

Variscite DART-MX93 Evaluation Kit



Variscite DART-MX93 Evaluation Kit User Guide

[Home](#) » [Variscite](#) » Variscite DART-MX93 Evaluation Kit User Guide 

Contents

- [1 Variscite DART-MX93 Evaluation Kit](#)
- [2 Product Usage Instructions](#)
- [3 Features](#)
- [4 Evaluation kit initial Setup](#)
- [5 Documents / Resources](#)
 - [5.1 References](#)
- [6 Related Posts](#)



Variscite DART-MX93 Evaluation Kit



Specifications

- Product Name: DART-MX93 based on NXP i.MX93 Evaluation Kit
- CPU: NXP i.MX93
- Display: 7" LCD
- Storage: eMMC, microSD card
- Connectivity: USB, Debug connector
- Power Input: 5V, 120VAC~240VAC

Product Usage Instructions

Evaluation Kit Initial Setup

1. Remove the 7" LCD and VAR-DT8MCustomBoard from the package.
2. Connect the LCD Display and Touch cables to connectors J15, J18 respectively.
3. Plug the USB type A to micro B cable between the USB debug connector (J10) and a PC USB port.
4. Follow VHP-DT8MM/P documentation for heatsink assembly if needed.

Setting the Host PC for Debug

1. Download and install a PC terminal software like Putty.
2. Configure software parameters: Baud Rate: 115200, Data bits: 8, Stop bits: 1, Parity: None, Flow Control: None

Booting from eMMC

1. Set Boot select switch (SW7) to INT position.
2. Connect the wall adapter to the 5V power jack (J4) and a power source.
3. Turn Power ON switch (SW8) to ON state.
4. Boot messages will appear in the PC terminal window.

Booting from a micro SD card

1. Set Power ON switch (SW4) to off state.
2. Set Boot select switch (SW7) to EXT position.
3. Insert microSD card into the slot (J9) of VAR-DT8MCustomBoard.
4. Turn Power ON switch (SW8) to ON state.
5. Boot messages will appear in the PC terminal window.

FAQ

Where can I find more information about the product?

You can visit the following links for more details:

- [VariWiki Page](#)
- [DART-MX93 Evaluation Kits](#)
- [DART-MX93 System on Module](#)
- [VAR-DT8CustomBoard Carrier Board](#)
- [Customer Portal](#)

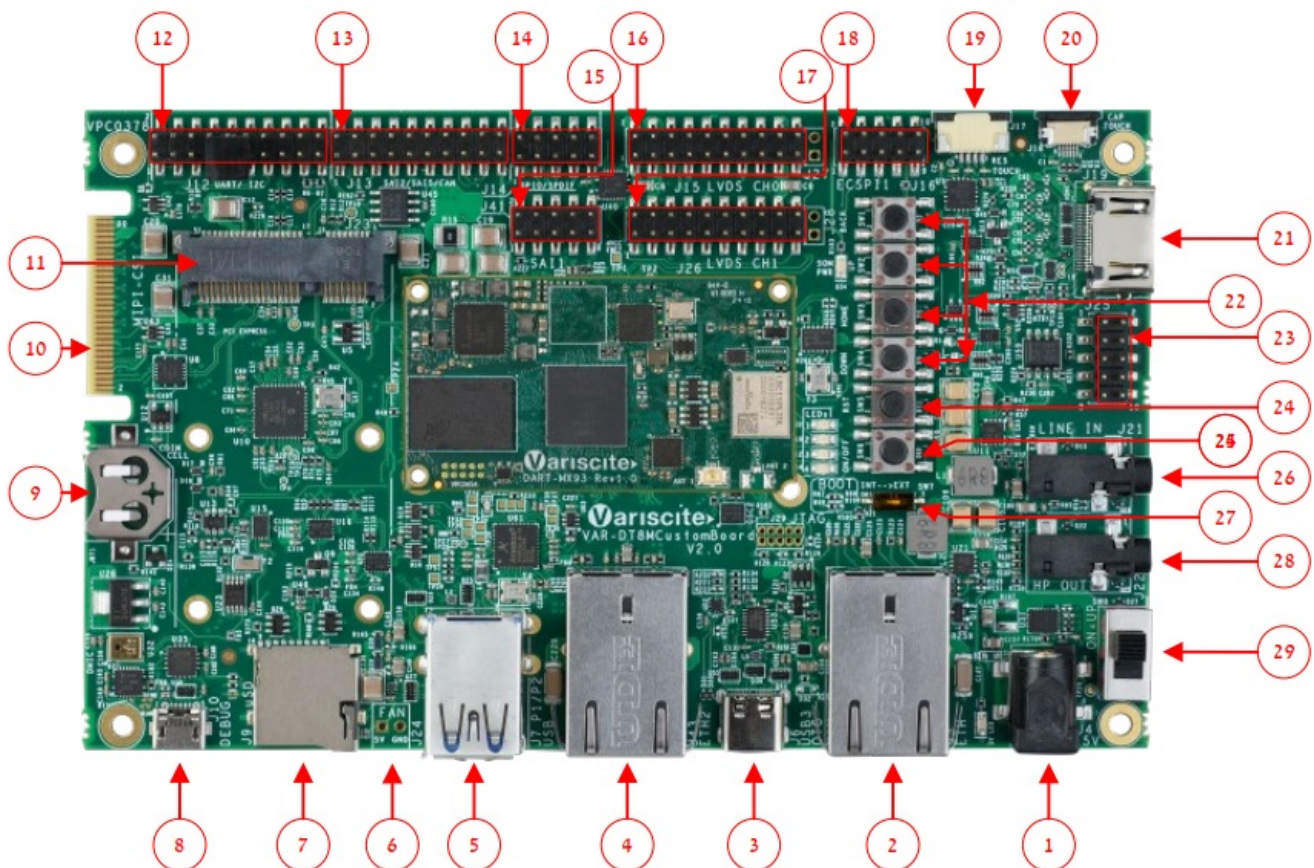
If you need further assistance, please contact sales@variscite.com. P/N VSS0199

DART-MX93 based on NXP i.MX93 Evaluation Kit Quick Start Guide

Features

1. 5V PWR IN (J4)
2. Gigabit Ethernet #1 (J5)
3. USB 3.0 OTG (J6)
4. Gigabit Ethernet #2 (J43)
5. Dual USB 3.0 Host (J7)
6. FAN 5V (J24)
7. micro SD Card slot (J9)
8. USB Debug (J10)
9. RTC BAT. Slot (JBT1)
10. Single MIPI-CSI (J11)
11. Mini PCIe #1 (J23)
12. UART, I2C (J12)
13. SAI2, SAI5, PDM, CAN (J13)
14. GPIO, SPDIF (J14)
15. QSPI (J41)

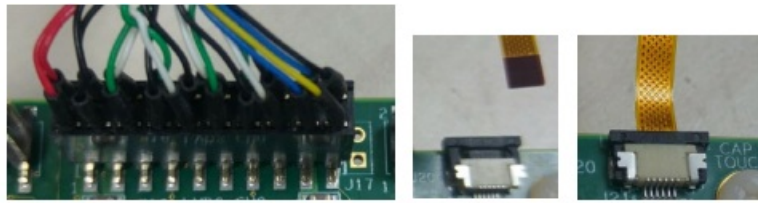
16. LVDS CH0 (J15)
17. LVDS CH1 (J26)
18. ECSPI, Host wake (J16)
19. Resistive Touch (J17)
20. Capacitive Touch (J18)
21. HDMI(J19)
22. User Buttons (SW1-SW4)
23. SAI1 (J25)
24. Reset Button (SW5)
25. ON/OFF Button (SW6)
26. Line In (J21)
27. Boot Select Switch (SW7)
28. Headphones (J22)
29. Power ON (SW8)



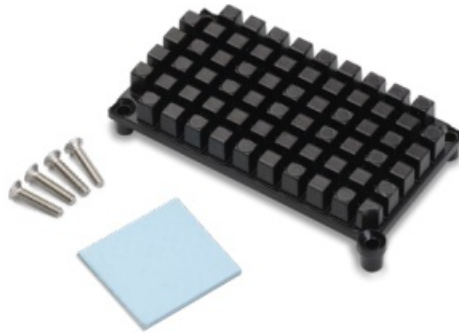
Evaluation kit initial Setup

1. Carefully remove the 7" LCD and VAR-DT8MCustomBoard from the package.
2. Connect the 7" LCD Display and Touch cables to the Evaluation Kit connectors J15, J18 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 (J10) and a PC USB port.
4. For heatsink assembly instructions, please follow the VHP-DT8MM/P 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. For internal boot:

Set the Boot select switch (SW7) to INT position to boot from the SOM's internal storage.
2. Plug the wall adapter into the 5V power jack (J4) and to a 120VAC~240VAC power source.
3. Set Power ON switch (SW8) to ON state.
4. Boot messages should be 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 (SW4) to off state.
2. Set Boot select switch (SW7) to EXT side in order to boot from the SD card.
3. Push microSD card into the microSD card slot (J9) of the VAR-DT8MCustomBoard.
4. Set Power ON switch (SW8) to ON state.
5. Boot messages should be printed within the PC terminal window.

(Re-)Installing the file system on the eMMC

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

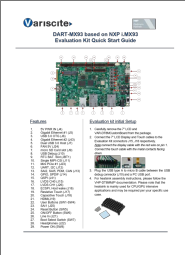
Links

- Wiki page: <https://variwiki.com/index.php?title=DART-MX93>
- DART-MX93 Evaluation kits: <https://www.variscite.com/product/evaluation-kits/dart-mx93-evaluation-kits/>
- DART-MX93 System on Module: <https://www.variscite.com/product/system-on-module-som/cortex-a55/dart-mx93-nxp-i-mx93/>
- VAR-DT8CustomBoard carrier board: <https://www.variscite.com/product/single-board-computers/var-dt8mcustomboard>
- 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 DART-MX93 Evaluation Kit [pdf] User Guide DART-MX93, DART-MX93 Evaluation Kit, DART-MX93, Evaluation Kit, Kit
--	--

References

-  varisciteportal.axosoft.com/login
- [User Manual](#)

Manuals+, Privacy Policy

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.