

## Start Application Development Immediately with The Avnet XRF16™ Module Using the XRF16™ Carrier Card and Avalon™ Software Suite

The XRF16 Xilinx RFSoc System-on-Module (SOM) is designed for integration into your deployed system. The XRF16 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 XRF16 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 over OCuLink, 10/25/100 GbE, and Xilinx Aurora.

The SOM RF-ADC and RF-DAC ports are made available using Samtec IsoRate<sup>®</sup> 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.

### Features

#### RF Interface & Synchronization

- 4x Samtec IsoRate<sup>®</sup> 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 10/25/100 GbE
  - 3x OCuLink for PCIe Gen3/4 or Xilinx Aurora

#### System Peripherals

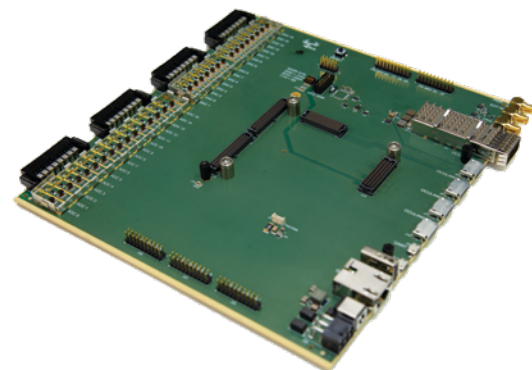
- 1GbE connector
- Micro USB2.0 for device connection
- Micro USB for JTAG & UART
- Micro USB for UART
- JTAG debug header
- 50 PL-GPIO at standard header pins
- 24 PS-GPIO at standard header pins

#### System

- Supply 12V power at 2.5mm center positive jack or 6-pin rugged locking connector
- 8.0" x 9.0" footprint

To purchase this kit, visit [avnet.me/xrf16-cc](https://avnet.me/xrf16-cc)

For information about XRF products, visit [avnet.me/xrf-family](https://avnet.me/xrf-family)



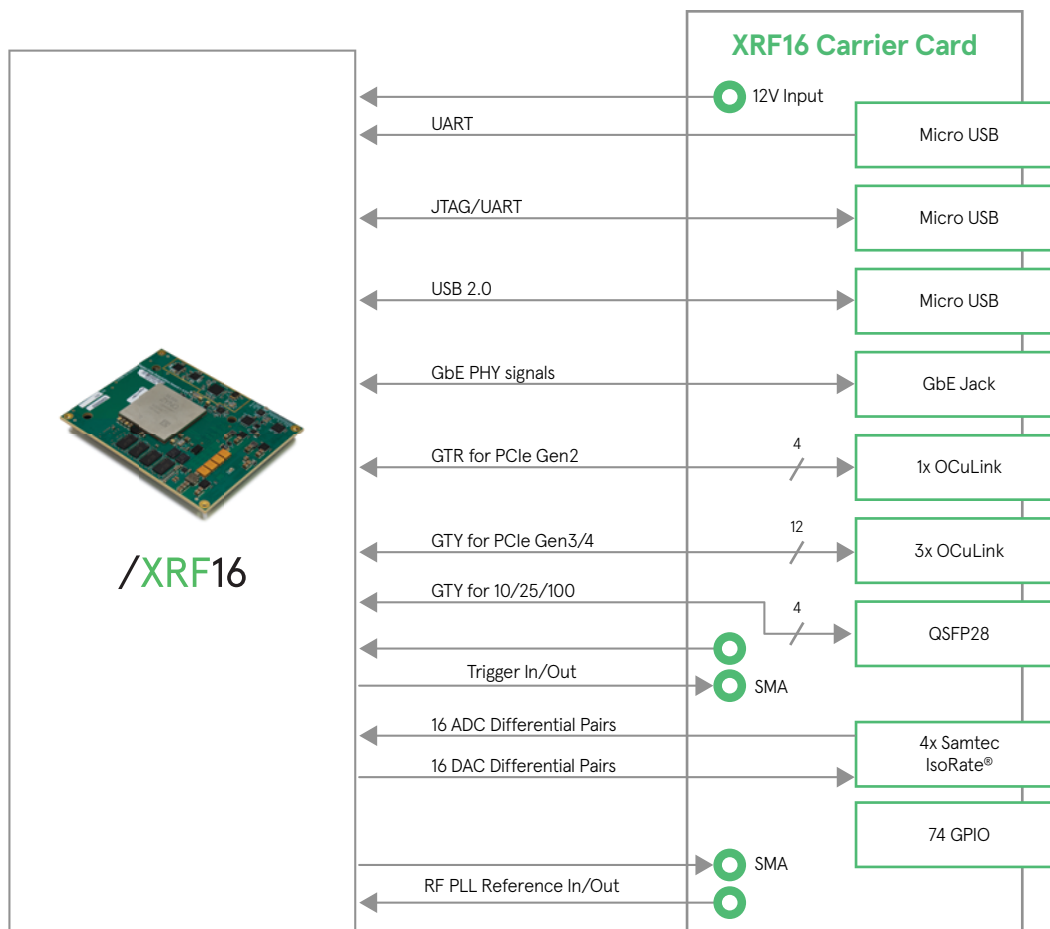
### Kit Includes

- XRF16 Carrier Card
- Avalon™ Software

### Target Apps

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

## Block Diagram



## Featured Manufacturers



## Parts

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

## Related Parts

Part Number	Description	Price
AES-XRF16-ZU39-G	XRF16™ Xilinx RFSoc System-on-Module 16-Channel / Gen-2 / 5 GHz	\$21,995 USD
AES-XRF16-ZU49-G	XRF16™ Xilinx RFSoc System-on-Module 16-Channel / Gen-3 / 6 GHz	\$24,995 USD

Countries Available for Purchase: Americas, EMEA

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