

# A6B10G-GF22



## 6-bit, 10 GSPS

## Analog to Digital Converter IP block

### General Description

The A6B10G is a low-power, high-speed analog to digital converter (ADC) intellectual property (IP) design block. It is a flash-type ADC, with 6-bit resolution and a sampling rate of 10 gigasamples per second (GSPS).

The A6B10G is a unique solution that provides the dual benefit of reaching an extremely high sampling speed while maintaining an exceptionally low power consumption of approximately 187 mW, making it a perfect fit 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. The ADC IP is also available in a radiation-tolerant version, that can function under harsh environmental constraints.

### Key Features

- ◆ 6 bit resolution
- ◆ 10 GSPS sampling rate
- ◆ 187 mW power
- ◆ 25 GHz Input Bandwidth
- ◆ Dynamic Performance:
  - ◆ SFDR: 44 dBc
  - ◆ ENOB: 5.1
- ◆ Hard IP block
- ◆ GlobalFoundries 22 nm process
- ◆ Radiation-tolerant design available: A6B10GRH

### Applications

- ◆ High-speed test and measurement systems
- ◆ Communications and networking
  - ◆ Wideband RF Receivers
  - ◆ Phased Array Receivers
  - ◆ Optical Communications
- ◆ Military and Civil Aerospace applications

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