

VT-SBC-3568 Single Board Computer



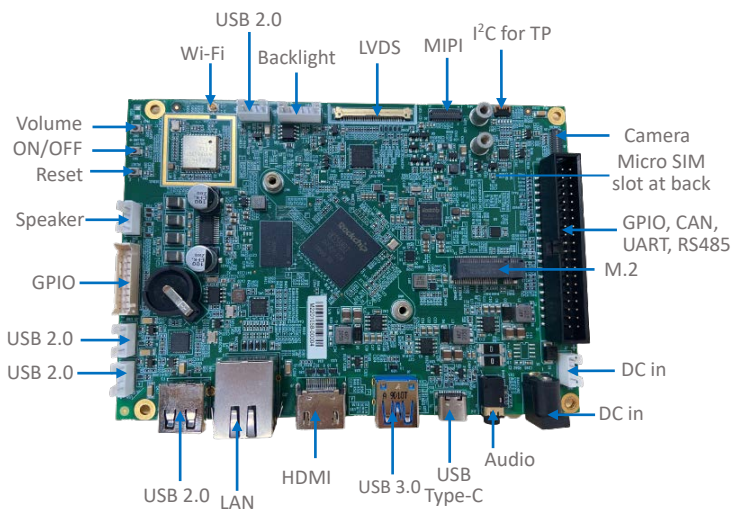
Product Brief Introduction

VT-SBC-3568 Single Board Computer is powered by Rockchip RK3568 processor that integrates quad-core ARM Cortex-A55 CPU and Mali G52 GPU to provide optimized performance at lower power consumption, and offer high-quality video encoding and decoding for better display performance.









While both wired and wireless network accesses are available, user data is kept safe and secure in transmission. Meanwhile, the board provides a range of customer expansion options to meet the requirements of different application purposes, especially in industrial IoT scenarios.

Featuring high flexibility and high performance, the board is able to work under extreme environments at industrial-grade temperatures ranging from -20°C to +70°C, making it a reliable industrial IoT solution.

Exterior and Features



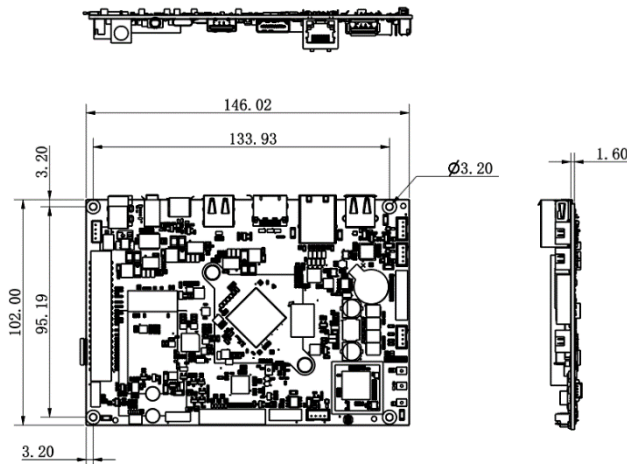
VT-SBC-3568

-  RK3568, Quad-core ARM Cortex-A55 processor
-  4GB on-board LPDDR4
-  Rich interfaces, flexible expansion
-  high-quality video encoding and decoding
-  Ethernet/Wi-Fi & BT/4G/5G supported
-  RTC and WDT supported
-  USB 2.0 & USB 3.0
-  Industrial-grade temperature range

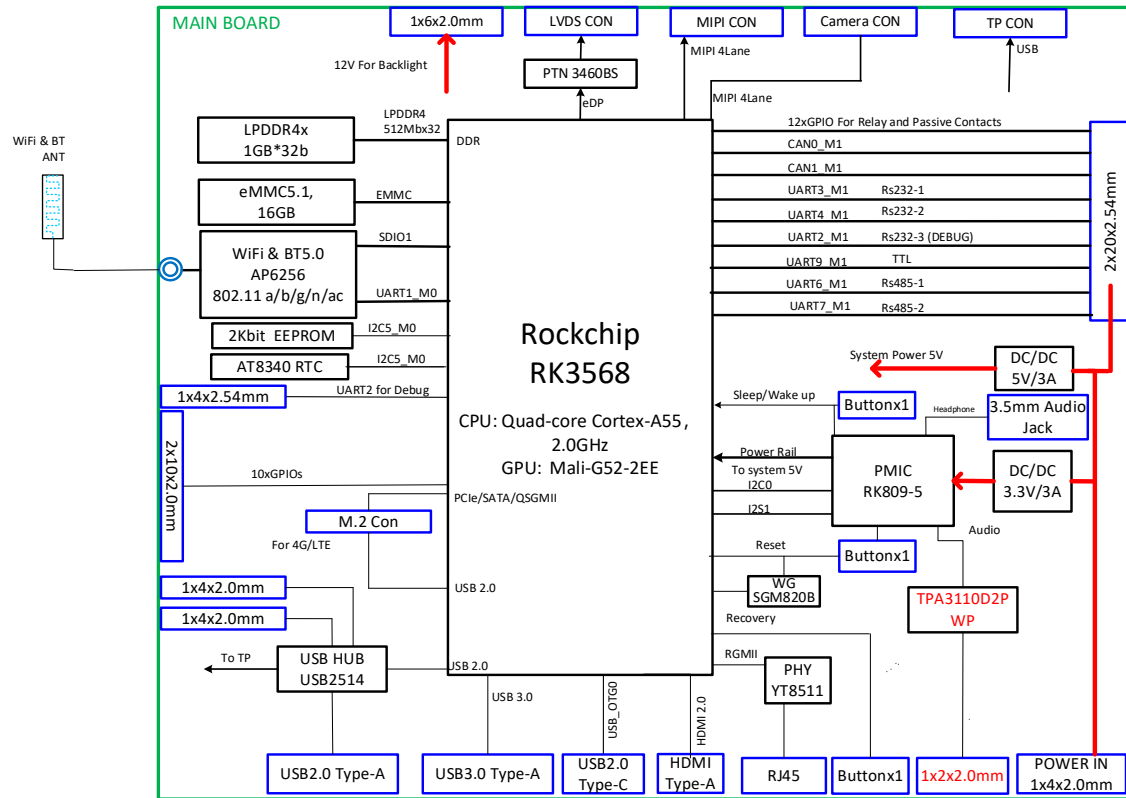
VT-SBC-3568 Single Board Computer Datasheet

VT-SBC-3568			
System	CPU	RK3568, Quad-core ARM Cortex-A55 MPCore, up to 2.0 GHz	
	GPU	ARM Mali-G52	
	Memory	4GB LPDDR4 (Optional: 2GB)	
	Storage	16GB eMMC V5.1, up to 128GB 2Kb EEPROM	
Communication	Ethernet	1 x RJ45, 10/100/1000Mbps 100Base-T4 (surge suppression)	
	Cellular	4G/5G (Optional)	
	Wi-Fi & BT	2.4GHz/5GHz Wi-Fi & BT 5.0	
Media	Display	1 x Dual LVDS with backlight control, up to 1920 x 1080 (Optional: eDP, up to 2K)	
	Camera	1 x HDMI 2.0	1 x MIPI DSI
	Audio	1 x 4-lane MIPI CSI	
I/Os	Serial	1 x 3.5mm Audio jack	2 x 5W/8Ω Speaker connector
	USB	5 x UART (RS232/RS485)	1 x UART for debugging
	GPIO	1 x USB 3.0 Type-A	1 x USB 2.0 Type-C
	SIM slot	1 x USB 2.0 Type-A	3 x USB 2.0 connector
	RTC	18 x GPIO	
	WDT	1 x Micro SIM slot	
	Expansion	Bus	2 x CAN, without transmitter 1 x I ² C for infrared TP
System Control	Button	1 x Reset 1 x Power button	1 x Volume button
Power	Input	12V/3A DC	
Software	Operating system	Debian 10, Android 11+	
	Device management platform	BlueSphere MDM (Android device only)	
	OTA tool	BlueSphere OTA	
Mechanical	Dimensions	146.02mm x 102mm	
	Cooling mode	Fanless	
Environment Condition	Temperature	Operating: 0°C~+60°C (RK3568), -20°C~+70°C (RK3568J) Storage: -20°C~+70°C (RK3568), -40°C~+85°C (RK3568J)	
	Humidity	≤96%RH (Non-condensing)	

Product Outlines



Block Diagram



Company Profile

Since 2002 established by two Silicon Valley entrepreneurs, Vantron Technology has been a pioneer in connected IoT devices and IoT platform solutions. Today, Vantron serves countless customers all over the world, some of them are Fortune 500 companies. Products lines cover edge intelligent hardware, IoT communication devices, industrial displays and BlueSphere cloud device management platform.

Vantron has 20 years of experience in R&D of embedded edge intelligent hardware like SOM board and motherboard, and provided users with various embedded solutions with ARM and X86 architecture. From Linux to Windows, from embedded to desktop level, from gateway to server. At the same time, we provide our users with system clipping, driver transplantation and other services.

Vantron IoT communication devices support multi-protocol connection of industrial equipment, edge computing of local data. Abundant wired and wireless connectivity make remote operations and maintenance possible. From electricity and transportation to smart retail, medical and warehousing, Vantron IoT communication device can be deployed anywhere in any business section. Vantron believes its IoT solution to help many companies finish their digital transformation, efficiency of manufacturing and productivities have been improved significantly.

Vantron industrial display systems, ARM and X86 series, are equipped with Rockchip, NXP, MediaTek, Intel and other high-performance processors. It supports various operating systems such as Windows, Linux, and Android. Diverse wireless communications keep your device online all the time. Multiple installation methods make it suitable for a variety of application scenarios. Features like waterproof, dustproof, shatter resistant guarantee the best performance in any environment.

Vantron BlueSphere device management platform, a software product, is playing a big role in Vantron overall IoT solution. Today, Vantron puts more focus on offering complete cost effective, leading-edge yet reliable solutions to help customers carry out their visions.