

A8B10G-GF22



8-bit, 10GSPS

Analog to Digital Converter IP block

General Description

The A8B10G is an ultra low-power, high performance analog to digital converter (ADC) intellectual property (IP) design block. It is a flash-type ADC, with 8-bit resolution and a sampling rate of up to 10 gigasamples per second (GSPS).

The A8B10G is a unique solution that provides the dual benefit of reaching an extremely high sampling speed without requiring large amounts of energy. It maintains its high performance while consuming an exceptionally low power of only 39 mW, making it an outstanding solution for designs with high efficiency, low power and high performance requirements.

The IP block has been designed in a 22nm CMOS process. Please contact the vendor about porting the IP to other processes.

Key Features

- ◆ 8 bit resolution
- ◆ 10 GSPS sampling rate
- ◆ 39 mW power
- ◆ 20 GHz Input Bandwidth
- ◆ Dynamic Performance:
 - ◆ SFDR: 53 dBc
 - ◆ ENOB: 7
- ◆ Hard IP block
- ◆ Global Foundries 22nm
- ◆ Radiation-tolerant design available: A8B10GRH

Applications

- ◆ High Performance Data Acquisition
- ◆ Direct RF Down Conversion
- ◆ High-speed test and measurement systems
 - Communications and Networking
 - ◆ Wideband RF Receivers
 - ◆ Phased Array Receivers
 - ◆ Optical Communications
- ◆ Military and Civil Aerospace applications

Contact us at:

P: +1 480-494-5618

E: info@alphacoreinc.com

Visit us at:

304 S Rockford Dr

Tempe, AZ 85288 USA

