

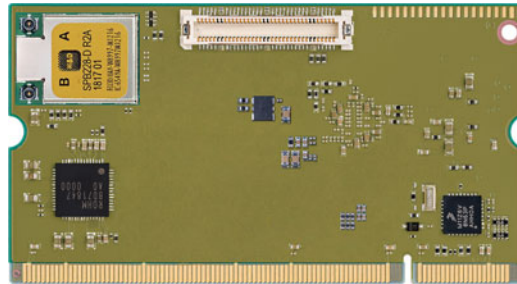
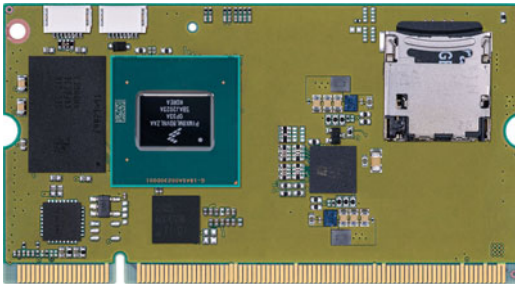
Trizeps VIII Plus

SODIMM-200 CPU-Module with NXP i.MX 8M Plus SoC

Keith & Koep

- NXP i.MX 8M Plus Arm Cortex A53 Quad-Core CPU up to 1.8 GHz, integrated Cortex M7
- Integrated NPU (Neural Processing Unit), 2 integrated ISPs (Image Signal Processor)
- Configurable FPGA (upto 4300 LUTs)
- Additional NXP Kinetis V Arm Cortex M0+ MCU
- Up to 8 GByte LPDDR4-4000 RAM, 32 Bit
- 2x GBit Ethernet, 2x USB 3.0, 2x CAN-FD, PCIe
- Multi-Display and Multi-Camera
- Additional analog Hi-Fi Audio Codec
- Onboard WiFi/Bluetooth module
- Low power consumption via 14nm LPC FinFET technology

Garz  Fricke Group



Features

Processors	NXP™ i.MX 8M Plus with Arm® Cortex A53 Quad-Core CPU up to 1.8 GHz (consumer), 1.6 GHz (industrial), integrated Arm® Cortex M7 Co-Processor up to 800 MHz for Low-Power and Realtime applications, integrated NPU (Neural Processing Unit) with 2.3 TOP/s, 2 integrated ISPs (Image Signal Processor), resolution up to 12 MPixels and input rate up to 375 MPixels/s
MCU (optional)	NXP™ Kinetis V Arm® Cortex-M0+ up to 75 MHz / 8x 16 Bit ADC, UART, SPI, GPIO, I2C etc.
RAM Memory	Up to 8 GByte LPDDR4-4000, 32 Bit
Flash Storage	Onboard 4 Bit wide µSD Card Socket or onboard 8 Bit wide eMMC
FPGA (optional)	Programmable FPGA, up to 4300 LUTs
Wireless Communication (optional)	Onboard WiFi/Bluetooth module, WiFi 2.4 GHz / 5Ghz, 802.11 a/b/g/n/ac 2x2 MU-MIMO / Bluetooth 4.2, 5.0 / External chipsets for wireless communication can be connected via SDIO, PCIe or USB interfaces
Interfaces	2x USB 3.0 OTG, PCIe (routed to SODIMM socket or connected to WiFi-Bluetooth module), 3x 4 Bit wide SDIO 3.0, SPDIF In/Out, I2S, Multichannel Serial-Audio-Interface, 4x UART, 2x I2C, SPI, QSPI, GPIOs, PWMs, 2x CAN
Ethernet	Onboard 10/100MBit/1GBit RGMII PHY / Additional 10/100MBit/1GBit RGMII interface
Display	Interfaces: HDMI, MIPI display (4 channel) / Single- or Dual-LVDS, LCD 24 Bit RGB GPU: 16 GFLOPS (high-precision) OpenGL® ES 3.1/3.0, Vulkan®, Open CL™ 1.2 FP, OpenVG™ 1.1 Video-Decoder: 1080p60, h.265/4, VP9, VP8
Camera	Interfaces: 2x MIPI-CSI (4 channel) / Video Encoder: 1080p60, h.265/4
Audio	Digital: 18x I2S TDM, DSD512, S/PDIF Tx + Rx, 8 channel PDM Microphone input Analog: Stereo Headphone output, Mono Speaker output, Stereo Line-In, Microphone input
Power	High-Eff. PMIC with single supply controlled by I2C
SODIMM Standard	SODIMM200 Card Edge connector, pin compatible to Trizeps SODIMM-200 CPU modules / FX11 60 pol. high-speed board to board connector

General Details

System Software	Linux Yocto, Debian / Android / Windows 10 IoT
Voltage Supply	+3V3 DC
Operating Temperature	-40 bis 85°C (industrial) / -25 bis 85°C (Extended Consumer) / 0 bis 70°C (Consumer)
Board Dimensions	67.6 x 36.7 x 6.4 mm (W x H x D)
Environmental Standard	RoHS, REACH, WEEE
Availability	10 years form, fit, function*



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*beginning product life circle Rev.2104
Technical modifications reserved, errors excepted