

# MPSoC Module with Xilinx Zynq UltraScale+ ZU7EV, 4 GByte DDR4

Order number: TE0807-02-07EV-1E

# Product information "MPSoC Module with Xilinx Zynq UltraScale+ ZU7EV, 4 GByte DDR4"

The Trenz Electronic TE0807-02-07EV-1E is a powerful MPSoC module integrating a Xilinx Zynq UltraScale+, 4 GByte DDR4 SDRAM, 128 MByte Flash memory for configuration and operation, 20 Gigabit transceivers, and powerful switch-mode power supplies for all on-board voltages. A large number of configurable I/O's is provided via rugged high-speed stacking connections.

All this on a tiny footprint of  $5.2 \times 7.6$  cm at the most competitive price. These high-density integrated modules are smaller than a credit card and available in several variants.

All parts are at least extended temperature range of 0°C to +85°C. The module operating temperature range depends on customer design and cooling solution. Please contact us for options.

# **Key Features**

- Xilinx Zynq UltraScale+ XCZU7EV-1FBVB900E
- ZU7EV 900 Pin Packages
- 3 mm mounting holes for skyline heat spreader
- Size: 52 x 76 mm
- B2B Connectors: 4 x 160 pin
- Rugged for shock and high vibration
- 4 GByte DDR4 SDRAM
- 128 MByte SPI Boot Flash (dual parallel)
- User I/Os
  - o 65 x PS MIOs, 48 x PL HD GPIOs, 156 x PL HP GIPIOs (3 banks)
  - Serial transceivers: 4 x GTR + 16 x GTH
  - Transceiver clocks inputs and outputs
  - PLL clock generator inputs and outputs
- Graphic Processing Unit (GPU) + Video codec unit (VCU)
- Si5345 10 output PLL

- All power supplies on board, single 3.3V Power required
  - 14 on-board DC/DC regulators and 13 LDOs
  - o LP, FP, PL separately controlled power domains
- Support for all boot modes (except NAND)
- Support for any combination of PS connected peripherals
- Evenly spread supply pins for good signal integrity.

Other assembly options for cost or performance optimization plus high volume prices available on request.

### **Recommended Software**

#### Vivado Design Suite - HLx Edition Download

Vivado Design Suite HLx Editions include Partial Reconfiguration at no additional cost with the Vivado HL Design Edition and HL System Edition. In-warranty users can regenerate their licenses to gain access to this feature.

#### Overview of all Editions of Vivado Design Suite Editions

## **Development Support**

There is a base board available for this module.

Latest documentation, design support files and reference designs with source files are available for download free of charge.

# Scope of Delivery

1 x MPSoC Module TE0807-02-07EV-1E with Zynq UltraScale+ ZU07EV

#### Additional Information

- Manufacturer's article number: TE0807-02-07EV-1E
- Trenz Electronic TE0807 Wiki
- Support Forum

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

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