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 for Evaluation Purposes



▲ Top view



▲ Rear view

1 x 8GB eMMC

1 x RTC-Battery (CR2032)

1 x TPM 2.0 (option, 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

Storage

RTC

core system	
CPU	NXP i.MX 8M Mini 1.6GHz SoC with Quad A53
System Memory	LPDDR44GB
Operating System	Yocto 4.0, Linux Kernel 5.15.52
Storage	1 x Micro SD slot
	1 x 8GB eMMC
Internal I/O and Fea	tures
PCle*	1 x PCIe x4 slot (SCM187 support PCIe Gen2 x1)
USB*	2 x USB 2.0 (not support on SCM187)
Audio	1 x Line In/ Line Out
CANbus	2 x CANbus
I ² C	2 x I ² C Header
QSPI	1x QSPI Header
SPI	1x SPI Header
Graphics	1 x Dual-channel 24-bit LVDS
5G*	1 x SIM card slot (not support on SCM187)
	1 x M.2 Key B 3052 slot for 5G Module (not support on SCM187)
SATA*	1 x SATA for SATA III (not support on SCM187)
	1 x SATA Power (not support on SCM187)
Fan	1 x Fan control

^{*} 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

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Ethernet*	2 x GbE LAN (SCM187 support 1 x GbE LAN)
USB*	4 x USB 2.0 Type A (SCM187 support USB 2.0)
Graphics*	1 x HDMI (not support on SCM187)
	1 x DisplayPort (not support on SCM187)
COM	1 x DB9 for RS-232 (Tx/Rx)
	1 x DB9 for RS-232/RS-485 (Tx/Rx)
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)
Operating Humidity	10% to 95%, non-condensing
Storage Temperature	-40°Cto +85°C (-40°Fto +185°F)
Storage Humidity	10% to 95%, non-condensing

Ordering Information

Standard

SCM187-4R8EI-184EVK Evaluation Kit Boards, SMARC Module SCM187-4R8E-I with Baseboard SCB184 (Heatsink/Heat Spreader Excluded)

Optional

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ACC100-187-HS	SCM187 Heatsink Kit (-40°C to +75°C)
ACC100-187-HSP	SCM187 Heat Spreader Kit

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