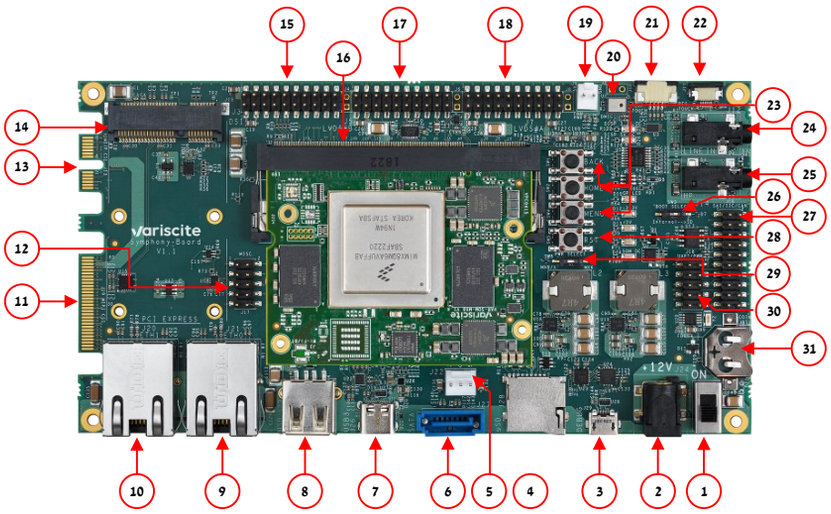
VAR-SOM-MX8 based on NXP i.MX8 Evaluation Kit Quick Start Guide

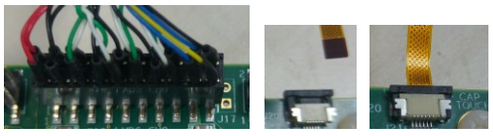


Features

1. Power ON Switch (SW7)
2. 12V DC In Jack (J24)
3. USB Debug (J29)
4. micro SD Card slot (J28)
5. SATA Power (J22)
6. micro SATA Connector (J27)
7. USB 3.0 OTG (J26)
8. USB 2.0 Host (J23)
9. Gigabit Ethernet #0 (J21)
10. Gigabit Ethernet #1 (J20)
11. MIPI-CSI Camera connector [optional] (J19)
12. Miscellaneous Header (J17)
13. HDMI/ Parallel Camera connector [optional] (J13)
14. Mini PCI Express Connector (J15)
15. DSI/QSPI/ADC Header (J3)
16. SOM Connector (J1)
17. LVDS#B Header (J5)
18. LVDS#A Header (J7)
19. Fan Power Connector (J9)
20. Digital Microphone (U1)
21. Resistive Touch (J10)
22. Capacitive Touch (J11)
23. User Buttons (SW1, SW2, SW4)
24. Line-In Connector (J12)
25. Headphones Connector (J14)
26. Boot Select Switch (SW3)
27. SAI/I2C/SPI/CAN Header (J16)
28. Reset Button (SW5)
29. PWR Select Switch (SW6)
30. UART/PWM Header (J18)
31. RTC Battery Holder (JBT1)

Evaluation kit initial setup

1. Carefully remove the 7" LCD and Symphony-Board from the package.
2. Connect the 7" LCD Display and Touch cables to the Evaluation Kit connectors J7, J11 respectively.
   Note: connect the display cable with the red wire on pin 1. Connect the touch cable with the metal contacts facing down.



3. Plug the USB type A to micro B cable between the USB debug connector (J29) and a PC USB port.
4. For heatsink assembly instructions, please follow the VHP-MX8 documentation.
   Please note that the heatsink is mainly used for CPU/GPU intensive applications and may be required per your specific use case.

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Setting the host PC for debug

1. Download any PC terminal software (e.g. Putty).
2. Set the PC terminal software parameters as follows:
   - Baud Rate: 115200
   - Data bits: 8
   - Stop bits: 1
   - Parity: None
   - Flow Control: None

Booting from eMMC

1. Set Boot select switch (SW3) to “Internal” position to boot from the VAR-SOM-MX8 internal storage.
2. Plug the wall adapter into the 12V power jack (J24) and to a 120VAC~240VAC power source.
3. Set Power ON switch (SW7) to ON state.
   Boot messages are printed within the PC terminal window.

Booting from a micro SD card

The microSD card is supplied within the package. Updated SD card images can also be downloaded from the Variscite FTP server.

See more details in the recovery SD card section in the Variscite Wiki pages.

1. Set Power ON switch (SW7) to off state.
2. Set Boot select switch (SW3) to “SD” position in order to boot from SD Card.
3. Push microSD card into the microSD card slot (J28) of the Symphony-Board.
4. Set Power ON switch (SW7) to ON state.
5. Boot messages are printed within PC’s terminal window.

(Re-)Installing the file system on the eMMC

Please refer to the recovery SD card section in the Variscite wiki pages.

Support

Visit our support center

Thank you for purchasing Variscite’s product.

For additional assistance please contact: sales@variscite.com