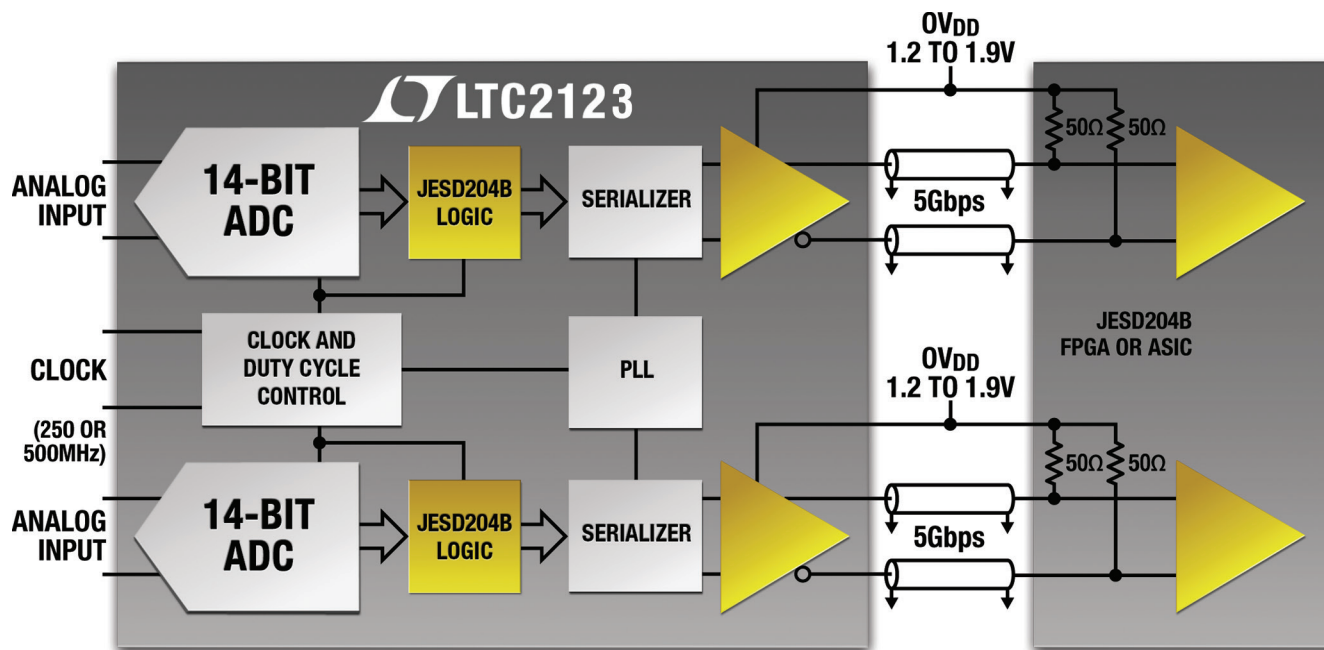


# 14-Bit 250MSPS ADC Family with JESD204B Serial Interface



## 5Gbps Single Lane or Two Lane 2.5Gbps JESD204B Compliant Serial Outputs

The LTC2123 is a family of dual, 14-bit 170MSPS and 250MSPS, high IF sampling ADCs that utilize a JESD204B compliant interface for easy interfacing to FPGA SerDes ports. Each ADC output can be digitized into a single lane with up to 5Gbps (20-bit encoding at 250MSPS), or split into two lanes for data transfer at a slower 2.5Gbps. The LTC2122 allows routing the outputs of the two ADCs onto a single 6Gbps lane if sampling at 150MSPS or below. High I/F undersampling performance is made possible by the easy to drive 1.25GHz input S/H circuit.

### Features

- 5Gbps JESD204B Serial Interface
- 70dB SNR, 90dB SFDR
- Single 1.8V Supply
- Easy to Drive 1.5V<sub>P-P</sub> Input Range
- 1.25GHz Full Power Bandwidth S/H
- Optional Clock Duty Stabilizer
- Divide-by-Two Clock Circuit
- Low Power Sleep and Nap Modes
- Serial SPI Port for Configuration
- 48-Pin (7mm × 7mm) QFN Package

### LTC2123 ADC Family

	170MSPS	250MSPS
14-Bit	2122	2123
Power Consumption	376mW/Ch	432mW/Ch



1.8V Dual ADCs,  
JESD204B



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# High Speed ADC Portfolio

	10Msps	20Msps	25Msps	40Msps	65Msps	80Msps	105Msps	125Msps to 150Msps	170Msps	210Msps	250Msps	310Msps
16-Bit	Single	2202	2201	2203	2204	2205 2215 2272	2206 2216 2273	2207 2217 2274	2208	2209	2107	
	Dual		2269	2160	2161	2162	2163	2164	2165			
14-Bit	Single	2245		2246	2247	2248	2249	2254	2255			
	Dual	2295		2296	2297	2298	2299	2284	2285	2155-14	2156-14	2157-14
	Quad			2170-14	2171-14	2172-14	2173-14	2174-14	2175-14			
	Octal			9006-14	9007-14	9008-14	9009-14	9010-14	9011-14			
12-Bit	Single	2225		2226	2227	2228	2229	2252	2253	2221	2220	2241-12
	Dual	2290		2291	2292	2293	2294	2282	2283		2155-12	2156-12
	Quad			2170-12	2171-12	2172-12	2173-12	2174-12	2175-12			
	Octal			9006-12	9007-12	9008-12	9009-12	9010-12	9011-12			
10-Bit	Single			2236	2237	2238	2239	2250	2251	2231	2230	2241-10
	Dual			2286	2287	2288	2289	2280	2281			

## Parallel



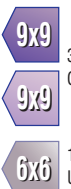
1.8V Lowest Power, Single & Dual ADCs, CMOS/DDR CMOS/DDR LVDS



3.3V High SNR/SFDR ADCs, CMOS/LVDS



2.5V High SNR/SFDR ADC, DDR LVDS



3.3V/2.5V ADCs, CMOS/LVDS



1.8V High IF Undersampling Single & Dual ADCs, DDR LVDS



3V ADCs, CMOS  
3V Dual ADCs, CMOS

## Serial



3.3V Single ADCs, JESD204  
1.8V Dual ADCs, Serial LVDS  
1.8V Dual ADCs, JESD204B



1.8V Dual ADCs, Serial LVDS  
1.8V Quad ADCs, Serial LVDS  
1.8V Octal ADCs, Serial LVDS