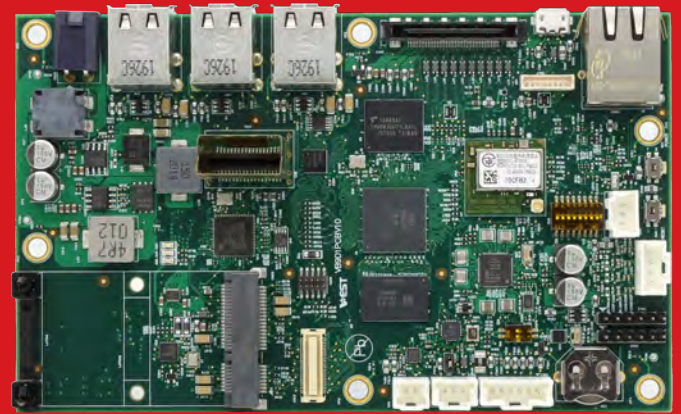


VEST SBC i.MX8M Mini

VPN8M4-SBC

VEST is a leading embedded solutions provider, committing to excellence and innovation. Our Single Board Computer (SBC) is designed for fast integration into your product, enabling swift market entry and ensuring a competitive advantage.



Industrial /
Commercial
IoT



Efficient
CPU



Robust Security
Features



Rich
Multimedia

ABOUT OUR PRODUCT

Introducing the VEST SBC i.MX8M Mini, this compact Single Board Computer (SBC) enable designers to deliver an intuitive, highly interactive, and immersive user experience.

Unleash the full potential of the NXP i.MX8M Mini, featuring an advanced implementation of a Quad Arm® Cortex®-A53 core, which operates at a top clock speed of 1.8 GHz. This provides rich multimedia functionality for general purpose Human-Machine-Interface (HMI) solutions enabling touchy, voice, graphics, video.

This Single Board Computer is versatile and suitable for diverse range of applications such as

- Advanced Human Machine Interface Application
- Industrial and commercial IoT
- Point of Care
- Telematics
- Industrial Automation
- Video / Audio Streaming

Key Features

- Rich multimedia capabilities for advanced HMI application
- A general-purpose Cortex®-M4 400 MHz core processor is for low-power processing
- 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



Specifications

CPU Details	
CPU	i.MX8M Mini 4x Cortex®-A53 @ 1.8GHz, Cortex®-M4 @ 400MHz
GPU	GC Nano Ultra for 3D Acceleration GC 320 for 2D Acceleration

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	
BSP	Yocto Linux, Ubuntu and Android

Multimedia	
Video Encoder	1080p60, H.264, VP8
Video Decoder	1080p60, H.265/4, VP9, VP8
Display Controller	Support up to 1080p60 Display through MIPI DSI
Display and Touch	On Board LVDS and I2C Touch Connector for 7" or 10" LCD Panel Socket Dual Channel 4-lane LVDS 4-lane MIPI-DSI I2C Touch PWM Up to 1A Backlight Output
Audio and Video	Microphone Input (2mm Pitch 2 Pin Header) 2mm Pitch, 4 Pin Header for Speaker L&R, up to 10W/ch into 8ohm Load Compatible to NXP MIPI-HDMI Adapter Card

Connectivity	
Wireless	On Board Dual Band Wi-Fi / Bluetooth Module with 1x Antenna (Optional)
USB	USB 2.0 OTG Micro, Type B 6x USB 2.0 Host, Type A
Serial Communication	RS485 (default) or RS232 CAN-1x 2mm Pitch 3 Pin Header
Ethernet	1x Gigabit Ethernet with AVB, IEEE 1588, EEE
I/O Expansion	0.5mm Pitch, 2x 25 Pin Header for 4-lane MIPI CSI SPDIF SPI PWM UART 12C GPIO Half & Full Size Mini PCIe with Micro SIM Card Socket
Debugging & Programming	Debug-2x UART Header, 2.54mm Pitch 6 Pin Header JTAG-1.27mm Pitch 2x 5 Pin Header
Buttons and Indicators	1x On/Off Button 1x Reset Button 1x 2mm Pitch 3 Pin Header for Reset & Power 1x GPIO Controlled LED Indicator
Power	12-24VDC, 2 Pin 4.2mm Pitch Mini Fit JR Header

Physical	
Form Factor	147mm x 89mm
Operating Temperature	Commercial Industrial (Optional)

