



# 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

	1.8V Single ADCs DDR LVDS Outputs		1.8V Dual ADCs DDR LVDS Outputs
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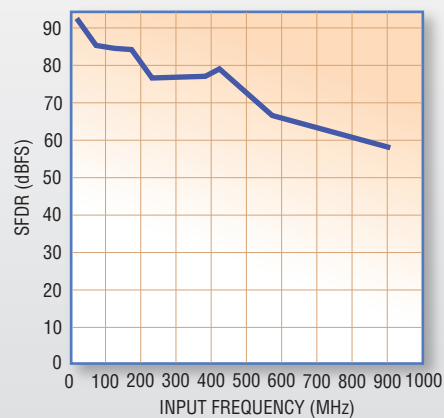
## High Undersampling Performance to 900MHz

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.

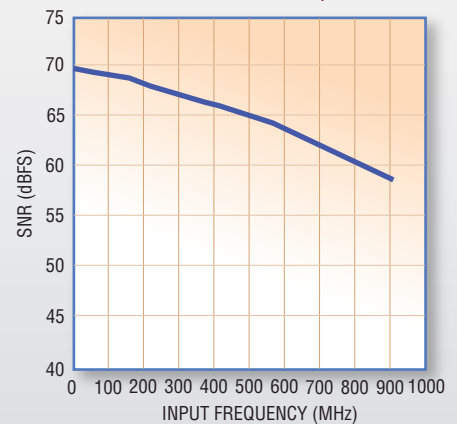
### Features

- 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	25Msps	40Msps	65Msps	80Msps	105Msps	125Msps to 150Msps	170Msps	210Msps	250Msps	310Msps
16-Bit	Single	2202	2203	2204	2205 2215 2272	2206 2216 2273	2207 2217 2274	2208	2209			
	Dual		2160 2180 2190	2161 2181 2191	2162 2182 2192	2163 2183 2193	2164 2184 2194	2165 2185 2195				
14-Bit	Single	2245	2246 2256-14	2247 2257-14	2248 2258-14	2249 2259-14	2254 2260-14	2255 2261-14 2262-14	2150-14	2151-14	2152-14	2153-14
	Dual	2295	2296 2140-14 2263-14	2297 2141-14 2264-14	2298 2142-14 2265-14	2299 2143-14 2266-14	2284 2144-14 2267-14	2285 2145-14 2268-14	2155-14	2156-14	2157-14	2158-14
	Quad		2170-14	2171-14	2172-14	2173-14	2174-14	2175-14				
	Octal					9009-14	9010-14	9011-14				
12-Bit	Single	2225	2226 2256-12	2227 2257-12	2228 2258-12	2229 2259-12	2252 2260-12	2253 2261-12 2221 2262-12	2220	2241-12	2242-12	2153-12
	Dual	2290	2291 2140-12 2263-12	2292 2141-12 2264-12	2293 2142-12 2265-12	2294 2143-12 2266-12	2282 2144-12 2267-12	2283 2145-12 2268-12	2155-12	2156-12	2157-12	2158-12
	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
	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