

START APPLICATION DEVELOPMENT IMMEDIATELY WITH THE AVNET XRF16[™] MODULE USING THE XRF[™] CARRIER CARD AND COMPREHENSIVE SOFTWARE SUITE

The XRF16 Xilinx RFSoc System-on-Module (SOM) is designed for integration into your deployed system. The XRF Carrier Card and software suite provide a rapid prototype platform, enabling you to develop application code for the XRF16 SOM that is ready for deployment when your custom carrier arrives.

The XRF Carrier provides connection to standard SOM peripherals including USB2.0, 1 Gb Ethernet, PCIe, UART, SPI, I2C, GPIO, and JTAG. High-speed digital connectivity is available through sixteen 28Gbps Xilinx GTY transceivers, enabling standards like PCIe Gen3, OcuLink, 100/40/10 GbE, and Xilinx Aurora.

The SOM RF-ADC and RF-DAC ports are made available using Samtec IsoRate[®] connectors that easily convert to SMA with cable adapters. Synchronization is enabled by external reference clock connection, external in/out triggers, and software examples demonstrating RFSoc multi-tile sync (multi-converter sync) and multi-board synchronized analog capture.

FEATURE LIST

RF Interface & Synchronization

- 4x Samtec IsoRate[®] high density quick connect
- Trigger In, Trigger Out, External Clock Reference (SMA)

High-Speed Data Transfer

- 16x 28Gbps serial links, connected as:
 - 1x QSFP28 for 10/40/100 GbE
 - 3x OcuLink for PCIe Gen3 or Xilinx Aurora

System Peripherals

- 1GbE connector
- USB2.0 Type-A for device connection
- Micro USB for serial terminal
- JTAG debug header
- 50 PL-GPIO at standard header pins
- 24 PS-GPIO at standard header pins

12V Power

- 2.5mm standard laptop jack (center positive)
- 6-pin rugged, locking connector



KIT INCLUDES

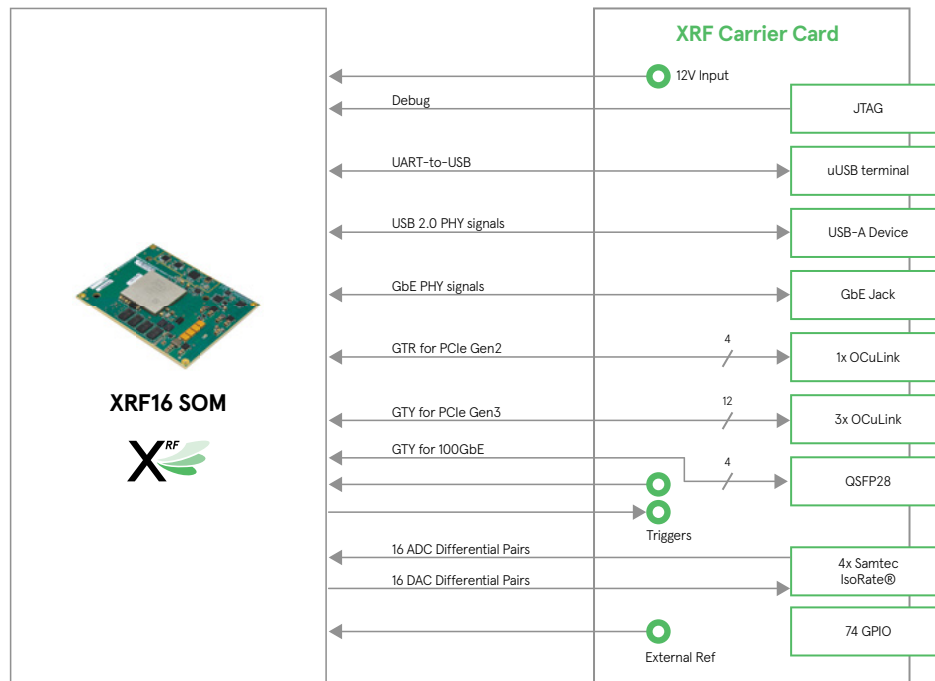
- XRF16 Carrier Card
- Software

TARGET APPS

- Phased Array Radar
- 5G Massive MIMO
- Hybrid Beamforming
- Signal Detection & Jamming
- Medical Imaging
- Multi-Channel RF Instrumentation

To purchase this kit, visit www.avnet.com/rfsocsom

BLOCK DIAGRAM



FEATURED MANUFACTURERS



PARTS

Part Number	Description	Resale
AES-XRF-CC-G	XRF16™ Carrier Card	\$4,995 USD

RELATED PARTS

Part Number	Description	Resale
AES-XRF16-ZU39-G	XRF16™ Xilinx RFSoc System-on-Module 16-Channel / Gen-2 / 5 GHz	\$21,995 USD

Countries Available for Purchase: Americas, EMEA

CONTACT INFORMATION

North America
 2211 S 47th Street
 Phoenix, Arizona 85034
 United States of America
 eval.kits@avnet.com
 1-800-585-1602

Europe
 Gruber Str. 60c
 85586 Poing
 Germany
 marketing@silica.com
 +49-8121-77702

Europe (EBV)
 Im Technologiepark 2-8
 85586 Poing
 Germany
 http://ebv.com/contact

Japan
 Yebisu Garden Place Tower, 23F
 4-20-3 Ebisu, Shibuya-ku
 Tokyo 150-6023 Japan
 eval-kits-jp@avnet.com
 +81-(0)3-5792-8210

Asia
 151 Lorong Chuan
 #06-03 New Tech Park
 Singapore 556741
 XilinxAPAC@avnet.com
 +65-6580-6000