#### VEST iMX8M Nano Dev Kit S

VEST is a leading embedded solutions provider, committing to excellence and innovation. VEST i.MX8M Nano 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.









# ABOUTOUR **PRODUCT**

Introducing the VEST i.MX8M Nano 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 Nano, featuring Arm® Cortex®-A53 cores and Cortex®-M7 core. This provides cost-effective integration and affordable performance for smart, connected, power-efficient devices requiring graphics, vision, voice control, intelligent sensing and general-purpose processing.

This Development Kit is suitable for diverse range of applications, such as

- 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
- Consumer audio devices

#### **Key Features**

- Provides a balance between performance and efficiency
- Low power consumption, making it suitable for battery-powered devices
- A wide range of connectivity options and interfaces for cameras and displays
- Built-in security features like secure boot, cipher acceleration, and DRM support
- Compact size, ideal for space-constrained applications
- A wide range of audio interfaces

### **Support**











VESTConnect360
Cloud Management System











## Specifications (VEST iMX8M Nano Dev Kit S)

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CPU Details	
CPU	Up to 4x Arm® Cortex®-A53 @ 1.5GHz   Cortex®-M7 @ 750 MHz
GPU	GC7000UL with 2 shaders for 3D Graphics
Memory	
Memory	1GB 16-bit LPDDR4-3200
Storage	8GB eMMC5.1
External Storage	Micro SD 3.0 Socket Push-Push Type
Operating System / Driver	
BSP	Yocto Linux, Ubuntu and Android
Multimedia	
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
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 Type C with PD
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 1   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
	M.2 Key E 2230 Form Factor   SDIO   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)
Physical	
Form Factor	180mm x 120mm (Carrier Board) , 82mm x 50mm SMARC (SOM)
Operating Temperature	Commercial   Industrial (Optional)
Ordering Information	
Part No.	VES-8MN-07-00-SMX-DEV