



AD4080 PCN Data Sheet Revision

Data Sheet Specification Comparison – Change no. 1

Data Sheet Specification Table 1 – page 3.

DC Performance Section: Gain Error Drift typ. change

From
Rev. A (Old)

DC PERFORMANCE		20			Bits
No Missing Codes					LSB
Differential Nonlinearity (DNL)			±0.5	±0.99	ppm
Integral Nonlinearity (INL)			±4	±8	LSB RMS
Transition Noise			6.9		%FS
Gain Error	T _A = 25°C		0.01	±0.025	ppm/°C
Gain Error Drift			0.095		ppm/°C
Zero Error	T _A = 25°C		15		μV
Zero Error Drift	T _A = -40°C to +85°C		0.05		ppm/°C
Power Supply Rejection	VDD33 = 3.3 V ± 5%		-89		dB
	VDD11 = 1.1 V ± 5%		-68		dB
Low Frequency Noise	Bandwidth = 0.1 Hz to 10 Hz		174		nV RMS

To
Rev. B (New)

DC PERFORMANCE		20			Bits
No Missing Codes					LSB
Differential Nonlinearity (DNL)			±0.5	±0.99	ppm
Integral Nonlinearity (INL)			±4	±8	LSB RMS
Transition Noise			6.9		%FS
Gain Error	T _A = 25°C		0.01	±0.025	ppm/°C
Gain Error Drift	T _A = -40°C to +85°C		0.2		ppm/°C
Zero Error	T _A = 25°C		15		μV
Zero-Error Drift	T _A = -40°C to +85°C		0.05		ppm/°C
Power Supply Rejection	VDD33 = 3.3 V ± 5%		-89		dB
	VDD11 = 1.1 V ± 5%		-68		dB
Low Frequency Noise	Bandwidth = 0.1Hz to 10Hz		174		nV RMS

Data Sheet Specification Comparison – Change no. 2

Data Sheet Specification Table 1 – page 4.

Digital Inputs Sections as shown below – VIH min change

From
Rev. A (Old)

DIGITAL INPUTS (CNV, CS, SCLK, and SDI)	VDD11 supply domain inputs	0	2.5	
Input Voltage Tolerance				
Logic Levels				
Input Low Voltage, V_{IL}		0	$0.36 \times VDD11$	
Input High Voltage, V_{IH}		$0.73 \times VDD11$	2.5	
DIGITAL INPUTS (GPIOx, DCS, and DCLK)	IOVDD supply domain inputs			
Input Voltage Tolerance		0	1.26	V
Logic Levels				
Input Low Voltage, V_{IL}		0	$0.36 \times IOVDD$	V
Input High Voltage, V_{IH}		$0.73 \times IOVDD$	IOVDD	V
Input Current				
Input Low Current, I_{IL}		-1	+1	μA
Input High Current, I_{IH}		-1	+1	μA
Input Pin Capacitance			4.5	pF

To
Rev. B (New)

DIGITAL INPUTS (CNV, CS, SCLK, and SDI)	VDD11 supply domain inputs	0	2.5	
Input Voltage Tolerance				
Logic Levels				
Input Low Voltage (V_{IL})		0	$0.36 \times VDD11$	
Input High Voltage (V_{IH})		0.92	2.5	
DIGITAL INPUTS (GPIOx, DCS, and DCLK)	IOVDD supply domain inputs			
Input Voltage Tolerance		0	1.26	V
Logic Levels				
V_{IL}		0	$0.36 \times IOVDD$	V
V_{IH}		0.92	IOVDD	V
Input Current				
Input Low Current (I_{IL})		-1	+1	μA
Input High Current (I_{IH})		-1	+1	μA
Input Pin Capacitance			4.5	pF