SCM187-4R8EI-184EVK

SMARC v2.1 SoM Evaluation Kit with i.MX 8M Mini Quad 1.6 GHz SoC, 4GB RAM, 8GB eMMC, GbE LAN, USB, Audio, and CANBus for Evaluation Purposes



▲ Top view



▲ Rear view

1 x TPM 2.0 (optional, none in default)

Features

- NXP i.MX 8M Mini Quad A53 Core processor
- Cortex-M4 for real-time control
- Dual CANBus
- Dual-channel 24-bit LVDS
- GbE LAN
- Audio
- Micro SD Socket
- 12V-24V Wide Voltage
- Yocto 4.0





▲ Side view

▲ Front view

Specifications

Core	System

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CPU	NXP i.MX 8M Mini 1.6GHz SoC with Quad A53
System Memory	LPDDR4 4GB
Operating System	Yocto 4.0, Linux Kernel 5.15.32
Storage	1 x Micro SD slot
	1 x 8GB eMMC
Internal I/O and Fea	tures
PCIe*	1 x PCIe x4 slot (SCM187 supports PCIe Gen2 x1)
USB*	2 x USB 2.0 (not supported on SCM187)
Audio	1 x Line In/ Line Out
CANBus	2 x CANBus
I ² C	2 x I ² C Header
QSPI	1 x QSPI Header
SPI	1x SPI Header
Graphics	1 x Dual-channel 24-bit LVDS
LTE/5G*	1 x SIM card slot (not supported on SCM187)
	1 x M.2 Key B 3052 slot for 5G Module (not supported on SCM187)
SATA*	1 x SATA for SATA III (not supported on SCM187)
	1 x SATA Power (not supported on SCM187)
Fan	1 x Fan control
Storage	1 x 8GB eMMC
RTC	1 x RTC-Battery (CR2032)

^{*} The connected SMARC module must also support the features for the connector to function. Refer to the SMARC module's datasheets for information about supported features.



External I/O

External I/O	
Ethernet*	2 x GbE LAN (SCM187 supports 1 x GbE LAN)
USB*	4 x USB 2.0 Type A (SCM187 supports USB 2.0)
Graphics*	1 x HDMI (not supported on SCM187)
	1 x DisplayPort (not supported on SCM187)
COM	1 x DB9 for RS-232
	1 x DB9 for RS-232/485
OS Flash	1 x OS Flash
GPIO	10 x GPIO
Power	1 x Lockable DC jack (12V-24V)
Reset	1 x Reset button
Storage	1 x Micro SD slot

^{*} The connected SMARC module must also support the features for the connector to function. Refer to the SMARC module's datasheets for information about supported features.

Mechanical and Environmental

Power Input	12V-24V DC-in
Dimensions	146 x 102 mm (approx. 5.75" x 4.02")
Operating Temperature	-20°C to +70°C (-4°F to +158°F)
Storage Temperature	-40°C to +85°C (-40°F to +185°F)
Operating Humidity	10% to 95%, non-condensing
Storage Humidity	10% to 95%, non-condensing

Ordering Information

Standard

SCM187-4R8EI-184EVK Evaluation kit board, SMARC module SCM187 with baseboard SCB184 (heat spreader excluded)

^{*} Specifications and certifications may vary based on different requirements.