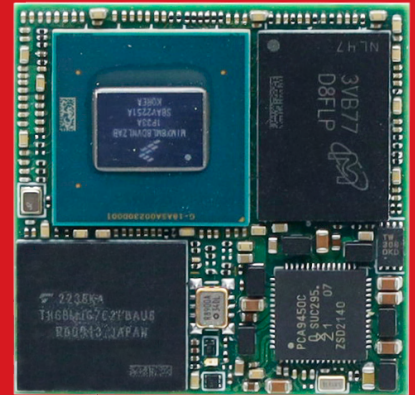
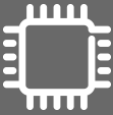



# VEST OSM i.MX8M Plus

VEST is a premier provider of embedded solutions, dedicated to excellence and innovation. Our VEST Open Standard Module(OSM), as defined by SGeT, offers a compact, standardized form factor that streamlines product development and manufacturing processes. This OSM promotes supply chain resilience, accelerates time-to-market, and provides a competitive edge for your products.



  
**Edge Computing**

  
**Rich Multimedia**

  
**High Performance CPU**

  
**Robust Security Features**

## ABOUT OUR PRODUCT

Unleash the full potential of the NXP i.MX8M 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.

Introducing the VEST OSM (Small) i.MX8M Plus SOM suitable for diverse range of applications, such as

- Edge Computing
- Video / Audio Conferencing
- Advanced Human Machine Interface Application
- Point of Sales, Digital Signage, Smart Retail, Smart Cities
- Point of Care
- Portable Test and Measurement Instruments
- Automation for Industry 4.0

## Key Features

- Dedicated NPU to accelerate AI and machine learning
- Accelerate real-time data processing, with dual display
- Rich multimedia capabilities
- Secured data integrity, safeguard against unauthorized access
- Multiple high-speed interfaces that comply with industrial standards facilitate seamless integration with various peripherals
- High stability, temperature compensated RTC, with auto power switching function

## Support



**VESTConnect360**  
Cloud Management System



**Scan here to purchase**

## Specifications (VEST OSM i.MX8M Plus)

CPU Details	
CPU	Up to 4x Cortex®-A53 @ 1.8GHz, Cortex®-M7 @ 800MHz
GPU	GC7000UL with 2 shaders for 3D Graphics   GC520L for 2D
NPU	Neural Processing Unit (NPU) operating at up to 2.3 TOPS
Memory	
Memory	2GB (up to 8GB) LPDDR4
Storage	16GB (up to 256GB) eMMC 5.1
External Storage	1x MMC (8-bit), 1x SDIO 3.0 (4-bit)
Operating System / Driver	
BSP	Yocto Linux, Android and NXP Real Time Edge Software
Security	
SOC	Arm®TrustZone® DRM Ciphers, Secure Clock, eFuse key storage, Random Number, 32KB Secure RAM
Secure IOT/Cloud	Security key Storage
Multimedia	
Video Encoder	1080p60, HEVC H.265, H.264
Video Decoder	1080p60, HEVC H.265, H.264, VP9, VP8
Camera	2x MIPI CSI (4-lane)
Display	HDMI 2.0a TX, LVDS (4/8-lane) TX, MIPI DSI (4-lane)
Hi-Fi Audio	Cadence® Tensilica® HiFi 4 DSP @ 800MHz
Audio	3x I2S
Others	
RTC	Yes (Temperature compensated RTC - optional)
Connectivity	
Networking	2x Gigabit Ethernet
USB	2x USB 3.0 OTG
PCIe	1x PCIe Gen 3.0
Serial Communication	4x UART   2x SPI   2x CAN FD
I2C	4x I2C
GPIO	Up to 24 GPIOs
Power	5Vdc +/-5%
Physical	
Form Factor	OSM Size-S (Small) module 30mm x 30mm
Operating Temperature	Commercial / Industrial (Optional)
Ordering Information	
Part No.	VPN8MP4-OSM-42-OC VPN8MP4-OSM-42-OI

