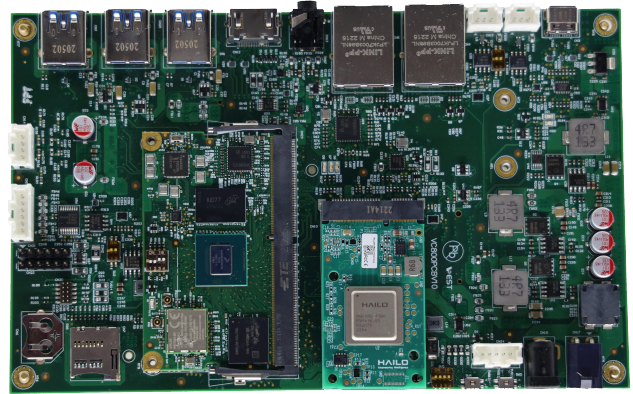


VEST i.MX 8M Plus Dev Kit

VEST-8MP-00-DEV

VEST is a leading embedded solutions provider, committing to excellence and innovation. Our Development Kits expedite product development, enabling swift market entry for your products and ensuring a competitive advantage.



**AI/ML
Support**



**Rich
Multimedia**



**High Performance
CPU**



**Robust Security
Features**

ABOUT OUR PRODUCT

Introducing the VEST i.MX 8M Plus Development (Dev) Kit. This comprehensive solution comprises a System on a Module (SOM) and a Carrier board.

Unleash the full potential of the NXP i.MX 8M Plus, featuring ARM® Cortex™-A53 processor and Neural Processing Unit (NPU). This empowers Artificial Intelligence (AI) and Machine Learning (ML) capabilities, enhances multimedia performance, supports cutting-edge Edge Computing, provides robust video graphics, and enables rapid processing – all within a compact, cost-efficient, and power-efficient package. AI processing performance is further driven up to 26 tops with integration of Hailo AI accelerator module.

This Dev Kit is versatile and suitable for diverse range of applications, such as

- Video / Audio Conferencing
- Advance Human Machine Interface Application
- Point of Sales
- Digital Signage
- Portable Test and Measurement Instruments
- Automation for Industry 4.0.

Key Features

- Dedicated NPU to accelerate AI and machine learning
- Drive AI performance with Hailo accelerator module
- Accelerate real-time data processing, with dual display
- Rich multimedia capabilities
- Up to 4K camera support
- Built-in 10W audio amplifier (plug and play speaker driver)
- Secured data integrity, safeguard against unauthorized access
- Multiple high-speed interfaces that comply with industrial standards facilitate seamless integration with various peripherals

Support



Yocto Linux



Android



Ubuntu



Qt



TensorFlow

VESTConnect360

Cloud Management System

VestConnect360

Our Main Office:

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All product specifications are subject to change without notice. Last updated: 31 - OCT - 2023.
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Specifications

CPU Details	
CPU	i.MX 8M Plus 4x Cortex-A53 @ 1.8GHz, Cortex-M7 @ 800MHz
GPU	16 GLOPS (high-precision) OpenGL® ES 3.1/3.0, Vulkan®, Open CL™ 1.2 FP, Open VG™ 1.1
NPU	Neural Processing Unit (NPU) Operating at up to 2.3 TOPS
AI Accelerator	Support Hailo AI Accelerator module up to 26 Tops (Optional)
Memory	
Memory	2GB (up to 8GB) 32-bit LPDDR4 up to 4.0GT/s
Storage	8GB (up to 128GB) eMMC5.1
Storage	Micro SD 3.0 Socket Push-Push Type
Operating System	
BSP	Yocto Linux, Ubuntu and Android
Multimedia	
Video Encoder	1080p60, h.265/4
Video Decoder	1080p60, h.265/4, VP9, VP8
Hi-Fi Audio	Cadence® Tensilica® Hifi 4 DSP @ 800MHz
Camera	2x MIPI CSI with Dual Image Signal Processors
Display	MIPI-DSI, up to UWHd and WUXGA HDMI 2.0a Tx, up to 4kp30 LVDS (4/8-lane) Tx, up to 1920x1080p60
Display and Touch	On board LVDS and I2C Touch Connector for 7" & 10" LCD Panel M.2 Key B Form Factor Display Daughter Board Socket Dual Channel 4-lane LVDS 4-lane MIPI-DSI I2C Touch PWM Backlight Output
Audio and Video	HDMI 2.0a Type A 3.5mm Headphone Jack with Microphone Input 2mm Pitch, 4 Pin Header for Speaker L&R, Up to 10W/ch into 8ohm Load
Connectivity	
Connectivity (Wifi)	On Board Dual Band Wi-Fi/Bluetooth Module (optional) Full Size Mini PCIe with Gen3 x 1 Lane Nano SIM Card Socket
Networking	2x 10/100/1000 BaseT RJ45 Ethernet, 1x Ethernet with TSN Support
USB	USB 3.0 OTG, Type C 3x USB 3.0 Host, Type A
Serial Communication	RS485 (Default) or RS232 2x CAN/CAN-FD 2mm Pitch 3 Pin Header
Expansion	M.2 Key B Form Factor Expansion Daughter Board Socket 4-Lane MIPI CSI x 2
Debugging & Programming	2x Debug-UART Header, 2.54mm pitch 5pin header JTAG-1.27 mm Pitch 2 x 5 Pin Header
Buttons and Indicators	1x On/Off Button 1x Reset Button 1x On/Off, Reset, Power LED Control Signal Connector-2mm Pitch 5 Pin Header Power LED Indicator-x2, 3.3V & 5V
Power	12-24VDC, 2.0mm DC Jack or 2 Pin 4.2mm Pitch Mini Fit JR Header
Physical	
Form Factor	180 mm x 112 mm (Carrier Board) , 69.6mm x 40mm (SOM)


What Encompasses i.MX 8M Plus Development Kit




VEST i.MX8M Plus
Dev Board




Heat Sink



Power
Adapter



Plug and Socket



Antenna x2