



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.
- 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

- Download any PC terminal program. Variscite suggests using <u>Putty</u>
- 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

 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. <u>NAND boot:</u>

Set Boot select switch #1 (SW1) Upwards & Boot select switch #2 (SW2) Downwards to boot from DART-6UL NAND.

- 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.

Booting from micro SD Card

<u>The microSD card is supplied within the</u> package. The image can be also downloaded from Variscite FTP site. Please contact Variscite's sales for details: sales@variscite.com

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

- 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.
- 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: http://variwiki.com/index.php?title=DART-6UL_Yocto_NAND_Recovery

Additional Support Links

- 1. Wiki pages: <u>http://variwiki.com/index.php?title=Main_Pa</u> ge
- 2. Support Forum: http://variscite.com/support-forum/index.php
- 3. VAR-DVK-6UL: <u>http://www.variscite.com/products/evaluatio</u> <u>n-kits/dart-6ul-kits</u>
- 4. DART-6UL: <u>http://www.variscite.com/products/system-on-module-som/cortex-a7/dart-6ul-freescale-imx-6ul</u>
- 5. VAR-6ULCustomBoard: http://www.variscite.com/products/singleboard-computers/var-6ulcustomboard

Thank you for purchasing Variscite's product.

For additional assistance please contact: support@variscite.com