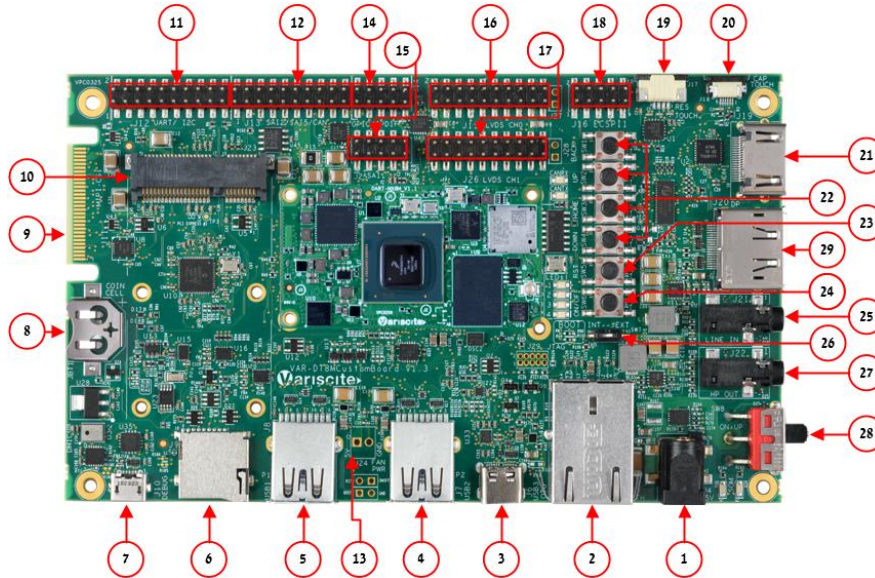


DART-MX8M based on NXP i.MX8M Evaluation Kit Quick Start Guide



Features:

1. 5V PWR IN (J4)
2. Gigabit Ethernet (J5)
3. USB 3.0 OTG (J6)
4. USB 3.0 Host P2(J7)
5. USB 3.0 Host P1(J8)
6. SD-MMC (J9)
7. USB Debug (J10)
8. RTC BAT. Slot (JBT1)
9. Dual MIPI-CSI (J11)
10. Mini PCIe #1 (J23)
11. UART, I2C (J12)
12. SAI2, SAI5, CAN_FD (J13)
13. FAN 5V (J24)
14. GPIO, SPDIF (J14)
15. SAI1 (J25)
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-TOP: SW4-BOT)
23. Reset Button (SW5)
24. ON/OFF Button (SW6)
25. Line In (J21)
26. Boot Select Switch (SW7)
27. Headphones (J22)
28. Power ON (SW8)
29. Display Port (J20)

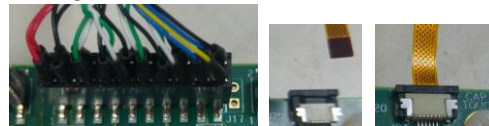
Evaluation kit initial Setup

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:

Display cable – connect cable with RED wires on pin 1 side

Touch cable – connect cable with 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. Peel off the plastic layer on the bottom of the heat sink and place the exposed sticky surface on top of the SOC.



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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. For internal boot:
2. Set Boot select switch (SW7) to eMMC position to boot from the DART-MX8M internal storage.
3. Plug the wall adapter into the 5V power jack (J4) and to a 120VAC~240VAC power source.
4. Set Power ON switch to ON state.
5. 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 (SW4) to off state.
2. Set Boot select switch (SW7) to SD side in order to boot from SD Card.
3. Push microSD card into the microSD card slot (J9) of the VAR-DT8MCustomBoard.
4. Set Power ON switch 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:
<https://variwiki.com/index.php?title=DART-MX8M>
- DART-MX8M Evaluation kits:
<https://www.variscite.com/product/evaluation-kits/dart-mx8m-kits/>
- DART-MX8M System on Module:
<https://www.variscite.com/product/system-on-module-som/cortex-a53-krait/dart-mx8m-nxp-imx-8m/>
- VAR-DT8MCustomBoard:
<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