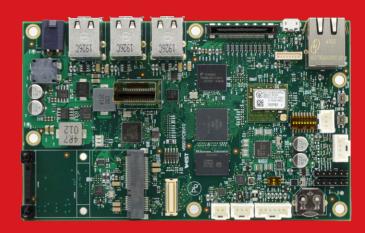


VEST SBC i.MX8M Mini

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.











Rich Multimedia

ABOUTOUR 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

ADVANCED PRODUCTS CORPORATION PTE LTD (APC)







Specifications (VEST SBC i.MX8M Mini)

| CPU Details | |
|-------------|--|
| CPU | i.MX8M Mini 4x Cortex®-A53 @ 1.8GHz, Cortex®-M4 @ 400MHz |
| GPU | GCNanoUltra for 3D Graphics GC320 for 2D |

| Memory | emory | |
|------------------|------------------------------------|--|
| 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, H.264, 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 Mirco, 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 (Energy Efficient Ethernet for Low Power) |
| 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 Mirco 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 |

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

| Ordering Information | |
|----------------------|-------------------|
| Part No. | VPN8MM4-SBC-41-WC |