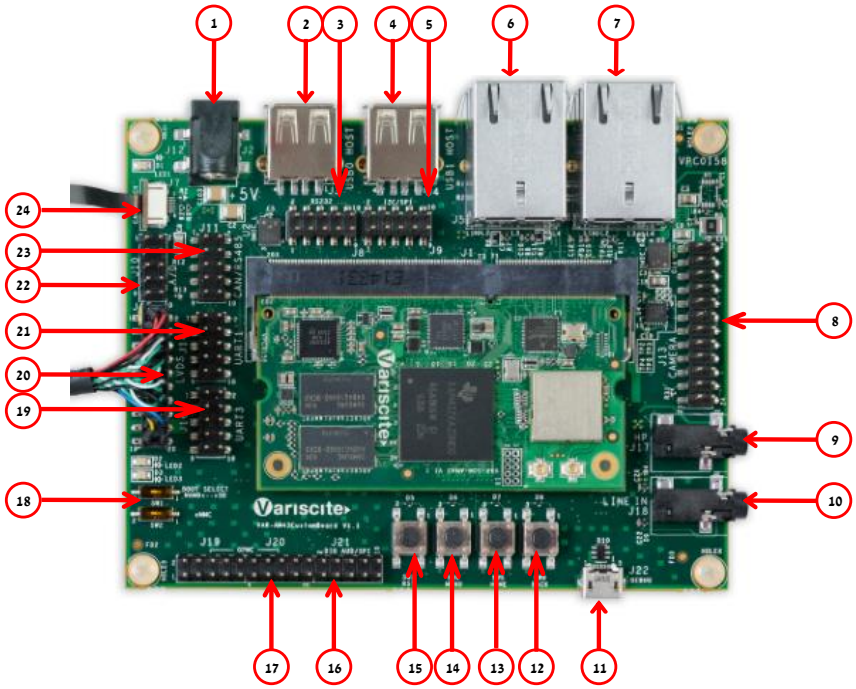
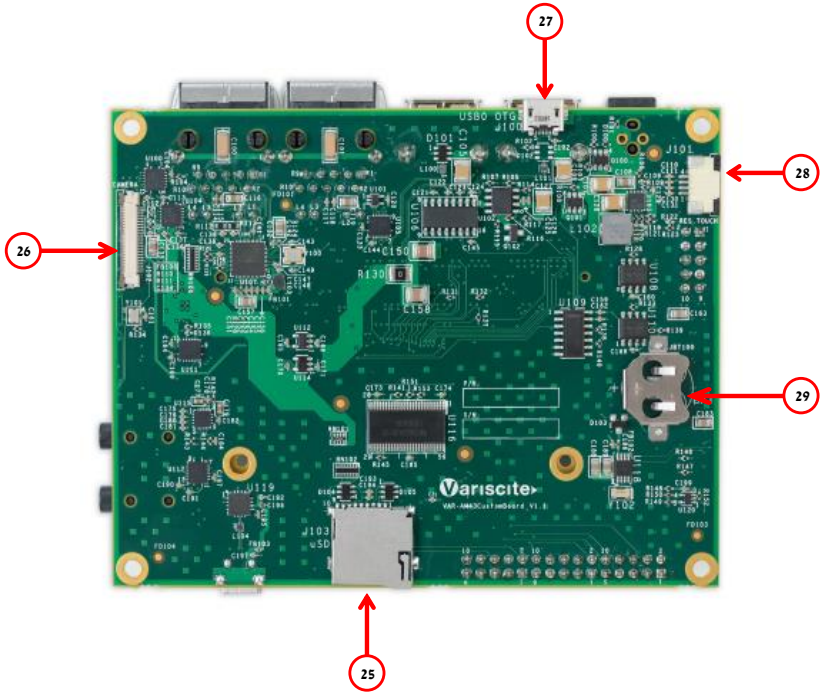
VAR-SOM-AM43 based on TI AM437x Evaluation Kit Quick Start Guide





Top side:

1. 5V DC In Jack (J12)
2. USB0 Host
3. RS232 Header (J8)
4. USB1 Host
5. I2C / SPI Connector (J9)
6. 10/100/1000Mbps ETH1 (J5)
7. 10/100/1000Mbps ETH2 (J6) *
8. Camera Header
9. Headphones Jack (J17)
10. Line In (J18)
11. USB Debug (J22)
12. USER Button3 (SW6)
13. USER Button2 (SW5)
14. USER Button1 (SW4)
15. Reset Button (SW3)
16. Digital Audio / SPI (J21)
17. GPIO Headers (J19 / J20)
18. Boot select switches
19. UART3 Header (J16)
20. LVDS Display Connector
21. UART1 Header (J14)
22. A2D Header (J10)
23. CAN / RS-485 Header
24. Capacitive Touch (J7)

Bottom side:

25. microSD connector (J103)
26. OV2659 Image-sensor
27. USB0 OTG
28. Resistive Touch
29. RTC Battery Holder

Evaluation Kit initial Setup

1. Carefully remove the 7” LCD and VAR-AM43CustomBoard board from the package.
2. Connect the 7” LCD Touch and Display cables to the Evaluation Kit connectors J7, J15 respectively as shown in the upper left picture.
   Note: Display cable connector pins 1, 2 (colored in red) should be connected to J15 pins 1, 2 respectively.
   Touch cable – connect the cable with metal contacts facing down.

*** NOTE**: VAR-DVK-AM43 supports dual GbE w/o Wi-Fi / BT
VAR-DVK-AM43_W supports single GbE and Wi-Fi /B

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3. Plug the USB type A to micro B cable between the USB debug connector (J22) and a PC USB port.
4. Plug the wall adapter's connector into the VAR-AM43CustomBoard 5V power jack (J12).

Setting the Host PC for Debug

1. Download any PC terminal program. Variscite suggests using Putty.
2. Set PC terminal software parameters as follows:
   - Baud Rate: 115200
   - Data bits: 8
   - Stop bits: 1
   - Parity: None
   - Flow Control: None

Booting from eMMC (Default file System)

1. Remove the SD-Card with boot SW from the carrier.
2. Set Boot select switch (SW1/SW2) as follows:
   2.1. SW1 set to "2" (OFF)
   2.2. SW2 set to "1" (ON)
3. Connect the 5V power supply to the carrier board.
4. Boot messages are printed in the PC's terminal window.

Booting from micro SD Card

The microSD card is supplied as part of the package. The image can also be downloaded from Variscite's FTP site. Please contact Variscite's sales for details: sales@variscite.com

1. Verify the following switch configuration:
   4.1. SW1 set to "1" (ON)
   4.2. SW2 set to "2" (OFF)
2. Push microSD card into the slot (J103) in the VAR-AM43CustomBoard.
3. Connect 5V to the carrier board.
4. Boot messages are printed in the PC's terminal window.

Burning Recovery File System

Please refer to Variscite's wiki pages at:
https://variwiki.com/index.php?title=VAR-SOM-AM43_Yocto_NAND_Recovery

Additional Support Links

1. Wiki pages:
   https://variwiki.com/index.php?title=VAR-SOM-AM43
2. Customer portal:
   https://varisciteportal.axosoft.com/login
3. VAR-SOM-AM43 Evaluation Kits:
   https://www.variscite.com/product/evaluation-kits/var-som-am43-kits
4. VAR-SOM-AM43:
   https://www.variscite.com/product/system-on-module-som/cortex-a9/var-som-am43-cpu-ti-am437x-am4376-am4377-am4378-am4379
5. VAR-AM43CustomBoard:
   https://www.variscite.com/product/single-board-computers/var-am43custom board

Thank you for purchasing Variscite's product.

For additional assistance please contact:
support@variscite.com