

# VAR-SOM-MX6 based on NXP's i.MX6 **Evaluation Kit Quick Start Guide**





#### Top side:

- 1. LVDS Display
- 2. Extension Headers
- 3. Debug UART (J34)
- 4. Reset Button
- 5. Boot Select button (SW3)
- 6. User/Back Button
- 7. Extension Headers
- 8. Capacitive LCD Backlight
- 9. On/Off switch (SW1)
- 10. 12V DC In Jack (J19)
- 11. Headphones
- 12. Line In
- 13. MIPI CSI-2 Camera connects to Variscite's VAR-EXT-CB402 Camera board Bottom side:
- 14. PCI Express
- 15. SIM Card

- 16. SATA
- 17. JTAG
- 18. UART DTE
- 19. Gigabit Ethernet
- 20. USB Host
- 21. Extension Header
- 22. SD Card (J13)
- 23. Resistive LCD
- 24. USB OTG
- 25. Resistive Touch
- 26. Extension Header
- 27. Capacitive LCD
- 28. RTC Battery Holder
- 29. Capacitive Touch
- 30. HDMI
- 31. USB Host x 2



#### **Evaluation Kit initial Setup**

- 1. Carefully remove the Evaluation Kit from the package.
- 2. Plug the RS232 cable between Debug UART connector (J34) and a PC serial interface (DTE). Note: Pin #1 on the RS323 cable marked with arrow should be connected
  - To Pin #2 of J34 marked on PCB.
- 3. Plug the wall adapter's pin into the VAR-MX6CustomBoard 12V power jack (J19) and to a 120VAC~240VAC power source.



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#### 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

## Using Default file System

- 1. Switch ON (leftwards) the On/Off switch (SW1).
- 2. Boot messages are printed within PC's terminal window.

### **Booting from SD Card**

The SD card is supplied within the package. The image can be also downloaded from Variscite FTP site. Please refer to "Burning Recovery File System" section.

- 1. Verify Switch SW1 is OFF.
- 2. Push SD card into the SD card slot (J13) of the VAR-MX6CustomBoard.
- 3. Press and hold down Boot select button (SW3) to boot from SD Card.
- 4. Switch ON (leftwards) the On/Off switch (SW1).
- 5. Wait for 5 sec and release the Boot Select button.
- 6. Boot messages are printed within PC's terminal window.

### **Burning Recovery File System**

Please refer to Variscite's wiki pages for preparing recovery SD card and burning internal storage (NAND/eMMC) at: <u>https://variwiki.com/index.php?title=Yocto\_Recovery\_SD\_card\_latest</u>

## Additional Support Links

- Wiki pages: <u>https://variwiki.com/index.php?title=Main\_Page</u>
- Customer portal: <u>https://varisciteportal.axosoft.com/login</u>

VAR-SOM-MX6 Evaluation Kit: <a href="https://www.variscite.com/product/evaluation-kits/var-som-mx6-kits">https://www.variscite.com/product/evaluation-kits/var-som-mx6-kits</a>

- VAR-SOM-MX6: <u>https://www.variscite.com/product/system-on-module-som/cortex-a9/var-som-mx6-cpu-freescale-imx6</u>
- VAR-MX6CustomBoard: <u>https://www.variscite.com/product/single-board-computers/var-mx6customboard</u>

#### Thank you for purchasing Variscite's product.

For additional assistance please contact: <a href="mailto:sales@variscite.com">sales@variscite.com</a>