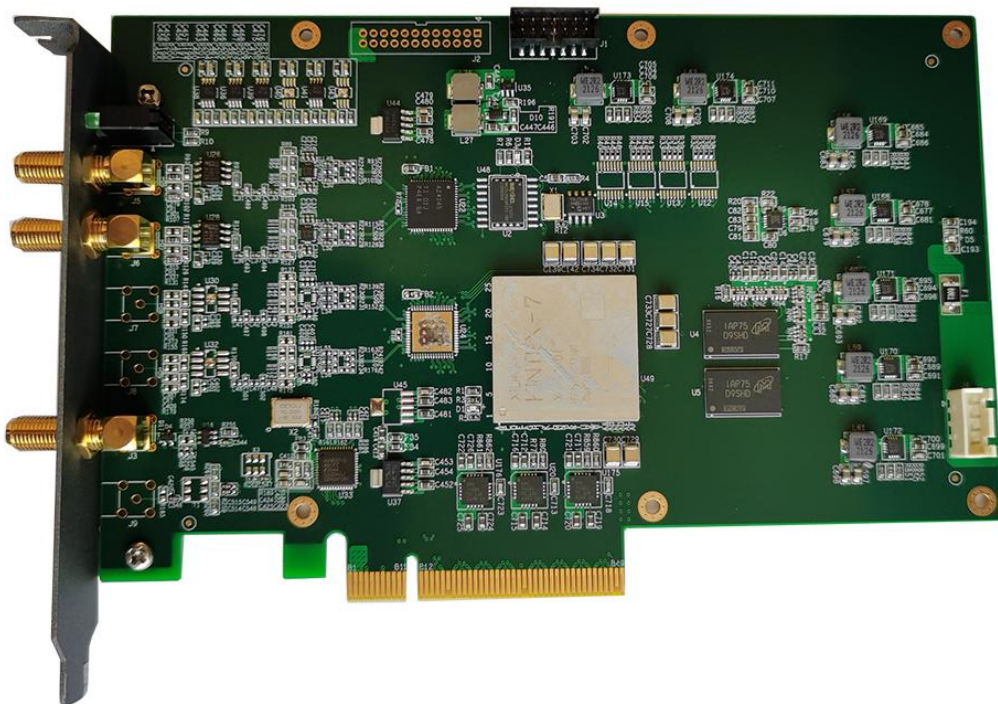


# 250MSps dual-channel high-speed data acquisition card

**P/N:YB-DAS-250-DAQ**



## ❖ Specification

- 14bits dual-channel simultaneous real-time sampling
- 250MSps sampling rate
- DC coupling, 50  $\Omega$  input impedance
- 2Vpp input voltage range
- 0-125MHz analog bandwidth (bandwidth can be customized)
- Up to 88dBc SFDR
- Trigger output pulse, 16-channel digital IO
- PCI Express x8 Lane high-speed transfer interface
- 2GB DDR3 cache

## ❖ Overview

This is a PCIe x8 Lane, dual channel, 14bits respectively rate high speed data acquisition card with 250MSps sampling rate. high performance FPGA chip on board with rich multiplier and RAM resources. The driver has good compatibility and supports multiple versions of WIN7, WIN8, WIN10 with 32/64bits, as well as CentOS and Ubuntu systems.

## ❖ Specifications

Input Channel		
Number of input channels	2	
Input Impedance	50±1%	Ω
Input Signal Range	2V <sub>p-p</sub> /10dBm	
Input coupling method	DC (Customizable AC coupling)	
Resolution	14	bits
Bandwidth(-3dB)	0-125 (other bandwidths can be customized)	MHz
Spurious-free dynamic range (SFDR)	-1dBFS Input/250MSps	
f <sub>IN</sub> =26MHz	88.5	dBc
f <sub>IN</sub> =42MHz	88.9	dBc
Signal-to-noise ratio (SNR)	-1dBFS Input/250MSps	
f <sub>IN</sub> =26MHz	70	dBFS
f <sub>IN</sub> =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	4	nS
Minimum pulse width	4	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)**