



A6B10G

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 212 mW, making it a perfect fit for designs with high efficiency, low power and high performance requirements.

The IP block has been designed and verified in a 28nm 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.

TO GET MORE INFORMATION

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KEY FEATURES

- ◆ 6 bit resolution
- ◆ 10 GSPS sampling rate
- ◆ 212 mW power
- ◆ 25 GHz Input Bandwidth
- ◆ Dynamic Performance:
 - ◆ SFDR: 40 dBc
 - ◆ ENOB: 4.9
- ◆ Hard IP block
- ◆ STMicroelectronics 28nm process
- ◆ Silicon-validated
- ◆ Radiation-tolerant design available: A6B10GRH

APPLICATIONS

- ◆ High-speed test and measurement systems
 - ◆ Oscilloscopes, spectrometers & digitizers
- ◆ Communications and networking
 - ◆ Satellite Subsystems
 - ◆ Wideband RF Receivers
 - ◆ Phased Array Receivers
 - ◆ Optical Communications
- ◆ Military and Civil Aerospace Applications