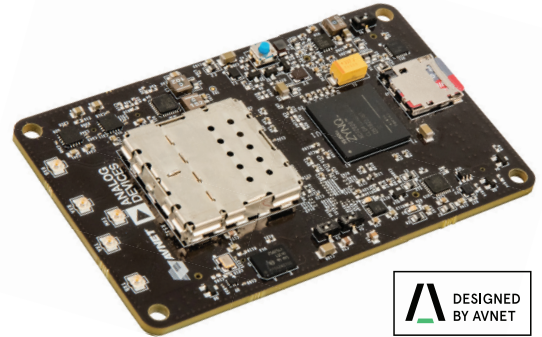


Avnet's PicoZed™ SDR 1x1 is a Software Defined Radio (SDR) that combines the Analog Devices AD9364 integrated RF Agile Transceiver™ with the Xilinx Z-7020 Zynq®-7000 All Programmable SoC. Cost-optimized for single RF receive and transmit paths in the 70 MHz to 6.0 GHz range, it offers the same handheld form-factor as the high performance, dual-channel PicoZed SDR 2x2 based on the Xilinx Z-7035 and Analog Devices AD9361. Integrating the critical RF signal path and high-speed programmable logic in a fully-verified system-on-module (SOM), PicoZed SDR forms the RF-to-baseband signal processing core of a wireless communications system, allowing you to focus on the differentiating features of your product. With available carrier cards for fast prototype and 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

- 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
- Industrial temperature rated, production-ready SOM
- Conforms to MIL-STD 202G for thermal, vibration, and shock
- **Digital Processing**
 - Xilinx Zynq XC7Z020-1CLG400I AP SoC
 - 1GB DDR3L SDRAM (x32)
 - 256Mb QSPI Flash
 - microSD Card Interface
 - 10/100/1000 Ethernet PHY
 - USB 2.0 OTG ULPI PHY
 - 84 User I/O
- **Radio Transceiver**
 - Analog Devices AD9364-BBCZ Integrated 1x1 RF Agile Transceiver™
 - RF transceiver with integrated 12-bit DACs and ADCs
 - Band: 70 MHz to 6.0 GHz
 - TDD and FDD operation
 - Adjustable channel BW: <200 kHz to 56 MHz
- Miniature U.FL RF connectors- 2 TX, 2 RX, 1 TX monitor
- Voltage regulation and sequencing with power-good failsafe circuits
- Power and signal interface through 4 micro header connectors
- Clock and frequency synthesis circuits
- Includes schematics, BOM, HDL, Linux drivers and application software

KIT INCLUDES

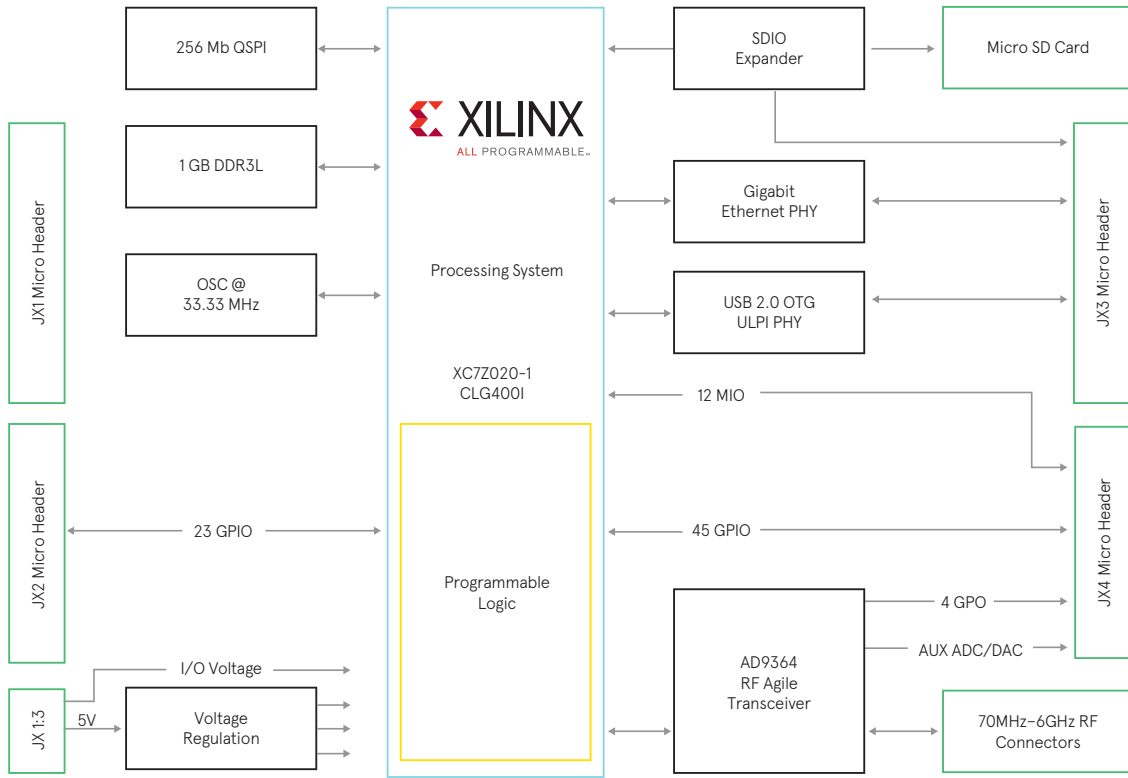
- PicoZed SDR 1x1 SOM

TARGET APPLICATIONS

- Software Defined Radio
- Satellite communications
- Wideband RF signal processing systems
- Portable RF instrumentation

To purchase this kit, visit picozed.org/product/picozed-sdr-1x1-som

BLOCK DIAGRAM



FEATURED MANUFACTURERS



PARTS

Part Number	Description	Resale
AES-Z7PZ-SDR1-G	PicoZed SDR 1x1 with Xilinx Zynq Z-7020 and Analog Devices AD9364	\$549 USD (1-99); \$499 USD (1,000+)

RELATED PARTS

Part Number	Description	Resale (100-499*)
AES-PZSDRCC-FMC-G	PicoZed SDR FMC Carrier Card	\$595 USD
AES-PZSDRCC-BRK-G	PicoZed SDR Breakout Carrier	\$199 USD
AES-Z7PZ-SDR2-G	PicoZed SDR 2x2 with Xilinx Zynq Z-7035 and Analog Devices AD9361	\$1,095 USD
AES-Z7PZ-SDR2-DEV-G	PicoZed SDR AD9361 Development Kit	\$1,799 USD

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

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