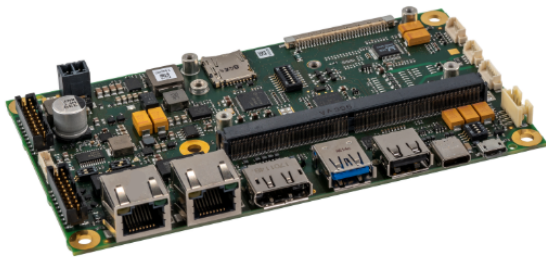


TRIA SM2S-MB-EP5

/SimpleFlex, Application-Ready Embedded Platform SMARC™ 2.1

146 x 80 mm



2 W

-40 +85



Highlights

- SMARC™ 2.1 carrier board for short size modules
- HDMI/DisplayPort connector
- USB Type-C (with DisplayPort)
- LVDS/eDP/MIPI-DSI connector
- Regulated backlight supply
- up to two Gigabit Ethernet ports
- Mini PCI Express Card slot
- M.2 key M slot
- One USB 3.0 Type A
- One USB 2.0 Type A
- One USB 2.0 OTG port
- Four UART, RS232, RS485
- Two CAN (one CAN opt. galv. isolated)
- SPI/eSPI, 12 GPIO
- HD or I2S audio interface with 2x 2.5W Stereo Amplifier
- MIPI CSI-2 camera interface
- µSD Card socket
- WLAN/BT/NFC with antenna (option)
- Fan connector
- RTC battery

SMARC



- Input voltage 10 VDC to 36VDC
- Form Factor (146 x 80 mm)

Technical Data

Technology	Carrier
Formfactor	146 x 80 mm
Flash	µSD Card Socket
Storage Interfaces	M.2 key M slot
USB	1x USB 3.0 host port 1x USB 3.0 Type C 3x USB 2.0 host port 1x USB 2.0 OTG port (MicroUSB) 1x USB 2.0 on Mini PCI Express slot
Serial Interfaces	4 x UART, RS232, RS485
Bus Interfaces	1x Mini PCI Express x1 Card slot 1 x M.2 key M slot (2 x PCI Express or SATA) 1x CAN 2.0B 1x CAN 2.0B isolated (option) 2x SPI, 12 GPIO
Display Interfaces	DisplayPort/HDMI connector LVDS/eDP/DSI on Jili30 connector and backlight connector MIPI CSI-2 camera interface
Network Interface	2x 10/100/1000BASE-T Ethernet on RJ45 connector, with two integrated status LED's
Audio Interface	HD or I2S Audio codec with amplifier (opt.)
Miscellaneous	fan connector, PWM controlled by module Socket for CR2032 type RTC battery (3V) WLAN/BT/NFC Module (SPB209A)
Feature Highlights	Support of listed carrier board features and interfaces depends on used module
Power Requirement	Input voltage 10VDC to 36VDC
Environment	Temperature Range: -40°C ... +85°C operating -20°C ... +85°C storage Humidity: 5 ... 90% (operating, non condensing) 5 ... 90% (storage, non-condensing)
Dimensions	146 x 80 mm
Certificates	UL / CE

Technical Data for TRIA SM2S-MB-EP5

Order Reference

Order No.	Description	Reference	Status*
85087	SMARC 2.1 compatible embedded platform (146 x 80mm), 10-36V input voltage, 3x RS232, 1x RS485, dual RJ45 LAN with LED (1 x LAN i210), 1x M.2 2280 Key M slot, mPCIe slot, 1x USB 3.0 Type A, 1x USB 3.0/DisplayPort Type C, 1x USB 2.0 Type A, 1x USB 2.0 internal, 1x µUSB 2.0 Host/Device, 2x SPI, I ² C, 12 GPIO on FC, 1x DisplayPort++, LVDS/eDP/DSI on JILI30 connector, µSD Card Slot, regulated backlight supply, HD Audio with amplifier, system fan connector, camera connector, RTC battery. Industrial temperature range -40..+85°C, x86 full version	MSC SM2S-MB-EP5-001 PCBFTX	PV
83977	SMARC 2.1 compatible embedded platform (146 x 80mm), 10-36V input voltage, 3x RS232, 2x CAN, dual RJ45 LAN with LED (1 x LAN i210), 1x M.2 2280 Key M slot, mPCIe slot, 1x USB 3.0 Type A, 1x USB 2.0 Type A, 1x USB 2.0 internal, 1x µUSB 2.0 Host/Device, 2x SPI, I ² C, 8 GPIO on FC, 1x HDMI, LVDS/eDP/DSI on JILI30 connector, µSD Card Slot, regulated backlight supply, I2S Audio, 1W Mono, camera connector, RTC battery. Industrial temperature range -40..+85°C, ARM full version	MSC SM2S-MB-EP5-002 PCBFTX	PV
83979	SMARC 2.1 compatible embedded platform (146 x 80mm), 12V input voltage, 3x RS232, 1x RS485, dual RJ45 LAN with LED, 1x M.2 2280 Key M slot, 1x USB 2.0 Type A, 1x USB3.0 Type A, 1x USB 2.0 internal, 1x µUSB 2.0 Host/Device, 2x SPI, 12 GPIO on FC, 1x DisplayPort++, LVDS/eDP/DSI on JILI30 connector, regulated backlight supply, RTC battery, Industrial temperature range -40..+85°C, x86 slim version	MSC SM2S-MB-EP5-003 PCBFTX	PV
83981	SMARC 2.1 compatible embedded platform (146 x 80mm), 10-36V input voltage, 2x UART, 1x RS232, 2x CAN, 1x RJ45 LAN with LED, 1x USB 2.0 Type A, 1x USB3.0 Type A, 1x USB 2.0 internal, 1x µUSB 2.0 Host/Device, 2x SPI, 12 GPIO on FC, 1x HDMI, µSD Card Slot, LVDS/eDP/DSI on JILI30 connector, regulated backlight supply, RTC battery. Industrial temperature range -40..+85°C, ARM slim version	MSC SM2S-MB-EP5-004 PCBFTX	PV
113145	SMARC 2.x compatible embedded platform (146 x 80mm), 10-36V input voltage, 3x RS232, 1x RS485, 1x CAN, dual RJ45 LAN with LED, 1x M.2 2280 Key M slot (PCIeC, PCIeD), mPCIe slot (PCIeA), 1x USB 3.0 Type A, 1x USB 2.0 Type A, 1x USB 2.0 internal, 1x µUSB 2.0 Host/Device, 2x SPI, I ² C, 8 GPIO on FC, 1x HDMI, LVDS/eDP/DSI on JILI30 connector, µSD Card Slot, regulated backlight supply, I2S Audio, 1W Mono, camera connector, RTC battery. Industrial temperature range -40..+85°C, ARM Plus version	MSC SM2S-MB-EP5-006 PCBFTX	PV

Ordering Information for TRIA SM2S-MB-EP5

*PV = Preferred variant; OR = on Request (in OEM quantities only)

Accessories

Display Kits

Order No.	Description	Reference
78879	Displaykit suitable for all COM Carrier Boards and all COM Starterkits. Comprises 10.1" WVGA LCD with PCAP Touch Sensor and Touch Controller. Includes all cables required to connect to COM Carrier Boards (LVDS, B/L & Touch).	MSC DIS-AM1280800-101-KIT BRDFTX

10.1" Display kit

Order No.	Description	Reference
78880	Displaykit suitable for all COM Carrier Boards and all COM Starterkits. Comprises 12.1" WVGA LCD with PCAP Touch Sensor and Touch Controller Includes all cables required to connect to COM Carrier Boards (LVDS, B/L & Touch)	MSC DIS-AM1280800-121-KIT BRDFTX

12.1" Display kit

Order No.	Description	Reference
81871	Displaykit suitable for all COM Carrier Boards and all COM Starterkits. Comprises 5.0" WVGA LCD with PCAP Touch Sensor and Touch Controller Includes all cables required to connect to COM Carrier Boards (LVDS, B/L & Touch)	MSC DIS-AM800480-050-KIT BRDFTX

5.0" Display kit

Order No.	Description	Reference
78911	Displaykit suitable for all COM Carrier Boards and all COM Starterkits. Comprises 7.0" WVGA LCD with PCAP Touch Sensor and Touch Controller Includes all cables required to connect to COM Carrier Boards (LVDS, B/L & Touch)	MSC DIS-AM800480-070-KIT BRDFTX

7" Display kit

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