

VT-SBC-3568 Single Board Computer



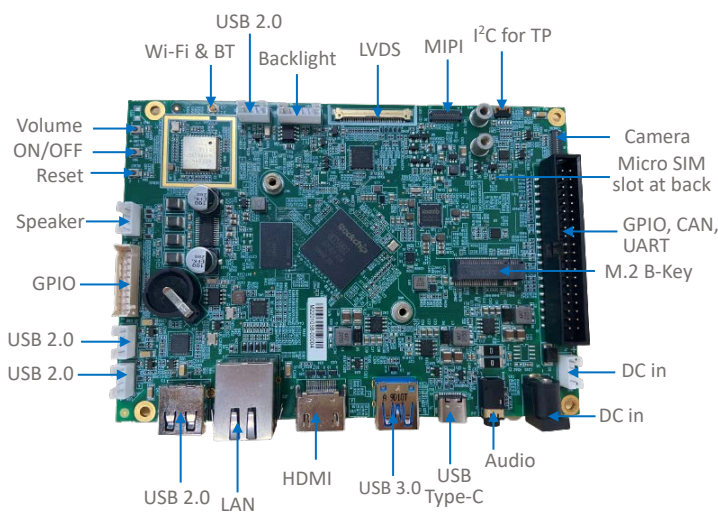
Product Brief

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



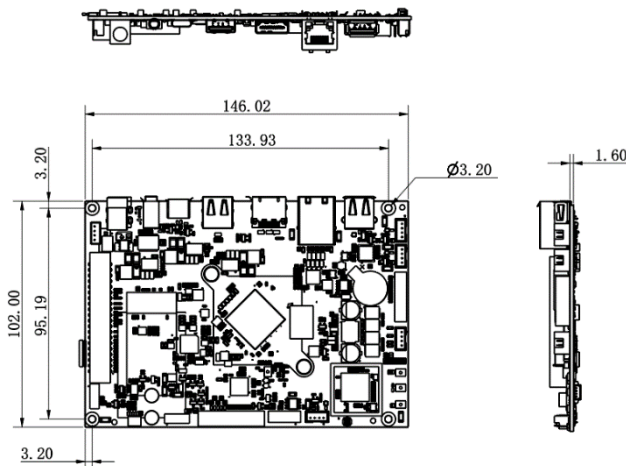
VT-SBC-3568

-  RK3568, Quad-core ARM Cortex-A55 processor
-  4GB on-board LPDDR4
-  Rich interfaces for flexible expansion
-  H.264/H.265 video codec
-  LVDS/eDP, MIPI, HDMI for video output
-  Ethernet, Wi-Fi & BT/4G/5G supported
-  RTC and WDT supported
-  USB 2.0 & USB 3.0

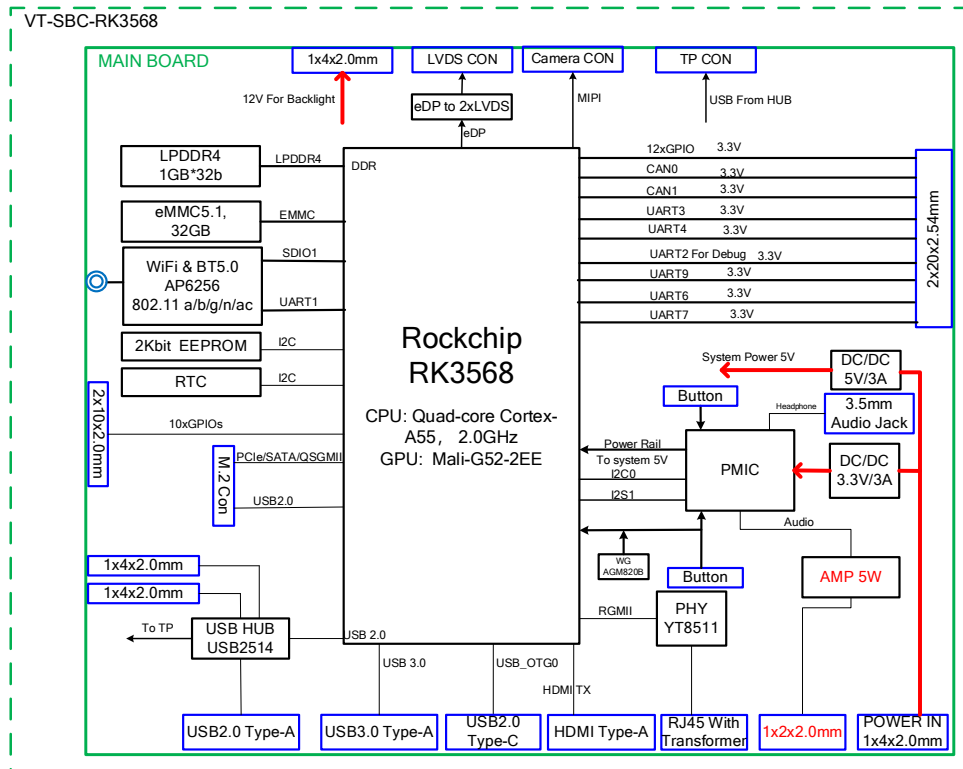
VT-SBC-3568 Single Board Computer Datasheet

VT-SBC-3568				
System	CPU	RK3568, Quad-core ARM Cortex-A55 MPCore, up to 2.0 GHz		
	GPU	ARM Mali-G52-2EE		
	Memory	4GB LPDDR4 (Optional: 2GB)		
	Storage	32GB eMMC V5.1, up to 128GB 2Kb EEPROM	SSD expansion supported by an M.2 B-Key	
Communication	Ethernet	1 x RJ45, 10/100/1000Mbps 100Base-T4		
	Cellular	Optional: 4G/5G (supported by an M.2 B-Key)		
	Wi-Fi & BT	Wi-Fi 802.11 a/b/g/n/ac & BT 5.0		
Media	Display	1 x Dual LVDS, up to 1920 x 1080 / 1 x eDP, up to 2K 1 x HDMI 2.0, up to 4096 x 2304 @60Hz 1 x MIPI DSI, up to 1920 x 1200 @60Hz		
	Camera	1 x 4-lane MIPI CSI		
	Audio	1 x 3.5mm Audio jack	2 x 5W/8Ω Speaker connector	
I/Os	Serial	5 x UART (3.3V)	1 x Debug UART (3.3V)	
	USB	1 x USB 3.0 Type-A 1 x USB 2.0 Type-A	1 x USB 2.0 Type-C 3 x USB 2.0 connector	
	GPIO	18 x GPIO (3.3V)		
	SIM slot	1 x Micro SIM slot		
	RTC	Supported		
	WDT	Supported		
	Expansion	Bus	2 x CAN, without transmitter	1 x I ² C for TP
M.2 B-key slot		1 x M.2 B-key (2242/2260), PCIe for 4G/5G module or SSD		
System Control	Button	1 x Reset 1 x Power button	1 x Volume button	
	Power	Input: 12V/3A DC		
Software	Operating system	Android 11+, Debian 10, Linux Yocto		
	Device management platform	BlueSphere MDM (Android version only)		
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



Ordering Information

Ordering No.	CPU	I/Os	Connectivity
VT-SBC-3568	RK3568, Quad-core ARM Cortex-A55 processor	HDMI, MIPI DSI, LVDS/eDP, MIPI CSI, USB-A, USB-C, CAN, UART, I ² C, GPIO	Ethernet, Wi-Fi & BT
VT-SBC-3568-4G			Ethernet, Wi-Fi & BT, 4G
VT-SBC-3568-5G			Ethernet, Wi-Fi & BT, 5G

* More variants are available, please contact the sales executive for details.

Packing list	
VT-SBC-3568 single board computer	1
12V 3A power adapter & power cable	1 Kit
Wi-Fi & Bluetooth antenna	1

Optional accessories	
4G/5G module	1
4G/5G antenna	1

Since its establishment in 2002 by two Silicon Valley entrepreneurs, Vantron Technology has been at the forefront of the connected IoT devices and IoT platform solutions. Today, Vantron boasts a global customer base that includes many Fortune Global 500 companies. Its product lines cover edge intelligent hardware, IoT communication devices, industrial displays and BlueSphere cloud platforms.

With over 20 years of experience in R&D of intelligent edge hardware, Vantron has provided users with diverse embedded solutions featuring ARM and X86 architectures. Its offerings range from Linux, Android to Windows, from embedded to desktop level, and from gateways to servers. In addition, it provides users with system trimming, driver transplantation and more to cater to the unique needs of its users.