	(L)89/(R)89/(T)89/(B)89
Touchscreen	Touch screen type	Infrared touch screen
	Touch points	4 point
	Physical resolution	32768×32768
	Touch accuracy	<1.5mm(Central region) ; <3.2mm (Edge area)
	Touch diameter	>5mm
	Controller	USB I/O
	Transmittance	>75% ( AG Glass)
	Driver support	Linux. Android
	Response time	<8ms
	Touch activation force	No need for pressure
	Surface hardness	7H
	Touch life	Resistant to scratches and can withstand more than 100 million touches
Environmental	Operating temperature	-20 ~ 60°C
	Storage temperature	-30 ~ 80°C
	Relative humidity	0~95% (No condensation)
	Vibration	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, duration 11ms
	Water proof	IP65

# ARM6000-CXXX-C5-3399-T Series

Rockchip RK3399 High-Performance ARM Industrial Tablet



ARM6000-CXXX-C5-3399-T series uses Rockchip RK3399 6-core processor, 2x A72 (up to 1.8GHz), 4x A53 (up to 1.4GHz); it has super general computing capabilities. Dual Gigabit Ethernet, supports 4G/5G (optional), WiFi network, 4-way serial port, 4-way USB, rich interfaces; equipped with 10.1", 12.5", 15.6", 21.5" high-definition LCD screen, capacitive 10-point touch Control, precise and sensitive. The all-aluminum alloy shell is lightweight and reliable, with good heat dissipation and EMC performance. The front panel supports IP65 dustproof and waterproof design, and supports VESA and embedded hook installation (patented design). It can be widely used in smart cabinets, outdoor unmanned express vehicles, AGV service robots, industrial MES, face payment equipment, security, medical, transportation, systems and other industries.

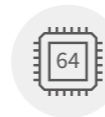


Android 7.1.2



Ubuntu 18.04

## Features



### Rockchip RK3399 6-core 64-bit high-performance processor

Using a dual "server-grade" core Cortex-A72 + quad-core Cortex-A53 large and small core architecture with a frequency of up to 1.8GHz, the new core can provide up to 100% performance improvement compared to the previous core design.



### Mali-T860 MP4 Quad-core graphics processor

Supports OpenGL ES1.1/2.0/3.0/3.1/3.2, Vulkan 1.0, OpenCL 1.2, DX11, AFBC (frame buffer compression), powerful GPU performance, and can be used for computer vision, machine learning, 4K, 3D rendering and other applications.



### Aluminum magnesium alloy shell

Good heat dissipation and EMC performance, stable operation; IP65 dustproof and waterproof front panel design; supports VESA and embedded hook installation (patented design).



### Abundant I/O Interfaces

1x 1000Mbps Ethernet, onboard 2.4G WiFi, support for BT5.0, 4x COM ports, 2x USB2.0 (expandable to 4 ports), 1x USB3.0 (OTG multiplexing), support for LTE 4G/5G module (optional), support for 2-channel speaker output.



### Support Android and Ubuntu dual systems

Supports a variety of 4G modules, supports 4G routing function; background network heartbeat, can automatically reset 4G/5G, "permanently online"; supports screen rotation, permanent hiding of the navigation bar and other functions; supports U disk OTA upgrade and online upgrade.



### High-Definition Capacitive Touch

10.1" - 1280x800 / 12.5" / 15.6" / 21.5" - 1920x1080 HD display; 10-point high-sensitivity touch, smooth and responsive with no lag or blind spots, high stability.



### Flexible modular design

A modular design is adopted between the display touch screen and the host. The same series can be matched with hosts of multiple specifications to facilitate on-site maintenance and upgrades.



### Wide Voltage Power Supply: DC 12V~24V

Wide Voltage Input: DC 12V~24V, equipped with overcurrent and reverse connection protection measures, uses secure Phoenix terminals for the interfaces.



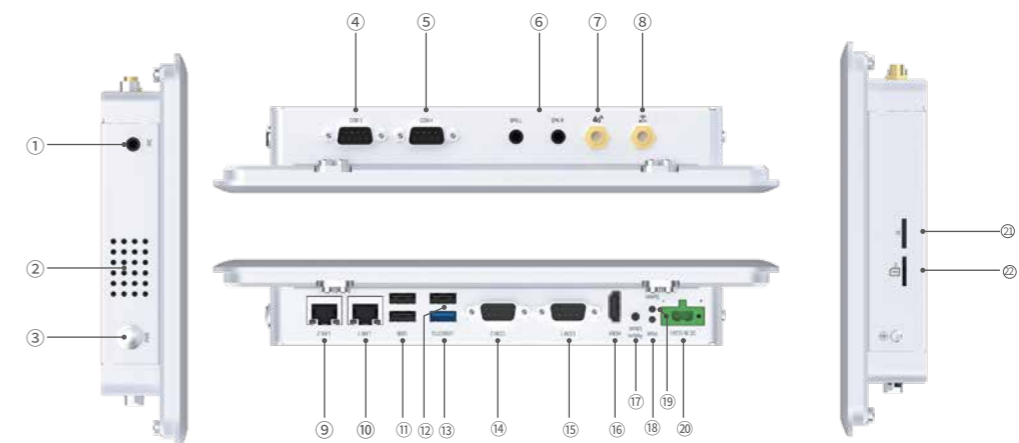
### Independently Developed Industrial Motherboard

Abundant coastline interfaces, meeting the "wireless cable" design of the entire system, ensuring stability and reliability.



### Embedded and VESA

Supports Panel Embedded or Various VESA Arm Mount Installations.



ARM6000-CXXX-C5-3399-T Interface Diagram

- |                      |                  |                    |                 |              |          |
|----------------------|------------------|--------------------|-----------------|--------------|----------|
| 1 : Mic In(Optional) | 5 : COM4         | 9 : LAN2(Reserved) | 13 : USB3.0/OTG | 17 : Return  | 21 : TF  |
| 2 : SPK(Reserved)    | 6 : SPK          | 10 : LAN1          | 14 : COM2       | 18 : PWR LED | 22 : SIM |
| 3 : PWR(Optional)    | 7 : 4G(Optional) | 11 : USB2.0        | 15 : COM1       | 19 : SYS LED |          |
| 4 : COM3             | 8 : WiFi         | 12 : USB2.0        | 16 : HDMI       | 20 : DC IN   |          |



Model		ARM6000-C101-C5-3399-TH	ARM6000-C125-C5-3399-TH
Processor	CPU	Rockchip RK3399 6-core processor, 2×A72 ( up to 1.8GHz ) + 4×A53 ( up to 1.4GHz )	
	GPU	Mali-T860MP4 GPU, OpenGL ES1.1/2.0/3.0/3.1/3.2, Vulkan 1.0, OpenCL 1.2, DX11	
Memory	Capacity	Onboard LPDDR4 2GB/4G	
Storage	eMMC	Onboard eMMC 16G/32G	
	TF card expansion	1×TF card interface, max support 128GB	
I/O	Ethernet	1×10/100/1000Mbps rate self-detecting Ethernet, 1×10/100/1000Mbps rate self-detecting Ethernet (optional) onboard 2.4G WiFi, supports Wi-Fi 802.11b/g/n protocol, supports Bluetooth, Bluetooth 5.0	
	Audio	2×Ø3.5 PhoneJack Power amplifier interface ( 8Ω 6W ) , 1×MIC IN (optional)	
	USB	3×USB2.0, 1×USB3.0	
	MiniPCIE	Support LTE 4G LTE/5G Module (optional)	
	Serial Port	4×RS232 (DB9), 1×RS485, 1×RS485, COM1/2 setup RS232/485, COM1 default RS485, COM2 default RS232, COM4 setup TTL, default RS232	
	Display	1×HDMI, Support 4K 60Hz display, Support HDCP 1.4/2.2	
	OTG	1×USB3.0 (USB-A)	
Physical properties	Dimensions	10.1"	12.5"
	Overall	269.16mm×187.8mm×40.8mm	335.68mm×221.72mm×40.8mm
	Hole	261.16mm×179.8mm	327.68mm×13.72mm
	Weight	1.17kg	1.7kg
	Installation	Bracket installation	
OS	OS	Android 7.1.2. ubuntu 18.04	
Power	Input	DC 12V~24V	
	Power consumption	20 Watt	15 Watt
LCD screen	Screen type	10.1" TFT-LCD	12.5" TFT-LCD
	Resolution	1280×800	1920×1080
	Max color	16.7MB	16.7MB
	Display area	215.96mm×134.60mm	274.59mm×153.94mm
	Backlight	LED	LED
	BacklightMTBF (Hour)	30000hrs	25000hrs
	Pixel pitch	0.1695×0.1695	0.144×0.144
	Brightness	350 cd/m <sup>2</sup>	300 cd/m <sup>2</sup>
	Contrast	800:1	1200:1
	Perspective	(L)85/(R)85/(T)85/(B)85	(L)85/(R)85/(T)85/(B)85
Touchscreen	Touch screen type	Multi-point capacitive touch screen	
	Touch points	>86%	
	Controller	USB I/O	
	Driver support	Android	
	Touch diameter	10 point	
	Surface hardness	7H	
Environmental	Operating temperature	-20 ~ 60°C	0 ~ 60°C
	Storage temperature	-30 ~ 80°C	
	Relative humidity	0~95% (No condensation)	
	Vibration	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, duration 11ms	
	Water proof	IP65	

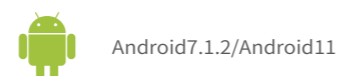
Model		ARM6000-C156-C5-3399-T	ARM6000-C2145-C5-3399-T
Processor	CPU	Rockchip RK3399 6-core processor, 2×A72 ( up to 1.8GHz ) + 4×A53 ( up to 1.4GHz )	
	GPU	Mali-T860MP4 GPU, OpenGL ES1.1/2.0/3.0/3.1/3.2, Vulkan 1.0, OpenCL 1.2, DX11	
Memory	Capacity	Onboard LPDDR4 2GB/4G	
Storage	eMMC	Onboard eMMC 16G/32G	
	TF card expansion	1×TF card interface, max support 128GB	
I/O	Ethernet	1×10/100/1000Mbps rate self-detecting Ethernet, 1×10/100/1000Mbps rate self-detecting Ethernet (optional) onboard 2.4G WiFi, supports Wi-Fi 802.11b/g/n protocol, supports Bluetooth, Bluetooth 5.0	
	Audio	2×Ø3.5 PhoneJack Power amplifier interface ( 8Ω 6W ) , Built-in 4Ω/1.5W speaker (reserved), 1×MIC IN(optional)	
	USB	3×USB2.0, 1×USB3.0	
	MiniPCIE	Support LTE 4G LTE/5G Module (optional)	
	Serial Port	4×RS232 (DB9), 1×RS485, 1×RS485, COM1/2 setup RS232/485, COM1 default RS485, COM2 default RS232, COM4 setup TTL, default RS232	
	Display	1×HDMI, HDMI, Support 4K 60Hz display, Support HDCP 1.4/2.2	
	OTG	1×USB3.0 (USB-A)	
Physical properties	Dimensions	15.6"	21.45"
	Overall	400.2mm×257.2×40.8mm	548.4 mm×340.3mm×51.1mm
	Hole	392.2mm×249.2mm	540.4mm×332.3mm
	Weight	2.0kg	5.88kg
	Installation	Bracket installation	
OS	OS	Android 7.1.2. ubuntu 18.04	
Power	Input	DC 12V~24V	
	Power consumption	15 Watt	30 Watt
LCD screen	Screen type	15.6" a-Si TFT-LCD	21.45" TFT-LCD
	Resolution	1920×1080	1920×1080
	Max color	16.7MB	16.7MB
	Display area	343.16mm×192.59mm	477.66mm×259.28mm
	Backlight	LED	LED
	BacklightMTBF (Hour)	15000hrs	30000hrs
	Pixel pitch	0.17925×0.17925	0.0831×0.241
	Brightness	250 cd/m <sup>2</sup>	250 cd/m <sup>2</sup>
	Contrast	800:1	3000:1
	Perspective	(L)85/(R)85/(T)85/(B)85	(L)89/(R)89/(T)89/(B)89
Touchscreen	Touch screen type	Multi-point capacitive touch screen	
	Touch points	>86%	
	Controller	USB I/O	
	Driver support	Android	
	Touch diameter	10 point	
	Surface hardness	7H	
Environmental	Operating temperature	0 ~ 60°C	-20 ~ 60°C
	Storage temperature	-30 ~ 80°C	
	Relative humidity	0~95% (No condensation)	
	Vibration	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, duration 11ms	
	Water proof	IP65	

# ABX-SLA1-W6XX Series

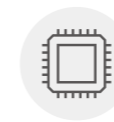
Rockchip RK3568/RK3399 AI High performance host



ABX-SLA1-W6XX uses Rockchip high-performance processor to meet the needs of AI intelligence, smart applications, and computing power. Gigabit Ethernet, supports 4G/5G, WiFi network, 4-way serial ports (3 RS232, 1 RS485), 3-way USB, rich interfaces; supports bracket and rail installation; can be widely used in industrial gateways and face recognition equipment, thin client (cloud service), VOIP video conferencing system, IoT Internet of Things field, VR recording, VR and other industries.

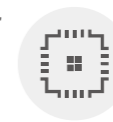


## Features



### Rockchip 64-bit high-performance processor

Rockchip RK3568 ARM Quad Cortex-A55 up to 2.0GHz  
Rockchip RK3399 ARM Dual Cortex-A72 and Quad Cortex-A53 1.8 GHz



### Mali-G52 Graphics Processor

Supports OpenGL ES 3.2/2.0/1.1, Vulkan 1.1



### Independently Developed Industrial Motherboard

Abundant coastline interfaces, meeting the "wireless cable" design of the entire system, ensuring stability and reliability.



### Abundant I/O Interfaces

1×1000Mbps Ethernet (optional dual Gigabit), onboard 2.4G WiFi supports BT5.0, 4×COM, 3×USB2.0, 1×USB3.0 (OTG multiplexing), supports LTE 4G/5G mode Group (optional), supports 2 speaker outputs.



### Good heat dissipation design

It uses aluminum profiles for rapid heat conduction and stable operation; it supports bracket and guide rail installation.



### Support Android and Debian dual systems

Supports a variety of 4G modules, supports 4G routing function; background network heartbeat, Can automatically reset 4G/5G, "permanently online"; supports screen rotation and navigation Bars can be permanently hidden and other functions; support U disk OTA upgrade and online upgrade.



### Wide voltage power supply: DC 12V~24V

DC 12V~24V wide voltage input, with overcurrent and reverse connection protection measures, and the interface adopts fastening Phoenix terminals.



### Wide temperature operation: -20°C~60°C

High-quality wide-temperature parts are selected inside the product, and the whole machine can achieve an operating temperature range from -20°C to 60°C, meeting the needs of most industries and use areas.



- |                      |                    |
|----------------------|--------------------|
| 1 : WiFi             | 5 : Return         |
| 2 : GPS              | 6 : HDMI           |
| 3 : 4G/5G (Optional) | 7 : UP SIM,DOWN TF |
| 4 : DC IN            | 8 : USB3.0/OTG     |
| 9 : USB2.0           | 13 : SPK (L/R)     |
| 10 : USB2.0          | 14 : COM4-RS485    |
| 11 : LAN             | 15 : COM3-RS232    |
| 12 : Headphones      | 16 : COM2-RS232    |
|                      | 17 : COM1-RS232    |

ABX-SLA10-W6XX Series Interface Diagram



- |                      |                    |
|----------------------|--------------------|
| 1 : WiFi             | 5 : HDMI           |
| 2 : 4G/5G (Optional) | 6 : UP SIM,DOWN TF |
| 3 : DC IN            | 7 : USB3.0/OTG     |
| 4 : Return           | 8 : USB2.0         |
| 9 : USB2.0           | 13 : COM4-RS485    |
| 10 : LAN             | 14 : COM3-RS232    |
| 11 : Headphones      | 15 : COM2-RS232    |
| 12 : SPK (L/R)       | 16 : COM1-RS232    |

ABX-SLA12-W6XX Series Interface Diagram



Model		ABX-SLA10-W610
Processor System	CPU	Rockchip RK3399 ARM Dual Cortex-A72 and Quad Cortex-A53 1.8 GHz
	GPU	Mali-T860MP4 GPU,OpenGL ES 1.1/2.0/3.1,OpenCL 1.1, DirectX 11
Memory	Memory	Onboard 2/4GB LPDDR4
	Storage	Emmc Onboard 16/32GB eMMC TF Socket 1xTF,MAX 128GB
I/O Interface	Ethernet	1x10/100/1000Mbps 2.4G/5G WiFi , Wi-Fi 802.11b/g/n , Bluetooth 5.0
	GPS	GPS/BD module,Support GPS+ Beidou Function
	AUDIO	2xØ3.5 SPK 1x Ø3.5 PhoneJack
	USB	2xUSB2.0, 1xUSB3.0
	Expansion Slots	1 x MINI-PCIE with USB 3.0 signal for LTE Modules, 1 x SIM card socket
	COM	3xRS232 , COM1-3,1xRS485 , COM4
	Display	1 x HDMI 2.0, upto 4096x2304@60fps
	OTG	1xUSB3.0 (USB-A)
Mechanical	Dimensions	215mm x 147mm x 37mm (W x H x D)
	Construction	Aluminum housing
	Mounting	Wall Mount/DIN-Rail
	Weight	0.9kg
OS	OS	Android 11, Debian10
	Power	DC IN DC 12V~24V Power Consumption Boost 13W
Environment	Temperature	Operating:-20 ~ 60°C (-4°F~140°F) Storage:-30 ~ 80°C (-22~ 176°F)
	Relative Humidity	5~95% (Non-condensing)
	Vibration during Operation	SSD applied: 1.5 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis
	Shock during Operation	SSD applied: 10 G, IEC 60068-2-64, Half-sine Wave, Sustained11ms



Model		ABX-SLA12-W600/601
Processor System	CPU	Rockchip RK3568 ARM Quad Cortex-A55 up to 2.0GHz
	GPU	Mali-G52 support OpenGL ES 1.1/2.0/3.2, Vulkan 1.0/1.1, OpenCL 2.0
	NPU	Up to 1.0 Tops.Supports INT8/INT16 hybrid operation
Memory	Memory	Onboard 2/4GB LPDDR4
	Storage	Emmc Onboard 16/32GB eMMC TF Socket 1xTF,MAX 128GB
I/O Interface	Ethernet	1x10/100/1000Mbps 2.4G WiFi , Wi-Fi 802.11b/g/n , Bluetooth 5.0
	AUDIO	2xØ3.5 SPK 1x Ø3.5 PhoneJack
	USB	2xUSB2.0, 1xUSB3.0
	Expansion Slots	1 x MINI-PCIE with USB 3.0 signal for LTE/5G Modules, 1 x SIM card socket 1 x M.2 E Key with PCIE 3.0/PCIE 2.0/USB 2.0 signal for Wi-Fi 5/6
	COM	3xRS232 , COM1-3 1xRS485 , COM4
	Display	1 x HDMI 2.0, upto 4096x2304@60fps
	OTG	1xUSB3.0 (USB-A)
	Mechanical	Dimensions
Construction		Aluminum housing
Mounting		Wall Mount/DIN-Rail
Weight		0.9kg
OS	OS	Android 11, Debian10
	Power	DC IN DC 12V~24V Power Consumption Boost 13W
Environment	Temperature	Operating:-20 ~ 60°C (-4°F~140°F) Storage:-30 ~ 80°C (-22~ 176°F)
	Relative Humidity	5~95% (Non-condensing)
	Vibration during Operation	SSD applied: 1.5 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis
	Shock during Operation	SSD applied: 10 G, IEC 60068-2-64, Half-sine Wave, Sustained11ms

# eBOX-390X-3399 Series

Rockchip RK3399 AI High performance host

eBOX-390X-3399 uses Rockchip RK3399 6-core high-performance processor to meet the needs of AI intelligence, smart applications, and computing power. Dual Gigabit Ethernet, supports 4G/5G, WiFi network, 4-way serial port, 4-way USB, rich interfaces; supports bracket and rail installation; can be widely used in industrial gateways, face recognition equipment, thin clients (cloud services), VOIP video conferencing system, IoT Internet of Things field, VR recording, VR and other industries



## Features

**Rockchip 64-bit high-performance processor**  
Using a dual "server-grade" core Cortex-A72 + quad-core Cortex-A53 large and small core architecture with a frequency of up to 1.8GHz, the new core can provide up to 100% performance improvement compared to the previous core design.

**Independently Developed Industrial Motherboard**  
Abundant coastline interfaces, meeting the "wireless cable" design of the entire system, ensuring stability and reliability.

**Wide voltage power supply: DC 12V~24V**  
DC 12V~24V wide voltage input, with overcurrent and reverse connection protection measures, and the interface adopts fastening Phoenix terminals.

**Good heat dissipation design**  
Aluminum profiles are used for rapid heat conduction and stable operation; support bracket and guide rail installation

**Mali-T860 MP4 quad-core graphics processor**  
Supports OpenGL ES1.1/2.0/3.0/3.1/3.2, Vulkan 1.0, OpenCL 1.2, DX11, AFBC (frame buffer compression), powerful GPU performance, and can be used for computer vision, machine learning, 4K, 3D rendering and other applications

**Abundant I/O Interfaces**  
1x 1000Mbps Ethernet, onboard 2.4G WiFi, support for BT5.0, 4x COM ports, 2x USB2.0 (expandable to 4 ports), 1x USB3.0 (OTG multiplexing), support for LTE 4G/5G module (optional), support for 2-channel speaker output.

**Support Android and Debian dual systems**  
Supports a variety of 4G modules, supports 4G routing function; background network heartbeat, Can automatically reset 4G/5G, "permanently online"; supports screen rotation and navigation

**Wide temperature operation: -20°C~60°C**  
High-quality wide-temperature parts are selected inside the product, and the whole machine can achieve an operating temperature range from -20°C to 60°C, meeting the needs of most industries and use areas.



eBOX-390X-3399 Interface Diagram

- 1 : COM3
- 2 : SPK(R/L)
- 3 : 4G/5G(Optional)
- 4 : WiFi
- 5 : TF
- 6 : SIM
- 7 : DC IN
- 8 : SYS LED
- 9 : PWR LED
- 10 : Return
- 11 : HDMI
- 12 : COM1
- 13 : COM2
- 14 : USB3.0/OTG
- 15 : USB2.0
- 16 : LAN 1
- 17 : LAN 2



Model		eBOX-3904-3399	eBOX-3904-3399-2E	eBOX-3905-3399-EG
Processor	CPU	Rockchip RK3399 6-core processor, 2×A72 ( up to 1.8GHz ) + 4×A53 ( up to 1.4GHz )		
	GPU	Mali-T860MP4 GPU, OpenGL ES1.1/2.0/3.0/3.1/3.2, Vulkan 1.0, OpenCL 1.2, DX11		
Memory	Memory	onboard LPDDR4 2GB/4G		
	eMMC	onboard eMMC 16G/32G		
Storage	TF Socket	1×TF card interface, max support 128GB		
	Ethernet	1×10/100/1000Mbps Ethernet	2×10/100/1000Mbps Ethernet	2×10/100/1000Mbps Ethernet
I/O Interface	AUDIO	onboard 2.4G WiFi, supports Wi-Fi 802.11b/g/n protocol, supports Bluetooth, Bluetooth 5.0		
	USB	2×Ø3.5 PhoneJack Power amplifier interface ( 8Ω 6W )		
	MiniPCIE	3×USB2.0, 1×USB3.0		
	Serial port	Support LTE 4G LTE/5G Module (optional)		
	Display	3×RS232 (DB9), ttyXRUSB1~ ttyXRUSB3, COM1/2 set RS232/485, COM1 default RS485, COM2 default RS232		
	OTG	1×HDMI, Support 4K 60Hz display, Support HDCP 1.4/2.2		
	OTG	1×USB3.0 (USB-A)		
Mechanical	Dimensions	215mm×147mm×39.8mm		
	Material	Aluminum box plus aluminum profile		
	Weight	1.66kg		
	Installation	Embedded bracket installation	Embedded bracket installation	Rail installation
OS	OS	Android 7.1.2, ubuntu 18.04		
	DC IN	DC 12V~24V		
Power	Power Consumption	15 Watt		
	Operating temperature	-20 ~ 60°C(-4°F~140°F)		
Environment	Storage temperature	-30 ~ 80°C(-22°F~ 176°F)		
	Relative Humidity	0~95% (Non-condensing)		
	Vibration	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, Sustained11ms		

## Nodka R&D Center

### Kunshan X86 Motherboard and ODM

- X86/ARM Domestic Motherboard R&D
- ODM Product Development
- Keeping up with X86/ARM Technological Roadmaps and Trends



### Suzhou System and Application Development

- Complete System, Board-level, and IO Application Development
- Focus on System-level Application Development
- Accumulate Rich Industry and Field Experience

### Shenzhen Software Research and Development Center

- Android/Linux Application Development

## Nodka R&D Strength

