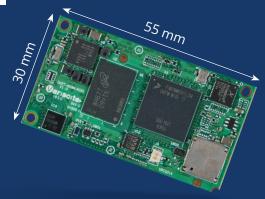
# **DART-MX8M-MINI**

# from \$57

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 pincompatible 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/BT, 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
- Capacitive touch screen
- Dual channel LVDS display

### **Networking**

- 10/100/1000Mbps Ethernet
- Certified WiFi 802.11ac/a/b/g/n and Bluetooth 5.2/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 - 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)

### 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
- mPCle

### Camera

MIPI CSI serial

### **Additional expansion Connectors**

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

### Debua

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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