

# QCADC14-18U



## 10 bit, 1 Msps Low Power SAR ADC with 16 input Multiplexer

### General Description

The QCADC14-18U cell is a 10 bit, low power Analog to Digital converter capable of running up to a 1 Msps conversion rate. The cell contains an internal bandgap reference generator that creates an internal 1.2 volt reference which is used as the full scale voltage. An external voltage reference can also be used to determine the full scale voltage. A sixteen input analog multiplexer is included that allows sampling of multiple signals. The QCADC14-18U cell is useful for a variety of data signal conversion applications.

### Features

- Designed for a 0.18 um, 1P4M CMOS process (M4 is thick)
- Cell uses 1P4M
- Size – 600.00 um x 600.00 um
- Sampling rates from 100 Ksps up to 1 Msps
- Bias circuits internal to circuit
- Low power supply current, 3 mA typical
- Pin provided for power-down mode
- Utilizes MMC capacitors for smaller size

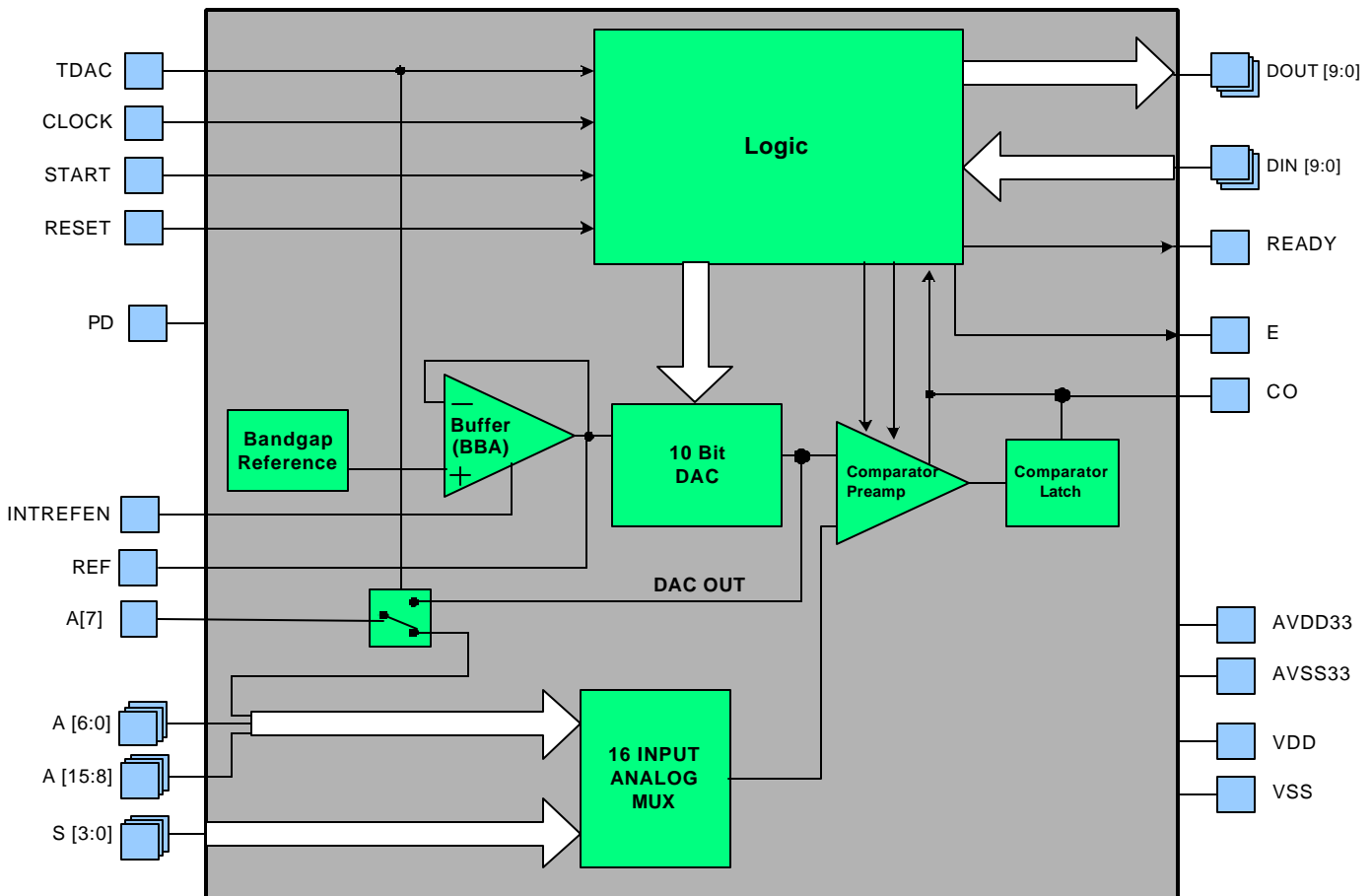


Figure 1. QCADC14-18U Block Diagram