

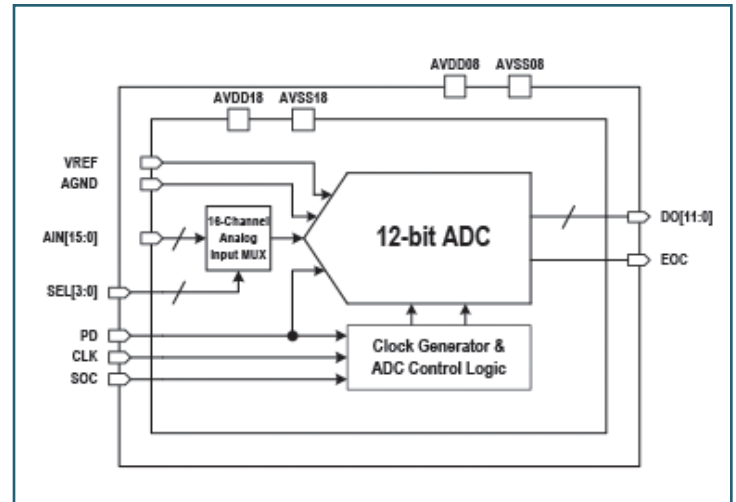
## 12-Bit 1MS/s 16 Channel ADC

### Overview

This is a 12-bit 1MS/s analog-to-digital converter (ADC) with a 16-channel analog input MUX and level-shifters for a low voltage digital interface. It converts an analog input signal to 12-bit digital output codes at a maximum conversion rate of 1MS/s with 20MHz internal main operation clock and 1MHz sampling clock with 30% duty cycle.

### Key Features

- 14nm Low Power CMOS device technology
- Dual power supply : 1.8V, 0.8V
- Resolution: 12-bit
- Conversion rate: 1MS/s
- Input range: AGND to VREF (0~AVDD18)
- Input frequency: DC to 100kHz (@FS=1MS/s)
- DNL/INL: 3LSB / 6LSB
- SNDR: 54dB



### Deliverables

- Data Sheet
- User Guide
- Verilog model
- Timing DK
- CDL netlist
- Layout (GDSII or OAS)

### Applications

- Mobile/Consumer/IoT

# SAMSUNG Foundry

For more information, please contact us at [IP@silvaco.com](mailto:IP@silvaco.com).

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