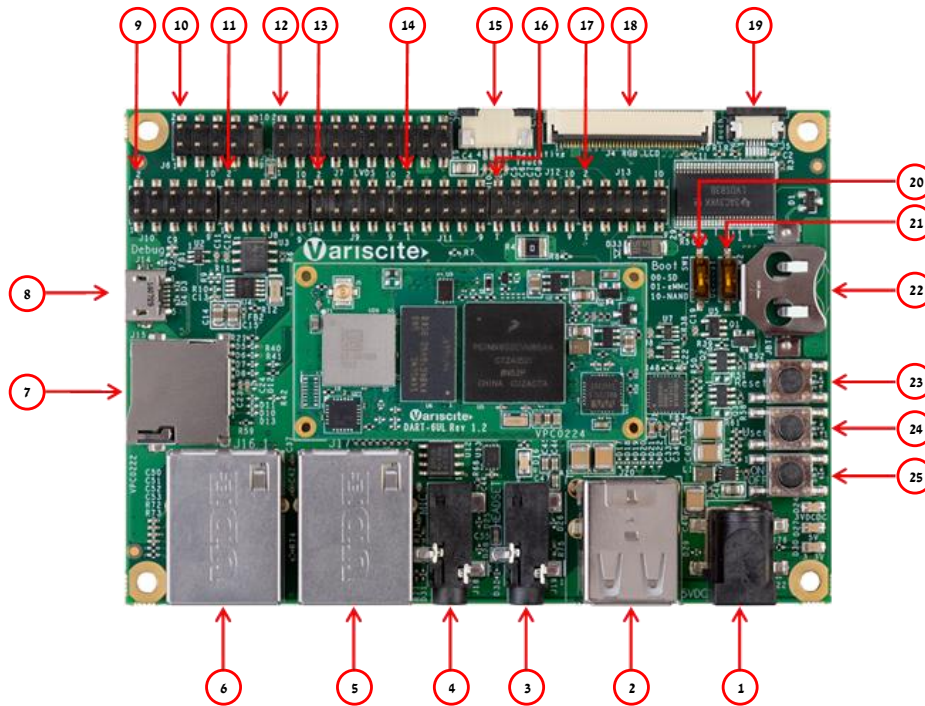


DART-6UL based on NXP/Freescale i.MX6 UltraLite Evaluation Kit Quick Start Guide



Features:

1. 5V DC In Jack (J22)
2. Dual USB Host Connector (J20)
3. Headset (J19)
4. Line In (J18)
5. 10/100 Mbps Ethernet #2 (J17)
6. 10/100 Mbps Ethernet #1 (J16)
7. micro SD Card slot (J15)
8. USB Debug (J14)
9. Expansion Header (J10)
10. Expansion Header (J6)
11. Expansion Header (J8)
12. LVDS Header (J7)
13. Expansion Header (J9)
14. Expansion Header (J11)
15. Resistive Touch (J3)
16. Expansion Header (J12)
17. Expansion Header (J13)
18. LCD Connector (J4)
19. Capacitive Touch (J5)
20. Boot select switch #1 (SW1)
21. Boot select switch #2 (SW2)
22. RTC Battery Holder (JBT1)
23. Reset Button (SW3)
24. User Button (SW4)
25. On/Off Button (SW5)

Evaluation kit initial Setup

1. Carefully remove the 7" LCD and VAR-6ULCustomBoard board from the package.
2. Connect the 7" LCD Display and Touch cables to the Evaluation Kit connectors J4, J5 respectively.

Note:

Display cable – connect cable with metal contacts facing up.

Touch cable – connect cable with metal contacts facing down.

3. Plug the USB type A to micro B cable between the USB debug connector (J14) and a PC USB port.

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Setting the Host PC for Debug

1. Download any PC terminal program. Variscite suggests using [Putty](#)
2. Set PC terminal software parameters as follows:
 - Baud Rate: 115200
 - Data bits: 8
 - Stop bits: 1
 - Parity: None
 - Flow Control: None

Using Default file System

1. Depending on your SOM's HW configuration, eMMC or NAND Flash assembled:
 - eMMC boot:
Set Boot select switch #1 (SW1) Downwards & Boot select switch #2 (SW2) Upwards to boot from DART-6UL eMMC.
 - NAND boot:
Set Boot select switch #1 (SW1) Upwards & Boot select switch #2 (SW2) Downwards to boot from DART-6UL NAND.
2. Power ON the VAR-6ULCustomBoard by plugging the wall adapter's pin into the 5V power jack (J22) and to a 120VAC~240VAC power source.
3. Boot messages are printed within PC's terminal window.

Bootting from micro SD Card

The microSD card is supplied within the package. The image can be also downloaded from Variscite FTP site. Please refer to "Burning Recovery File System" section.

1. Power Off the the VAR-6ULCustomBoard by disconnecting the wall adapter's pin from the 5V power jack (J22).

2. Set Boot select switches #1 (SW1) & #2 (SW2) downwards to boot from microSD Card.
3. Push microSD card into the microSD card slot (J15) of the VAR-6ULCustomBoard.
4. Power ON the VAR-6ULCustomBoard by plugging the wall adapter's pin into the 5V power jack (J22) and to a 120VAC~240VAC power source.
5. Boot messages are printed within PC's terminal window.

Burning Recovery File System

Please refer to Variscite's wiki pages at: [https://variwiki.com/index.php?title=Yocto Recovery SD card latest](https://variwiki.com/index.php?title=Yocto_Recovery_SD_card_latest)

Additional Support Links

- Wiki pages: https://variwiki.com/index.php?title=Main_Page
- Variscite Customers Portal: <https://varisciteportal.axosoft.com/login>
- VAR-DVK-6UL: <https://www.variscite.com/product/evaluation-kits/dart-6ul-kits>
- DART-6UL: <https://www.variscite.com/product/system-on-module-som/cortex-a7/dart-6ul-freescale-imx-6ul>
- VAR-6ULCustomBoard: <https://www.variscite.com/product/single-board-computers/var-6ulcustomboard>

Thank you for purchasing Variscite's product.

For additional assistance please contact: sales@variscite.com