



# FPGA Module with Xilinx Artix-7 XC7A100T-2FGG484C, 4 x 5 cm, 1 GByte DDR3L

- **Order number:** TE0713-02-100-2C

## Product information "FPGA Module with Xilinx Artix-7 XC7A100T-2FGG484C, 4 x 5 cm, 1 GByte DDR3L"

The Trenz Electronic TE0713-02-100-2C is an industrial-grade FPGA module integrating a Xilinx Artix-7 FPGA, USB 3.0 to FIFO bridge, 1 GByte of DDR3L SDRAM, 32 MByte Flash memory for configuration and operation, and powerful switching-mode power supplies for all on-board voltages. Numerous configurable I/O's are provided via rugged high-speed 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 commercial temperature range of 0°C to +70°C. The module operating temperature range depends on customer design and cooling solution. Please contact us for options.

### Key Features

- Xilinx Artix-7 XC7A100T-2FGG484C
- Rugged for high shock and high vibration resistance
- Industrial temperature range on request
- Plug-on module with 2 x 100-pin and 1 x 60-pin high-speed hermaphroditic strips
- 1 GByte DDR3L 32-bit SDRAM
- 32 MByte QSPI Flash memory (with XiP support)
- USB 3.0 to FIFO interface bridge
- 152 FPGA I/O's (75 differential pairs) available via B2B connectors
- Programmable clock quad generator
  - GTP transceiver clock (default 125 MHz)
  - Fabric clock (default 200 MHz)

- External clock input for GTP transceivers via B2B connector
- 4 GTP (multi Gigabit transceiver) lanes
- On-board high-efficiency DC-DC converters
- System management and power sequencing
- eFUSE bit-stream encryption
- AES bit-stream encryption
- User configurable LED
- 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 WebPACK Edition \(free version\)](#)

The Vivado Design Suite HL WebPACK Edition is the FREE version of the design suite. Vivado HL WebPACK delivers instant access to some basic Vivado features and functionality at no cost.

### [Overview of all editions of Vivado Design Suite](#)

## Scope of Delivery

- 1 x TE0713-02-100-2C Trenc Electronic 4 x 5 cm Micromodule

## Additional Information

- Manufacturer's article number: TE0713-02-100-2C
- Trenc Electronic TE0713 Wiki
- Support Forum

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

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