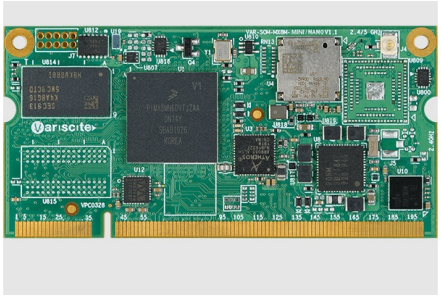
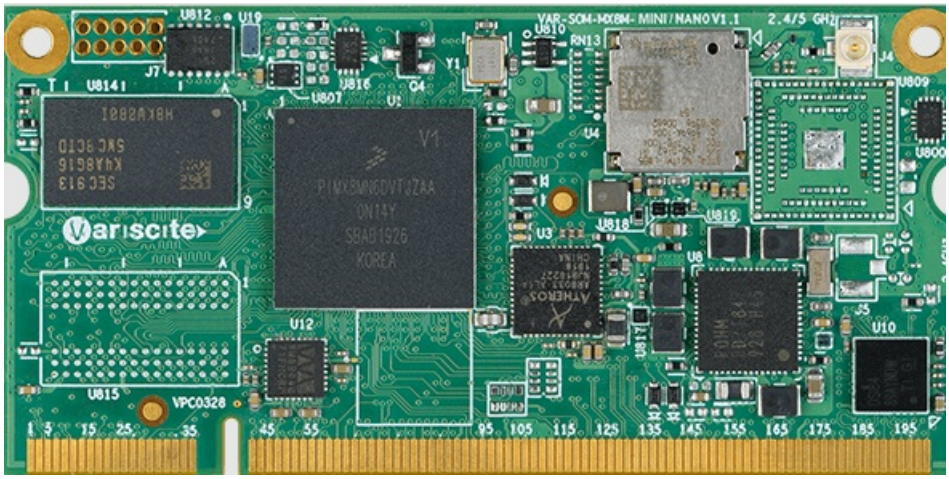


Variscite VAR-SOM-MX8M-NANO Based on NXP i.MX 8M Nano Evaluation Kit User Guide

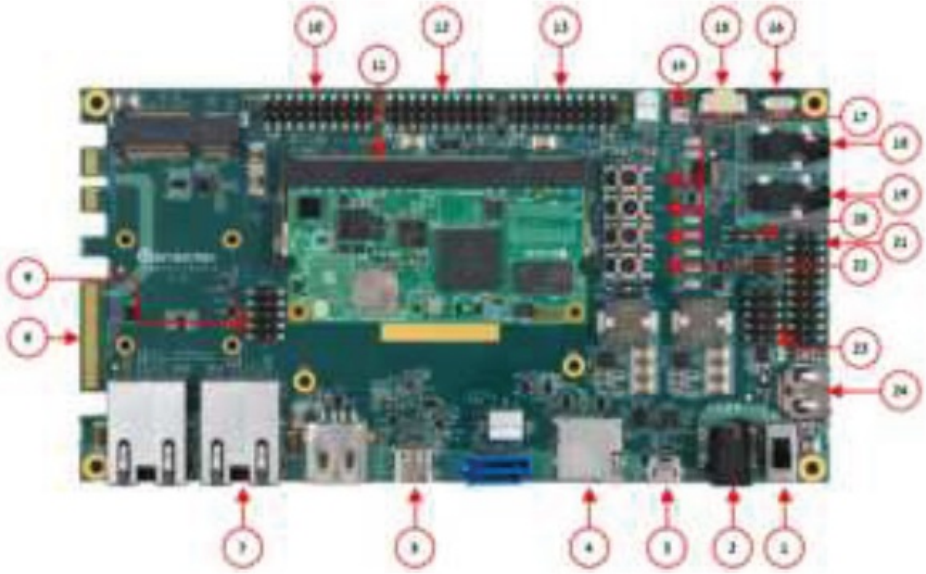
Contents

1 Variscite VAR-SOM-MX8M-NANO Based on NXP i.MX 8M Nano Evaluation Kit
2 Features
3 Evaluation kit initial Setup
4 Setting the host PC for debug
5 Booting from eMMC/NAND
6 Booting from a micro SD card
7 (Re-)Installing the file system to eMMC/NAND
8 Documents / Resources
8.1 References
9 Related Posts

Variscite VAR-SOM-MX8M-NANO Based on NXP i.MX 8M Nano 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. USB 2.0 OTG (J26)
6. USB 2.0 Host (J23)
7. Gigabit Ethernet #0 (J21)
8. MIPI-CSI Camera connector [optional] (J19)
9. Miscellaneous Header (J17)
10. ONOFF/GPIO Header (J3)
11. SOM Connector (J1)
12. LVDS#B Header (J5)
13. LVDS#A Header (J7)
14. Digital Microphone (U1)
15. Resistive Touch (J10)
16. Capacitive Touch (J11)
17. User Buttons (SW1, SW2, SW4)
18. Line-In Connector (J12)
19. Headphones Connector (J14)
20. Boot Select Switch (SW3)
21. SAI/I2C/SPI/CAN Header (J16)
22. Reset Button (SW5)
23. UART/PWM Header (J18)
24. 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. For heatsink assembly instructions, please follow the VHP-VS8M 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/NAND

1. Set Boot select switch (SW3) to “Internal” position to boot from the 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/NAND

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

- Wiki page: http://variwiki.com/index.php?title=VAR-SOM-MX8M-NANO
- VAR-SOM-MX8M-NANO Evaluation kits: https://www.variscite.com/product/evaluation-kits/var-som-mx8m-nano-evaluation-kits/
- VAR-SOM-MX8M-NANO System on Module: https://www.variscite.com/product/system-on-module-som/cortex-a53-krait/var-som-mx8m-nano-nxp-i-mx-8m-nano/
- Symphony carrier board: https://www.variscite.com/product/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-MX8M-NANO Based on NXP i.MX 8M Nano Evaluation Kit [pdf] User Guide VAR-SOM-MX8M-NANO Based on NXP i.MX 8M Nano Evaluation Kit, VAR-SOM-MX8M-NANO, Based on NXP i.MX 8M Nano Evaluation Kit, Nano Evaluation Kit, Evaluation Kit

References

- VAR-SOM-MX8M-NANO | 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-MX8M-NANO Evaluation Kits based on i.MX 8M Nano
- Leading ARM System On Module (SoM) designer and manufacturer | Variscite
- Symphony-Board ARM Single Board Computer - Variscite
- Leading ARM System On Module (SoM) designer and manufacturer | Variscite
- VAR-SOM-MX8M-NANO : NXP i.MX 8M Nano ARM System on Module

Manuals+,