A10B3M-XF180

10-bit, 3 MSPS
Analog to Digital Converter IP block

General Description

The A10B3M is an ultra-low-power and medium-speed analog to digital converter (ADC) intellectual property (IP) design block. It is a successive approximation register (SAR) ADC, with 10-bit resolution and a sampling rate of 3 megasamples per second (MSPS).

The A10B3M delivers unrivaled performance in the ultra-low power ADC market, with a power consumption of only 600 uW, and input bandwidth of 3 GHz.

The cost-effective IP block has been designed in a 180nm CMOS process.

The ADC IP is also available in a radiation-tolerant version, that can function under harsh environmental constraints.

Available as IP and Integrated Circuit

Key Features

- 10 bit resolution
- 3 MSPS sampling rate
- 600 uW power
- 10 MHz Input Bandwidth
- Dynamic Performance:
  - SFDR: 70 dBc
  - ENOB: 8.7
- Hard IP block
- X-Fab 180 nm process
- Radiation-tolerant design available: A10B3MRH

Applications

- Low-power Data Acquisition
- Wearable Medical Devices
- Ultrasound and Medical Imaging
- Battery-powered, Portable or Handheld Systems
- Internet-of-Things

Contact us at:

P: +1 480-494-5618

E: info@alphacoreinc.com

Visit us at:

304 S Rockford Dr

Tempe, AZ 85288 USA

Part no.: 06 1 1P0 043 XF180

Rev: 20230817

*Specifications subject to change