

## VT-SBC35-G1200 Single Board Computer

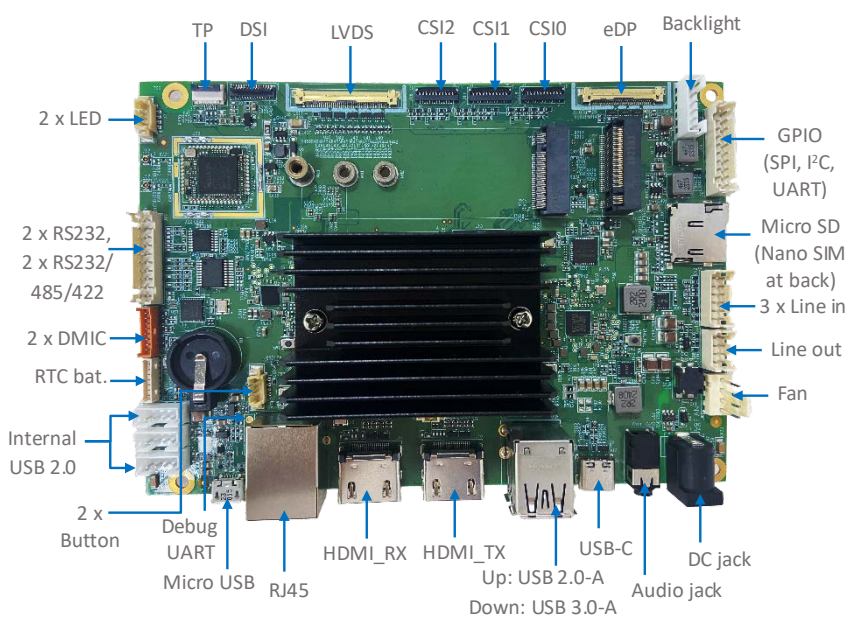


### Product Brief









Adopting the 3.5-inch form factor, VT-SBC35-G1200 single board computer is powered by the MediaTek MT8395 processor that combines four high-performance Cortex-A78 cores and four power-efficient Cortex-A55 cores, striking a balance between power and performance for a wide range of IoT applications. It integrates a Mali G57 MC5 GPU for enhanced 2D/3D graphic acceleration complemented by HEVC/H.264 video encoder and multi-standard video decoder support. The HiFi 4 audio DSP offers efficient pre-/post-processing capability for audio and video contents. In addition, it incorporates a Tensilica VP6 APU backed by MediaTek Deep Learning Accelerator (MDLA 3.0), offering 4.8 TOPS AI performance for demanding imaging, computer vision, and neural network applications.

VT-SBC35-G1200 boasts versatile display output options that enable dual displays in extended mode. It offers an RJ45 Ethernet jack and a combo Wi-Fi 5 and Bluetooth 5.0 chip for IoT connectivity. It also provides optional 4G/5G connectivity for users. Additionally, it provides rich on-board interfaces to meet diverse application scenarios such as smart home, edge AI, industrial IoT, and digital media.

### Exterior and Features



#### VT-SBC35-G1200

-  MediaTek MT8395 octa-core processor
-  Optional Wi-Fi 6/4G/5G connectivity
-  Display output up to FHD and 4K @60Hz
-  4K @60fps video encoder, 4K @90fps decoder
-  16MP + 16MP @30fps for dual-camera ISP
-  Rich I/Os: COM, USB, SPI, UART, I2C, GPIO
-  High-performance APU and GPU
-  3.5-inch form factor

**VT-SBC35-G1200 Single Board Computer Datasheet**

VT-SBC35-G1200				
<b>System</b>	CPU	MediaTek MT8395, Quad-core ARM Cortex-A78 (2.2GHz) + Quad-core ARM Cortex-A55 (2.0GHz)		
	GPU	Mali-G57 MC5		
	APU	4.8 TOPS, Tensilica VP6 + MediaTek Deep Learning Accelerator (MDLA 3.0)		
	Audio DSP	HiFi 4		
	Memory	8GB 64-bit LPDDR4x		
	Storage	64GB eMMC 5.1 + 64GB UFS2.1	Optional: SSD expansion (M.2 Key M)	
<b>Communication</b>	Ethernet	1 x RJ45, 10/100/1000Mbps		
	Wi-Fi & BT	Wi-Fi 5 & BT 5.0	Optional: Wi-Fi 6 & BT 5.2 (M.2 Key M)	
	Cellular	Optional: 4G/5G (M.2 Key B)		
<b>Media</b>	Display (Extend mode of dual displays supported)	2 x HDMI 2.0, up to 4K @60Hz (one HDMI_RX, one HDMI_TX)		
		1 x MIPI DSI, up to 4K @60Hz (default) / 1 x Dual LVDS, up to 1920 x 1200		
		1 x eDP, up to 4K @60Hz		
		1 x DisplayPort over USB Type-C, up to 4K @60Hz		
	Audio	1 x 3.5mm Combo audio jack	1 x DMIC	
		1 x Line out connector (amplifier board support, 12V)		3 x Line in connector (AMIC board support)
Camera	3 x MIPI CSI-2, ISP: 48MP @30fps (single cam.), 16MP + 16MP @30fps (dual cam.)			
Touch	1 x I <sup>2</sup> C connector for TP			
<b>I/Os</b>	Serial	2 x RS232 connector	2 x RS232/RS422/RS485 connector	
	USB	1 x USB 2.0 Type-A	3 x USB 2.0 connector	1 x Micro USB 2.0
		1 x USB 3.0 Type-A		1 x USB 3.0 Type-C
	GPIO header	12 x GPIO (Max.), including 1 x SPI, 1 x UART (3.3V, with RTS/CTS), 1 x I <sup>2</sup> C		
	Fan	1 x Fan connector		
	UART	1 x Debug UART (1.8V)		
	SD & SIM	1 x Micro SD slot	1 x Nano SIM slot	
RTC & WDT	Supported			
<b>Expansion</b>	M.2 Key B	1 x M.2 key B (2242/2260), USB 3.0, for 4G/5G		
	M.2 Key M	1 x M.2 Key M (2280), PCIe 3.0, for SSD or Wi-Fi 6 & BT 5.2		
<b>System Control</b>	Connector	2 x LED connector	2 x Key connector (RST, download)	
	Key	4 x Key (SW1: Power, SW2: Reset, SW3: Volume +/program download, SW4: Volume -/Home)		
<b>Power</b>	Input	12V/3A DC (via the DC jack or USB Type-C)		
<b>Software</b>	Operating system	Android 13, Linux Yocto		
<b>Mechanical</b>	Dimensions	146.02mm x 102mm		
<b>Environment Condition</b>	Temperature	Operating: 0°C~+60°C		
		(Optional: -40°C~+85°C)		
	Humidity	20%-80% RH (Non-condensing)		
Certification	FCC, ISED, CE			

**Product Outlines**

