# VAR-SOM-AM62

**Cost-effective and power-efficient System on Module** 

from \$33

The VAR-SOM-AM62 is based on a TI AM625x processor featuring a 1.4GHz Quad Cortex-A53 CPU, a 400MHz Cortex-M4F, and a 333MHz programmable real-time co-processor. It offers an ideal solution for embedded industrial products requiring high performance, reduced power consumption and graphics capabilities.

The SoM delivers an integrated 3D graphics acceleration, dual LVDS, camera input, certified dual-band Wi-Fi, BT/BLE 5.2 along with rich industrial connectivity and features like 3x CAN bus, dual GbE and industrial operating temperatures.



The VAR-SOM-AM62 is a member of the VAR-SOM Pin2Pin product family, providing extensive scalability options and reduced development time, costs, and risks. Starting from i.MX 6UL/6ULL modules, through the i.MX 6, i.MX 93 and i.MX 8M processors family, up to the high-performance i.MX 8X and i.MX 8QuadMax platforms.

The Symphony carrier board complements an attractive full reference kit for the VAR-SOM-AM62, used by Variscite's customers for evaluation, development, and mass production.

# **Main Features**

#### **Texas Instruments AM625x**

- 1.4GHz Quad-core Cortex-A53
- Real-time 400MHz Cortex-M4F and 333MHz PRU coprocessors
- 3D GPU graphics acceleration
- Up to 4GB DDR4 memory, up to 128GB eMMC storage

#### **Display and Video Support**

- Dual-channel LVDS display
- · Resistive/capacitive touch screen

#### Networking

- 2x10/100/1000Mbps ethernet
- Certified dual-band Wi-Fi 802.11ac/a/b/g/n
- Bluetooth/BLE 5.2
- 3 x CAN bus

### **USB**

2x USB2.0 OTG

#### **Audio**

- Digital audio (McASP)
- · Headphone-out, line-in
- Digital microphone (stereo)

#### Camera

MIPI CSI2 serial input

#### Other interfaces

 SD/MMC, UART, I2C, SPI, QSPI, ePWM, GPIO, JTAG, timers, GPMC

## **OS** support

- Linux
- Android
- FreeRTOS

## Power

Single 3.3V

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

- 67.8 mm x 33 mm x 3.4 mm
- -40 to 85°C industrial temperature support

Optimized power consumption in both operational and suspend modes.



# **Complementing the VAR-SOM-AM62**

# VAR-SOM-AM62 Evaluation Kit

The VAR-DVK-AM62 allows full performance and capability evaluation, serving as an evaluation, development, and production platform for hardware and software teams.

## **Evaluation Kit content**

- Symphony-Board populated with VAR-SOM-AM62
- 7" LCD + capacitive touch panel
- Power supply and communication cables
- WiFi/BT antenna
- Documentation and design package

# Symphony-Board

Supporting the VAR-SOM Pin2Pin Family and optimized for the VAR-SOM-AM62

The Symphony-Board 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**

Dual LVDS display

## **Touch panel**

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

# **Audio**

- Headphone
- Line-in
- Digital mic

#### Storage

SD/SDIO/MMC card socket

#### USB

USB 2.0 ports: 2x OTG

# **Ethernet**

 2 x 10/100/1000Mbps ethernet RJ45

# **Camera (extension boards)**

Single serial MIPI CSI

# **Additional Expansion Connectors**

- SPI, SPDIF, GPIO
- · UART, I2C, CAN bus
- ePWM
- SAI

#### Debua

· Micro USB

# RTC backup battery

CR1225 coin battery socket

#### **Power**

12V DC input

## Size

16.9cm x 8.9cm

# **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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