HPORTEK

PRODUCT DATASHEET

SYHS-8CH-DRF

8-Channel Direct RF Sampling Board

The SYHS-8CH-DRF is an 8-channel direct RF sampling board with a high-performance FPGA and RF direct-sampling ADCs, supporting high-speed sampling, digital channel reception, and high-speed data transfer.



Features

• High integration, easy system integration

• Abundant peripheral interfaces

• 8-channel high-speed ADC

• Configurable acquisition duration

• High sampling precision

• Configurable NCO frequency NCO

• Configurable trigger modes

• Configurable clock modes

Published technical information

Parameter	Specification / typical value
Electrical Performance	
Maximum Sampling Rate	≥3GSPS
Directly Samplable Signal Band	≥5GHz
Input Signal Passband	≥7GHz (-3dB cutoff bandwidth)
NSD	-148dBfs/Hz
ADC Resolution	14bit

Parameter	Specification / typical value
Maximum Receive Bandwidth	1.2GHz
DDC Count	2 DDCs per ADC channel
Maximum DDC Decimation Factor	≥8
NCO Resolution	≥48bit
ADC Channels	8
ADC Effective Number of Bits	（300MHz～1GHz）：10bit；（≥1GHz）：9.5bit
DUT Signal Power Range	Supports -20dBm to +5dBm
Sample Data Buffer Duration	≥20ms per channel
External Reference Clock Locking	Supports 10MHz ref. clock
General	
Dimensions (L×W×H)	312mm×263mm×21mm
Supply Voltage	12V
Operating Temperature	-20℃～+55℃
Operating Humidity	5%～95%

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.

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https://www.hportek.com/en/product/high-speed-acquisition-board-syhs-8ch-drf/