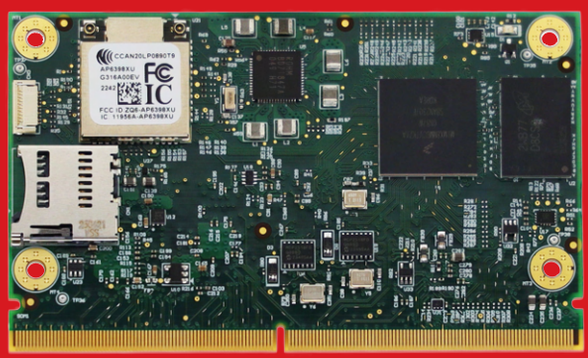
VEST Your Partner in Innovation
Embedded Solutions

NXP Gold Partner

VEST SMX i.MX8M Mini

VEST is a leading embedded solutions provider, committing to excellence and innovation. Our VEST SMX i.MX8M Mini in SMARC 2.1 standard form factor expedite product development and manufacturing for supply resilience, enabling swift market entry for your products and ensuring a competitive advantage.



Industrial / Commercial IoT

Efficient CPU

Robust Security Features

Edge Computing

ABOUT OUR **PRODUCT**

Unleash the full potential of the NXP i.MX8M Mini, featuring ARM® Cortex®-A53 processor. 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 i.MX8M Mini SMARC 2.1 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

- 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
- Machine Vision with MIPI-CSI (4-lane)
- NXP eIQ™ software suite

Support

VESTConnect360 Cloud Management System

SMARC module

SGeT STANDARDIZATION GROUP FOR EMBEDDED TECHNOLOGIES

ADVANCED PRODUCTS CORPORATION PTE LTD (APC)

Scan here to purchase

Website: apc-vest.com
Email: sales@apc-vest.com
E-Store: shop.apc-vest.com
LinkedIn: www.linkedin.com/company/advanced-product-corporation

Your Partner in Innovation
Embedded Solutions

NXP Gold Partner

Specifications (VEST SMX i.MX8M Mini)

CPU Details	
CPU	Up to 4x Cortex®-A53 @ 1.8GHz, Cortex®-M4 @ 400MHz
GPU	GCNanoUltra for 3D Graphics | GC320 for 2D

Memory	
Memory	2GB 32-bit LPDDR4-3000
Storage	16GB eMMC5.1
External Storage	1x Micro SD 3.0 Socket Push-Push Type via SDIO 3.0

Operating System / Driver	
BSP	Yocto Linux, Ubuntu and Android

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, H.264, VP8
Video Decoder	1080p60, H.265, H.264, VP9, VP8
Camera	1x MIPI CSI (4-lane)
Display	Dual Channel LVDS (defualt) or MIPI DSI (4-lane)
Audio	2x SAI

Connectivity	
Wireless	On SOM Board Dual Band Wi-Fi/Bluetooth Module (802.11a/b/g/n/ac and BT 5.0) (Optional)
Networking	10/100/1000 BaseT RJ45 Ethernet
USB	1x USB 2.0 OTG, 4x USB 2.0 Host
PCIe	1x PCIe Gen 2.0
Serial Communication	3x UART (for Wifi-BT version) or 4x UART (for without Wifi-BT version)
SPI	2x SPI or 1 SPI with 1x CAN FD (Depend on board build configurations)
CAN	2x CAN FD w/o SPI, or 1x CAN FD with 1x SPI (Depend on board build configurations)
I2C	4x I2C
GPIO	9x GPIOs (Note that additional GPIOs are retrieved from unused control signals eg. Camera control signals)
Debugging	1x JTAG Connector
Power	5Vdc +/-5%

Physical	
Form Factor	82mm x 50mm SMARC 2.1
Operating Temperature	Commercial | Industrial (Optional)

Ordering Information	
Part No.	VE8MM4SMX42WC VE8MM4SMX42WI

ADVANCED PRODUCTS CORPORATION PTE LTD (APC)

Scan here to purchase

Website: apc-vest.com
Email: sales@apc-vest.com
E-Store: shop.apc-vest.com
LinkedIn: www.linkedin.com/company/advanced-product-corporation