

KEY ELECTRICAL CHARACTERISTICS

Parameter	Notes	MIN	TYP	MAX	UNIT
Full scale differential input voltage range	V(inp)-V(inn)	±0.0039*VREF			mV
Effective-Number-of-Bits (ENBs) ⁽¹⁾	Gain=128, Rate=10SPS	19.5			Bits
	Gain=128, Rate=40SPS	18.4			
Noise-Free Bits (NFBs) ⁽²⁾	Gain=128, Rate=10SPS	17.1			Bits
	Gain=128, Rate=40SPS	16.0			
Integral Nonlinearity (INL)	Differential input, end-point fit	±0.001			% of FSR
Common mode input range		AGND+0.9		AVDD-1.3	V
VREF input voltage range		1.8		AVDD	
Output data rate		10/40			Hz
Output data coding	2's complement	800000		7FFFFFF	HEX
Output settling time ⁽³⁾		400/100			ms
Input offset		0.01			mV
Input referred noise		50			nV(rms)
Temperature drift	Input offset	±15			nV/°C
	Gain	±7			ppm/°C
Input common mode rejection		100			dB
Power supply rejection		100			dB
Power supply voltage	DVDD	2.6		5.5	V
	AVDD	2.6		5.5	V
Analog supply current	Normal	1100			μA
	Power down	0.3			
Digital supply current	Normal	100			μA
	Power down	0.2			

(1) (2) ENBs = $\ln(FSR/RMS\ Noise)/\ln(2)$, NFBs = $\ln(FSR/Peak-to-Peak\ Noise)/\ln(2)$. FSR is full-scale input or output. RMS Noise corresponds to input or output RMS noise. Peak-to-Peak Noise corresponds to input or output peak-to-peak noise.

(3) Settling time refers to the time from power up, reset, input channel change and gain change to valid stable output data.

Table 2 Key Electrical Characteristics