Click to Enlarge

Zynq UltraScale+ MPSoC ZCU104 Evaluation Kit

by: Xilinx, Inc

XILINX.

The ZCU104 Evaluation Kit enables designers to jumpstart designs for video conferencing, surveillance, Advanced Driver Assisted Systems (ADAS) and streaming and encoding applications.

Price: $1,554.00
Part Number: EK-U1-ZCU104-G
Lead Time: 2 Weeks
Device Support: Zynq UltraScale+ MPSoC

Feedback

or buy from: Authorized Distributors

OVERVIEW

Product Description

The ZCU104 Evaluation Kit enables designers to jumpstart designs for embedded vision applications such as surveillance, Advanced Driver Assisted Systems (ADAS), machine vision, Augmented Reality (AR), drones and medical imaging. This kit features a Zynq® UltraScale+™ MPSoC EV device with video codec and supports many common peripherals and interfaces for embedded vision use case. The included ZU7EV device is equipped with a quad-core ARM® Cortex™-A53 applications processor, dual-core Cortex-R5 real-time processor, Mali™-400 MP2 graphics processing unit, 4KP60 capable H.264/H.265 video codec, and 16nm FinFET+ programmable logic.

Feedback

Key Features & Benefits

- reVISION package provides out-of-box SDSoC software development flow with OpenCV libraries, machine learning framework, USB HD camera, and live sensor support
- reVISION Getting Started Guide

- USB3, DisplayPort & SATA
- LPC FPGA mezzanine card (FMC) interface for I/O expansion
- Optimized to work with SDSoC/reVISION development environment with OpenCV and Machine Learning libraries

---

Featured Xilinx Devices

Featuring the Zynq UltraScale+ **XCZU7EV-2FFVC1156 MPSoC**

System Logic Cells (K)	504
Memory	38Mb
DSP Slices	1,728
Video Codec Unit	1
Maximum I/O Pins	464

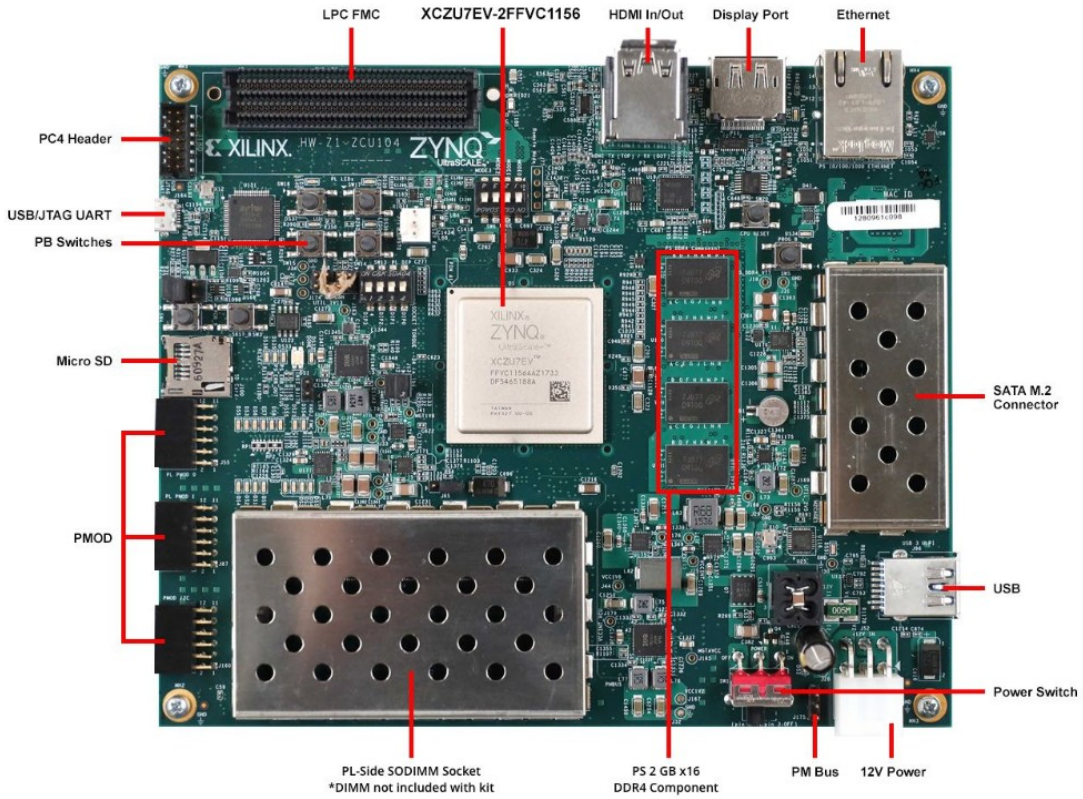
PRODUCT INFORMATION

Specifications

What's Inside

Board Features

Featuring the Zynq UltraScale+ **XCZU7EV-2FFVC1156 MPSoC**



Configuration

- USB-JTAG FT4232H
- Dual Quad-SPI flash memory
- MicroSD Card

Feedback

- PS DDR4 64-bit Component
- Quad-SPI flash
- Micro SD card slot

Control & I/O

- 4x directional pushbuttons
- DIP switches
- PMBUS, clocks, and I2C bus switching
- USB2/3

Expansion Connectors

- FMC LPC (1x GTH)
- 3 PMOD connectors
- PL DDR4 SODIMM Connector – 64 bit

Communication & Networking

- USB-UARTs with FT4232H JTAG/3xUART Bridge
- RJ-45 Ethernet connector
- SATA (M.2) for SSD access

Display

- HDMI 2.0 video input and output (3x GTH)
- DisplayPort (2x GTR)

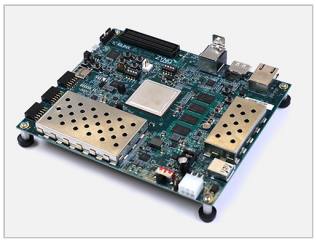
Clocking

- Programmable clocks, System clock, user clock

Power

- 12V wall adaptor or ATX

What's Inside



ZCU104 Evaluation Board

Access to a full seat of Vivado® Design Suite: Design Edition
Node locked & Device-locked to the XCZU7EV MPSoC FPGA, with 1 year of updates

Ethernet Cable

Access to the SDSoC™ development environment

1080p60 USB3 Camera

Feedback

4-Port USB 3.0 Hub

RESOURCES

- Documentation
- Tools & IP
- Training & Support

Filter Documentation

Step 1: Board Revision

- ● Rev 1.0

Step 2: Tools Version

- ● Most Recent Documents
- ○ Vivado Design Suite 2019.1
- ○ Vivado Design Suite 2018.3

Feedback

Click to update search results table

Update Search Results

Document Type

- [ ] Example Designs 7
- [ ] Board Files 3
- [ ] User Guides 2

Results per page 25 50 75 100

Title Date

Results **1-12** of **12**

UG1267 - ZCU104 Board User Guide (UG1267) (v1.1) Oct 09, 2018

Document Type: User Guides

Describes in detail the features of the ZCU104 evaluation board. Use this guide for developing and evaluating designs targeting the Zynq UltraScale+ MPSoC XCZU7EV-2FFC1156 device on the ZCU104 board.

XTP482 - Zynq UltraScale+ MPSoC ZCU104 Evaluation Kit Quick Start Guide (v2.1) May 30, 2018

Document Type: User Guides

Describes how to set up and run the BIST test for the ZCU104 evaluation board. The voucher code appears on the printed Quick Start Guide inside the kit.

XTP484 - ZCU104 Schematics (v1.0) Apr 12, 2018

Document Type: Board Files

See All Versions

Associated File(s):

zcu104-schematic-source-rdf0436.zip

zcu104-bom-rdf0437.zip zcu104-xdc-rdf0438.zip

Feedback

Document Type: Board Files

See All Versions

Associated File(s):

zcu104-allegro-board-source-rdf0439.zip

zcu104-gerber-files-rdf0440.zip

XTP486 - ZCU102 CE Declaration of Conformity (v1.0)

Mar 20, 2020

Document Type: Board Files

XTP498 - ZCU104 Board Interface Test (v5.0)

May 29, 2019

Document Type: Example Designs

Running the ZCU104 Board Interface Test (BIT)

See All Versions

Design File(s):

rdf0452-zcu104-bit-c-2019-1.zip

XTP499 - ZCU104 IBERT Tutorial (v4.0)

Dec 10, 2018

Document Type: Example Designs

Creating an Using a GTH IBERT Design with the ZCU104 board

See All Versions

Design File(s):

rdf0453-zcu104-ibert-c-2018-3.zip

XTP500 - ZCU104 IPI Tutorial (v4.0)

Dec 10, 2018

Document Type: Example Designs

See All Versions

Design File(s):

rdf0454-zcu104-ipi-c-2018-3.zip

XTP501 - ZCU104 MIG Tutorial (v4.0)

Dec 10, 2018

Document Type: Example Designs

Using MIG to create a DDR4 memory design for the ZCU104

See All Versions

Design File(s):

rdf0455-zcu104-mig-c-2018-3.zip

XTP502 - ZCU104 System Controller GUI Tutorial (v5.0)

May 29, 2019

Document Type: Example Designs

Using the System Controller GUI with the ZCU104

See All Versions

Design File(s):

rdf0456-zcu104-system-controller-c-2019-1.zip

XTP503 - ZCU104 Restoring Flash Tutorial (v4.0)

Dec 10, 2018

Document Type: Example Designs

Restore the Flash Memory of the ZCU104 to factory defaults

See All Versions

Design File(s):

rdf0457-zcu104-restoring-flash-c-2018-3.zip

Feedback

Document Type: Example Designs

Installing Xilinx software, UART drivers, and Board Setup for the ZCU104

See All Versions

Design Tools & Downloads

Name	Description	License Type	Files
Vivado Design Suite	The Xilinx Vivado® Design Suite is a revolutionary IP and System Centric design environment built from the ground up to accelerate the design for FPGAs and SoCs.	Node locked and device-locked to the XCZU7EV MPSoC FPGA, with one year of updates	Download Vivado Design Suite
Vitis Unified Software Platform	Full suite of tools for embedded software development, hardware acceleration, and debug targeting Xilinx platforms.	Free	Download Vitis Embedded Platforms
PetaLinux Tools	Configure, Build, and Deploy Linux operating system to Xilinx platforms.	Free	Download Petalinux Tools

Intellectual Property

Name	Description	License Type
Memory Interface Generator (MIG)	MIG is a free software tool used to generate memory controllers and interfaces for Xilinx FPGAs.	No-Charge IP

Feedback

Additional Tools, IP and Resources

Open Source	Software Tool	TeraTerm	One of many possible terminal emulators used for serial connection from your PC to the evaluation kit.

Training

- Training Resources
- Design Hub
- Vivado Design Suite Training Course
- Designing with the UltraScale and UltraScale+ Architectures

Support

- Solution Center
- Community Forums
- Partner Design Services

RELATED PRODUCTS

Feedback

Featured Accessories

Platform Cable USB II

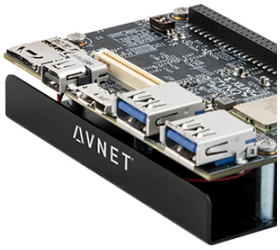
SmartLynq Data Cable

FMC Loopback (

Similar Products

Zynq UltraScale+ MPSoC ZCU102 Evaluation Kit

Zynq UltraScale+ MPSoC ZCU106 Evaluation Kit



Ultra96

Download Kit Selection Guide

Feedback

ENGLISH