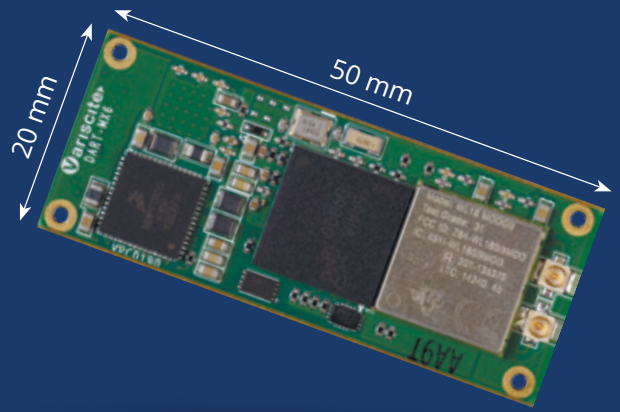


# DART-MX6

The Smallest i.MX6 SoM in the Embedded Market



Measuring only 20mm x 50mm, the DART-MX6 is the smallest SoM supporting NXP's i.MX6 quad and dual core Cortex-A9 processor.

The DART-MX6 offers impressive performance and scalability alongside optimized power consumption and miniature size thus making it ideal for portable and battery operated embedded systems.

The DART-MX6 highly integrated connectivity includes dual band Wi-Fi/BT with MIMO, dual USB, Gigabit

Ethernet, PCIe and A/V interfaces all supported in -35 to 85 °C industrial operating temperatures.

The VAR-DT6CustomBoard carrier board of the DART-MX6 completes an attractive full reference kit which can be used for customers evaluation, development and mass production.

## Main Features

### NXP i.MX6

- High performance 800 MHz Quad Core Cortex-A9  
Up to 2GB LP-DDR2, 64GB eMMC
- Full HD 1080p video encoding/decoding capability
- Vivante GPU providing 2D/3D acceleration

### Display Support

- 2 x LVDS, HDMI 1.4, MIPI-DSI
- LCD: WUXGA (1920 x 1200), HDMI: 1080p

### Networking

- Gigabit Ethernet
- Certified WiFi 802.11 a/b/g/n with MIMO and Bluetooth 5.1/BLE
- PCIe

### USB

- USB 2.0 OTG
- USB 2.0 Host

### Audio

- Digital audio SSI(AUDMUX)/SPDIF
- Digital microphone (stereo)
- Headphone out, Line-in

### Camera

- MIPI CSI serial input
- Parallel input

### Other Interfaces:

- Dual CAN, I2C, SPI, PWM, JTAG, UART, SD/MMC

### OS Support

- Linux
- Android

### Power

- Single 3.7V

### Dimensions (W x L x H)

- 20mm x 50mm x 4mm

### -40 to 85°C Industrial temperature range

### Low Power consumption:

- Only 8mA in suspend mode

# Complementing the DART-MX6

## DART-MX6 Evaluation Kit

The VAR-DVK-DT6 allows full performance and capability evaluation, serving as a development and evaluation platform for hardware and software teams.

### Evaluation Kit content

- VAR-DT6CustomBoard populated with DART-MX6
- 7" LCD + capacitive touch panel
- Power supply and communication cables
- Documentation and design package



## VAR-DT6CustomBoard

### VAR-DT6CustomBoard - Supporting DART-MX6

The VAR-DT6CustomBoard 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

- Dual 18/24-bit LVDS headers
- DSI
- HDMI 1.4

### Touch Panel

- Capacitive touch support (6-pin FFC/FPC)

### Audio/Video

- Serial camera (MIPI CSI)
- Parallel camera (header)
- Headphone
- Line-in
- Digital microphone

### USB

- 1 x USB 2.0 host
- 1 x USB OTG

### Ethernet

- Gigabit Ethernet

### PCIe

### Storage

- SD/MMC card socket

### Debug

- Micro USB
- JTAG (header)

### Additional expansion Connectors

- SPI, I2C
- CAN Bus
- UART, RS232
- Digital microphone
- PWM

### RTC backup battery

- CR1225 coin battery socket

### Power

- 5V DC input

### Size

- 8.7cm x 11.7cm

## About Variscite

Variscite is a leading System on Module (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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