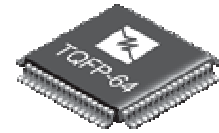


## CDK2307D - 12/13-bit, 80MSPS, Dual ADC

The CDK2307 is a high performance, low power dual Analog-to-Digital Converter (ADC). The ADC employs internal reference circuitry, a CMOS control interface and CMOS output data, and is based on a proprietary structure. Digital error correction is employed to ensure no missing codes in the complete full scale range. Several idle modes with fast startup times exist. Each channel can independently be powered down and the entire chip can either be put in Standby Mode or Power Down mode. The different modes are optimized to allow the user to select the mode resulting in the smallest possible energy consumption during idle mode and startup. The CDK2307 has a highly linear THA optimized for frequencies up to Nyquist. The differential clock interface is optimized for low jitter clock sources and supports LVDS, LVPECL, sine wave and CMOS clock inputs.



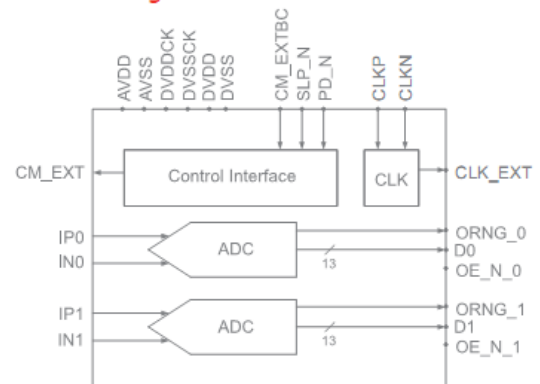
### Features

- 13-bit resolution
- 80MSPS maximum sampling rate
- Ultra-low power dissipation: 102mW
- 72.4 dB SNR at  $F_{in} = 8\text{MHz}$
- 11.5 bits ENOB
- 1.8V core supply voltage
- 1.7V to 3.6V I/O supply voltage
- Parallel CMOS output

### Applications

- Medical imaging
- Portable test equipment
- Digital oscilloscope
- IF communications

### Functional Block Diagram



### Ordering Information

Part #	Status	Package	Pb-Free	Temp Range	Budgetary 1K Price	Packing method	Sample	RFQ
CDK2307DITQ64	Production	TQFP-64	Yes	-40°C to +85°	\$25.60	Tray	Yes	RFQ
CDK2307DITQ64X	Production	TQFP-64	Yes	-40°C to +85°	\$25.60	Tape and Reel	Yes	RFQ