

0

0

# VAR-SOM-AM43

#### **Main Features**

0

#### **Texas Instruments Sitara AM437x**

- High performance 1GHz Cortex-A9
- Quad 200MHz Programmable Realtime Unit (PRU)
- PowerVR<sup>™</sup> SGX530 graphics core
- 1024 MB DDR3
- 512 MB SLC NAND Flash
- 32 GB eMMC

#### **Display Support**

- Resolution 1400 x 1050 x 24 bpp
- LCD : Parallel RGB
- Resistive/capacitive touch panel

#### Networking

- 2 x 10/100/1000Mbps Ethernet
- Certified 802.11 a/b/g/n with MIMO + BT4.0/BLE

#### USB

- USB 2.0 OTG
- USB 2.0 Host

#### Audio/Video

- Parallel camera input
- Digital audio McASP
- Microphone: Digital and Analog
- line-in, line-out

Other Interfaces: Dual CAN, SPI, I2C, McASP, ADC, JTAG

#### -40-85 °C industrial temperature

#### **OS Support**

- Linux Yocto
- Android

#### Power

• Single 3.3V In

**Dimensions (W x L x H):** 38.6 mm x 67.8 mm x 3.0 mm

#### **Overview**

Supporting the 1GHz Sitara<sup>™</sup> AM437x ARM<sup>®</sup> Cortex<sup>™</sup> A9 processor from Texas Instruments (TI) with quad 200MHz realtime programmable unit (PRU) and a rich 2D/3D graphics accelerator.

The quad PRUs are ideal for offloading real-time processing from the main Cortex CPU, managing deterministic tasks and supporting dedicated industrial protocols. The PRUs alongside the rich industrial connectivity of the VAR-SOM-AM43 makes it an optimized solution for products targeting automation, robotics, controllers, HMI and other industrial segments.

With dual GbE, USB, touch controller, audio, certified Wi-Fi 802.11 a/b/g/n with optional MIMO and BT4.0/BLE, the VAR-SOM-AM43 is also highly integrated with support for a wide range of operating systems.



### **Complementing the VAR-SOM-AM43**





#### **Overview**

The VAR-DVK-AM43 allows full performance and capability evaluation, serving as a development platform for hardware and software teams.

 VAR-AM43CustomBoard populated with VAR-SOM-AM43

DEFGHJKLMN

SUNG 461646D-F

- 7" LCD + capacitive touch panel
- Power supply and communication cables
- Documentation and design package

## VAR-AM43CustomBoard



#### **Display Support**

3-pair 18-bit LVDS header

#### **Touch Panel**

- Capacitive touch support (6-pin FFC/FPC)
- 4-wire resistive touch (FFC/FPC)

#### Audio

- Headphone
- Line-in
- Digital Mic

#### Video

- OV2659 sensor module FFC/FPC connector
- Parallel camera input (header)

#### **Overview**

The VAR-AM43CustomBoard delivers an impressive feature-set and spec range at an unbeatable price-point. This latest addition to the Variscite custom board portfolio allows flexible assembly for a range of operating systems and applications.

#### USB

- 1 x USB 2.0 host
- 1 x USB OTG

#### Ethernet

Dual Gigabit Ethernet

#### Storage

SD/MMC card socket

#### Serial Interfaces

- RS232 (header)
- Micro USB (debug)
- RS485 (Header)
- 2 x CAN bus (header)
- Dual UART (header)

#### **Additional Expansion Connectors**

- SPI, I2C, McASP
- 8 ch. ADC
- GPIOs

#### **RTC backup battery**

CR1225 coin battery socket

#### **Power**

5V DC Input

#### Size

• 86mm x 111mm

**About Variscite** 

In less than a decade Variscite has taken a leading position in the System on Modules (SoM) design and manufacture market. 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



