



DART-SD410 based on Qualcomm Snapdragon 410 Evaluation Kit Quick Start Guide



Features:

- 1. 5V DC In Jack (J18)
- 2. USB Debug (J21)
- 3. Microphone Jack (J16)
- 4. Headset Jack (J15)
- 5. Gigabit Ethernet Jack (J22)
- 6. USB Device (J20)
- 7. Dual USB Host (J14)
- 8. Speaker connector placeholder (J19)
- 9. LVDS Header (J11)
- 10. 24bit LVDS expansion placeholder (12)
- 11. HDMI (J9)
- 12. UARTO Header (J7)
- 13. Capacitive Touch (J4)
- 14. I2C/SPI Header (J5)
- 15. GPIO/I2S Header (J8)
- 16. JTAG Header (J6)
- 17. Camera Board PCB Connector (J10) Interfaces with VAR-EXT-CB410
- 18. micro SD Card slot (J3)
- 19. RTC Battery Holder (JBT1)
- 20. Back Button (SW8)
- 21. Boot select switch (SW3)
- 22. Home Button (SW5)
- 23. USB Boot switch (SW7)
- 24. Power Button (SW9)
- 25. On/Off switch (SW10)

Evaluation kit initial Setup

- Carefully remove the 7" LCD and VAR-SD410CustomBoard board from the package.
- Plug the supplied USB type A to micro B cable between the USB debug connector (J21) and a PC USB port. Wait for USB device enumeration and driver installation.
- Connect the supplied 5V DC power supply to 5V DC In Jack (J18).
- 4. Power On the board by On/Off switch (SW10).
- 5. The Board will boot into preloaded OS.





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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 parameters as follows:
 - Baud Rate: 115200
 - Data bits: 8
 - Stop bits: 1
 - Parity: None
 - Flow Control: None

Preparing images

 The Package includes a microSD card which contains a recovery SD Card image for installing OS and recovery.

The image can also be downloaded from Variscite FTP site.

Booting and OS Burning

- 1. Insert included SD Cart into SD Card slot (J3).
- 2. Set Boot select switch (SW3) to the ON position in order to boot from SD Card.
- Plug a USB type A to micro B cable between the USB Debug connector (J21) and a PC USB port.
- Power ON the VAR-SD410CustomBoard By plugging the wall adapter power connector into the 5V power jack (J18) and to a 120VAC~240VAC power source.
- 5. The system will read the image from external SD card and boot into Debian Release.
- Navigate to /media/linaro/OSes/Android or to /media/linaro/OSes/Debian folder on the SOM using PC terminal program.
- Execute update.sh script by running ./update.sh
 This will flash the OS to the On SOM eMMC.
- 8. Wait till Done message appear.
- 9. Power off the VAR-SD410CustomBoard.

- 10. Set Boot select switch (SW3) to the OFF position to boot from the On SOM eMMC.
- 11. Power ON the VAR-SD410CustomBoard
- 12. Boot messages are printed in the PC's terminal window and the flashed OS will start.
- 13. For additional instructions follow: <u>https://variwiki.com/index.php?title=DART-</u> <u>SD410 Android Getting Started</u>

Additional Support Links

- Wiki pages: <u>https://variwiki.com/index.php?title=Main_P</u> <u>age</u>
- Variscite Customers Portal: <u>https://varisciteportal.axosoft.com/login</u>
- VAR-DVK-SD410: <u>https://www.variscite.com/product/evaluatio</u> <u>n-kits/dart-sd410-kits/</u>
- DART-SD410: <u>https://www.variscite.com/product/system-on-module-som/cortex-a53-krait/dart-sd410-qualcomm-snapdragon-410/</u>
- VAR-SD410CustomBoard: <u>https://www.variscite.com/product/single-board-computers/var-sd410customboard/</u>

Thank you for purchasing Variscite's product.

For additional assistance please contact: <u>sales@variscite.com</u>