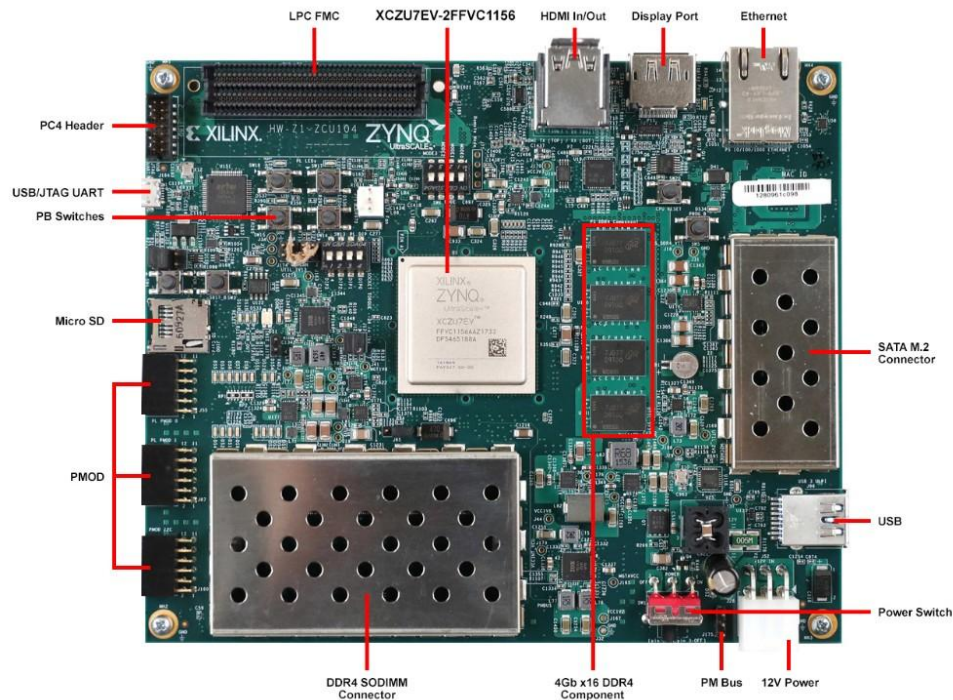# Xilinx Zynq UltraScale+ MPSoC ZCU104 Evaluation Kit

Part No.:- EK-U1-ZCU104-G

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, Augumented 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.

Key Features & Benefits

- Optimized for out-of-box software-based application development with Zynq UltraScale+ MPSoC
- PS DDR4 4GB Component – 64-bit
- Integrated video codec unit supports H.264/H.265

- USB3, DisplayPort & SATA
- One 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

Configuration

- USB-JTAG FT4232H
- Dual Quad-SPI flash memory
- Boot from microSD card

Memory

- 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
- Jitter attenuator

Power

- 12V wall adaptor or ATX

What's Inside

ZCU104 Evaluation Board

Ethernet Cable

1080p60 USB3 Camera

4-Port USB 3.0 Hub

Power Cord and Adapter