

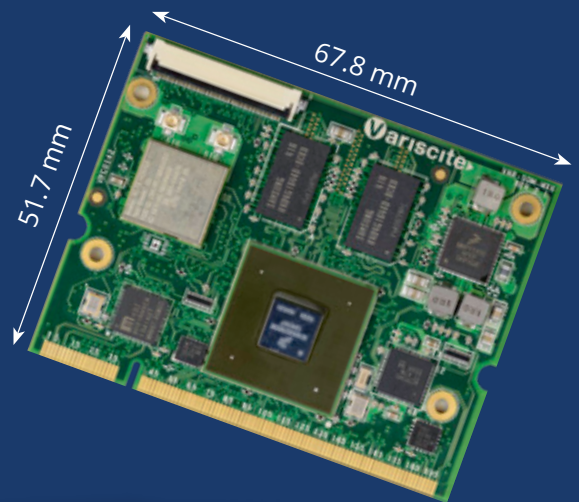
# VAR-SOM-MX6

Design without boundaries

from \$52

Supporting the NXP i.MX 6 1.2 GHz quad/dual/single core Cortex-A9 processor, the impressive scalability of the VAR-SOM-MX6 satisfies the needs of the most demanding future application requirements.

This high-performance System on Module, allows customers to create optimized products for target markets without the need for lengthy and costly redesign cycles.



The four CPU assembly options can accommodate broader connectivity, faster processing power, enhanced algorithms or improved graphics and video performance to name a few.

## Main Features

### NXP iMX 6

- High performance with 1.2 GHz Solo/Dual Lite/ Dual/Quad/QuadPlus Core Cortex-A9
- Up to 4GB DDR3, 4GB SLC NAND and 64GB eMMC
- Full HD 1080p video encoding/decoding capability
- Vivante GPU providing 2D/3D acceleration (note: in QuadPlus 50% enhanced performance)

### Display Support

- 2 x LVDS, HDMI 1.4, MIPI-DSI
- LCD: WUXGA (1920 x 1200), HDMI: 1080p
- 4-wire resistive touch panel

### Networking

- Gigabit Ethernet
- Certified WiFi 802.11 a/b/g/n with MIMO and Bluetooth 4.2/BLE

### USB

- USB 2.0 OTG
- USB 2.0 Host

### Audio

- Digital audio SSI(AUDMUX)/SPDIF
- Digital microphone (stereo)
- Headphone out, Line-in

### Ethernet

- Gigabit Ethernet

### Camera

- MIPI CSI serial input
- 2 x parallel input

### Other Interfaces:

- Dual CAN, I2C, SPI, PWM, JTAG, keypad
- PCIe, S-ATA

### -40 to 85°C industrial temperature support

### OS Support

- Linux
- Android

### Power

- Single 3.3V
- Digital I/O 3.3V
- RTC external backup battery

### Dimensions (W x L x H):

- 51.7 mm x 67.8 mm x 4.5 mm



# Complementing the VAR-SOM-MX6

## VAR-SOM-MX6 Evaluation Kit

The VAR-DVK-MX6 allows full performance and capability evaluation, serving as a development and evaluation platform for hardware and software teams.

### Evaluation Kit content

- VAR-MX6CustomBoard populated with VAR-SOM-MX6
- Two display options:
  - 7" LCD + resistive touch panel;
  - 7" LCD + capacitive touch panel
- Power supply and communication cables
- Documentation and design package



## VAR-MX6CustomBoard

VAR-MX6CustomBoard - Supporting VAR-SOM-MX6

The VAR-MX6CustomBoard not only ensures scalable and simplified development to achieve a short-time to market for current innovations, but also accommodates potential R&D directions and marketing opportunities.



### Display Support

- 4-pair 24-bit LVDS header
- 18-bit RGB parallel

### Touch Panel

- 44-wire resistive touch panel (4-pin FFV/FPC)
- Capacitive touch support (10-pin FFV/FPC)

### Audio

- Headphone
- Line-in
- Digital microphone

### Ethernet

- Gigabit Ethernet

### USB

- 3 x USB 2.0 host
- 1 x USB OTG

### Storage

- SD/MMC card socket
- SATA 22-pin (7+15)

### Serial Interfaces

- PCIe
- Mini PCIe Socket+ SIM
- DB-9 male (DTE)
- IDC10 header (Debug)
- RS485 (Header)

### Expansion Connectors

- SPI, I2C, UART
- CAN Bus
- EMI (Local Bus Interface)
- SD/MMC interface
- Parallel Camera Interface
- Serial Camera Interface (MIPI CSI)
- Serial Display Interface (MIPI DSI)
- Backlight driver

### Power

- 7.5V -14V DC Input

## 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.

For more information contact:

[sales@variscite.com](mailto:sales@variscite.com)

Copyright ©2019 Variscite. All rights reserved. Variscite Ltd. logos and product names are registered trademarks of Variscite Ltd. No part of this document may be reproduced by any means, nor translated to any electronic medium without the written consent of Variscite. Information contained in this document is believed to be accurate and reliable; however, Variscite assumes no responsibility for its use. Specifications are subject to change without notice.

