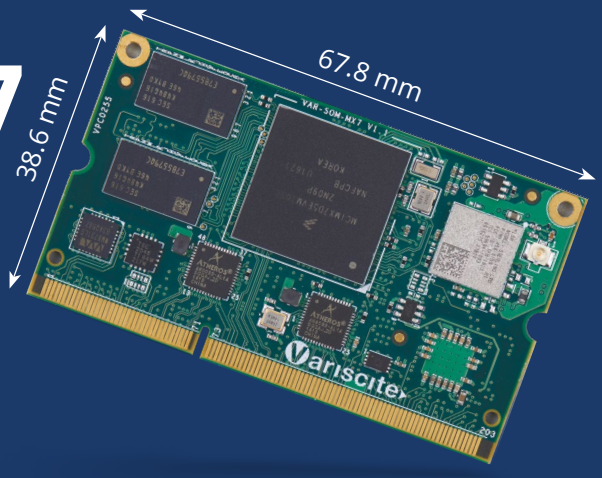
VAR-SOM-MX7



from $35

The VAR-SOM-MX7 is a highly flexible System-on-Module (SoM) based on NXP's i.MX7 family and carries a dual 1GHz ARM Cortex-A7 processor alongside real-time 200MHz ARM Cortex-M4 co-processor.

A versatile platform, the VAR-SOM-MX7 provides a variety of interfaces and connectivity options – all packaged at an optimized power, size and cost. The VAR-SOM-MX7 is ideal for products and applications requiring real-time low-power processing combined with high performance application processor for optimizing performance and power consumption.

The VAR-SOM-MX7 highly integrated connectivity includes a certified Wi-Fi, Bluetooth/BLE, dual GbE, PCIe, dual USB, audio, camera, display with touch panel and additional serial and parallel interfaces. In addition, the system supports industrial operating grade, targeting embedded application requiring a wide temperature range.

The VAR-MX7CustomBoard carrier board complements an attractive full reference kit of the VAR-SOM-MX7 used by Variscite's customers for evaluation, development and mass production.

Main Features

NXP i.MX7
- Dual 1GHz ARM Cortex-A7
- Real-time 200MHz Cortex-M4 co-processor
- Neon Media Processor Engine (MPE)
- Up to 2GB DDR3L, 512MB NAND / 64GB eMMC

Display Support
- 24bits Parallel LCD up to WXGA (1366 x 768)
- MIPI DSI
- EPD (E-Ink)
- Resistive/capacitive touch screen

Networking
- 2 x 10/100/1000Mbps Ethernet
- Certified Wi-Fi 802.11 ac/a/b/g/n
- Certified Bluetooth 4.2/BLE

USB
- USB 2.0 OTG
- USB 2.0 Host

Audio
- Digital audio (I2S compliant)
- Analog microphone (stereo)
- Headphone out, line-in
- MQS audio interface

Camera
- Parallel input
- MIPI CSI serial input

Other Interfaces:
- Dual CAN, I2C, SPI, PWM, JTAG, UART, SD/MMC
- PCIe, Smartcard, ADC, timers, keypad
- 32-bit parallel external local bus

OS Support
- Linux

Power
- Single 3.3V

Dimensions (W x L x H):
- 38.6 mm x 67.8 mm x 4.0 mm

-20 to 85°C Industrial temperature range

Low Power consumption:
- Optimized power consumption in both operational and suspend modes

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Complementing the VAR-SOM-MX7

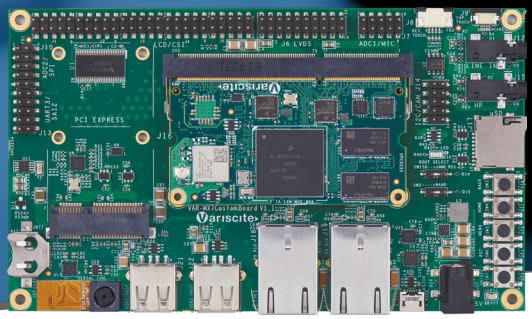
VAR-DVK-MX7 Evaluation Kit

The VAR-DVK-MX7 allows full performance and capability evaluation, serving as an evaluation, development and production platform for hardware and software teams.

Evaluation Kit content

- VAR-MX7CustomBoard populated with VAR-SOM-MX7
- 7” LCD + capacitive touch panel
- Power supply and communication cables
- Documentation and design package

VAR-MX7CustomBoard



VAR-MX7CustomBoard - Supporting VAR-SOM-MX7

The VAR-MX7 CustomBoard ensures a scalable and simplified development and reference board to achieve a short time-to-market for customer’s designs and end-products.

Display Support
- 24-bit RGB
- 18-bit LVDS
- DSI

Touch Panel
- Capacitive touch (6-pin FFC/FPC)
- Resistive touch (4-pin FFC/FPC)

Audio
- Headphone
- Line-in
- Digital audio (via header)

USB
- USB 2.0 host
- USB OTG/HOST

Ethernet
- 2 x 10/100/1000Mbps Ethernet RJ45

Storage
- SD/MMC card socket

PCIe

Camera
- MIPI CSI serial
- Parallel (via header)

Additional expansion Connectors
- SPI, I2C
- CAN Bus
- UART
- MQS audio
- PWM, ADC

Debug
- Micro USB

RTC backup battery
- CR1225 coin battery socket

Power
- 5V DC input

Size
- 8.7cm x 14.8cm

About Variscite

Variscite is a leading System on Modules (SoM) and Single-Board-Computer (SBC) design and manufacture company. A trusted provider of development and consulting services for a variety of embedded platforms, Variscite transforms clients’ visions into successful products.

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