CAE108 SARADC 8IL

The SARADC 8IL generation 5c is a standalone version of Caeleste's on-chip image sensor compatible SARADC family.

Features

- Successive Approximation Register (SAR), interleaved 8-fold
- 12 bit default nominal resolution
- 14 bit and 16 bit resolution by in-ADC transparent oversampling, resulting in 12 and 13 ENOB
- 0.7LSB noise, 0.7LSB DNL, 4LSB INL in nominal mode.
- TID, SEU and SEL radiation tolerant
- Unsupervised calibration and code gap removal.
- Accepts pseudo-differential, fully differential and single-ended signals
- Input sample rate nominal 40 MHz
- Analog supply 3.3V
- Digital supply 1.8V
- differential (sub-)LVDS / CML output at 480 Mbps nominal rate

Application

Companion ADC of space image sensors
Companion ADC of cryogenic image sensors
ADC for nuclear and hazardous environment inspection applications

The evaluation kit includes

- Ceramic or COB packaged ADC8 prototype
- PCB board with socket
- Differential BNC input
- LVDS output
- Demonstration program running on PC via interface