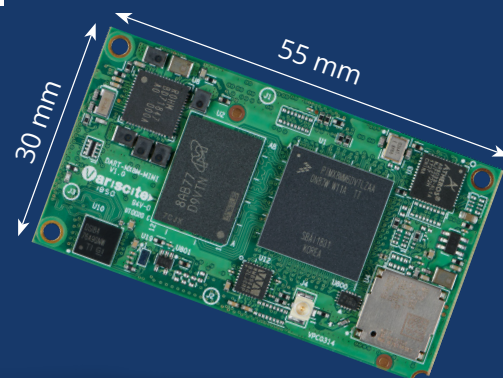


DART-MX8M-MINI

from \$53

Packed in a tiny 55x30 mm package, the DART-MX8M-MINI System on Module powered by NXP's i.MX8M Mini with up to 2GHz Quad-core ARM Cortex-A53 plus 400MHz Cortex-M4 real-time processor. Leveraging advanced low power silicon process technology to provide optimized power consumption while maintaining a high-performance bar.

The DART-MX8M-MINI and the DART-MX8M are pin-compatible solutions, providing our customers with ultimate flexibility. The SoM offers integrated 1080p video encode and decode acceleration support, 2D and 3D graphics, HQ audio and a wide range of connectivity options such as certified Wi-Fi 6 802.11ax/ac/a/b/g/n



with BT/BLE 5.4 and optional 802.15.4, Ethernet and USB.

The VAR-DT8MCustomBoard carrier board complements an attractive full reference kit of the DART-MX8M-MINI used by Variscite's customers for evaluation, development and mass production.

Main Features

NXP i.MX 8M Mini

- Up to 2GHz Quad-core ARM Cortex-A53
- Real-time 400MHz Cortex-M4 co-processor
- Neon Media Processor Engine (MPE)
- Up to 4GB LPDDR4-3000 memory, up to 128GB eMMC storage

Display and video Support

- 1080p60 H.265/H.264/VP9 Decode, 1080p60
- MIPI DSI 1080p60
- Resistive/capacitive touch screen
- Dual channel LVDS display

Networking

- 10/100/1000Mbps Ethernet
- Certified Wi-Fi 6 802.11ax/ac/a/b/g/n and optional 802.15.4
- Bluetooth 5.4/BLE

High Speed interfaces

- PCIe
- 2 x USB 2.0 OTG

Audio

- Digital audio (SAI, SPDIF, PDM)
- Analog, Digital microphone (stereo)
- Headphone out, Line-in

Camera

- MIPI CSI2 serial input

Other Interfaces:

- I2C, QSPI, SPI, PWM, JTAG, UART, SD/MMC, GPIO, timers

OS Support

- Linux
- Android

Power

- Single 3.5-5V

Dimensions (W x L x H):

- 30.0 mm x 55.0 mm x 4.7 mm

-40 to 85°C industrial temperature support

Low Power consumption:

- Optimized power consumption in both operational and suspend modes



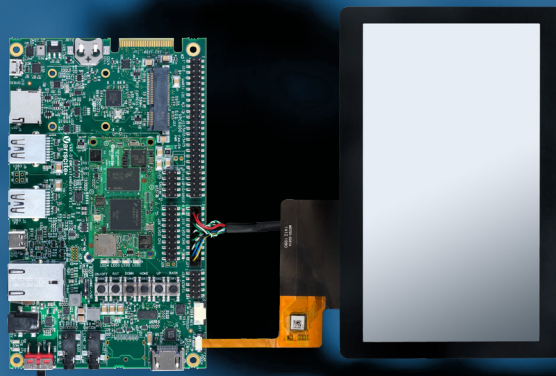
Complementing the DART-MX8M-MINI

DART-MX8M-MINI Evaluation Kit

The VAR-DVK-DT8M-MINI allows full performance and capability evaluation, serving as an evaluation, development and production platform for hardware and software teams.

Evaluation Kit content

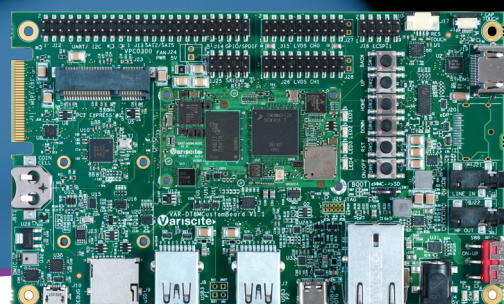
- VAR-DT8MCustomBoard populated with DART-MX8M-MINI
- 7" LCD + capacitive touch panel
- Power supply and communication cables
- Documentation and design package
- WiFi/BT antenna



VAR-DT8MCustomBoard

VAR-DT8MCustomBoard - Supporting DART-MX8M-MINI

The VAR-DT8MCustomBoard ensures a scalable and simplified development and reference board to achieve a short time-to-market for customer's designs and end-products.



Display Support

- DSI, LVDS display

Touch Panel

- Capacitive touch (6-pin FFC/FPC)
- Resistive touch (4-pin FFC/FPC)

Audio

- Headphone
- Line-in
- Digital mic

Storage

- SD/SDIO/MMC card socket

High speed interfaces

- 2x USB 2.0 ports
- 10/100/1000Mbps Ethernet RJ45
- mPCIe

Camera

- MIPI CSI serial

Additional expansion Connectors

- SPI, SPDIF, GPIO
- UART, I2C
- PWM
- SAI

Debug

- Micro USB

RTC backup battery

- CR1225 coin battery socket

Power

- 5V DC input

Size

- 15.0cm x 9.0cm

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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