A4B20G-ST28

4-bit, 20 GSPS
Analog to Digital Converter IP block

General Description

The A4B20G is a low-power, high-speed analog to digital converter (ADC) intellectual property (IP) design block. It is a flash-type ADC, with 4-bit resolution and a sampling rate of 20 gigasamples per second (GSPS).

The A4B20G is a unique solution that provides the dual benefit of reaching an extremely high sampling speed while maintaining an exceptionally low power consumption of 104 mW.

The IP block has been designed 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.

Key Features

- 4 bit resolution
- 20 GSPS sampling rate
- 104 mW power
- 25 GHz Input Bandwidth
- Dynamic Performance:
  - SFDR: 26 dBc
  - ENOB: 3.1
- Hard IP block
- STMicroelectronics 28nm process
- Radiation-tolerant design available: A4B20GRH

Applications

- High-Speed Test and Measurement Systems
- Communications and Networking
  - Wideband RF Receivers
  - Phased Array Receivers
  - Optical Communications Receivers
- Radio Astronomy

Contact us at:

P: +1 480-494-5618

E: info@alphacoreinc.com

Visit us at:

304 S Rockford Dr

Tempe, AZ 85288 USA

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