Trenz Electronic GmbH - TE0715-04-30-1C Datasheet

Welcome to E-XFL.COM

Understanding Embedded - Microcontroller, Microprocessor, FPGA Modules

Embedded - Microcontroller, Microprocessor, and FPGA Modules are fundamental components in modern electronic systems, offering a wide range of functionalities and capabilities. Microcontrollers are compact integrated circuits designed to execute specific control tasks within an embedded system. They typically include a processor, memory, and input/output peripherals on a single chip. Microprocessors, on the other hand, are more powerful processing units used in complex computing tasks, often requiring external memory and peripherals. FPGAs (Field Programmable Gate Arrays) are highly flexible devices that can be configured by the user to perform specific logic functions, making them invaluable in applications requiring customization and adaptability.

Applications of Embedded - Microcontroller,

Details	
Product Status	Obsolete
Module/Board Type	MCU, FPGA
Core Processor	ARM Cortex-A9
Co-Processor	Zynq-7000 (Z-7030)
Speed	125MHz
Flash Size	32MB
RAM Size	1GB
Connector Type	Samtec LSHM
Size / Dimension	1.97" x 1.57" (50mm x 40mm)
Operating Temperature	0°C ~ 70°C
Purchase URL	https://www.e-xfl.com/product-detail/trenz-electronic/te0715-04-30-1c

Company Profile

Since 1992, Trenz Electronic GmbH successfully operates as a development service enterprise in the electronics branch. Our services include design-in support as well as turnkey design which typically cover all steps from product specification, hardware and software design up to prototyping and production.

We are particularly specialized in the design of high-speed data acquisition, high-accuracy measurement and embedded digital signal processing systems based on FPGA and ARM architectures.

We maintain long-term customer relationships, characterized by flexibility and technical competence.

Hardware Design

- System Architecture and Design
- Hardware Integration (Design-In)
- Ultrafast Digital Logic
- Analog and Mixed Signal
- Digital Signal Processing
- Schematic Capture and PCB Layout

HDL Design

- FPGA and System-On-Chip Design
- System Design and Synthesis
- HDL Design (VHDL,Verilog)
- Integration of Soft-Cores (Xilinx MicroBlaze, ARM Cortex …)
- USB, PCI-Express, Gigabit Ethernet
- Ultrafast ADC/DAC Interfaces

Software Development

- Device Driver and Application Software development
- Software and Firmware development

ISO 9001:2008
(quality management)
certified

ISO 14001:2004
(environmental
management) certified

Trenz Electronic GmbH

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TEB0911 Series

Xilinx Zynq UltraScale+, 6 FMC Solts, Gigabit Ethernet

Key Features

- Zynq UltraScale+ MPSoC - 1156 Package ZU9 (ZU6, ZU9, ZU15 Possible as assembly option)
- 64-Bit DDR4 SODIMM (PS connected)
- PS-GTR
  - M2 PCIe SSD (internal, 1-Lane)
  - 2 x USB3 Host (from 4 port internal HUB)
  - 2 Lane DisplayPort output - Monitor
- RJ45 GbE Ethernet PS connected, 88E1512 PHY
- 4 x FMC-HPC connector front
  - 4 GTH
  - 1 GT Clock
  - 68+4 HP or HD I/O
- FMC-HPC connector Back
  - 4 GTH
  - 1 GT Clock
  - 12 I/O
- FMC-HPC connector Back
  - 1 GTH
  - 1 GT Clock
  - 12 I/O
- 2 x SFP+ connected to 2 PL GTH,
- 1 x SFP+ connected to PL GTH
- Power: 24V

Overview

The Trenz Electronic TEB0911 "UltraRack+" is a high performance Zynq UltraScale+ MPSoC board with 6 FMC slots and Gigabit Ethernet.

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

XILINX ALL PROGRAMMABLE™

ZYNQ® UltraSCALE+

TEC0330 Virtex-7 PCIe FMC Carrier

Overview

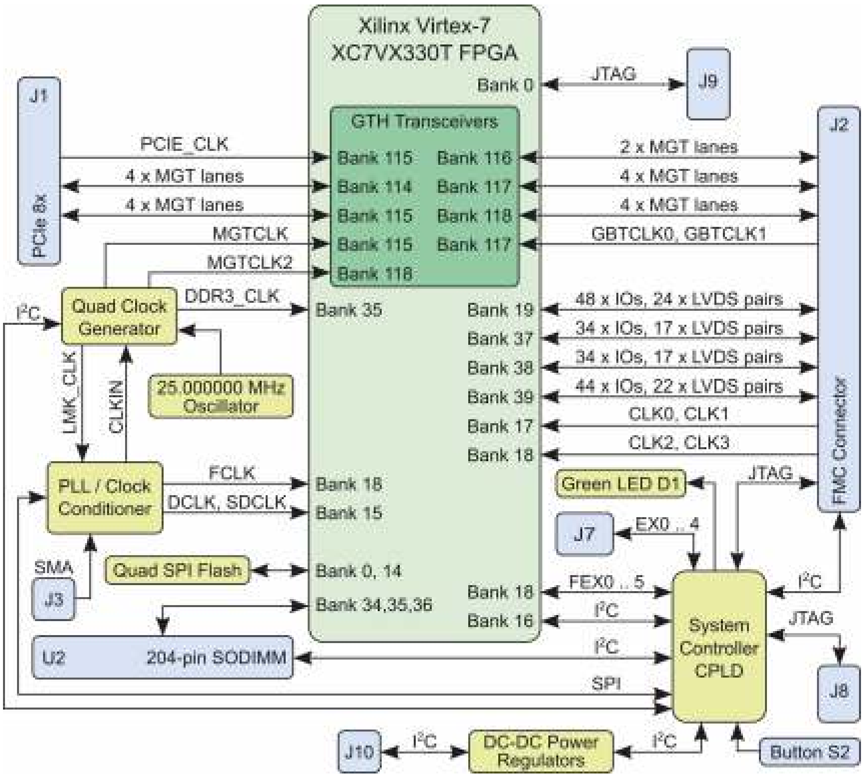
Trenz Electronic TEC0330 is an 8 lanes PCIe GEN2 Card integrating a high performance Xilinx Virtex-7 330T FPGA with 32 MByte Flash memory for configuration and operation, DDR3 SODIMM Socket and full FMC HPC connector for FPGA Mezzanine Cards.

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

Key Features

- FMC HPC
- 8 lane PCIe Gen 2 capable
- Xilinx Virtex-7 XC7VX330T-2FFG1157C
- DDR3 SODIMM Socket
- 32 MByte SPI Flash
- LMK04828B Clock Synthesizer
- External Clock Input

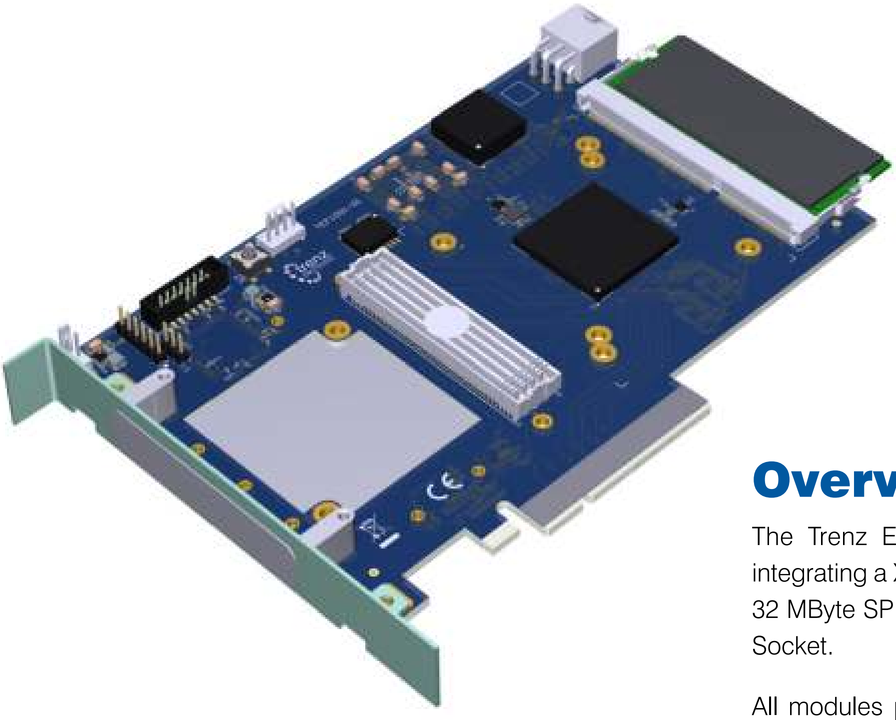
Other assembly options for cost or performance optimization plus high volume prices available on request.



www.trenz-electronic.de/tec0330

TEF1001 Series

PCIe FMC Carrier, Xilinx Kintex-7, SPI Flash, 4 lane PCIe



Overview

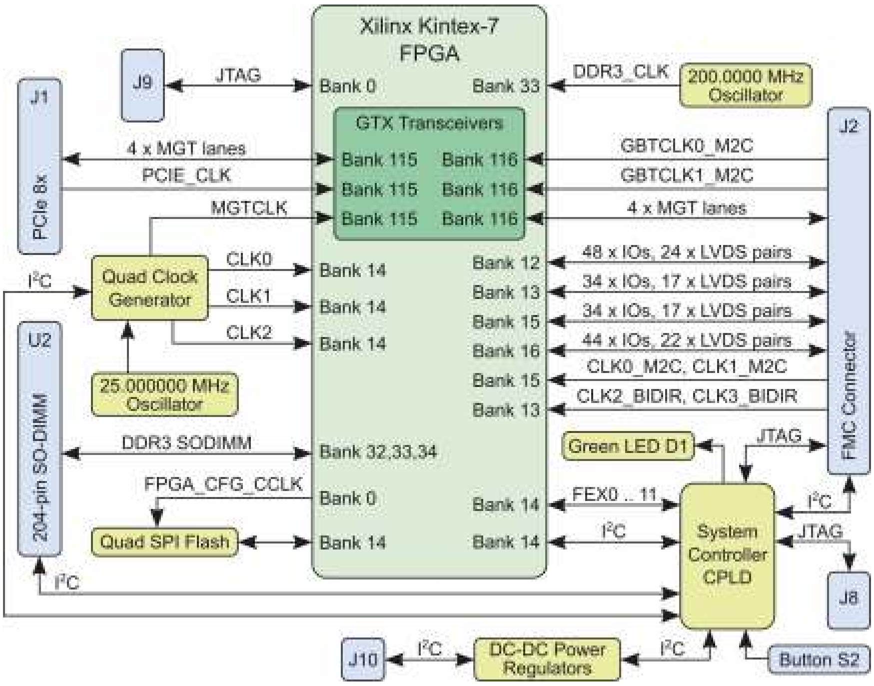
The Trenz Electronic TEF1001 is a PCIe FMC Carrier integrating a Xilinx Kintex-7 FPGA (K160T, K325T or K410T), 32 MByte SPI Flash, an 4 lane PCIe and a DDR3 SODIMM Socket.

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

Key Features

- One Vita 57.1 FMC HPC Slot
- 4 lane PCIe Gen 2
- Xilinx Kintex-7 XC7K160T-2FBG676I
- DDR3 SODIMM Socket
- 32 MByte SPI Flash
- Programmable clock generator Si5338
- 200 MHz Low-Jitter LVDS oscillator
- High performance DC-DC converters

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



trenz electronic

TE0729 Series

Xilinx Zynq, 1x Gig ETH, 512 MByte DDR3, 2x 100MBit ETH, 4 GByte eMMC, 3.3V Only

5.2 form X factor 7.6

Overview

The Trenz Electronic TE0729 is an industrial-grade SoC module integrating a Xilinx Zynq-7020 with a Gigabit Ethernet transceiver, 2 x 100 MBit Ethernet, 512 MByte DDR3 SDRAM, 32 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 strips.

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

Extended device life cycle

Rugged for industrial applications

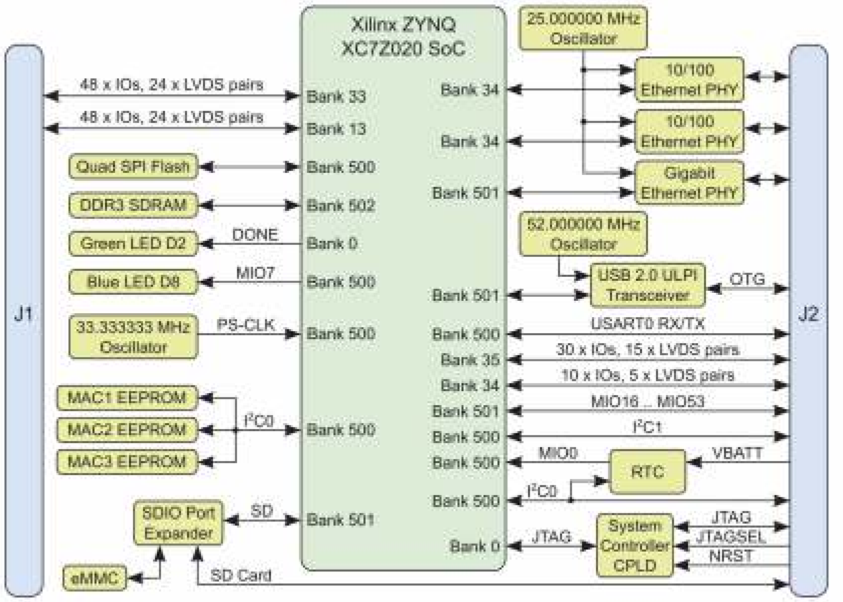
XILINX ALL PROGRAMMABLE.

ZYNQ

Key Features

- Zynq XC7Z020-2CLG484I
- Rugged for shock and high vibration
- 2 x ARM Cortex-A9
- 1 x 10/100/1000 Mbps Ethernet transceiver PHY
- 2 x 10/100 Mbps Ethernet transceiver PHYs
- 3 x MAC-Address EEPROMs
- 16-Bit wide 512 MByte DDR3 SDRAM
- 32 MByte QSPI-Flash-Memory
- 4 GByte e-NAND-Flash-Memory (embedded eMMC Memory)
- USB 2.0 high-speed ULPI transceiver
- Plug-on module with 2 x 120-pin high-speed hermaphroditic strips
- 136 FPGA I/O's (58 LVDS pairs possible) and 14 MIO's available on
- board-to-board connectors
- On-board high-efficiency DC-DC converters
  - 4.0 A x 1.0 V power rail
  - 1.5 A x 1.5 V power rail
  - 1.5 A x 1.8 V power rail
  - 1.5 A x 2.5 V power rail
- System management
- eFUSE bit-stream encryption
- AES bit-stream encryption
- Temperature compensated RTC (real-time clock)
- User LED
- Evenly spread supply pins for good signal integrity
- 3 mm mounting holes for Skyline heat spreader
- Cooling Solution available

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



TE0715 Series

Xilinx Zynq, Cortex-A9, DDR3, Flash, GBit Ethernet, 4 x Transceiver

Key Features

- Industrial-grade Xilinx Zynq-7000 (Z-7015, Z-7030) SoM , supported by the free Xilinx Vivado WebPACK tool
- Rugged for shock and high vibration
- ARM dual-core Cortex-A9
- 10/100/1000 tri-speed gigabit Ethernet transceiver (PHY) with SGMII
  - MAC Address EEPROM
- 32-Bit-wide 1 GByte DDR3 SDRAM
- 32 MByte QSPI Flash memory (with XiP support)
- Programmable clock generator
  - Transceiver clock (default 125 MHz)
- Plug-on module with 2 × 100-pin and 1 × 60-pin high-speed hermaphroditic strips
- 132 FPGA I/O's (65 LVDS pairs possible) and 14 PS-MIO available on board-to-board connectors
- 4 GTP/GTX (high-performance transceiver) lanes GTP/GTX (high-performance transceiver) clock input
- USB 2.0 high-speed ULPI transceiver
- On-board high-efficiency DC-DC converters
  - 4.0 A x 1.0 V power rail
  - 1.5 A x 1.5 V power rail
  - 1.5 A x 1.8 V power rail
- System management
- eFUSE bit-stream encryption
- AES bit-stream encryption
- Temperature compensated RTC (real-time clock)
- User LED
- Evenly spread supply pins for good signal integrity

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

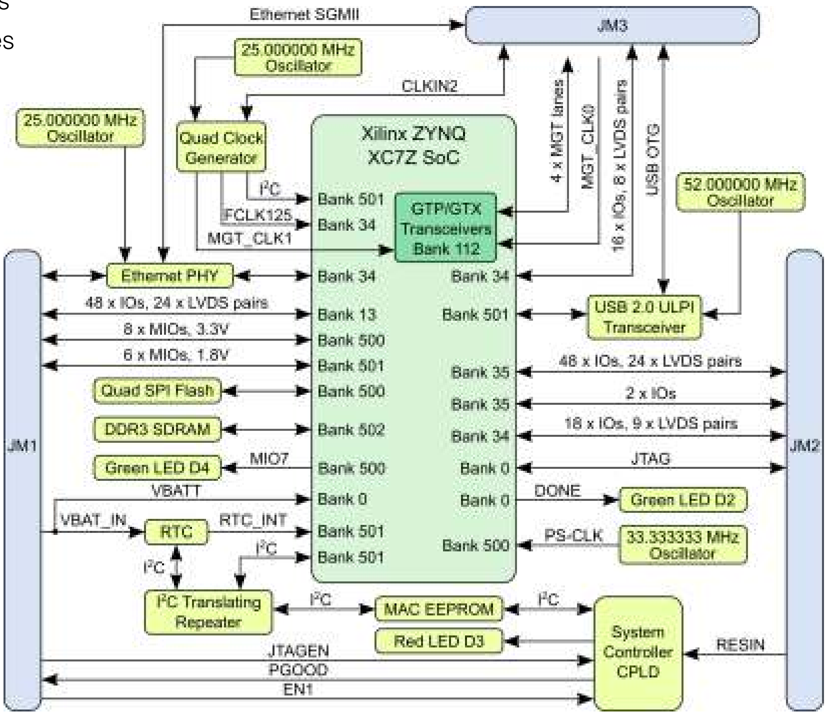
Overview

Trenz Electronic TE0715 are industrial-grade SoC modules integrating a Xilinx Zynq-7000 SoC, a gigabit Ethernet transceiver (physical layer), 1 gigabyte DDR3 SDRAM with 32-Bit width, 32 megabyte Flash memory for configuration and operation, 4 transceivers, a USB ULPI transceiver, and powerful switch-mode power supplies for all onboard voltages. A large number of configurable I/O's is provided via rugged high-speed stacking strips. All modules in 4 x 5 cm form factor are mechanically compatible.
All this on a tiny fooprint, smaller than a credit card, at the most competitive price.

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

Extended device life cycle

Rugged for industrial applications



www.trenz-electronic.de/te0715

TE0720 Series

Xilinx Zynq, 2 × Cortex-A9, DDR3, Flash, GBit Ethernet, USB

Overview

Trenz Electronic TE0720 are industrial-grade SoC modules integrating a Xilinx Zynq-7000 SoC, a gigabit Ethernet transceiver, 1 gigabyte DDR3 SDRAM with 32-Bit width, 32 megabyte Flash memory for configuration and operation, a USB ULPI transceiver, 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 modules in 4 x 5 cm form factor are mechanically compatible.
All this on a tiny footprint, smaller than a credit card, at the most competitive price.

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

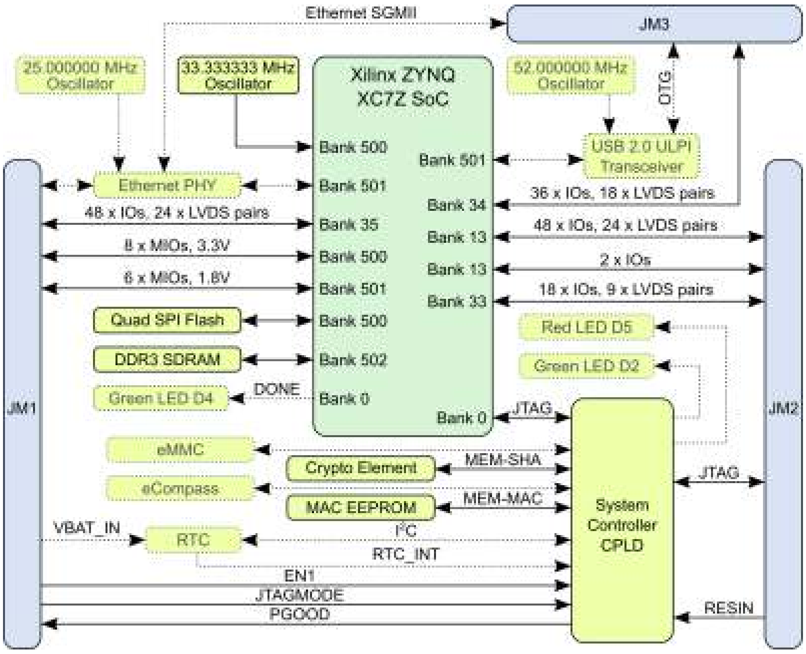
Extended device life cycle

Rugged for industrial applications

Key Features

- Industrial-grade Xilinx Zynq 7020 SoM, supported by the free Xilinx Vivado WebPACK tool
- Rugged for shock and high vibration
- ARM Dual Core Cortex-A9
- 10/100/1000 tri-speed gigabit Ethernet transceiver (PHY) with SGMII
  - MAC Address EEPROM
- 32-Bit-wide 1 GByte DDR3 SDRAM
- 32 MByte QSPI Flash memory (with XiP support)
- 4 GByte (up to 32 GB) e-NAND
- Plug-on module with 2 × 100-pin and 1 × 60-pin high-speed hermaphroditic strips
- 152 FPGA I/O's (75 LVDS pairs possible) and 14 PS-MIO available on board-to-board connectors
- USB 2.0 high-speed ULPI transceiver
- On-board high-efficiency DC-DC converters
  - 4.0 A x 1.0 V power rail
  - 1.5 A x 1.5 V power rail
  - 1.5 A x 1.8 V power rail
- System management and power sequencing
- eFUSE bit-stream encryption
- AES bit-stream encryption
- Temperature compensated RTC (real-time clock)
- 3 user LEDs
- Optional MEMS sensor (3D accelerometer and 3D magnetometer)
- Evenly spread supply pins for good signal integrity

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



trenz electronic

TE0782 Series

Xilinx Zynq, 2 × Cortex-A9, DDR3, Flash, 2 × GBit Ethernet, 2 × USB, 16 × Transceiver

8.5 form X factor 8.5

Overview

The Trenz Electronic TE0782 are industrial-grade SoC modules integrating a Xilinx Zynq-7 XC7Z035, XC7Z045 or XC7Z100, 1 GByte DDR3 SDRAM, 4 GByte eMMC, 16 GTX high-performance transceiver lanes, 32 MByte QSPI 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 strips. All this in a 8.5 x 8.5 cm form factor at the most competitive price.

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

Key Features

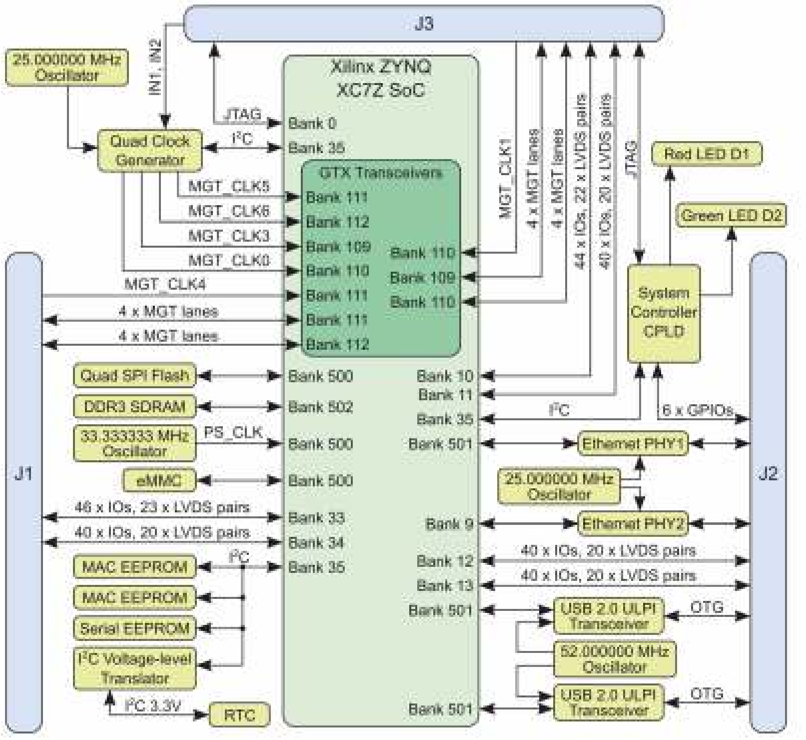
- Industrial-grade Xilinx Zynq-7 XC7Z035, XC7Z045 or XC7Z100 SOM
- Rugged for shock and high vibration
- Dual ARM Cortex-A9 MPCore
- Real Time Clock
- 2 x Hi-Speed USB2.0 ULPI Transceiver PHY
- 2 x Gigabit Ethernet Transceiver PHY
- 2 x Ethernet MAC Address EEPROM
- 1 GByte DDR3 SDRAM
- 32 MByte QSPI Flash memory
- 4 GByte eMMC (optional up to 64 GByte)
- Optional 2 x 8 MByte HyperRAM (max 2 x 32 MByte HyperRAM)
- Si5338 PLL for GTX clocking
- Plug-on module with 3 x 160-pin high-speed strips
- 16 GTX high-performance tranceiver lanes , GTX high-performance
- Transceiver clock input
- 254 FPGA I/O‘s (125 LVDS pairs possible) available on board-to-board connectors
- On-board high-efficiency DC-DC converters
- System management and power sequencing
- eFUSE bit-stream encryption
- AES bit-stream encryption
- Evenly spread supply pins for good signal integrity

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

Extended device life cycle

Rugged for industrial applications

XILINX ALL PROGRAMMABLE™ ZYNQ™



www.trenz-electronic.de/te0782

TE0722 Series

Xilinx Zynq, Dual Core ARM A9+, 16 MByte SPI Flash, DIP40 Form Factor

Overview

The DIPFORTy1 "Soft Propeller" is based on the Xilinx Zynq-7000, a System on Chip which contains a FPGA and a Dual Core ARM A9+ processor with enough logic gates to become a Propeller. The board also has 16 MByte of Flash used for configuration and everything fits on a Propeller-compatible DIP 40 pinout.

DIPFORTy1 "Soft-Propeller" is the lowest cost Zynq based module ever made and the first Zynq module that can use existing bases and project boards (Parallax Propeller chip compatibility). All this in a compact 1.8 x 5.1 cm form factor, at the most competitive price.

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

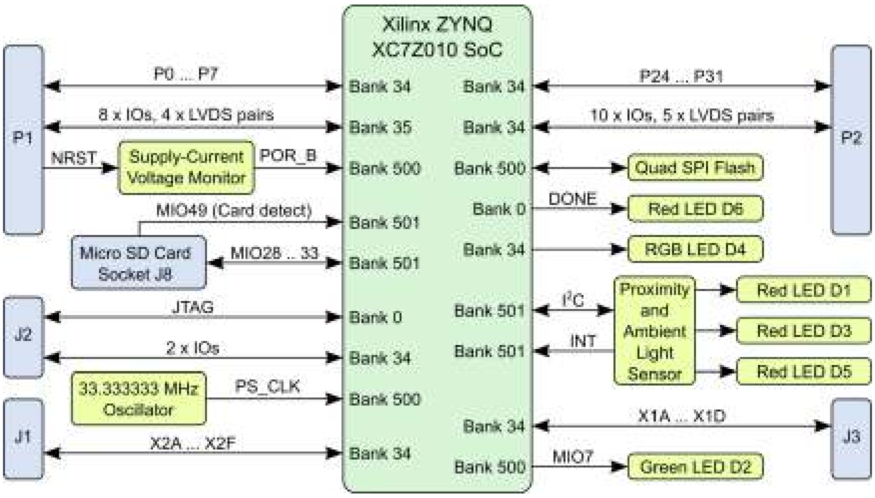
Extended device life cycle

"Ideal for Maker"

Key Features

- Xilinx Zynq-7: XC7Z010-CLG225
  - 16 MByte SPI Flash (primary boot)
  - 33.333 MHz Clock (MEMS Oscillator)
- Dual Core ARM A9+
- DIP40 form factor
  - 2 x 20 holes for socket pins or pin-header
  - Size: 18 x 51 mm
- Total user accessible PL I/O: 46 (+3 Input only)
  - DIP40 header pins: 34 I/O
  - XMOD J1: 6 I/O
  - XMOD J2: JTAG + 2 I/O (or 3 input + 2 I/O)
  - XMOD J3: 4 I/O
- 3.3V single supply
- RGB LED (PL I/O connected)
- "Done" LED (inverted polarity)
- User LED (ARM CPU MIO GPIO)
- MicroSD Card socket (MIO, ZYNQ secondary boot media)
- Sil1143 Proximity and ambient light sensor

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



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TE0711 Series

Xilinx Artix-7 T, Flash, USB, high pin count, low cost

4 form X factor 5

Overview

Trenz Electronic TE0711 are industrial-grade FPGA modules integrating a Xilinx Artix-7 T FPGA, 32 MByte Flash memory for configuration and operation, and powerful switch-mode power supplies for all on-number of board voltages. A large configurable I/O's is provided via rugged high-speed stacking strips. All modules in 4 x 5 cm form factor are mechanically compatible.

All this on a tiny footprint, smaller than a credit card, at the most competitive price.

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

Key Features

- Industrial-grade Xilinx Artix-7 (15T to 100T) SoM, supported by the free Xilinx Vivado WebPACK tool
- Rugged for shock and high vibration
- 32 MByte QSPI Flash memory (with XiP support)
- 100 MHz programmable MEMS oscillator
- Plug-on module with 2 × 100-pin and 1 × 60-pin high-speed hermaphroditic strips
- 178 FPGA I/O's (84 differential pairs) available on board-to-board connectors
- On-board high-efficiency DC-DC converters
  - 4.0 A x 1.0 V power rail
  - 1.0 A x 1.8 V power rail
- System management and power sequencing
- eFUSE bit-stream encryption
- AES bit-stream encryption
- 3 user LEDs
- FTDI USB to UART/FIFO bridge
- Evenly-spread supply pins for good signal integrity

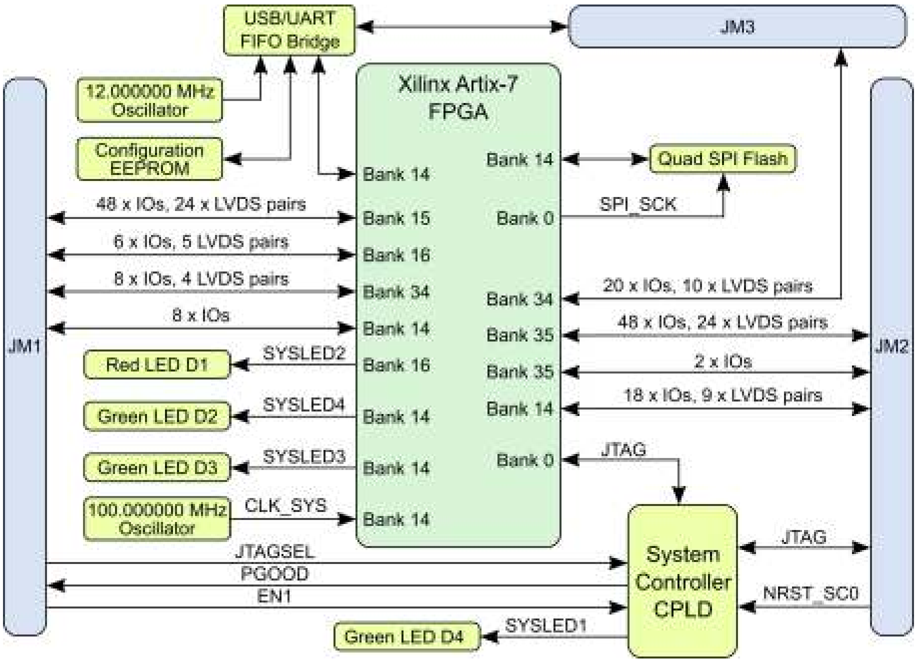
Other assembly options for cost or performance optimization plus high volume prices available on request.

Extended device life cycle

Rugged for industrial applications

XILINX ALL PROGRAMMABLE

ARTIX 7



TE0714 Series

Xilinx Artix-7, 16 MByte Flash, 4 x GTP Transceiver

Overview

The Trenz Electronic TE0714 is an industrial-grade FPGA module integrating a Xilinx Artix-7 (A15T, A35T, A50T), 16 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 strips.

All this on a tiny footprint, smaller than a credit card, at the most competitive price.

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

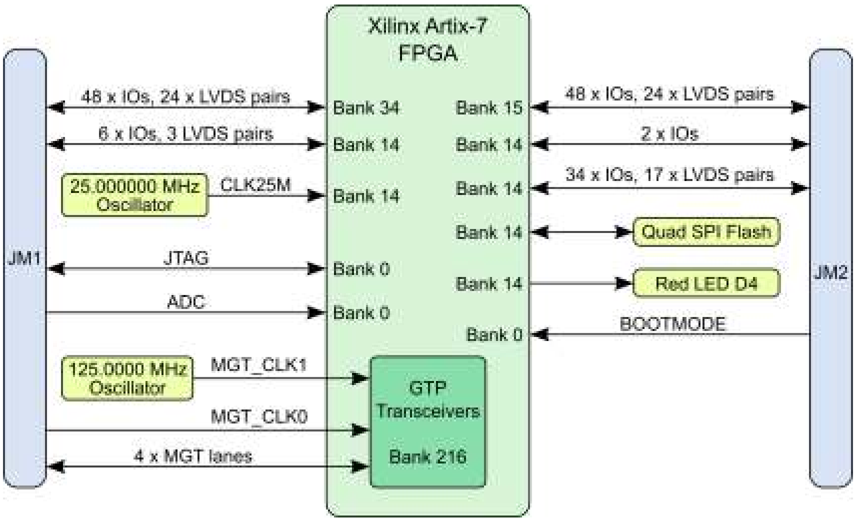
Extended device life cycle

Rugged for industrial applications

Key Features

- Xilinx Artix-7 (A15T, A35T, A50T)
- Rugged for shock and high vibration
- 16 MByte QSPI Flash memory
- Dimensions: 4 x 3 cm
- Differential MEMS Oscillator for GT Clocking
- MEMS Oscillator for PL Clocks (option)
- Plug-on module with 2 × 100-pin high-speed hermaphroditic strips
  - 144 FPGA I/O's (max 68 differential)
  - XADC Analog Input
  - 4 GTP (high-performance transceiver) lanes
  - GT Reference Clock input
  - Optimized I/O and power pins for good signal integrity
- On-board high-efficiency DC-DC converters
- eFUSE bit-stream encryption (AES)
- One user LED

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



www.trenz-electronic.de/te0714

TE0790 / TE0790-L

Xmod Form-Factor, FT2232H, Lattice XO2-256 CPLD, 4 Position DIP Switch

Overview

Xmod-USB-X is a universal USB adapter with 2 channels based on FTDI FT2232H USB2 HS Interface chip.

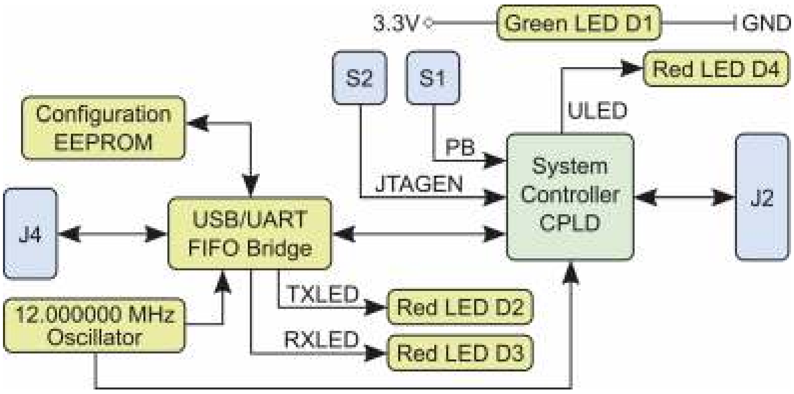
In the consigned default configu-ration Port A is JTAG and Port B is a serial interface. FT2232H port A and B are connected to small on-board programmable CPLD to allow flexible application specific remappings of FT2232H functions into 8 user I/O pins of single Xmod 12 x 8 Module.

Minimum PCB area on base board to support JTAG function 5 x 10 mm (does not include mounting hole space).
TE0790 is compatible with Xilinx Tools in contrast to the TE0790-01L, that can be used flexibly.

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

Key Features

- Xmod form-factor
  - Supported base slots: 6 x 2, 8 x 4, 10 x 6, 12 x 8, 5 x 2, 5 x 3
  - Size: 20 x 25 mm
  - M3 mounting hole
- FT2232H
  - Channel B RX/TX LED's (on top, not visible from front)
  - Mini-USB connector (more rugged then micro-USB)
  - 93C56 EEPROM
- Lattice XO2-256 CPLD
  - On board programmable using Lattice tools
  - 8 universal I/O pins
  - VCCIO either 3.3 V or user supplied (1.8 to 3.3V)
  - Red user LED (front visible)
  - 12 MHz clock from on-board Oscillator
- LDO for optional USB power
- Green Power-on LED (front visible)
- User button (front accesible)
- 4 position DIP switch
  - Choose CPLD program mode
  - FTDI EEPROM disable (not implemented in PCB REV 1)
  - Use VIO same as VCC
  - Use VCC from USB



TE Carrier Boards
custom built for specific Trenz Electronic micromodules

Following Trenz Electronic Carrier Boards are custom-built base boards for specific Trenz Electronic SoMs, which exposes the module's B2B-connector-pins to accessible connectors and provides a whole range of on-board components to test and evaluate Trenz Electronic SoMs.

TEBF0808

- Mini-ITX form factor
- ATX power supply connector (Important 12 V only supply required)
- optional 12 V standard power plug
- USB 3.0 with USB 3.0 HUB
- Gigabit Ethernet RJ45
- MicroSD Card (bootable) and eMMC (bootable)
- PCIe slot - one PCIe lane (16 Lane connector)
- Displayport Single Lane
- One SATA Connector
- Dual SFP+
- FMC HPC slot (1.8 V max VCCIO)
- Fan connectors, PC enclosure, FMC fan
- Intel front panel- and HDA audio-connector
- CAN FD transceiver (10 pin IDC connector)
- 20 pins ARM JTAG connector (PS JTAG0)
- One Samtec FireFly (4 GT lanes bidir)
- One Samtec FireFly connector for reverse loopback

TEB0728

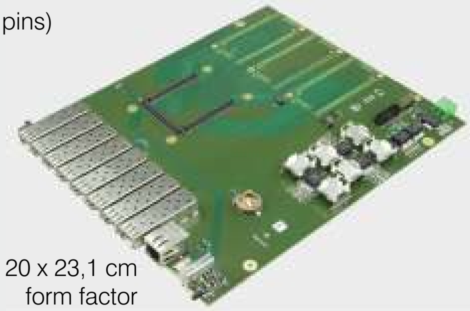
- Trenz TE0728 module socket (3 x Samtec SEM connectors 80 pins)
- 2 x RJ45 Ethernet
- SD card slot
- Power supply with DC jack
- 3 x user LED's (red/yellow/green)
- User push button

TEB0729

- Trenz TE0729 module socket (2 x Samtec BTE/BSE connectors 120 pins)
- 5 V board supply via DC jack
- 3 x RJ45 Ethernet
- 1 x MicroUSB and 1 x SD card connector
- 1 x 128K I2C CMOS Serial EEPROM
- 1 x 2K I2C Serial EEPROM
- XMOD (TE0790) pin header
- 2 x pin header FPGA bank power supply
- 1 x VBat pin header and 2 x VG96 pin header
- 1 x user push button, 1 x LED (red), user switch FPGA boot mode

TEB0745

- Trenz TE0745 module socket (3 x Samtec ST5 connectors 160 pins)
- 24 V power supply over ARKZ950/2 connecting terminal
- XMOD (TE0790) Pin Header (JTAG / UART)
- 1 x EMI Network Filter
- microSD connector
- RJ45 Ethernet connector
- USB Host connector
- 8 x SFP connector
- 6 x pin header 50 pol. (FPGA bank I/O's and power)
- 6 x pin header 12 pol. (FPGA bank I/O's and power)



20 x 23,1 cm
form factor

TEBA0714

- Trenz TE0714 module socket (2 x Samtec LSHM connectors 100 pins)
- XMOD (TE0790) pin header
- 1 x pin header 16 pol. (JTAG, MGT-CLK, boot mode, XADC, I/O's)
- 1 x pin header 10 pol. (I/O's)
- SFP connector
- LDO voltage regulator 3.3 V to 2.5 V
- 2 x user LED's (red/green) and 1 x LED (red)
- 2 x pin headers 50 pol. (FPGA bank I/O's and power)
- 1 x pin header for FPGA bank power VCCIO34 (1.8 VOUT, 2.5 V, 3.3 VOUT)
- 1 x pin header for FPGA bank power V_CFG (1.8 VOUT, 2.5 V, 3.3 VOUT)

www.trenz-electronic.de/te-baseboards

oi710 - Quad 1.2GHz DAC

www.sundance.technology/oi710/

The oi710 a combination of a DAC module (SMT-FMC211) and the EMC^2-DP. As such this system gives you four 1.25GHz DAC channels on a OneBank® PC/104 FPGA carrier card.

- Quad channel DAC (TI DAC3484)
- DAC control by Artix-7 FPGA (XC7A15T)
- 16-bit DDR3 local memory for DAC data
- I^{2}C bus for control
- External clock and triggers

EMC^2-DP stackable box

Coming soon!

Here's a preview of our stackable ruggedised case for the EMC^2-DP. Currently in the R&D phase so please get in touch with any customisation requests!

oi816 - Octal 16BIT ADC

www.sundance.technology/oi816/

A combination of an eight channel ADC module (FMC168) and the EMC^2-DP. This system gives you eight 16-bit ADC channels at 250MSPS on a OneBank® PC/104 FPGA carrier card.

- Eight-channel 16-bit 250MSPS A/D conversion
- Available as air cooled and conduction cooled
- VITA 57.1-2010 compliant
- Based on TI ADS42LB69
- Coaxial front panel inputs on SSMC connectors
- Single ended AC or DC coupled analogue input

- Flexible clock tree enables:
  - internal clock
  - internal clock locked to an external reference
  - external clock
  - external sync / 1PPS

Sundance Multiprocessor Technology Ltd.
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Chesham, HP5 1PS.
United Kingdom.

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Email: enquiries@sundance.com

Xilinx development boards and kits provide an out-of-the box design solution to accelerate development time and time-to-market. Xilinx offers kits complete with evaluation boards, the Vivado Design Suite tools, IP cores, reference designs and FPGA Mezzanine Card (FMC) support – so application development begins immediately out of the box.

The Vivado Design Suite delivers a SoC-strength, IP-centric and system-centric, next generation development environment that has been built from the ground up to address the productivity bottlenecks in system-level integration and implementation.

Xilinx Zynq UltraScale+ MPSoC ZCU102 Evaluation Kit

The ZCU102 Evaluation Kit enables designers to jumpstart designs for Automotive, Industrial, Video and Communications applications. This kit features a Zynq UltraScale+™ MPSoC device with a quad-core ARM® Cortex-A53, dual-core Cortex-R5 real-time processors, and a Mali-400 MP2 graphics processing unit based on Xilinx's 16nm FinFET+ programmable logic fabric. The ZCU102 supports all major peripherals and interfaces enabling development for a wide range of applications.

Key Features & Benefits

- Optimized for quick application prototyping with Zynq Ultrascale+ MPSoC
- DDR4 SODIMM – 4GB 64-bit w/ ECC attached to Processor Subsystem (PS)
- DDR4 Component – 512MB 16-bit attached to Programmable Logic (PL)
- PCIe Root Port Gen2x4, USB3, Display Port & SATA
- 4x SFP+ cages for Ethernet
- 2x FPGA Mezzanine Card (FMC) interfaces for I/O expansion including 16 x 16.3 Gb/s GTH transceivers and 64 user defined differential I/O signals

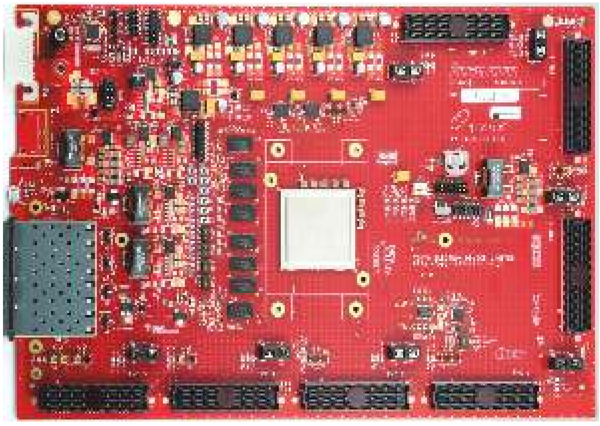
This is just one example of our wide variety of Boards and Kits from Xilinx. Please have a look in our online shop for a wider selection or ask for a quote at sales@trenz.biz.

Since 1965, Tokyo Electron Device Limited (TED) has been focused on the semiconductor distribution business. Leveraging 40 years of industry experience, in 2004, TED began offering FPGA solutions under the "inrevium" brand name.
Today, inrevium offers FPGA platform solutions, market specific IP, technical support, and design services to customers worldwide. Inrevium's domain-specific expertise, market knowledge, and pre-qualified solutions, resulted in inrevium being adorned with the prestigious Xilinx Alliance Program Member designation.

With design and development centers in Japan, China, and Canada, and a global network of sales offices, inrevium remains uniquely positioned to provide high-value design services. In addition to services, the development centers also create market-specific multi-million gate LSI devices, FPGA evaluation boards, FMC option cards, ASIC prototyping boards, drivers, firmware, and IP, to support a wide range of worldwide applications.

FPGA Evaluation Platforms

The inrevium Xilinx FPGA Evaluation Kits are special-purpose FPGA kits intended for use by design professionals, innovating and delivering stunning 3D, Organic Light Emitting Diode (OLED), Quad HD (4K2K resolution) and many other digital display technologies, as well as 3D TV broadcasting.

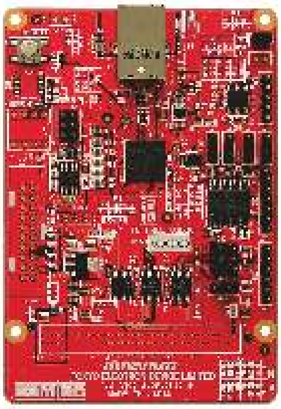


KINTEX UltraSCALE : 8K4K Image Evaluation Platform

FPGA Mezzanine Card (FMC) Standard

Developed by a consortium of companies ranging from FPGA vendors to end users, the FPGA Mezzanine Card is an ANSI standard that provides a standard Mezzanine Card form factor, connectors and modular interface to an FPGA located on a base board.

FMC is VITA 57 standard, provides a specification describing an I/O mezzanine module with connection to an FPGA or other device with reconfigurable I/O capability.



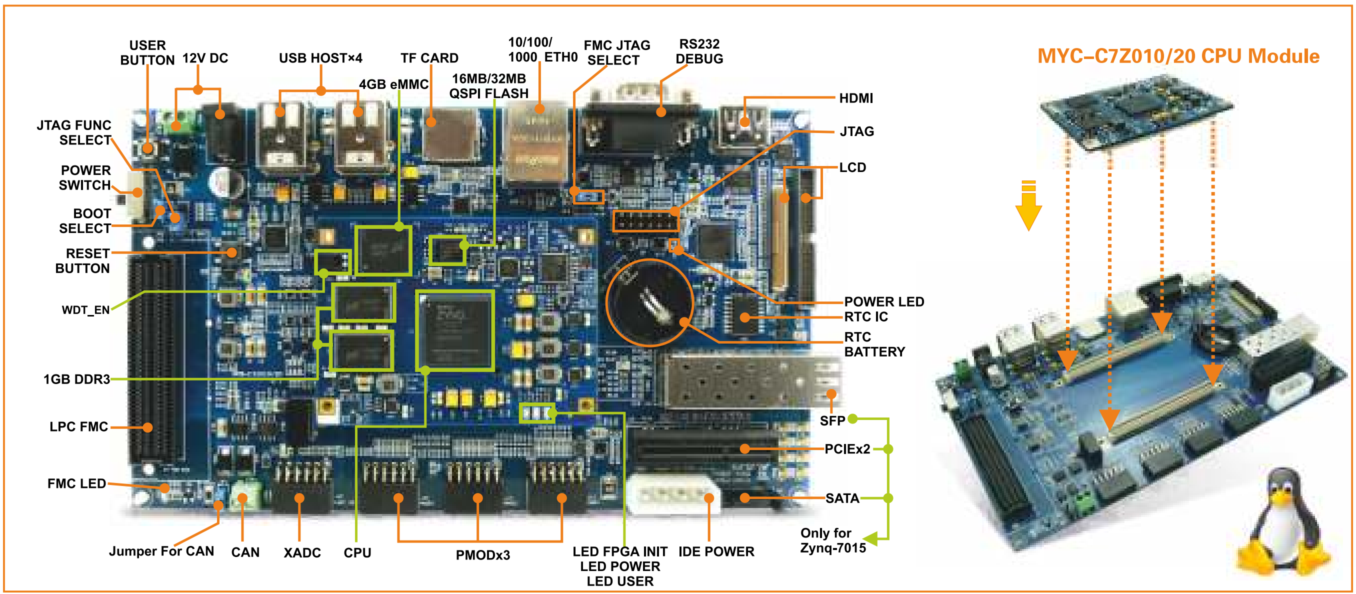
USB3.0 FMC Connectivity
mezzanine card

These are just selected examples of a wide variety of FPGA boards and FMC cards from inrevium.
Please have a look in our online shop or contact us at sales@trenz.biz
to get a quote for any available inrevium product.

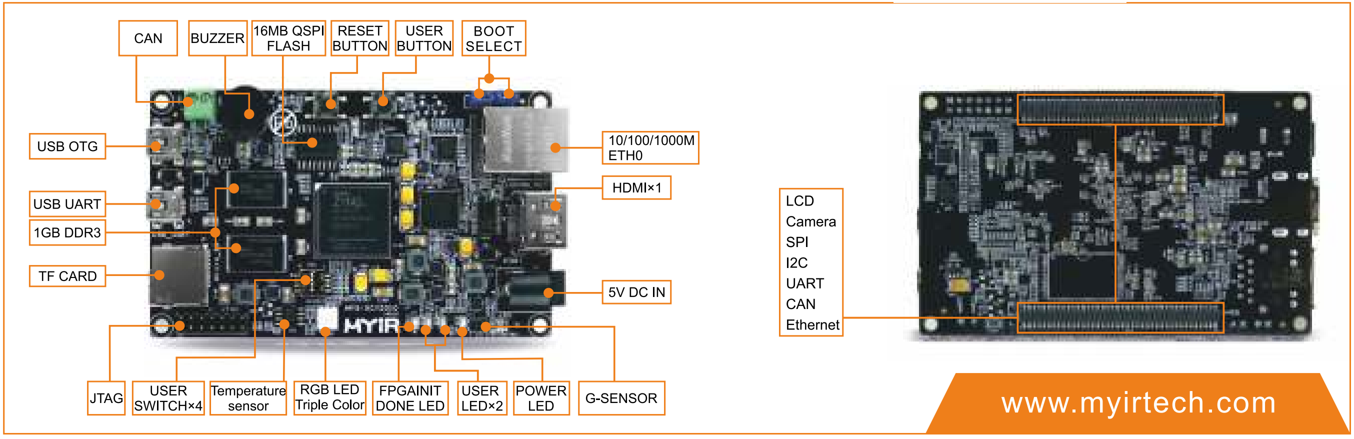
www.trenz-electronic.de/inrevium

MYIR Tech Limited is a global provider of ARM hardware and software tools, design solutions for embedded applications.
MYIR is an ARM Connected Community Member and work closely with ARM and many semiconductor vendors. They sell products ranging from board level products such as development boards, single board computers and CPU modules to help with your evaluation, prototype, and system integration or creating your own applications. Their products are used widely in industrial control, medical devices, consumer electronic, telecommunication systems, Human Machine Interface (HMI) and more other embedded applications. MYIR has an experienced team and provides custom services based on many processors (especially ARM processors) to help customers make your idea a reality.

MYD–C7Z010/20 Development Board



Z-turn Board



These are just selected examples of a variety of FPGA boards from MYIR. Please have a look in our online shop or contact us at sales@trenz.biz to get a quote for any available MYIR product.

Violet Series

It has been designed to continously stream samples data to host computer main memory at full rate. These boards are ideal for any applications that require unusally long samples at rates up to 250 Msps at a resolution of 14 bits.

Examles are:

- Software Defined RadioHigh Precision FFT Spectrum Analyzers

Time Tagger

Cronologic presents a new series of low cost, mid resolution time-to-digital converters.
Two new board are available featuring 500ps to 1ns single shot resolution at highest data bandwidths.
Time Taggers are ideally suitable in applications that do not require highest single shot timing resolution, but high data acquisition rates and lowest multiple hit deadtime. These include certain types of mass spectroscopy, time correlated single photon counting (TCSPC) and frequency counting applications.

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