



# 14-/12-Bit 310Mps Dual/Single ADC Family

	170Mps	210Mps	250Mps	310Mps
14-Bit	2155-14	2156-14	2157-14	2158-14
	2150-14	2151-14	2152-14	2153-14
12-Bit	2155-12	2156-12	2157-12	2158-12
	2150-12	2151-12	2152-12	2153-12
Power Consumption	284mW/Ch	308mW/Ch	325mW/Ch	362mW/Ch

 6x6 QFN	1.8V Single ADCs DDR LVDS Outputs	 9x9 QFN	1.8V Dual ADCs DDR LVDS Outputs
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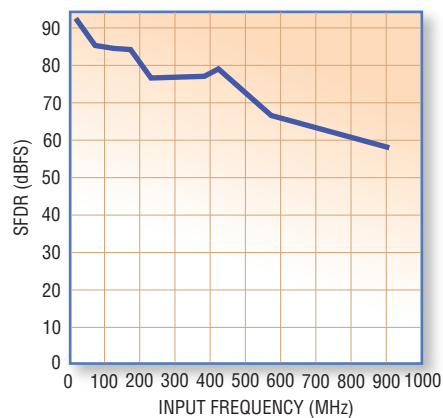
## High Undersampling Performance to 900MHz

The LTC®2153 and LTC2158 are a family of single and dual, high IF sampling 14-/12-bit, 170Mps to 310Mps ADCs that maintain excellent SFDR performance at input frequencies up to 900MHz. These ADCs have been specifically designed to meet the needs of today's communications systems, where high undersampling capability saves cost by eliminating downconversion stages.

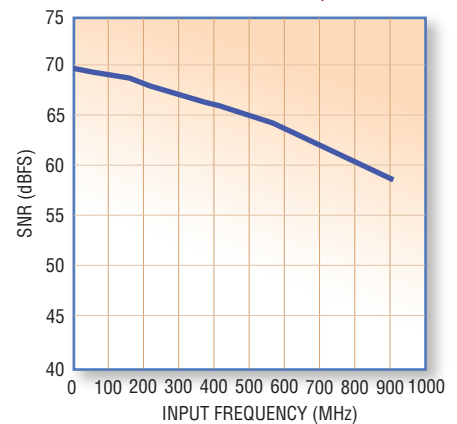
### Features

- 1.8V Single-Supply Operation
- DDR LVDS Outputs
- Easy-to-Drive 1.5V<sub>p,p</sub> Input Range
  - 1.32V<sub>p,p</sub> for LTC2158/LTC2153
- 1.25GHz Full Power Bandwidth S/H
- Optional Clock Duty Cycle Stabilizer
- Low Power Sleep and Nap Modes
- Serial SPI Port for Configuration
- Easy Evaluation Using PScope™ Tool

LTC2157-14:  
SFDR vs Input Frequency,  
-1dBFS, 250Mps



LTC2157-14:  
SNR vs Input Frequency,  
-1dBFS, 250Mps



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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	2206	2207	2208	2209			
16-Bit	Dual											
		2269	2160	2161	2162	2163	2164	2165				
14-Bit	Single											
	2245		2246	2247	2248	2249	2254	2255				
14-Bit	Dual											
	2295		2296	2297	2298	2299	2284	2285	2155-14	2156-14	2157-14	2158-14
14-Bit	Quad											
			2170-14	2171-14	2172-14	2173-14	2174-14	2175-14				
14-Bit	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	2242-12
12-Bit	Dual											
	2290		2291	2292	2293	2294	2282	2283	2155-12	2156-12	2157-12	2158-12
12-Bit	Quad											
			2170-12	2171-12	2172-12	2173-12	2174-12	2175-12				
10-Bit	Single											
			2236	2237	2238	2239	2250	2251	2231	2230	2241-10	2242-10
10-Bit	Dual											
			2286	2287	2288	2289	2280	2281				

## Parallel

6x6

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

7x7

7x7

3.3V High SNR/SFDR ADCs, CMOS/LVDS

9x9

9x9

3.3V/2.5V ADCs, CMOS/LVDS

9x9

6x6

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

9x9

5x5

3V ADCs, CMOS

9x9

3V Dual ADCs, CMOS

## Serial

6x6

3.3V 2-Wire Serial JESD204 ADCs

7x8

1.8V Dual ADCs, Serial LVDS

6x6

1.8V Dual ADCs, Serial LVDS

7x8

1.8V Quad ADCs, Serial LVDS

11x9

1.8V Octal ADCs, Serial LVDS