DART-SD800

The Smallest Snapdragon™ SoM in the Embedded Market

Main Features

Qualcomm Snapdragon™ 800 (APQ8074)

- High performance 2.3 GHz Quad Krait™ 400
- Highly efficient DMIPS/mW performance
- Enhanced ARMv7 compliant architecture
- Adreno 330 GPU providing 2D/3D graphics acceleration
- 4K x 2K Ultra HD video capture/playback
- 3GB LP-DDR3, 64GB eMMC

Display Support

- HDMI 1.4a, Dual MIPI-DSI
- Up to QSXGA 2560 x 2048 x 24bits

Networking

- Dual Band Wi-Fi 802.11a/b/g/n with MIMO option
- Bluetooth: 4.0 + BLE

USB

- 1 x Super Speed USB3.0 OTG with integrated PHY
- 1 x USB2.0 OTG with integrated PHY
- 1 x HSIC for external PHY-less connection

Camera

- 2 x Camera MIPI CSI up to 32MP

Audio

- 3 x digital stereo microphone
- Analog stereo headset (microphone & headphones) with smart plug detect
- Stereo headphone output
- 4 x line out
- I2S output

Other Interfaces

- 8 x UART/I2C/SPI/4xGPIO
- SD/MMC, JTAG
- Backlight PWM

OS Support

- Android

Power

- Battery operated 3.3-4.5V
- Smart USB charger 5-10V
- RTC external backup battery

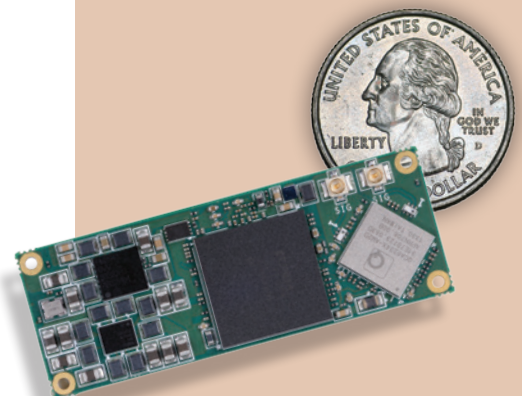### -20 to 85 °C Temperature range

Dimensions (W x L x H):
20mm x 55mm x 4mm

Overview

Bringing the Snapdragon™ magic to the embedded market, the DART-SD800 supports the Qualcomm Snapdragon™ 800 (APQ8074) 2.3 GHz quad Krait™ 400 processor.

In an amazing 20mm x 55mm ultra compact size, the DART-SD800 offers a staggering processing power and highly optimized power consumption, ideal for embedded portable devices and battery operated products.

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

VAR-DVK-SD800 Evaluation Kit

Overview

VAR-DVK-SD800 - Supporting DART-SD800

The VAR-DVK-SD800 allows the customer to fully evaluate the DART-SD800 hardware & software capabilities, serving as a complete development platform as well as a reference design for the customer's specific end-product.

The VAR-DVK-SD800 includes:

- DART-SD800
- Carrier board
- 7" LCD + capacitive touch panel
- Power supply and communication cables
- Documentation and design package

The VAR-DVK-SD800 carrier board includes the following features:

Display support:
- Dual 3-pair 18-bit LVDS
- HDMI 1.4a

Capacitive Touch Panel
- 6-Pin FFC/FPC

Camera
- On board dual MIPI-CSI connectors

Audio
- Stereo line-out
- On board digital microphone
- Headset (microphone plus headphone)
- I2S on expansion header

USB
- 1x USB 2.0 host
- 1 x USB 3.0 OTG
- 1 x micro USB debug port

Ethernet
- 10/100Mb Ethernet

Storage
- SD/MMC interface

Additional Connectors
- 8 x BLSP interfaces, configurable to I2C, UART, SPI, 4x GPIO
- Backlight driver
- JTAG

Battery
- 1-cell Li-Ion or Lithium
- 3V Lithium backup battery

Power: 5V DC Input

About Variscite

In less than a decade Variscite has taken a leading position in the System on Modules (SoM) design and manufacture market. A trusted provider of development and consulting services for a variety of embedded platforms, Variscite transforms clients' visions into successful products.

For more information contact:
sales@variscite.com

www.variscite.com