

Variscite VAR-SOM-MX8 Based on NXP i.MX8 Evaluation Kit User Guide

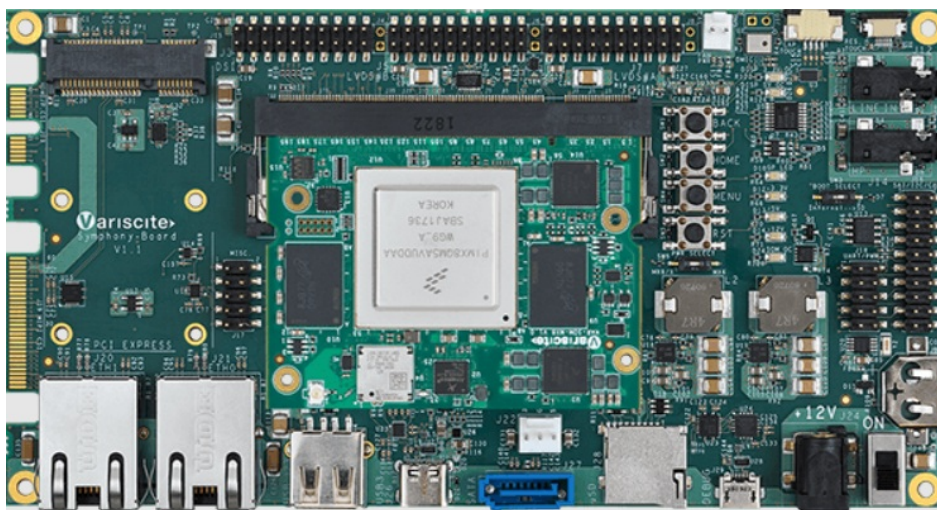
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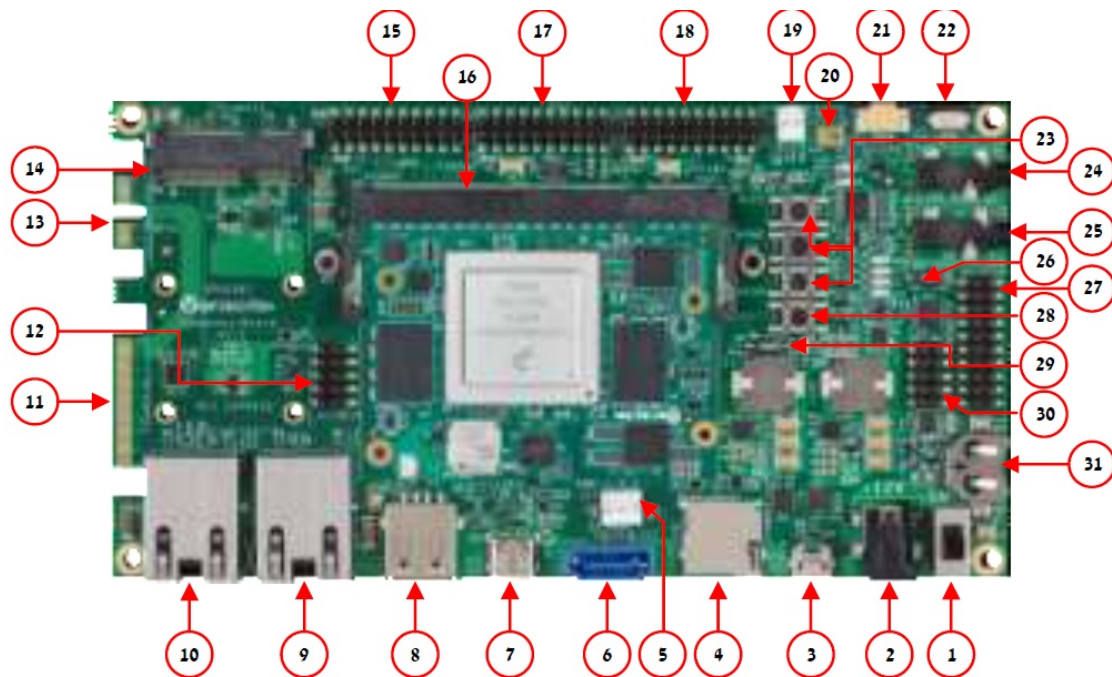
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Variscite VAR-SOM-MX8 Based on NXP i.MX8 Evaluation Kit



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)

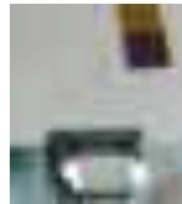
Evaluation kit initial Setup

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:

Display cable – connect the cable with the red wire on pin 1.

Touch cable – connect the 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. Verify PWR Select Switch (SW6) is set to "MX8/X" position.
5. 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.



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.
4. 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 to eMMC

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

Links

- Wiki page:
<http://variwiki.com/index.php?title=VAR-SOM-MX8>
- VAR-SOM-MX8 Evaluation kits:
<https://www.variscite.com/product/evaluation-kits/var-som-mx8-evaluation-kits/>
- VAR-SOM-MX8 System on Module:
<https://www.variscite.com/product/system-on-module-som/cortex-a72/var-som-mx8-nxp-freescale-i-mx8/>
- Symphony carrier board :
<https://www.variscite.com/products/single-board-computers/symphony-board/>
- Customer portal:
<https://varisciteportal.axosoft.com/login>

Thank you for purchasing Variscite’s product.

For additional assistance please contact: sales@variscite.com

Documents / Resources

	Variscite VAR-SOM-MX8 Based on NXP i.MX8 Evaluation Kit [pdf] User Guide VAR-SOM-MX8 Based on NXP i.MX8 Evaluation Kit, VAR-SOM-MX8, Based on NXP i.MX8 Evaluation Kit, Evaluation Kit
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References

- [VAR-SOM-MX8 | Variscite Wiki](#)

-  [Download PuTTY - a free SSH and telnet client for Windows](#)
-  [varisciteportal.axosoft.com/login](#)
-  [Leading ARM System On Module \(SoM\) designer and manufacturer | Variscite](#)
-  [VAR-SOM-MX8 Evaluation Kits based on NXP i.MX8 processor | Variscite](#)
-  [Leading ARM System On Module \(SoM\) designer and manufacturer | Variscite](#)
-  [VAR-SOM-MX8 : NXP iMX8 System on Module \(SoM\)](#)
-  [Variscite's Products - ARM System on Modules, Single Board Computers & Kits](#)
-  [Symphony-Board ARM Single Board Computer - Variscite](#)

Manuals+.