



# Micromodule with Xilinx Kintex UltraScale KU035, 2 GByte DDR4, Speedgrade 2

**Order number:** TE0841-02-035-2I

## Product information "Micromodule with Xilinx Kintex UltraScale KU035, 2 GByte DDR4, Speedgrade 2"

The Trenz Electronic TE0841-02-035-2I is a powerful FPGA module integrating a Xilinx Kintex UltraScale KU035, 2 GByte DDR4, 64 MByte (512 MBit) SPI Boot Flash 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 strips.

All this on a tiny footprint, smaller than a credit card, at the most competitive price. Modules in 4 x 5 cm form factor are fully mechanically and largely electrically compatible among each other.

All parts are at least industrial temperature range of -40°C to +85°C. The module operating temperature range depends on customer design and cooling solution. Please contact us for options.

## Key Features

- Xilinx Kintex UltraScale KU035 FPGA XCKU035-2SFVA784I
- Rugged for industrial application
- Size: 40 x 50 mm
- 3 mm mounting holes for skyline heat spreader
- 2 GByte (2 x 1 GByte) 16-Bit width DDR4 SDRAM
- 64 MByte SPI Boot Flash
- B2B Connectors: 3 x Razor Beam, total 260 terminals
  - User I/O: HR 56, HP 84
  - Serial transceiver: GTH 8 lanes (all)
  - GT clock inputs: 2

- Clocking
  - Si5338 - 4 output PLL, GT and PL clocks
  - 200 MHz LVDS oscillator
- Power
  - All power supplies on board, single supply operation supported.
  - User defined IO-Bank power
- 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 HL Design Edition

[Overview Xilinx Vivado Versions](#)

## Development Support

There are different base boards available for this module.

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

## Package Content

- 1 x TE0841-02-035-21 Micromodule 4 x 5 cm mit Kintex UltraScale XCKU035 (industrial temperature range)

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