



# 10-bit 1MSPS DAC

## CCAD901 Datasheet

### Product Description

The CCAD901 is a general-purpose high precision 10-bit 1MSPS DAC. The circuit was designed and fabricated in TSMC's 0.18u CMOS technology, and has been fully characterized for adherence to the Electrical Performance Specifications.

It is available as a GDSII layout file, and includes a Cadence library containing schematics, symbols and cell layouts. CCAD also provides an AHDL model for system simulation. The CCAD901 is an ideal circuit for integration into a wide variety of ASICs and ASSPs.

CCAD also offers customization and integration services.

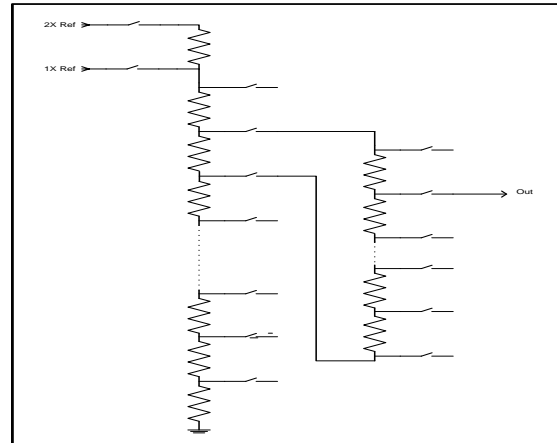
### Features

- Dual Power Rail: 1.96V to 3.65V for analog and 1.58V to 2.02V for digital
- High Precision [10-bit]
- Fast Conversion Time [1us]
- High Throughput [1MSPS]
- Scaled or Unscaled Reference
- Wide Input Range [0.5V to Avdd]
- Industrial Temperature Range [-40C to 125C]
- Die Area [275um x 441um]
- Available in TSMC 0.18u CMOS
- Portable to other CMOS processes

### Applications

- General Purpose DAC
- Data Acquisition Systems

### Circuit Diagram



Differential Nonlinearity (DNL < 0.2LSB)

