

As a MEMS pioneer, Analog Devices has held a leadership position as a large volume supplier of integrated MEMS accelerometers and gyroscopes. The ADXL products are the foundation for Analog Devices' accelerometer family. Available in low-g or high-g sensing ranges iMEMS (Integrated Micro Electro Mechanical

System) accelerometers are used to measure position, motion, tilt, shock, and vibration in a broad array of applications. Analog Devices offer a broad accelerometer portfolio, including high performance, low power consumption and small size.

Description	G Range	Axes	Sensitivity	Bandwidth	Voltage	Supply Current	Package	Digi-Key Part No.	Price Each			Tape and Reel	
									1	25	100	Qty.	Pricing
Single Axis Accelerometers — RoHS Compliant													
Low Power, High Precision Low Power, ADXL78	±1.5g ±35g	X	1000mV/g	10Hz	3 – 6	0.7mA	8-CLCC	ADXL103CE-ND	16.01	14.42	12.79	—	—
Low Power, ADXL78	±50g		55mV/g	400Hz	5	1.3mA	8-CLCC	AD22279-A-R2CT-ND‡	11.80	10.62	9.42	250	2256.75
Low Power, ADXL78	±70g		38mV/g	400Hz	5	1.3mA	8-CLCC	AD22280-R2CT-ND‡	11.80	10.62	9.42	250	2256.75
Low Power, ADXL193	±120g		27mV/g	400Hz	5	1.3mA	8-CLCC	AD22281-R2CT-ND‡	11.80	10.62	9.42	250	2256.75
Low Power, ADXL193	±250g		18mV/g	400Hz	5	1.5mA	8-CLCC	AD22282-A-R2CT-ND‡	12.98	11.69	10.37	250	2483.06
Low Power, ADXL193	±250g	8mV/g	400Hz	5	1.5mA	8-CLCC	AD22283-B-R2CT-ND‡	12.98	11.69	10.37	250	2483.06	
Dual Axis Accelerometers — RoHS Compliant													
Low Power, Digital Output Low Power, ADXL78	±2g	X, Y	12.5%/g	6kHz	2.7 – 5	0.5mA	8-LCC	ADXL202AE-ND*	17.67	16.50	15.32	—	—
Low Power, High Precision Low Power, ADXL78	±2g		12.5%/g	6kHz	2.7 – 5	0.5mA	8-LCC	ADXL202JE-ND*	15.48	14.45	13.42	—	—
Low Power, Single IC Chip Low Power, ADXL78	±1.7g		1000mV/g	10Hz	3 – 6	0.7mA	8-CLCC	ADXL203CE-ND	22.77	21.26	19.74	—	—
Low Power, Digital Out	±1.7g		620mV/g	2.5kHz	3 – 6	0.5mA	8-LCC	ADXL204CE-ND	22.77	21.26	19.74	—	—
Low Power, Small, Thin Low Power	±1.2g		30%/g	60Hz	3 – 6	0.7mA	8-LCC	ADXL213AE-ND	17.67	16.50	15.32	—	—
Low Power, Small, Thin Low Power	±5g	X, Y	174mV/g	2.5kHz	2.4 – 5.25	0.45mA	16-Lead LFCSP	ADXL320JCP-ND	8.43	7.59	6.73	—	—
Low Power	±18g		57mV/g	50Hz	2.4 – 6	0.49mA	16-LFCSP	ADXL321JCP-ND	8.43	7.59	6.73	—	—
Low Power	±2g		420mV/g	60Hz	2.4 – 6	0.45mA	16-LFCSP	ADXL322JCP-ND	8.43	7.59	6.73	—	—
Low Power, Small Low Power, ADXL278	±3g		300mV/g	1600Hz	1.8 – 5.25	320µA	16-LFCSP	ADXL323KCPZ-RLCT-ND‡	9.62	7.70	6.50	4,000	5964.40/M
Low Power, ADXL278	±35g		55mV/g	400Hz	5	2.2mA	8-CLCC	AD22284-A-R2CT-ND‡	15.95	14.89	13.82	250	3388.31
Low Power, ADXL278	±50g	X, Y	38mV/g	400Hz	5	2.2mA	8-CLCC	AD22285-R2CT-ND‡	15.95	14.89	13.82	250	3388.31
Low Power, ADXL278	±70g		27mV/g	400Hz	5	2.2mA	8-CLCC	AD22286-R2CT-ND‡	15.95	14.89	13.82	250	3388.31
Triple Axis Accelerometers — Low Power — RoHS Compliant													
Low Power, Small	±3g	X, Y, Z	300mV/g	1.6(X,Y) 0.55(Z)	2 – 3.6	0.2mA	16-LFCSP	ADXL330KCPZ-RLCT-ND‡	11.71	10.55	9.35	4,000	8541.45/M

Description	Range (°/s)	Axes	Sensitivity	Bandwidth	Voltage	Supply Current	Package	Digi-Key Part No.	Price Each			Tape and Reel	
									1	25	100	Qty.	Pricing
Gyroscopes													
Single Chip Yaw Rate Gyro	±300	Z	6mV/°/s	2500Hz	4.75 – 5.25	3.5mA	32-CBGA	ADXRS610BBGZ-RLCT-ND‡	50.10	46.76	43.42	500	20875.00
	±250		7mV/°/s	2500Hz		3.5mA		ADXRS612BBGZ-RLCT-ND‡	50.10	46.76	43.42	500	20875.00
	±150		12.5mV/°/s	3000Hz		5.0mA		ADXRS613BBGZ-RLCT-ND‡	42.51	39.68	36.85	500	17712.50
	±50	25mV/°/s	1000Hz	3.5mA	ADXRS614BBGZ-RLCT-ND‡	50.10	46.76	43.42	500	20875.00			
	±150	Z	12.5 ± 10%	40Hz	4.75 – 5.25	6.0mA	32-BGA	ADXRS150ABG-ND	50.10	46.76	43.42	—	—
	±300		5.0 ± 8%					ADXRS300ABG-ND	50.10	46.76	43.42	—	—
±75	15.0 ± 15%		ADXRS401ABG-ND					42.51	39.68	36.85	—	—	

‡ For Tape and Reel part number, change CT-ND to TR-ND. † Cut Tape * Not recommended for new design ♦ RoHS Compliant

iMEMS® Evaluation Boards

ADXR150EB-ND	Evaluation Board for the ADXR150, ±150°/s Single Chip Rate Gyro	\$54.40	ADXR610BBGZ-ND♦	Evaluation Board for ADXR610BBGZ	\$63.25
ADXL203EB-ND	Evaluation Board for ADXL203	\$32.59	ADXR612BBGZ-ND♦	Evaluation Board for ADXR612BBGZ	\$63.25
ADXL204EB-ND	Evaluation Board for the ADXL204CE, Dual Axis Accelerometer	\$32.59	ADXR613BBGZ-ND♦	Evaluation Board for ADXR613BBGZ	\$63.25
ADXL213EB-ND	Evaluation Board for ADXL213	\$32.59	ADXR614BBGZ-ND♦	Evaluation Board for ADXR614BBGZ	\$63.25
ADXL321EB-ND	Evaluation Board for ADXL321	\$32.59			
EVAL-ADXL330Z-ND♦	Evaluation Board for ADXL330	\$69.41			
ADXR401EB-ND	Evaluation Board for ADXR401ABG	\$54.40			

ANALOG DEVICES **iSensor™ Intelligent Sensors**

iSensor ADIS Accelerometers/Gyros enhance ADXL/ADXR iMEMS accelerometers with additional performance and functionality, such as embedded signal processing and control. These inertial sensors address special requirements such as calibration/tuning, application specific interfaces, digital I/O, wireless links, embedded intelligence and programmability, power management, and analog signal conditioning.

Description	Sensor Core	Output Type	Sensitivity	Temperature Sensor	Voltage Reference (V)	Supply Voltage (V)	Supply Current (mA)	Temperature Range (°C)	Package (mm/type)	Digi-Key Part No.	Price Each		
											1	25	100
ADIS Accelerometers — RoHS Compliant													
±1.7g Accelerometer	Accelerometer	SPI	820 LSB/g	Yes	3 – 5.25	1.5 (typical)	—	-40 – 125	12 LGA	ADIS16003CCCZ-ND	33.02	30.82	28.62
±5g Accelerometer	Accelerometer	SPI	256 LSB/g	Yes	3 – 5.25	1.5 (typical)	—	-40 – 125	12 LGA	ADIS16006CCCZ-ND	33.02	30.82	28.62
Programmable, ±5g Accelerometer	Accelerometer/Incl.	SPI	2 LSB/mg(101 SB/°)	Yes	3 – 3.6	11 (5 in Standby)	—	-40 – 125	16 LGA	ADIS16201CCCZ-ND	43.95	41.02	38.09
Programmable, Single Axis Inclinometer	360° Inclinometer	SPI	0.025°/LSB	Yes	3 – 3.6	11 (5 in Standby)	—	-40 – 125	16 LGA	ADIS16203CCCZ-ND	43.95	41.02	38.09
Programmable, High-g Sensor/Recorder	Accel./Impact Sensor	SPI	±70g ±37g	Yes	3 – 3.6	12 (5 in Standby)	—	-40 – 105	16 LGA	ADIS16204BCCZ-ND	37.88	35.35	32.83
Digital Dual Axis Accel./Inclinometer	Accel./Inclinometer	SPI	0.025°/LSB	Yes	3 – 3.6	14	—	-40 – 125	16 LGA	ADIS16209CCCZ-ND	63.59	59.35	55.11

Range (°/s)	Sensitivity	Output	Bandwidth (Maximum)	Noise Density (°/s / √Hz rms)	Temperature Sensor	Voltage Reference (V)	Supply Voltage (V)	Supply Current (mA)	Temperature Range (°C)	Digi-Key Part No.	Price Each		
											1	25	100
ADIS Gyroscopes													
±80	0.0122 °/s /LSB	SPI	1000Hz	0.04	Yes	4.75 – 5.25	6.5	—	-40 – 105	ADIS16060BCCZ-ND♦	62.09	57.95	53.81
±80	0.098 °/s /LSB	SPI	40Hz	0.05	Yes	4.75 – 5.25	7	—	-40 – 85	ADIS16080ACCZ-ND♦	62.09	57.95	53.81
±300	0.244 °/s /LSB	SPI	40Hz	0.10	Yes	4.75 – 5.25	7	—	-40 – 85	ADIS16100ACC-ND	62.09	57.95	53.81
±300	0.2 °/s /mV	Analog	320Hz	0.015	Yes	4.75 – 5.25	100	—	-40 – 85	ADIS16120AML-ND	1023.51	955.28	887.05
±250	0.000042 °/s /LSB	SPI	320Hz	0.0125	Yes	4.75 – 5.25	73	—	-40 – 85	ADIS16130AMLZ-ND♦	869.00	811.07	753.13
±80 – ±320	0.018 °/s /LSB	SPI	50Hz	0.056	Yes	4.75 – 5.25	18	—	-40 – 85	ADIS16250ACCZ-ND♦	74.76	69.78	64.80
±20 – ±80	0.004 °/s /LSB	SPI	50Hz	0.05	Yes	4.75 – 5.25	18	—	-40 – 85	ADIS16251ACCZ-ND♦	74.76	69.78	64.80
±80 – ±320	0.018 °/s /LSB	SPI	50Hz	0.05	Yes	4.75 – 5.25	18	—	-40 – 85	ADIS16255ACCZ-ND♦	99.24	92.63	86.01
±75 – ±300	0.018 °/s /LSB	SPI	350Hz	0.05	Yes	4.75 – 5.25	35	—	-40 – 85	ADIS16350AMLZ-ND♦	516.12	481.72	447.31
±75 – ±300	0.018 °/s /LSB	SPI	350Hz	0.05	Yes	4.75 – 5.25	33	—	-40 – 85	ADIS16354AMLZ-ND♦	604.17	563.90	523.62
±75 – ±300	0.018 °/s /LSB	SPI	350Hz	0.05	Yes	4.75 – 5.25	33	—	-40 – 85	ADIS16355AMLZ-ND♦	592.02	—	—

♦ RoHS Compliant

iSensor™ Evaluation Boards

ADIS16003/PCBZ-ND♦	Evaluation Board for the ADIS16003, ±1.7g, Dual Axis Accelerometer	\$103.31	ADIS16209/PCBZ-ND♦	Evaluation Board for ADIS16209	\$103.31
ADIS16006/PCBZ-ND♦	Evaluation Board for ADIS16006/PCB	\$103.31	ADIS16250/PCBZ-ND♦	Evaluation Board for the ADIS16250	\$103.31
ADIS16060/PCBZ-ND♦	Evaluation Board for ADIS16060	\$103.31	ADIS16251/PCBZ-ND♦	Evaluation Board for ADIS16251	\$103.31
ADIS16080/PCBZ-ND♦	Evaluation Board for ADIS16080	\$103.31	ADIS16255/PCBZ-ND♦	Evaluation Board for the ADIS16255	\$103.31
ADIS16100/PCBZ-ND♦	Evaluation Board for the ADIS16100, ±300°/Sec. Yaw Rate Gyro	\$103.31	ADIS16350/EVALZ-ND♦	Tri Axis Inertial Sensor Evaluation Kit	\$654.64
ADIS16120/PCBZ-ND♦	Evaluation Board for the ADIS16120	\$1350.00	ADIS16350/EVALZ-ND♦	Evaluation Board for Tri Gyro Accelerometer	\$527.44
ADIS16201/PCBZ-ND♦	Evaluation Board for the ADIS16201, Programmable, Dual-Axis Inclinometer/Accelerometer	\$103.31	ADIS16354/EVALZ-ND♦	Tri Axis Inertial Sensor Evaluation Kit	\$795.81
ADIS16203/PCBZ-ND♦	Evaluation Board for the ADIS16203	\$103.31	ADIS16354/PCBZ-ND♦	Evaluation Board for ADIS16354	\$616.31
ADIS16204/PCBZ-ND♦	Evaluation Board for ADIS16204/PCB	\$103.31	ADIS16355/PCBZ-ND♦	Evaluation Board for ADIS16355	\$674.25
			ADISEVALZ-ND♦	iSensor PC Evaluation System	\$320.81

Digi-Reel® Most SMT cutdown parts are available on a Digi-Reel®. For Digi-Reel part number, change 1-ND to 6-ND or CT-ND to DKR-ND. See Digi-Key® Services on page 2 for additional information.

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