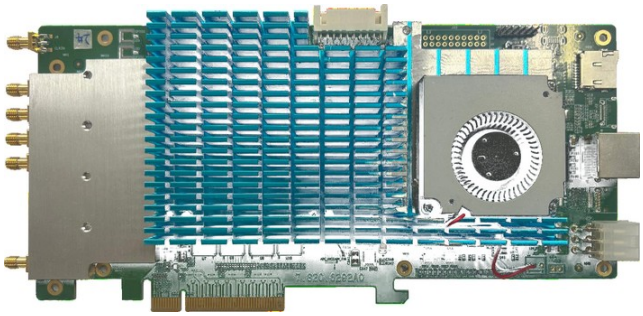
HPORTEK

PRODUCT DATASHEET

SYHS-RFSOC-PCIE

High-Speed Acquisition & Replay Card

The SYHS-RFSOC-PCIE is an RFSOC-based PCIe high-speed signal generation and acquisition board with 4 TX and 1 RX RF channels. It leverages the ZU47DR's integrated high-speed ADC/DAC for real-time RF acquisition and waveform generation, with PCIe high-throughput, low-latency data transfer and external reference clock support.



Features

• RFSOC core, high integration;

• 4TX/1RX RF channels; high-speed acquisition & arbitrary waveform generation;

• PCIe interface for low-latency, high-throughput data transfer; PCIe

• External ref. clock; multi-board sync;

• On-chip real-time DSP to reduce host load.

Published technical information

Parameter	Specification / typical value
ADC	
ADC Sampling Rate	5Gsps(MAX.)
ADC Resolution	14bit
ADC Effective Resolution	10bit
Input Power	≤1dBm (typical)
SFDR	≥60dBc
Typical Instantaneous Bandwidth	2GHz
Channel Phase Consistency	≤5°

Parameter	Specification / typical value
DAC	
DAC Sampling Rate	9.85Gsps(MAX.)
DAC Resolution	14bit
Output Power	≤5dBm
Typical Instantaneous Bandwidth	2GHz
FPGA & Memory	
Logic Resources	930K
CLB LUTs	425K
DSP Slices	4272
Interfaces	Custom configuration; contact engineering for frequency and specifications
PSDDR	4GB
PLLDDR	2GB
General	
Power Supply	DC 12V@3A

Prepared from the existing product catalogue. Specifications may change; typical values are not guaranteed limits. Confirm operating conditions, interfaces and ordering configuration with engineering. This document does not replace the equipment operating manual.

Engineering enquiries: george@hportek.com

https://www.hportek.com/en/product/high-speed-acquisition-board-syhs-rfsoc-pcie/