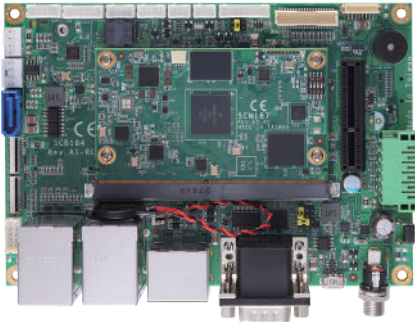
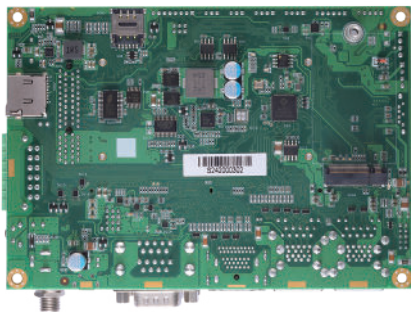


# SCM187-4R8EI-184EVK NEW

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



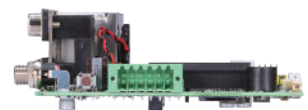
▲ Top view



▲ Rear view



▲ Front view



▲ Side view

## 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

## Specifications

### Core System

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 MicroSD slot 1 x 8GB eMMC

### Internal I/O and Features

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 <sup>2</sup> C	2 x I <sup>2</sup> C Header
QSPI	1 x QSPI Header
SPI	1 x 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)
Security*	1 x TPM 2.0 (optional, none in default)

\* 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.

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### 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)
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\* Specifications and certifications may vary based on different requirements.