Analog IP

12bit 2MSps A/D Converter

Overview

This IP is Successive Approximation Register (SAR) Analog to Digital Converter.

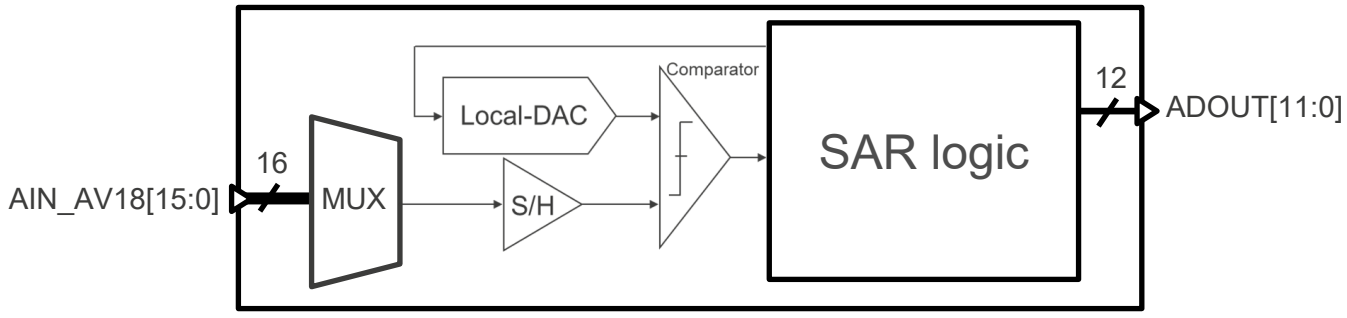
Technology

Process: T22ULP
Metallization technology: 1P10M

Features

- Conversion method: Successive Approximation Register (SAR)
- Sampling rate: 2MSps(Max.)
- A/D clock frequency: 108 MHz
- Resolution: 12 bit
  - DNL= -1LSB(Min.) / +2LSB(Max.)
  - INL = -4LSB(Min.) / +4LSB(Max.)
- Analog supply voltage： VCCA = 1.8 ± 0.15 V
- Digital supply voltage: VDD = 0.9 ± 0.09 V
- Consuming current: 1mA(max)
- Junction Temperature: -40 ― 125 ℃
- Input Channel: 16

Block diagram



CTPD-24-147
R06PF0060EJ0101