# Avnet Zynq™ Transceiver Evaluation Kit

**AVNET®**

*Reach Further™*

Avnet's Zynq™ Transceiver Evaluation Kit (AZTEK) aids designers in getting started with transceivers. This kit utilizes the cost effective Xilinx Zynq-7000™ SoC based Avnet PicoZed™ 7015 SOM. This SOM includes 4 high-speed serial transceiver lanes which can be used to transfer large amounts of data at high communication rates! Designers using AZTEK can quickly evaluate some of the most widely used protocols and transceiver technologies with a proven set of hardware. The result is seamless hardware and software integration across the various technologies included as well as room for growth! Included technologies are the SFP+ capable Optical Transceiver cage, SMA connectors, PCIe card edge and a FMC-LPC connector. No startup fees are required for evaluation and development.

To help you minimize risk and get to market faster, the PicoZed System-on-Module (SOM) is small, rugged, and built for deployment.

1. **Evaluate** the Zynq SoC and baseline performance using the AZTEK's PicoZed SOM – no need to spend resources evaluating accessories; AZTEK includes everything with specifications for the maximum performance!

2. **Prototype** your software and hardware concurrently using best-in-class IP, software APIs, reference designs, and drivers avoiding months of development time.

3. **Deploy** your end product with the PicoZed SOM, your differentiating features and a custom carrier board.

The AZTEK out-of-box reference design helps you quickly configure the onboard clock. This IDT part has given our end users one of the most versatile clocking solutions on the market. The AZTEK is the right solution for designers who need to work with data in extreme situations, yet are cost conscious.
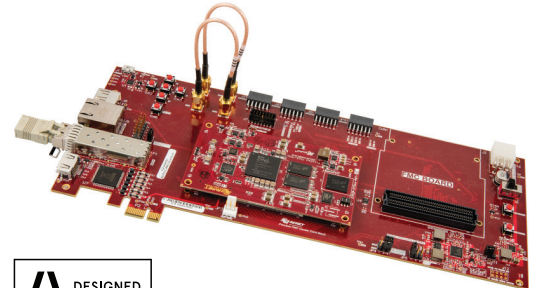
## FEATURES

### IP / Software
- Xilinx Vivado WebPack Compatible Designs
- IDT Timing Commander Compatible Reference Design
- Opsero Reference Design
- IBERT Reference Design

### Platform
- Powerful Zynq-7000 SoC integrates dual ARM© Cortex™ - A9 subsystem with an FPGA
- Low-cost PicoZed System-on-Module (SOM) – small, rugged, and built for deployment
- Cost Effective SOM Transceivers capable of 3.75 Gbps
- Modular FMC-based development system is flexible for a wide range of applications
- Avnet FMC V2 Carrier capable of up to 6.25 Gbps, making this easy to upgrade for more bandwidth needs

To purchase this kit, visit avnet.com/us/aztek

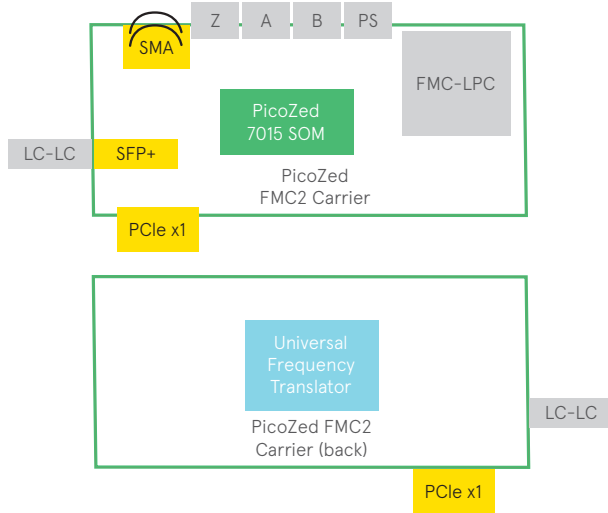**DESIGNED BY AVNET**

## KIT INCLUDES

- PicoZed 7015 SOM
- PicoZed FMC V2 Carrier
- Finisar 3.7G CPRI Wireless 300m SFP Optical Transceiver
- Molex Fiber Optic Loopback
- Samtec COAX Cabling
- 12V power supply
- PCIe bracket and ATX power adapter cable
- SOM Mounting hardware
- micro SD card
- USB cables
- Quick Start Card
- IDT Programming reference design and transceiver
- tutorial downloads
- Discount Coupon Code for Opsero Hardware

## TARGET APPLICATIONS

- Zynq Transceiver Development and Evaluation

**/PICOZED™ SDR**

## BLOCK DIAGRAM



| Protocol | Data rate (in Gbps) |
|----------|---------------------|
| **Giga Ethernet** | 1.25 |
| **PCIe Gen 1** | 2.5/5.0* |
| **XAUI** | 3.125 |
| **SATA** | 1.5/3.0 |
| **SRIO Gen 1** | 3.125/6.25* |
| **DisplayPort** | 1.62/2.7/5.4* |
| **Fibre Channel** | 1.0625/2.125/4.25* |
| **Aurora/Custom** | 3.75 |

*Note: Carrier Supports higher speeds than the SOM included in the KIT

## FEATURED MANUFACTURERS

molex — one company › a world of innovation    IDT Integrated Device Technology    XILINX ALL PROGRAMMABLE    samtec    Finisar

## PARTS

| Part Number | Description | Resale |
|-------------|-------------|--------|
| AES-PZCC-AZTEK-G | Avnet Zynq Transceiver Evaluation Kit | |

## RELATED PARTS

| Part Number | Description | Resale |
|-------------|-------------|--------|
| AES-Z7PZ-7Z010-SOM-G | PicoZed 7010 SOM | |
| AES-Z7PZ-7Z010-SOM-I-G | PicoZed 7010 SOM Ind. Temp | |
| AES-Z7PZ-7Z015-SOM-G | PicoZed 7015 SOM | |
| AES-Z7PZ-7Z015-SOM-I-G | PicoZed 7015 SOM Ind. Temp | |
| AES-Z7PZ-7Z020-SOM-G | PicoZed 7020 SOM | |
| AES-Z7PZ-7Z020-SOM-I-G | PicoZed 7020 SOM Ind. Temp | |
| AES-Z7PZ-7Z030-SOM-G | PicoZed 7030 SOM | |
| AES-Z7PZ-7Z030-SOM-I-G | PicoZed 7030 SOM Ind. Temp | |
| 106052-0040 | Molex Fiber Optic Loopback | |
| RF316-01SP1-01SP1-0300 | Samtec Coax Cable | |
| FTLF8524P3BNL | Finisar 3.7G CPRI Wireless SFP Optical Transceiver | |

**Countries Available for Purchase:** Americas, EMEA, Asia, Japan

## CONTACT INFORMATION

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