



# UltraITX+ Baseboard for Trenz Electronic TE080X UltraSOM+

• Order number: TEBF0808-04A

# Product information "UltraITX+ Baseboard for Trenz Electronic TE080X UltraSOM+"

This is the replacement of TEBF0808-04. They differ by the new USB VBUS resistor R65 10k. All changes caused by the new revision are included in the Product Change Notification (PCN).

The Trenz Electronic TEBF0808 carrier board is a baseboard for the Xilinx Zynq Ultrascale+ MPSoC modules TE0803, TE0807 und TE0808, which exposes the module's B2B connector pins to accessible connectors and provides a whole range of on-board components to test and evaluate the Zynq Ultrascale+ SoMs and for developing purposes. The carrier board has a Mini-ITX form factor making it capable to be fitted into a PC enclosure. On the PC enclosure's rear and front panel, MGT interfaces and connectors are accessible, for the front panel elements there are also Intel-PC compatible headers available.

#### **Features**

- Mini-ITX form factor, PC enclosure compatible
- ATX-24 power supply connector
- Optional 12V standard power plug
- Headers
- Intel 10-pin HDA Audio
- Intel 9-pin Power-/Reset-Button, Power-/HD-LED
- PC-BEEPER
- On-board Power-/Reset-Switches
- 2 x Configuration 4-bit DIP-switches
- 2 x Optional 4-wire PWM fan connectors
- PCIe Slot one PCIe lane (16 lane connector)
- CAN FD Transceiver (10 Pin IDC connector and 6-pin header)
- 4 x On-board configuration EEPROMs (1x Microchip 24LC128-I/ST, 3x Microchip 24AA025E48T-I/OT)
- Dual SFP+ Connector (2x1 Cage)
- 1 x DisplayPort (single lane)
- 1 x SATA Connector
- 2 x USB3.0 A Connector (Superspeed Host Port (Highspeed at USB2.0))
- 1 x USB3.0 on-board connector with two ports
- FMC HPC Slot (FMC\_VADJ max. VCCIO)
- FMC Fan
- Gigabit Ethernet RGMII PHY with RJ45 MagJack
- All carrier board peripherals' I2C interfaces muxed to MPSoC's I2C interface
- Quad programmable PLL clock generator SI5338A
- 2x SMA coaxial connectors for clock signals
- MicroSD-/MMC-Card Socket (bootable)
- 32 GBit (4 GByte) on-board eMMC flash (8 banks a 4 GBit)
- 2 x System Controller CPLDs Lattice MachXO2 1200 HC
- 1 x Samtec FireFly (4 GT lanes bidirectional)
- 1 x Samtec FireFly connector for reverse loopback
- 20-pin ARM JTAG Connector (PS JTAG0)
- 3 x Pmod connector (GPIO's and I2C interface to SC CPLDs and MPSoC module)
- On-board DC-DC PowerSoCs
- Module size: 170 mm × 170 mm. Please download the assembly diagram for exact details.
- Mating height with standard connectors: 5 mm

## Scope of Delivery

1 x UltraITX+ base board for Trenz Electronic's TE080x UltraSOM+ MPSoCs

#### Including pre-assembled accessories

• 2 x XMOD FTDI JTAG adapter (TE0790), compatible with Xilinx tools, for programming MPSoC and SC CPLDs

### Required Hardware

Switching Power Supply 12 V

# **Additional Information**

- Manufacturer's article number: TEBF0808-04A
- Trenz Electronic TEBF0808 Wiki
- Support Forum

The online pictures of this product are not a legally binding offer, but are symbol pictures for illustration and present

All modules produced by Trenz Electronic are developed and manufactured in Germany.