# Xilinx Virtex UltraScale FPGA VCU1287 Characterization Kit

Overview

## **Product Description**

The VCU1287 Characterization Kit provides everything you need to characterize and evaluate the 28 GTH (16Gbps) and 24 GTY (30Gbps) transceivers available on the Virtex® UltraScale™ XCVU095-FFVB2104E FPGA. Each GTH and GTY Quad and its associated reference clock are routed from the FPGA to SMA and Samtec BullsEye connectors. The BullsEye connector allows you to connect to a broad range of evaluation platforms, from backplanes and optical evaluation boards to high speed test equipment. Each BullsEye connector handles a full GTH or GTY Quad, four transmit/receive pairs, enabling the highest level of flexibility in testing custom applications. Find out more and see what is included in the kit.



## Key Features & Benefits

- Hardware environment for characterizing and evaluating the GTH and GTY transceivers on the Virtex® UltraScale™ XCVU095-FFVB2104E FPGA
- · Hardware, design tools, IP, and pre-verified reference designs
- Integrated Bit Error Ratio Test (IBERT) reference design
- · BullsEye connector supporting a full quad, with four transmit/receive pairs
  - 14 Samtec BullsEye connector pads for the GTH & GTY transceivers and reference clocks

- · Backplane Emulation Connector
- Two pairs of differential MRCC inputs with SMA connectors expand I/O with 3 FPGA Mezzanine Card (FMC) interfaces

## What's Included

- VCU1287 Characterization Board featuring the Virtex UltraScale XCVU095-FFVB2104E FPGA
- Full seat of Vivado® Design Suite: Design Edition
  - Device-locked to the Virtex UltraScale XCVU095-FFVB2104E FPGA
- One Samtec BullsEye Cable
- · On board GT reference clock generation provided via SuperClock-2 interface
- Cables & Power Supply
  - On-board power supplies providing all necessary voltages
  - Terminal blocks for optional use of external power supplies
  - Power module supporting Virtex UltraScale FPGA GTH & GTY transceiver power requirements
- · Additional downloadable content including
  - IBERT Reference Design and Demo
  - Board Design Files
  - Extensive Documentation

#### **Product Vendor:**



Part Number: CK-U1-VCU1287-G



# Highlighted Partner Bill of Materials (BOM)

Provider Name	Product Category	Item	Description
Samtec	Cable	HDR-155805-01-BEYE	BullsEye Cable for Xilinx FPGA Characterization kits

# Included in this Kit

### Design Tools

Name	Description	License Type
Vivado Design Suite: Design Edition (/products/design- tools/vivado.html)	The Xilinx Vivado® Design Suite is a revolutionary IP and System Centric design environment built from the ground up to accelerate the design for all programmable devices.	Node locked & device-locked to the Virtex UltraScale XCVU095-FFVB2104E FPGA