



VAR-SOM-AM43

Main Features

Texas Instruments Sitara AM437x

- High performance 1GHz Cortex-A9
- Quad 200MHz Programmable Realtime Unit (PRU)
- PowerVR™ 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 + BT4.2/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

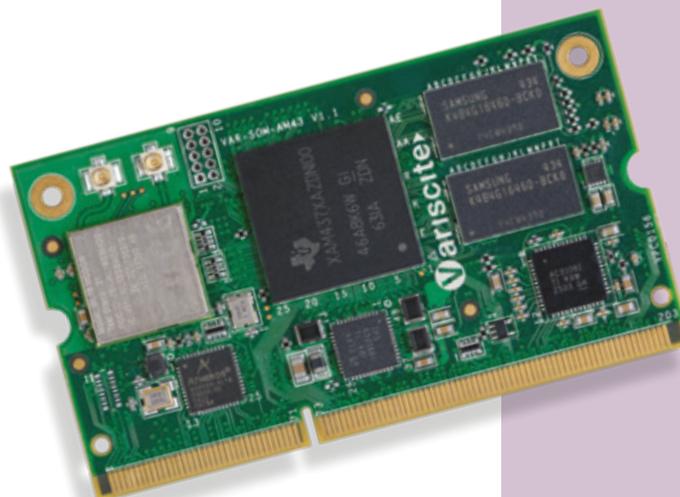
- Linux Yocto
- Android

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™ AM437x ARM® Cortex™ 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

VAR-DVK-AM43 Evaluation Kit



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

VAR-AM43CustomBoard



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.

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)

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

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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