

AD7284 Cpk Analysis on 7.5V Vdd Datasheet Parameters

Parameter	Datasheet Limits				-45C
	Min	Typ	Max	Unit	Mean
PRIMARY ADC DC ACCURACY (VPIN0 to VPIN8) Total Unadjusted Error VPAUXn-Vss Range VIN Range = 0 V to 5 V ^{***}		±1	±10	mV	-1.3290
PRIMARY ADC DC ACCURACY (VPAUX1 to VPAUX4) Total Unadjusted Error VIN range = 0 V to 5 V ^{***}		±2	±10	mV	3.2720
PRIMARY ADC DC ACCURACY (VSTACK6) Total Unadjusted Error VSTACK Range = 10 V to 40 V ^{***} VSTACK Voltage Accuracy VSTACK Range = 10 V to 40 V ^{***}		±16	±50	mV	-3.2340
SECONDARY ADC DC ACCURACY (VSIN0 to VSIN8) Total Unadjusted Error ^{***}		±15	±25	mV	0.3527

Notes

* For parameters with an upper and lower limit, the Cpk value quoted is the lowest value between Cpk-Hi and Cpk-Low.

** For parameters that are tested on more than one channel, the Cpk value quoted is from the channel with the lowest Cpk.

*** For tests that return LSB as a result, a conversion to mV was necessary.

Temperature Data		25C Temperature Data			130C Temperature Data		
Sigma	Cpk	Mean	Sigma	Cpk	Mean	Sigma	Cpk
0.8193	12.80	-1.2870	0.7604	13.81	3.3920	0.9884	9.91
1.3830	7.11	1.7950	1.2690	8.14	12.4600	1.9830	3.42
0.7192	3.25	-3.0210	0.5220	19.01	0.1405	0.5111	21.29
0.0945	16.83	0.0667	0.3701	29.47	-0.1156	0.3846	28.32

† Cpk-Lo.
the lowest Cpk.