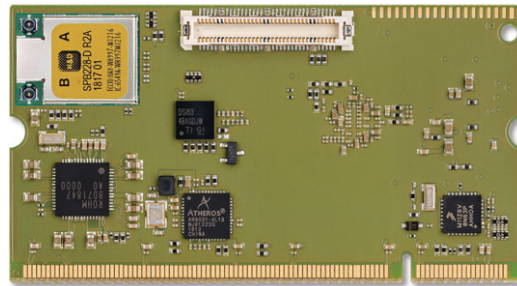
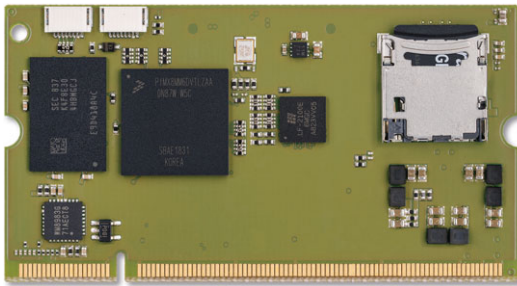


Trizeps VIII Mini / Nano

SODIMM-200 CPU-Module with NXP i.MX 8M Mini/Nano

Keith & Koep

- i.MX 8M Mini/Nano Arm Cortex A53 CPU up to 1.8/1.5 GHz, with integrated Cortex M4/M7
- Configurable FPGA (up to 4300 LUTs), e.g. with MIPI to RGB converter
- NXP Kinetis V Arm Cortex M0+ MCU provides additional interfaces like CAN, ADC, SPI, I2C
- LPDDR4-3200 RAM, up to 8 GByte, 32 Bit (Mini) / up to 4 GByte, 16 Bit (Nano)
- 1 GBit Ethernet, USB 2.0
- Onboard WiFi/Bluetooth module (Mini)
- Single or Dual LVDS Transceiver
- Additional Hi-Fi Audio Codec
- Low power consumption via 14nm LPC FinFET technology



Features

Processor	Trizeps VIII Mini: NXP™ i.MX 8M Mini with Arm® Cortex A53 Quad-Core up to 1.8 GHz (consumer), 1.6 GHz (industrial), with integrated Cortex M4 Trizeps VIII Nano: NXP™ i.MX 8M Nano with Arm® Cortex A53 Quad-Core up to 1.5 GHz (consumer), 1.4 GHz (industrial), with integrated Cortex M7
MCU (optional)	NXP™ Kinetis V Arm® Cortex-M0+ up to 75 MHz / CAN, 8x 16 Bit ADC, UART, SPI, GPIO, I2C etc.
RAM Memory	Trizeps VIII Mini: LPDDR4-3200 up to 8 GByte, 32 Bit Trizeps VIII Nano: LPDDR4-3200 up to 4 GByte, 16 Bit
Flash Storage	Onboard 4 Bit wide µSD Card Socket (recommendation) or onboard 8 Bit wide eMMC – not available at the same time
FPGA (optional)	Programmable FPGA with up to 4300 LUTs to convert parallel display/camera/data-streams to MIPI DSI/CSI
Wireless Communication (optional)	Trizeps VIII Mini: 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 Trizeps VIII Nano: No onboard WiFi/Bluetooth module available / External chipsets for wireless communication can be connected via SDIO or USB interfaces
Display Interfaces	MIPI display (4 channel) / Single-, Dual-LVDS or LCD 24 Bit RGB
Interfaces	2x USB2.0 OTG (Trizeps VIII Mini), 1x USB2.0 OTG (Trizeps VIII Nano), PCIe (only Trizeps VIII Mini, routed to SODIMM socket or connected to WiFi-Bluetooth module), 4 Bit wide SDIO, SPDIF In/Out, I2S, Multichannel Serial-Audio-Interface, 4x UART, 2x I2C, SPI, QSPI, GPIOs, PWM
Ethernet	Onboard 10/100MBit/1GBit RGMII PHY and SIOP interface
Extension Connector	Additional FX11 60 pol. high-speed board to board connector
Camera Interfaces	8bit parallel, MIPI (4 channel)
Audio Codec	Stereo Headphone output, Mono Speaker output, Stereo Line-In, Microphone input
Power	High-Eff. PMIC with single supply controlled by I2C
Pin compatible	Pin compatible to Trizeps SODIMM-200 CPU modules

General Details

System Software	Linux Kernel 4.14, Android 9, Windows 10 IoT Core
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*



*beginning product life circle Rev.2004
Technical modifications reserved, errors excepted

www.keith-koep.com

Keith & Koep GmbH
Uellendahler Str. 199
42109 Wuppertal
Tel +49 (202) 25253 0
Fax +49 (202) 25253 33