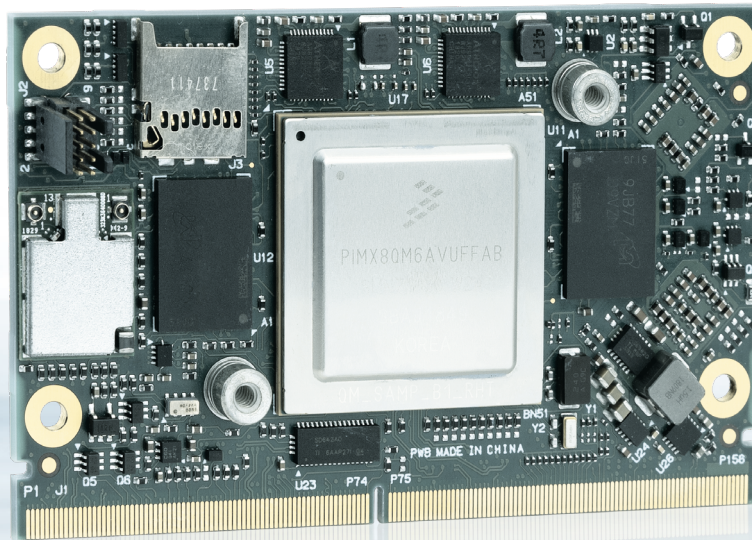


SMARC-sAMX8



SMARC-sAMX8 with NXP's i.MX8 Processor

- ▶ Quad-Core Arm® Cortex® A-53 with additional M4 and A72 Core on SMARC™ module short size form factor
- ▶ Up to 8 GByte LPDDR4 memory down
- ▶ Optional eMMC flash onboard
- ▶ LVDS support, HDMI/DP, eDP (via MIPI-DSI Bridge)

POSSIBILITIES START HERE

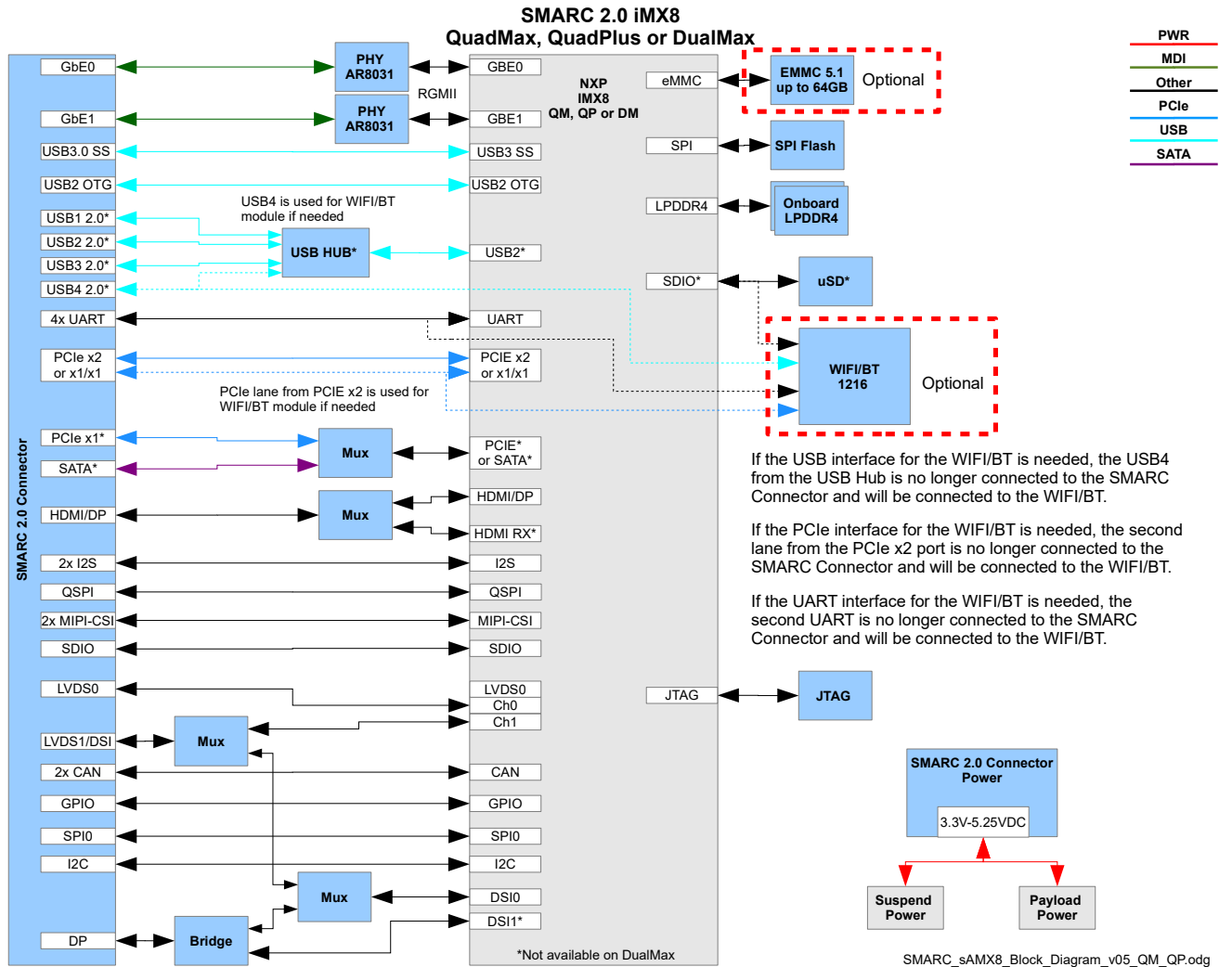
▶ TECHNICAL INFORMATION

FORM FACTOR	Smart Mobility ARChitecture (SMARC) Module 82 mm x 50 mm
PROCESSOR	NXP i.MX8
MEMORY	LPDDR4 @ 1600 MHz (no ECC)
BOOT FLASH	64 MByte SPI NOR flash
BOOTLOADER/BIOS	U-Boot Bootloader, Flash for Bootloader
EEPROM	24C32, 4k x 8 (32 kbit)
DISPLAY LVDS	18/24-bit LVDS RGB, Resolution: up to 1920 x 1080/60Hz, Single/Dual Channel
DISPLAY DP/HDMI	HDMI/DisplayPort from SoC
PCIe/SATA	3x PCIe lanes/1 SATA (Shared with 1x PCIe)
ONBOARD CONTROLLERS	
ETHERNET CONTROLLER	2x GBE PHY AR8031
WIFI/BLEETOOTH	Optional Wifi/Bluetooth module M.2 1216
WATCHDOG TIMER	CPU internal watchdog, configurable timeout counter
USB HUB	USB HUB USB4604 for 4x USB 2.0 ports on SMARC™ module Connector
REAL TIME CLOCK (RTC)	High accuracy (+/-3 ppm), low power, RV-8803
STORAGE	8 to 64 GByte eMMC 5.1 Flash (option)
H/W STATUS MONITOR	Voltage, Temperature monitoring
SECURITY	iMX8 features
OPERATING SYSTEM SUPPORT	Linux Yocto
POWER CONSUMPTION	Maximum Power consumption of the board is measured to 12 W (Quad Core)
INPUT VOLTAGE	Wide range VCC 3.3 V to 5.25 V

▶ PRODUCT VARIANTS OF SMARC-sAMX8

MODULE INCLUDING HEAT SPREADER	DESCRIPTION
1065-6539	SMARC-sAMX8BCAXA QPlus 6/8 GByte w/HS
1065-6541	SMARC-sAMX8CCDAA QMax 6/64 GByte WiFi/B w/HS
1065-6542	SMARC-sAMX8CAAAA QMax 2/8 GByte WiFi/B w/HS
1065-6543	SMARC-sAMX8CCDAA QMax 8/64 GByte WiFi/B w/HS
MODULE WITHOUT HEAT SPREADER	DESCRIPTION
1069-6991	SMARC-sAMX8BCAXX QPlus 6/8 GByte
1069-6992	SMARC-sAMX8CCDAX QMax 6/64 GByte WiFi/B
1069-6993	SMARC-sAMX8CAAXX QMax 2/8 GByte WiFi/B
1069-6994	SMARC-sAMX8CCDAX QMax 8/64 GByte WiFi/B

► BLOCK DIAGRAM



▶ CARRIER

ARTICLE	PART NO.	DESCRIPTION
SMARC 2.0 Evaluation Carrier	51300-0000-00-0	
SMARC Starter Kit	51100-0000-00-S	

▶ COOLING (Doesn't include hardware and thermal paste)

ARTICLE	PART NO.	DESCRIPTION
SMARC sAMX8 HEATSPREADER	5160685-1	

▶ MEMORY

The system supports the following memory features:

- ▶ LPDDR4 @ 1600 MHz (no ECC)

PROCESSOR TYPE	RAM
QUADPLUS, QUADMAX	LPDDR4 (no ECC) up to 8 GByte

▶ YOUR CONTACT

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