



Part Number ADSD-1420S-EX, Sampling A/D Converters

The ADSD-1420S is a functionally complete, dual 14 bit, 20MSPS, sampling A/D converter. Its standard, 40 pin triple-wide SMT package contains two fast settling sample/hold amplifiers, two 14 bit A/D converters, multiplexed output buffers, a precision reference, and all the timing and control logic necessary to operate from either two or a single start convert pulse. The ADSD-1420S is optimized for wideband frequency-domain applications and is fully FFT tested. The ADSD-1420S requires only +/-5V supplies and typically consumes 1.6 watts. The digital output is capable of driving 5V or 3V logic systems. -55°C to +125°C operating temperature range.

Image is for illustration purposes only

Specifications

Resolution	14 Bit
Number of Channels	2
Sampling Rate	20 MHz
Power Consumption	1.6 W
Differential Non-Linearity Error/Other	1.75 LSB
Integral Non-Linearity Error/Other	2.0 LSB
Package Type	SMT
Input Range 1st (min)	-2.5 V
Input Range 1st (max)	2.5 V
Required Supply Voltage 1st	5 V
Required Supply Voltage 2nd	-5 V
Total Harmonic Distortion	-80 dB
Signal to Noise Ratio	75 dB
Analog Bandwidth	25 MHz
Operating Temp. Range (min)	-55 °C
Operating Temp. Range (max)	+125 °C
RoHS	No
Status	Recommended for new design

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