

# PicoZed™ SDR AD9361 Development Kit



The PicoZed™ SDR Development Kit bundles everything required to start your software-defined radio (SDR) design. The kit includes the low-power, small footprint, rugged PicoZed SDR 2x2 system-on-module (SOM) based on the Xilinx Z-7035 and Analog Devices AD9361, and a carrier card for prototyping with standard high bandwidth interfaces like USB, Gigabit Ethernet, SFP+, and an RF power module. The carrier also includes HDMI, audio, and a camera module interface to enable a host of new SDR applications requiring audio/video and embedded vision. Data acquisition is managed under Ubuntu Linux running on the dual ARM-9 processor within the Zynq SoC, supporting fast data exchange over Ethernet to MATLAB and Simulink. Supported by robust simulation and code generation tools that integrate seamlessly with Xilinx Vivado® Design Suite, PicoZed SDR enables dramatic reduction in design cycles of your software-defined radio products.

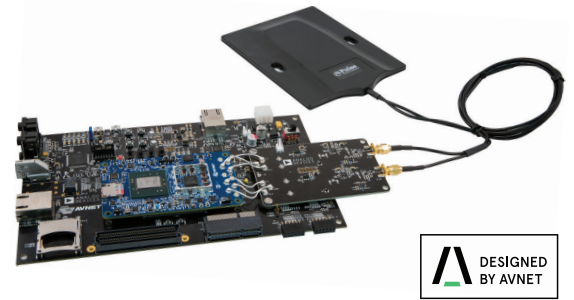
## FEATURES

### System-on-Module

- Fully-verified, low-power, rugged system-on-module (SOM) ready for end-product deployment
- Supported by MATLAB® and Simulink® for data streaming and Zynq targeting
- Xilinx Zynq XC7Z035-2L FBG6761 AP SoC
- 1GB DDR3L DRAM
- 256Mb QSPI Flash
- microSD Card Interface
- 10/100/1000 Ethernet PHY
- USB 2.0 OTG ULPI PHY
- Analog Devices AD9361-BBCZ Integrated RF Agile Transceiver™
  - RF 2 × 2 transceiver with integrated 12-bit DACs and ADCs
  - Band: 70 MHz to 6.0 GHz
  - TDD and FDD operation
  - Tunable channel BW: <200 kHz to 56 MHz
  - Supports MIMO radio: < 1 sample sync on both ADC and DAC
- Miniature RF connectors – 4 TX, 4 RX, 2 TX monitor

### FMC Carrier

- 10/100/1000 Mbps Ethernet PHY and connector
- 10/100/1000 Mbps Ethernet connector
- USB2.0 OTG micro-USB Type AB connector
- SFP+ connector and cage
- AD9361 external clock input
- 1 user GTX channel
- HDMI Output – AD7511 Transmitter
- Audio CODEC – ADAU1761
- Avnet Camera Module connector
- RF Personality Module (PA/LNA) connector
- FMC (Low Pin Count; 1 GTX)
- 2 Pmod™ interfaces (1 PL; 1 PS)
- Standard SD card interface
- USB-to-UART
- PC4 JTAG configuration port



## KIT INCLUDES

- PicoZed SDR 2x2 SOM (AES-Z7PZ-SDR2-G)
- PicoZed SDR FMC Carrier Card (AES-PZSDRCC-FMC-G)
- Pulse LTE/MIMO 2x2 antenna (WA700-2700)
- U.FL to SMA coax cables (4)
- Ethernet, HDMI, and USB cables
- 12V power supply
- SD memory card
- Quick Start Card
- JTAG HS3 High Speed Xilinx Programming Cable
- Schematics, BOM, HDL, Linux drivers and application software

## OPTIONAL

- RF Module with PA, LNA, and TDD switch
- ON Semi PYTHON-1300 camera module

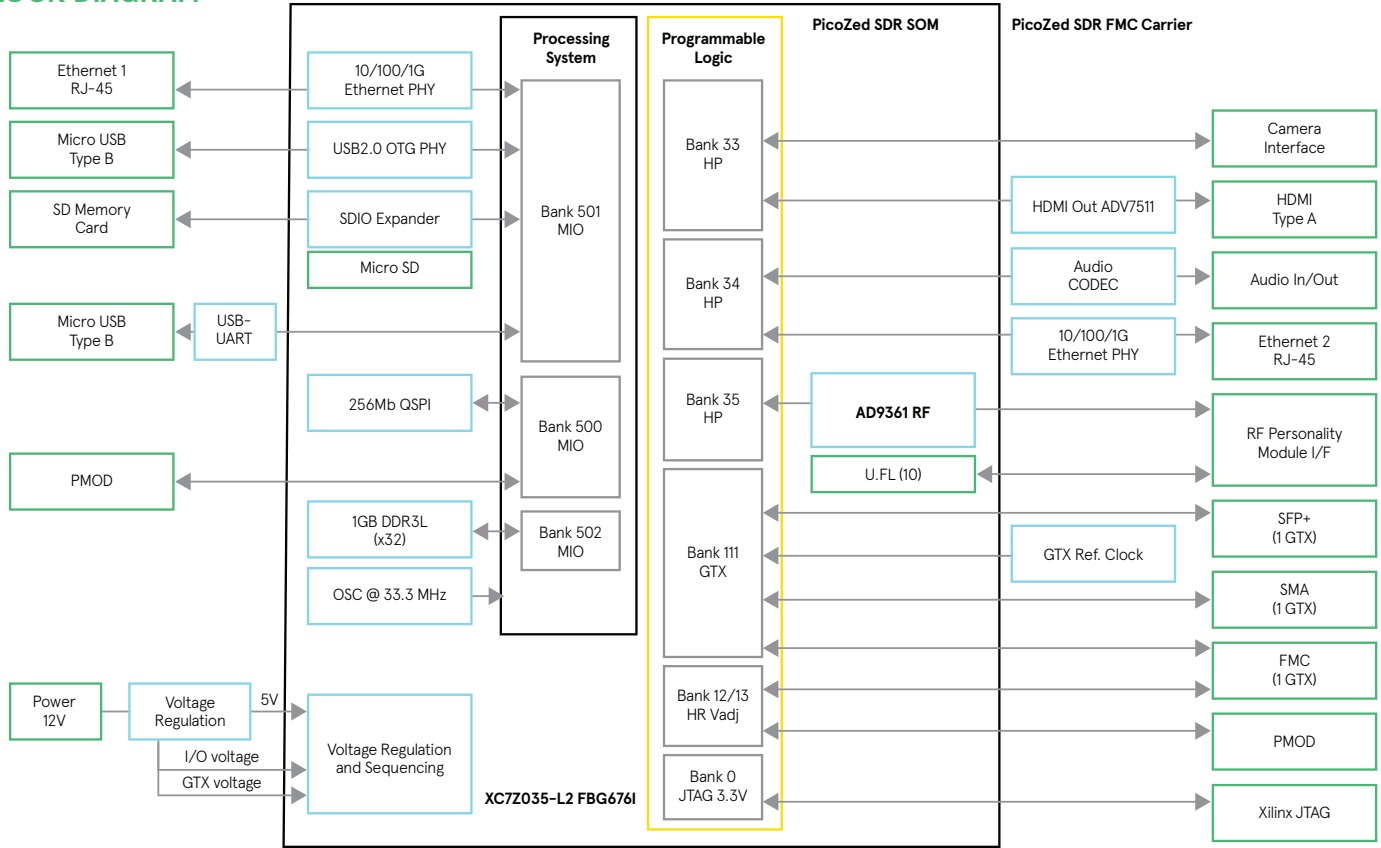
## TARGET APPLICATIONS

- Portable agile wireless communications
- P25 Public Safety Radio
- Point-to-point communication
- Femtocell & picocell base stations
- Portable Instrumentation

To purchase this kit, visit [www.picozed.org/sdr](http://www.picozed.org/sdr)

/PICOZED™ SDR

## BLOCK DIAGRAM



## FEATURED MANUFACTURERS



## PARTS

Part Number	Description	Resale
AES-Z7PZ-SDR2-DEV-G	PicoZed SDR AD9361 Development Kit	\$1,799 USD

## RELATED PARTS

Part Number	Description	Resale
AES-Z7PZ-SDR1-G	PicoZed SDR 1x1 SOM	\$549 USD (1-99); \$499 USD (1000+)
AES-Z7PZ-SDR2-G	PicoZed SDR 2x2 SOM	\$1,095 USD (1-99); \$995 USD (1,000+)
AD-PZSDR2400TDD-EB	PicoZed SDR RF Module with PA, LNA, and TDD switch	\$399 USD
AES-CAM-ON-P1300C-G	ON PYTHON-1300-C Camera Module	\$499 USD

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

## CONTACT INFORMATION

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