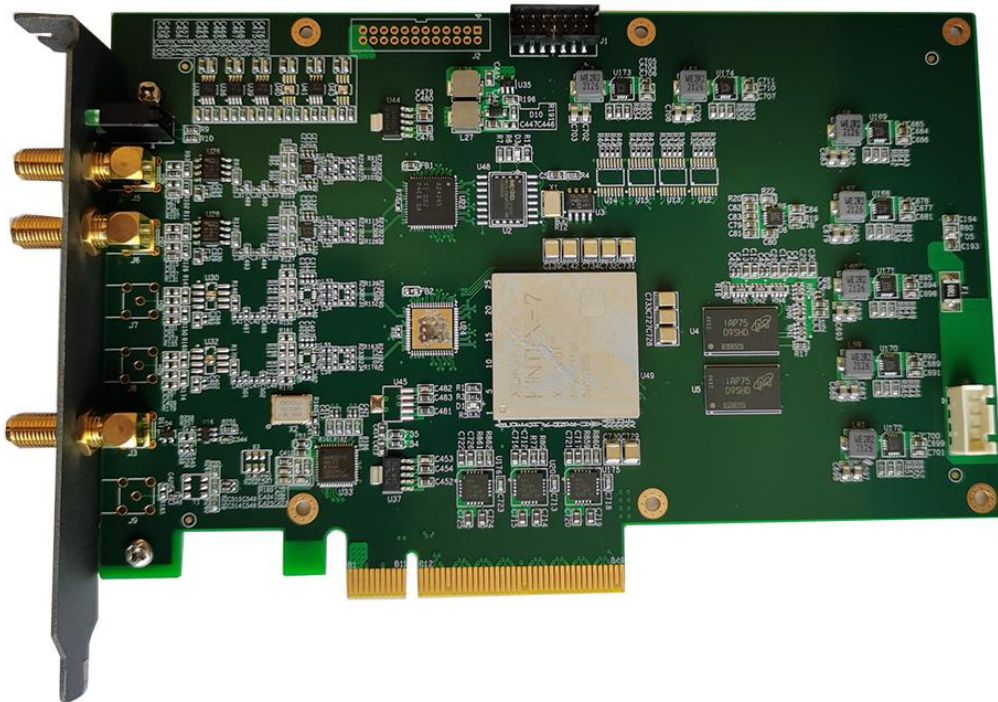


100MSps dual-channel high-speed acquisition fiber optic sensing and demodulation card

P/N:YB-DVS-100-DAQ



❖ Specification

- 14bits dual-channel simultaneous real-time sampling
- 100MSps sampling rate
- DC coupling, 50 Ω input impedance
- 2Vpp input voltage range, 0-60MHz analog bandwidth
- Up to 88dBc SFDR
- Trigger output pulse, 16-channel digital IO
- PCI Express x8 Lane high-speed transfer interface
- 2GB DDR3 cache
- Built-in fiber optic sensing and demodulation algorithm

❖ Overview

This is a PCIe x8 Lane, dual channel, 14bits respectively rate fiber optic sensing demodulation card with 100MSps sampling rate. on board XC7K160T/325T high performance FPGA chip with rich multiplier and RAM resources, with exponential amplification, averaging, filtering, power statistics and other fiber optic sensing demodulation algorithms. By using high-capacity data cache and high-speed data transmission engine technology, it supports real-time upload of raw data with data transmission rate up to 1.2GB/s. The driver has good compatibility and supports multiple versions of WIN7, WIN8 and WIN10 with 32/64bits.

❖ Specifications

Input Channel		
Number of input channels	2	
Input Impedance	50±1%	Ω
Input Signal Range	2V _{p-p} /10dBm	
Input coupling method	DC (Customizable AC coupling)	
Resolution	14	bits
Bandwidth(-3dB)	0-60	MHz
Spurious-free dynamic range (SFDR)	-1dBFS Input/100MSps	
f _N =26MHz	88.5	dBc
f _N =42MHz	88.9	dBc
Signal-to-noise ratio (SNR)	-1dBFS Input/100MSps	
f _N =26MHz	70	dBFS
f _N =42MHz	72	dBFS
Average noise density	-140	dBm/Hz
Internal reference clock		
Frequency	10	MHz
Stability	±0.5 (-20-60°C)	ppm
Trigger output		
High level minimum voltage	3.3	V
Pulse width resolution	10	nS
Minimum pulse width	10	nS
Digital input/output		
Number of channels	16	
Leveling standards	3.3V LVTTTL	
Output drive capability	8 (MAX)	mA
Signal Rate	50 (MAX)	Mbps
On-Board Cache		
	2	GB (DDR3L)

❖ Power supply and consumption

- Power supply voltage: 12V (gold finger power supply)
- Power consumption: 18W (Max)

❖ Temperature range

- Working temperature: -20~60°C
- Storage temperature: -40~85°C

❖ Mechanical dimensions

181mm(L) x 111mm(W)x20mm(D)