POWERFUL EVALUATION KIT FOR
THE ZYNQ-7000 EXTENSIBLE
PROCESSING PLATFORM

# ZYNQ-7000 EPP ZC702 EVALUATION KIT

The Xilinx® ZYNQ™-7000 EPP ZC702 Evaluation Kit gives developers a complete development platform including hardware, development tools, IP, and pre-verified reference designs. The included targeted reference design jump-starts development, and enables in-depth exercising of the ARM processing system and Xilinx 28nm scalable optimized programmable logic architecture. Additional reference designs and industry-standard FPGA Mezzanine Connectors (FMCs) let developers scale and customize designs using Xilinx and third-party daughter cards to best fit their application and system with this development board. This evaluation kit offers a wide feature set and abundant I/O expandability, to shorten time to market for applications that call for industry-leading performance, feature differentiation, and power efficiency.

## ▷ Xilinx Solution Highlights

- Productivity-boosting kit, including silicon, development tools, IP, and reference designs

- Wide feature set, with abundant I/O expandability, to develop solutions for most markets

- Foundation for Zynq-7000 EPP-based designs

- Best-in-class tools, operating system support, and ecosystem (including ARM community)

## ▷ A New Class of Devices: Zynq-7000 Extensible Processing Platform

- ARM® dual-core Cortex™-A9 processor meets Xilinx 28nm programmable logic

- ASIC-like performance and power with the flexibility of an FPGA and ease of programming of a microprocessor

- Flexibility to create a custom ARM-based ASSP by adding peripherals and accelerators to the programmable logic
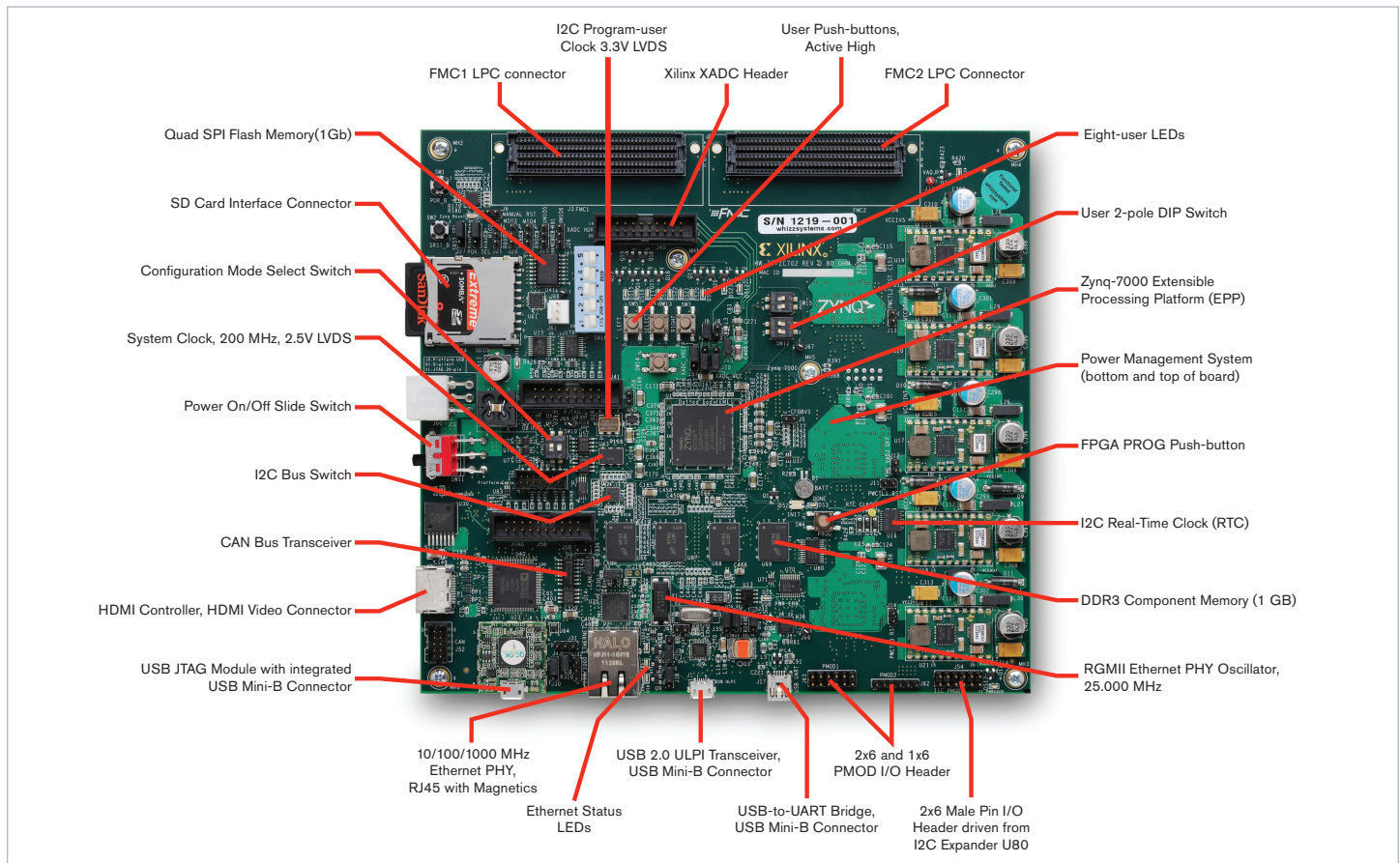
## What's Inside the ZC702 Evaluation Kit

- ZC702 Evaluation Board featuring the XC7Z020-1CLG484CES device
- Agile Mixed Signal (AMS)
- Full seat ISE® Design Suite Embedded Edition
- Cables and Power Supply:
  - Universal 12V power supply
  - USB cables, Ethernet cable
  - 8 GB Class 4 SD card
- USB Flash Drive (contains documentation, designs, and demos)

**Documentation, Designs, and Demos**

- Step-by-Step Getting Started Guide
- Hardware User Guide
- Reference Design and Design Example User Guide
- Schematics and PCB files
- Demonstrations
- Board design files

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## ZC702 EVALUATION BOARD



Labels (left side, top to bottom):
- Quad SPI Flash Memory(1Gb)
- SD Card Interface Connector
- Configuration Mode Select Switch
- System Clock, 200 MHz, 2.5V LVDS
- Power On/Off Slide Switch
- I2C Bus Switch
- CAN Bus Transceiver
- HDMI Controller, HDMI Video Connector
- USB JTAG Module with integrated USB Mini-B Connector

Labels (top):
- I2C Program-user Clock 3.3V LVDS
- FMC1 LPC connector
- Xilinx XADC Header
- User Push-buttons, Active High
- FMC2 LPC Connector

Labels (right side, top to bottom):
- Eight-user LEDs
- User 2-pole DIP Switch
- Zynq-7000 Extensible Processing Platform (EPP)
- Power Management System (bottom and top of board)
- FPGA PROG Push-button
- I2C Real-Time Clock (RTC)
- DDR3 Component Memory (1 GB)
- RGMII Ethernet PHY Oscillator, 25.000 MHz

Labels (bottom):
- 10/100/1000 MHz Ethernet PHY, RJ45 with Magnetics
- Ethernet Status LEDs
- USB 2.0 ULPI Transceiver, USB Mini-B Connector
- USB-to-UART Bridge, USB Mini-B Connector
- 2x6 and 1x6 PMOD I/O Header
- 2x6 Male Pin I/O Header driven from I2C Expander U80

## Take the NEXT STEP

For more information about the ZC702 Evaluation Kit, please visit: **www.xilinx.com/zc702**

For more information about the Zynq-7000 EPP product family, please visit: **www.xilinx.com/zynq**

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