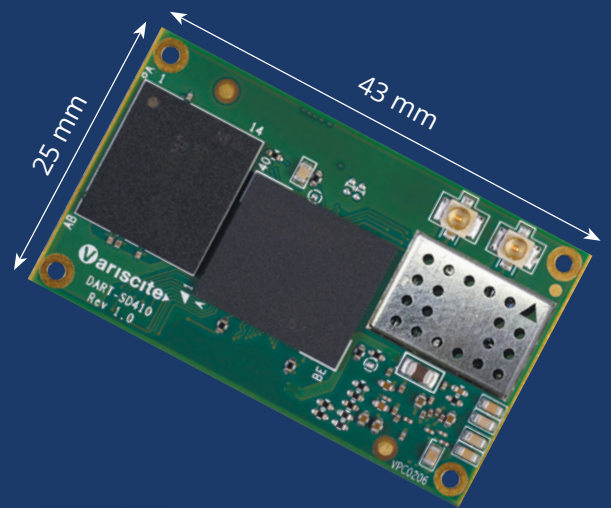


# DART-SD410

Bringing the Snapdragon™ Magic to the Embedded Market



Bringing the Snapdragon™ magic to the embedded market, the DART-SD410 supports the Qualcomm® Snapdragon™ 410 (APQ8016) 1.2GHz quad ARM Cortex-A53 with both 32-bit and 64-bit architecture.

In an amazing 25mm x 43mm ultra compact size, the DART-SD410 offers a staggering processing power and highly optimized power consumption, ideal for embedded portable devices and battery-operated products.

High-resolution camera, advanced multimedia support and broad connectivity options are just some of the features that ensure a richer experience in various embedded segments and applications.

## Main Features

### Qualcomm® Snapdragon™ 410 (APQ8016)

- 1.2GHz quad ARM® Cortex® A53 64/32-bit processor
- 400MHz Qualcomm® Adreno™ 306 2D/3D Graphics accelerator
- 1080p30 encode/decode
- Up to 2GB LP-DDR3 and 16GB eMMC

### Display Support

- 4-lane DSI
- HDMI and LVDS supported on carrier
- Up to 720p60/1080p30, 24-bit

### Wireless Connectivity

- Wi-Fi 802.11b/g/n
- Bluetooth: 4.1/LE backward compatible to 2.x+EDR and 3.0
- FM radio

### GPS

- Qualcomm® IZat™ Gen 8C location engine
- GPS, Compass and Glonass/Galileo

### USB

- 1 x USB2.0 Host/Device

### Ethernet

- Gigabit Ethernet through USB bridge on carrier

### Camera

- 2 x MIPI CSI, 4-lane up to 13MP and 2-lane up to 8MP

### Audio

- Digital microphone
- 2 x analog microphone
- Stereo headphone
- Mono speaker
- 2 x I2S

### Other Interfaces

- Up to 6 x SPI, 6 x I2C, 2 x UART, GPIOs
- SD/MMC, JTAG
- Backlight PWM

### OS Support

- Android, Linux, Windows 10

### Power

- Power in 3.7 - 4.5V

### -25 to 85°C Temperature range

### Dimensions (W x L x H)

- 25mm x 43mm x 4mm

Qualcomm Snapdragon and Qualcomm Adreno are products of Qualcomm Technologies, Inc. Qualcomm IZat is a product of Qualcomm Atheros, Inc.



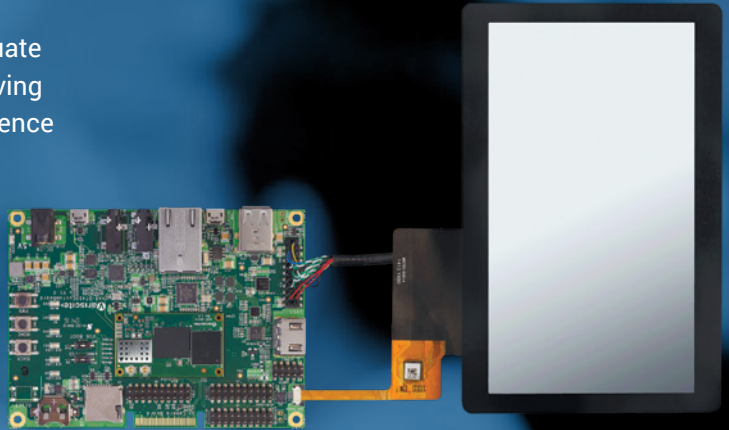
# Complementing the DART-SD410

## VAR-DVK-SD410 Evaluation Kit

The VAR-DVK-SD410 allows the customer to fully evaluate the DART-SD410 hardware & software capabilities, serving as a complete development platform as well as a reference design for the customer's specific end-product.

### Evaluation Kit content

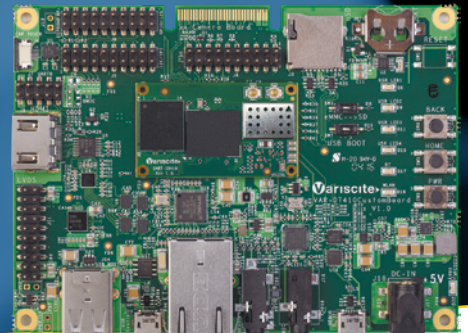
- DART-SD410
- Carrier board
- 7" LCD + capacitive touch panel
- Power supply and communication cables
- Documentation and design package
- Optional camera extension board



## VAR-SD410CustomBoard

VAR-SD410CustomBoard - Supporting DART-SD410

The VAR-SD410CustomBoard not only ensures scalable and simplified development to achieve a short-time to market for current innovations, but also accommodates potential R&D directions and marketing opportunities.



### Display support

- 4-pair 24-bit LVDS
- HDMI 1.3
- 4-lane DSI

### Capacitive Touch Panel

- 6-Pin FFC/FPC

### Camera

- Extension camera connector to support dual camera MIPI-CSI input

### Ethernet

- Gigabit Ethernet

### Audio

- Mono speaker header
- On board digital microphone
- Headset (microphone plus headphone)
- I2S on expansion header
- Analog microphone

### USB

- 2 x USB 2.0 host
- 1 x USB client (muxed with USB Host and ETH)
- 1 x micro USB debug port

### Storage

- SD/MMC interface

### Additional Connectors

- 4 x I2C, 2 x SPI, UART, GPIO
- JTAG

### Battery

- 3V Lithium backup battery

### Power

- 5V DC Input

### Size

- 87mm x 118mm x 20mm

## About Variscite

Variscite is a leading System on Modules (SoM) and Single-Board-Computer (SBC) design and manufacture company. A trusted provider of development and consulting services for a variety of embedded platforms, Variscite transforms clients' visions into successful products.

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