

# MPSoC Module with Xilinx Zynq UltraScale+ ZU5EV-1E, 2 GByte DDR4, 5.2 x 7.6 cm

Order number: TE0803-03-5DE11-A



# Product information "MPSoC Module with Xilinx Zynq UltraScale+ ZU5EV-1E, 2 GByte DDR4, 5.2 x 7.6 cm"

This article is the replacement of TE0803-02-05EV-1EA. All changes caused by the new revision are included in the Product Change Notification (PCN).

The Trenz Electronic TE0803-03-5DE11-A is an industrial-grade MPSoC module integrating a Xilinx Zynq UltraScale+ with ZU5EV, 2 GByte DDR4 SDRAM, 128 MByte Flash memory for configuration and operation, 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.

This product is or has been in development until recently. For this reason it is possible that no complete documentation is stored yet.

### Key Features

- Xilinx Zynq UltraScale+ XCZU5EV-1SFVC784E
- ZU5EV, 784 Pin Packages
- Dimensions: 5.2 x 7.6 cm
- Plug-on module with 4 x 160 pin B2B connectors
- Rugged for shock and high vibration
- 3 mm mounting holes for skyline heat spreader
- 2 GByte 64-Bit width DDR4 SDRAM
- 128 MByte SPI Boot Flash dual parallel
- 2 KBit Serial EEPROM for MAC Address
- 48 High-density (HD) I/O's (2 banks)
- Graphic Processing Unit (GPU) + Video codec unit (VCU)
- User I/O
  - o 65 x multi-use I/O's (MIO)
  - o 156 high-performance (HP) I/O's (3 banks)
  - o Serial transceiver: PS GTR 4; PL GTH 4
  - o Programmable 4-channel PLL clock generator
- All power supplies on board, single 3.3V power source required
- 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 TE0803-03-5DE11-A with Zynq UltraScale+ ZU5EV

#### Additional Information

- Manufacturer's article number: TE0803-03-5DE11-A
- Trenz Electronic TE0803 Wiki
- Support Forum

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

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