



Quick Guide

VIA IVT01

Overview

The VIA IVT01 is an Android™ 8.0" tablet with FHD capacitive touch screen. It is powered by the 2.0GHz MediaTek500 octa-core processor with 4GB LPDDR4 DRAM, 16/32GB eMMC storage and CMOS front camera.

Measuring just 218mm (W) x 37mm (H) x 145mm (D), the system integrates a set of I/O features through the side panel, including Micro USB 2.0 connector, Micro SIM card slot, 3.5mm audio jack, connectors to support CAN, RS-232, GPIO and power input.

Key Features

- High-performance octa-core MediaTek i500 processor
- 8.0" FHD capacitive touch screen
- Support for 4G, GPS, Wi-Fi, and Bluetooth wireless connectivity
- MIPI DSI display support
- Wide input voltage range supporting 9V~36V DC-in



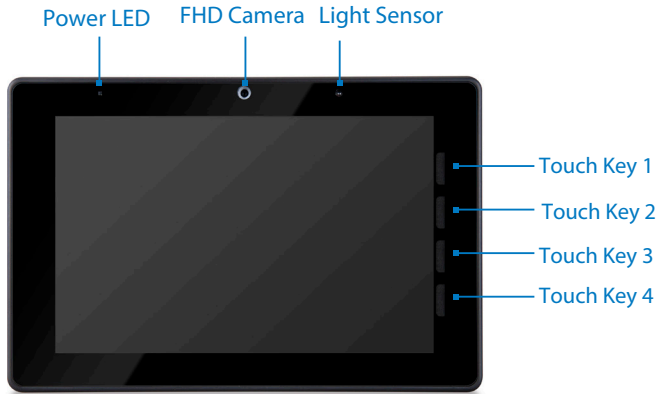
Specifications

SOM-9X50 Module	Processor	MediaTek i500 octa-core Processor - 4 Cortex-A73 @ 2.0GHz - 4 Cortex-A53 @ 2.0GHz
	System Memory	4GB LPDDR4-2400 DRAM
	Storage	16/32GB eMMC Flash memory
	Graphics	ARM Mali-G72 high-performance GPU - 3D graphics accelerator capable of processing 2400M pixel/sec@800MHz - OpenGL ES 1.1, 2.0, 3.0, 3.1 - Vulkan1.0 - OpenCL ES 1.1 full profile
	Video Decoder	1080p@30fps H.264/265
	Video Encoder	1080p@30fps H.264
	DSP	Cadence Tensilica Vision P6 x2
	PMIC/Audio Codec	MediaTeK MT6358 Over-current and thermal overload protection Under voltage lockout protection
Wireless Connectivity	MediaTek MT7668 supports integrated Wi-Fi and Bluetooth SIMCom SIM7600JC-H miniPCIe module	
MCU	STMicroelectronics STM32F103RCT6 ARM Cortex-M3 MCU with 256KB Flash, 72MHz CPU	
Display	8.0" FHD, 1920x1200 TFT LCD with LED Backlight, MIPI DSI interface	

Audio	Nuvoton NAU8223 Stereo Filter-Free Class-D Audio Amplifier
GPS	Locosys MC-1612-DG Dead Reckoning and Multiple GNSS with ADR/UDR Auto Switch Function
Sensor	Victory OE T348 3mm Round Ambient Light Sensor InvenSense ICM-20948 Low Power 9-Axis MEMS MotionTracking Device
Front Camera	CMOS FHD Camera Module
USB	TI TS3USB21 high-speed USB 2.0 (480Mbps) 1:2 Multiplexer/Demultiplexer Switch with Single Enable SMSC USB2514BI USB 2.0 High-Speed 4-Port Hub Controller
UART	Silicon Labs CP2108 USB to Quad UART Bridge Controller
Onboard I/O	1 2W speaker 1 Built-in microphone 1 MIPI DSI connector 1 MIPI CSI-2 connector 1 Touch screen connector 1 MiniPCIe slot (supports USB 2.0 host only) 1 Debug UART connector (supports TX/RX) 4 IPEX connectors (for internal RF antennas for Wi-Fi, 4G and GPS)
Coastline I/O	1 Connector to support: - Power input (ACC/IGN/BAT(DCIN)/GND) - 1 CAN - 5 GPI and 1GPO 1 Connector to support: - 2 RS-232 (TX/RX/CTS/RTS) 1 USB 2.0 host 4-pin connector (software controllable) 1 Micro SIM connector 1 Reset switch 4 Touch keys (on Touch screen) 1 3.5mm audio jack (support Headphone-out and MIC-in)
Watchdog	Supports Watchdog Timer
Power Supply	9V~36V DC-in, 36W Support intelligent vehicle power management: ACC/IGN on/off delay and power protection Supports Input Over Voltage Protection and Short Voltage Protection
Software Compatibility	Android 10 with preload GMS
Operating Temperature	-10°C ~ 60°C
Vibration Loading During Operation	Meets Japan government (MLIT) standard requirements
Dimensions	218mm (W) x 37mm (H) x 145mm (D) (8.58" x 1.46" x 5.71")
Compliance	Pre-scan for CE, FCC Class A TELEC

Layout Diagram

Front Side



Left Side



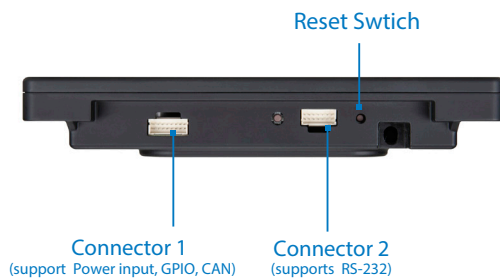
Rear Side



Right Side



Bottom Side



Android is a trademark of Google LLC.

* All product specifications are subject to change without notice. Update: October 6th, 2021.

www.viatech.com