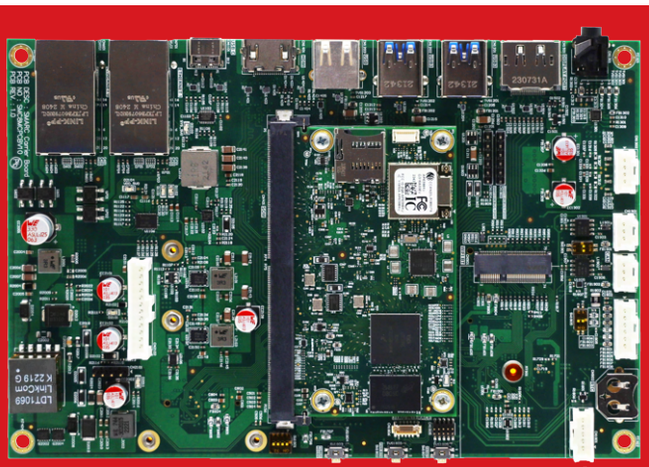
VEST **Your Partner in Innovation**
Embedded Solutions

NXP Gold Partner

VEST i.MX8M Mini Dev Kit S

VEST is a leading embedded solutions provider, committing to excellence and innovation. VEST i.MX8M Mini Dev Kit 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**

Introducing the VEST i.MX8M Mini SMARC 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.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.

This Development Kit is 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
- 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

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 i.MX8M Mini Dev Kit S)

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

Memory	
Memory	2GB (up to 8GB) 32-bit LPDDR4-3000
Storage	8GB (up to 128GB) eMMC5.1
External Storage	Micro SD 3.0 Socket Push-Push Type

Operating System / Driver	
BSP	Yocto Linux, Ubuntu and Android

Multimedia	
Video Encoder	1080p60 H.264, VP8
Video Decoder	1080p60 HEVC, H.265, H.264, VP9, VP8
Camera	1x MIPI CSI (4-lane)
Display and Touch	LVDS Connector with backlight for 7" & 10" LCD Panel | I2C Touch Connector for 7" & 10" LCD Panel | HDMI 2.0a Tx
Audio	Headphone Jack with Microphone Input | 4 Pin Header for Speaker L&R, Up to 10W/ch into 8ohm Load

Connectivity	
Wireless	On SOM Board Dual Band Wi-Fi/Bluetooth Module (802.11a/b/g/n/ac and BT 5.0)
Networking	10/100/1000 BaseT RJ45 Ethernet with PoE
USB	1x USB 2.0/3.0 Type C with PD | 2x USB 2.0/3.0 Type A | 1x USB 2.0 Type A
Serial Communication	RS485 with 120ohm Termination Resistor (Default) or RS232 | 2x CAN FD | UART x3
I/O Expansion	M.2 Key B Form Factor Expansion Daughter Board Socket | 4-Lane MIPI CSI x 1 | I2C x 2 | UART x 2 | SPI x 2 | GPIO M.2 Key B Expansion Daughter Board Socket | LVDS (4/8-lane, default) or MIPI DSI (4-lane) | I2C | GPIO PCIe M.2 Key E 2230 Form Factor | 1 Lane PCIe Gen 2.0 | USB | SDIO | I2S | UART | GPIO
Debugging & Programming	2x Debug-UART Header, 2.54mm Pitch 5pin Header | JTAG-1.27mm Pitch 2 x 5 Pin Header
Buttons and Indicators	1x Power Button | 1x Force Recovery | 1x System Reset | LEDs for PoE operation | LEDs for USB operation
Power	PoE (25w/channel), USB-C (60w)

Panel	
LCD Panel Size	7" LCD Panel, 10" LCD Panel (Optional)

Physical	
Form Factor	180mm x 120mm (Carrier Board) , 82mm x 50mm SMARC SOM
Operating Temperature	Commercial | Industrial (Optional)

Ordering Information	
Part No.	VES-8MM-07-00-SMX-DEV

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