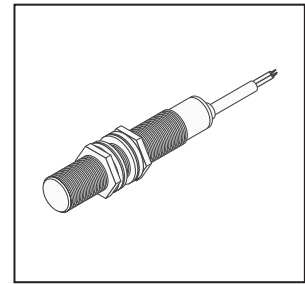


Honeywell

Sensing and Control

NEW! Ultrasonic Sensors

The 943 Series industrial sensors add to our product range of sensors. They have improved scanning ranges, remote teach in of the switching or analog outputs, as well as new advanced features, such as window and hysteresis modes.



Description	Switching Frequency	Output	Digi-Key Part No.	Price Each			Honeywell Part No.
				1	25	50	
943 Series, Software Programmable, 200 - 2000mm scan distance, M18 Plastic Housing	1.2Hz	NPN, 2 NO/NC	480-3007-ND	224.06	185.58	178.70	943-F4Y-2D-002-180E
	250ms	0 - 10V	480-3008-ND	224.06	185.58	178.70	943-F4Y-2D-1C0-180E

ST MEMS Accelerometers



ST offers a portfolio of MEMS-based sensors able to sense acceleration in two or three axis.

The mechanical part of linear accelerometer sensor is based on a silicon inter-digitated structure done by fixed and movable fingers.

To sense the acceleration in each axis, these structures are packaged

in orthogonally groups and the acceleration in each direction is sensed by measuring the change of capacitance between fixed and movable elements correlated to that axis.

The changing of capacitance per axis is then translated into an analog or digital output signal in the interface chip.

The whole process of design and production of sensors is managed by STMicroelectronics.

This guarantees to the customer high volume production, long term security, high precision and reliability since all the devices are tested by Standards and Proprietary Test Systems.

Output	Axis	Acceleration Range (g)	Package	Calibration (V)	Digi-Key Part No.	Price Each			Tape and Reel‡		STMicroelectronics Part No.
						1	10	100	Qty.	Pricing	
Analog	2	±2	16-LGA	3.0	497-6343-ND	6.44	5.88	4.65	—	—	LIS244AL
Analog	2	±2/±6	16-LGA	3.3	497-6344-1-ND NEW!	8.03	7.33	5.80	3,000	4397.40/M	LIS244ALHTR
Analog	3	±2	8-LGA	3.3	497-4917-ND	11.00	10.18	7.70	—	—	LIS3L02AL
Analog	3	±2	14-LGA	3.3	497-6340-ND	7.25	6.62	5.23	—	—	LIS302SG
Analog	3	±3.5	16-LGA	3.0	497-6341-ND	6.48	5.64	4.20	—	—	LIS344AL
Analog	3	±2/±6	16-LGA	3.3	497-6345-1-ND NEW!	9.02	8.24	6.51	3,000	4939.20/M	LIS344ALHTR
Analog	2	±2/±6	24-SOIC	3.3	497-6044-1-ND	8.86	8.09	6.40	1,000	4909.00	LIS2L02AS4-TR
Analog	3	±2	14-LGA	3.3	497-5910-1-ND	6.44	5.88	4.65	5,000	3500.00/M	LIS302ALBTR
Digital	3	±2/±8	14-LGA	3.3	497-5911-1-ND	11.00	10.18	7.70	5,000	6710.00/M	LIS302DLTR
Digital	2	±2/±8	14-LGA	2.16 - 3.6	497-6071-1-ND	8.63	7.88	6.23	5,000	4688.00/M	LIS202DLTR
Digital	3	±2/±6	28-QFPN	2.5	497-6346-1-ND NEW!	13.00	12.03	9.10	2,300	8060.00/M	LIS3LV02DQ-TR
Analog	3	±2/±6	44-QFN	2.4 - 3.6	497-6072-1-ND	11.00	10.18	7.70	2,300	6875.00/M	LIS3L02AQ3TR

‡ For Tape and Reel part number, change 1-ND to 2-ND.

Tools and Evaluation Boards

The Micro Electro Mechanical System is a new technology that exploits the mechanical properties of silicon to integrate mechanical structures sensitive to vibration, displacement, acceleration and rotation. This new technology opened the door to a new generation of compact, cost effective and sensitive sensors. While conventional microelectronics development focuses on incremental improvements of a well-established technology, MEMS challenge the way designers work, compelling them to think

three dimensionally and to acquire a unique blend of multi-disciplinary skills combining electrical, semiconductor and mechanical design.

Features: • Strategic Cost • Low Power Consumption • Low size and weight • High volumes • High reproducibility • High thermal stability by design • High integration with standard IC devices to build Multi Chip Modules (MCM) or smart sensors.



LIS302DL Evaluation Board

MEMS 3-Axis ±2g/±8g, Digital Output Low Power Linear Accelerometer Evaluation Board based on LIS302DL (EK302DL).

497-6229-ND (STEVAL-MKI006V1)..... \$54.60 497-6342-ND (STEVAL-MKI013V1)..... \$45.50

LIS3L02AL Evaluation Board

MEMS Analog Output Evaluation Board based on LIS3L02AL (EK3L02AL).

497-6230-ND (STEVAL-MKI002V1)..... \$31.20

LIS3LV02DL Evaluation Board

MEMS 3-Axis ±2g/±6g, Digital Output Low Voltage Linear Accelerometer. Evaluation Board based on LIS3LV02DL (EK3LV02DL).

497-6226-ND (STEVAL-MKI005V1)..... \$54.60

LIS3L06AL Evaluation Board

MEMS Analog Output Evaluation Board based on LIS3L06AL (EK3L06AL).

497-6233-ND (STEVAL-MKI012V1)..... \$32.50

LIS3LV02DL Adapter Board

LIS3LV02DL Adapter Board designed to be plugged into a standard DIL 20 socket.

497-6227-ND (STEVAL-MKI009V1)..... \$24.70

LIS3LV02DQ Evaluation Board

MEMS 3-Axis ±2g/±6g, Digital Output Low Voltage Linear Accelerometer Evaluation Board based on LIS3LV02DQ.

497-6249-ND (STEVAL-MKI004V1)..... \$54.60

Accelerometers for LIS302ALB Adapter Board

MEMS Analog Output Low Power 3-Axis Linear Accelerometer based on LIS302ALB (EK302ALB).

497-6245-ND (STEVAL-MKI007V1)..... \$32.50

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.

More Product Available Online: www.digkey.com

2450 (T083)

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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 & Reel\$		
									1	25	100	Qty.	Pricing	
Single Axis Accelerometers — RoHS Compliant														
Low Power, High Precision	±1.5g	X	1000mV/g	10Hz	3 - 6	0.7mA	8-CLCC	ADXL103CE-ND	15.83	14.25	12.64	—	—	
Low Power, ADXL78	±35g		55mV/g	400Hz	5	1.3mA	8-CLCC	AD22279-A-R2CT-ND	11.66	10.50	9.31	250	2231.25	
Low Power, ADXL78	±50g		38mV/g	400Hz	5	1.3mA	8-CLCC	AD22280-R2CT-ND	11.66	10.50	9.31	250	2231.25	
Low Power, ADXL78	±70g		27mV/g	400Hz	5	1.3mA	8-CLCC	AD22281-R2CT-ND	11.66	10.50	9.31	250	2231.25	
Low Power, ADXL193	±120g		18mV/g	400Hz	5	1.5mA	8-CLCC	AD22282-A-R2CT-ND	12.83	11.55	10.25	250	2454.38	
Low Power, ADXL193	±250g		8mV/g	400Hz	5	1.5mA	8-CLCC	AD22283-B-R2CT-ND	12.83	11.55	10.25	250	2454.38	
Dual Axis Accelerometers — RoHS Compliant														
Low Power, Digital Output	±2g	X, Y	12.5%/g	6kHz	2.7 - 5	0.5mA	8-LCC	ADXL202AE-ND*	17.46	16.30	15.14	—	—	
Low Power, Digital Output	±2g		12.5%/g	6kHz	2.7 - 5	0.5mA	8-LCC	ADXL202JE-ND*	15.30	14.28	13.26	—	—	
Low Power, High Precision	±1.5g		1000mV/g	10Hz	3 - 6	0.7mA	8-CLCC	ADXL203CE-ND	22.50	21.00	19.50	—	—	
Low Power, Single IC Chip	±1.7g		620mV/g	2.5kHz	3 - 6	0.5mA	8-LCC	ADXL204CE-ND	22.50	21.00	19.50	—	—	
Low-Cost, Analog Output	±2g		174mV/g	6kHz	2.4 - 5	0.4mA	8-CLCC	ADXL311JE-ND	8.50	7.65	6.79	—	—	
Low Power, Digital Out	±1.2g		30%/g	60Hz	3 - 6	0.7mA	8-LCC	ADXL213AE-ND	17.46	16.30	15.14	—	—	
Low Power, Small, Thin	±5g	X, Y	174mV/g	2.5kHz	2.4 - 5.25	0.45mA	16-Lead LFCSP	ADXL320JCP-ND	8.33	7.50	6.65	—	—	
Low Power	±18g		57mV/g	50Hz	2.4 - 6	0.45mA	16-LFCSP	ADXL321JCP-ND	8.33	7.50	6.65	—	—	
Low Power	±2g		420mV/g	60Hz	2.4 - 6	0.45mA	16-LFCSP	ADXL322JCP-ND	8.33	7.50	6.65	—	—	
Low Power, Small	±3g		300mV/g	1600Hz	1.8 - 5.25	320µA	16-LFCSP	ADXL323KCPZ-RLCT-ND	9.50	7.60	6.42	4,000	5890.00/M	
Low Power, ADXL278	±35g		55mV/g	400Hz	5	2.2mA	8-CLCC	AD22284-A-R2CT-ND	15.75	14.70	13.65	250	3346.88	
Low Power, ADXL278	±50g		38mV/g	400Hz	5	2.2mA	8-CLCC	AD22285-R2CT-ND	15.75	14.70	13.65	250	3346.88	
Low Power, ADXL278	±70g	27mV/g	400Hz	5	2.2mA	8-CLCC	AD22286-R2CT-ND	15.75	14.70	13.65	250	3346.88		
Triple Axis Accelerometers — Low Power — RoHS Compliant														
Low Power, Small	±3g	X, Y, Z	300mV/g	1.6(X,Y) 0.55(Z)	2.0 - 3.6	0.2mA	16-LFCSP	ADXL330KCPZ-RLCT-ND	11.58	10.43	9.25	4,000	8444.25/M	

Description	Range (°/s)	Axes	Sensitivity	Bandwidth	Voltage	Supply Current	Package	Digi-Key Part No.	Price Each		
									1	25	100
Gyroscopes											
Single Chip Yaw Rate Gyro	±150 ±300 ±75	Z	12.5 ± 10% 5.0 ± 8% 15.0 ± 15%	40Hz	4.75 - 5.25	6.0mA	32-BGA	ADXRS150ABG-ND ADXRS300ABG-ND ADXRS401ABG-ND	49.50 49.50 42.00	46.20 46.20 39.20	42.90 42.90 36.40

* Not recommended for new design § For Tape and Reel part number, change CT-ND to TR-ND.

iMEMS® Evaluation Boards

ADXRS150EB-ND	Evaluation Board for the ADXRS150, ±150°/s Single Chip Rate Gyro	.....\$53.75	ADXL321EB-ND	Evaluation Board for ADXL321	.....\$32.20
ADXL203EB-ND	Evaluation Board for ADXL203	.....\$32.20	ADXL330Z-ND	Evaluation Board for ADXL330	.....\$68.59
ADXL204EB-ND	Evaluation Board for the ADXL204CE, Dual Axis Accelerometer	.....\$32.20	ADXR401EB-ND	Evaluation Board for ADXR401ABG	.....\$53.75
ADXL213EB-ND	Evaluation Board for ADXL213	.....\$32.20			
ADXR300EB-ND	Evaluation Board for the ADXR300, ±300°/s Single Chip Rate Gyro	.....\$53.75			

ANALOG DEVICES iSensor™ Intelligent Sensors

iSensor ADIS Accelerometers/Gyros enhance ADXL/ADXRS 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 Supply (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	32.63	30.45	28.28
±5g Accelerometer	Accelerometer	SPI	256 LSB/g	Yes	3 - 5.25	1.5 (typical)	-40 - 125	12 LGA	ADIS16006CCCZ-ND	32.63	30.45	28.28
Programmable, ±5g Accelerometer	Accelerometer/Incl.	SPI	2 LSB/mg (10LSB/°)	Yes	3 - 3.6	11 (5 in Standby)	-40 - 125	16 LGA	ADIS16201CCCZ-ND	43.43	40.53	37.64
Programmable, Single Axis Inclinometer	360° Inclinometer	SPI	0.025°/LSB	Yes	3 - 3.6	11 (5 in Standby)	-40 - 125	16 LGA	ADIS16203CCCZ-ND	43.43	40.53	37.64
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	37.43	34.93	32.44
Digital Dual Axis Accel./Inclinometer	Accel./Inclinometer	SPI	0.025°/LSB	Yes	3 - 3.6	14	-40 - 125	16 LGA	ADIS16209CCCZ-ND NEW!	62.84	58.65	54.46

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	Yes	4.75 - 5.25	6.5	-40 - 105	ADIS16060BCCZ-ND NEW!	61.35	57.26	53.17
±80	0.098 °/s /LSB	SPI	40Hz	0.05	Yes	Yes	4.75 - 5.25	7	-40 - 85	ADIS16080ACCZ-ND	61.35	57.26	53.17
±300	0.244 °/s /LSB	SPI	40Hz	0.10	Yes	Yes	4.75 - 5.25	7	-40 - 85	ADIS16100ACC-ND	61.35	57.26	53.17
±300	0.2 °/s /mV	Analog	320Hz	0.015	Yes	Yes	4.75 - 5.25	100	-40 - 85	ADIS16120AMLZ-ND	999.75	933.10	866.45
±250	0.00042 °/s /LSB	SPI	320Hz	0.0125	Yes	Yes	4.75 - 5.25	73	-40 - 85	ADIS16130AMLZ-ND NEW!	848.82	792.24	735.65
±80 - ±320	0.018 °/s /LSB	SPI	50Hz	0.056	Yes	Yes	4.75 - 5.25	18	-40 - 85	ADIS16250ACCZ-ND	73.88	68.95	64.03
±20 - ±80	0.004 °/s /LSB	SPI	50Hz	0.05	Yes	Yes	4.75 - 5.25	18	-40 - 85	ADIS16251ACCZ-ND	73.88	68.95	64.03
±80 - ±320	0.018 °/s /LSB	SPI	50Hz	0.05	Yes	Yes	4.75 - 5.25	18	-40 - 85	ADIS16255ACCZ-ND	98.07	91.54	85.00
±75 - ±300	0.018 °/s /LSB	SPI	350Hz	0.05	Yes	Yes	4.75 - 5.25	35	-40 - 85	ADIS16350AMLZ-ND	510.00	476.00	442.00
±75 - ±300	0.018 °/s /LSB	SPI	350Hz	0.05	Yes	Yes	4.75 - 5.25	33	-40 - 85	ADIS16354AMLZ-ND NEW!	597.00	557.20	517.40
±75 - ±300	0.018 °/s /LSB	SPI	350Hz	0.05	Yes	Yes	4.75 - 5.25	33	-40 - 85	ADIS16355AMLZ-ND NEW!	585.00	—	—

◆ RoHS Compliant

iSensor™ Evaluation Boards

ADIS16003/PCBZ-ND	Evaluation Board for the ADIS16003, ±1.7g, Dual Axis Accelerometer	.....\$56.25	ADIS16250/PCBZ-ND	Evaluation Board for the ADIS16250	.....\$84.38
ADIS16006/PCBZ-ND	Evaluation Board for ADIS16006/PCB	.....\$56.25	ADIS16251/PCBZ-ND	Evaluation Board for ADIS16251	.....\$84.38
ADIS16060/PCBZ-ND	NEW! Evaluation Board for ADIS16060	.....\$84.38	ADIS16255/PCBZ-ND	Evaluation Board for the ADIS16255	.....\$84.38
ADIS16080/PCBZ-ND	Evaluation Board for ADIS16080	.....\$84.38	ADIS16350/EVALZ-ND	Tri Axis Inertial Sensor Evaluation Kit	.....\$646.88
ADIS16100/PCB-ND	Evaluation Board for the ADIS16100, ±300°/Sec. Yaw Rate Gyro	.....\$84.38	ADIS16350/PCBZ-ND	Evaluation Board for Tri Gyro Accelerometer	.....\$534.38
ADIS16120/PCB-ND	Evaluation Board for the ADIS16120	.....\$1350.00	ADIS16354/EVALZ-ND	NEW! Tri Axis Inertial Sensor Evaluation Kit	.....\$786.38
ADIS16201/PCBZ-ND	Evaluation Board for the ADIS16201	.....\$84.38	ADIS16354/PCBZ-ND	NEW! Evaluation Board for ADIS16354	.....\$673.88
ADIS16203/PCBZ-ND	Programmable, Dual-Axis Inclinometer/Accelerometer	.....\$84.38	ADIS16355/PCBZ-ND	NEW! Evaluation Board for ADIS16355	.....\$673.88
ADIS16204/PCBZ-ND	Evaluation Board for the ADIS16203	.....\$84.38	ADISEVALZ-ND	iSensor PC Evaluation System	.....\$196.88
ADIS16209/PCBZ-ND	Evaluation Board for ADIS16204/PCB	.....\$84.38	ADISEVAL/USBZ-ND	iSensor PC Evaluation System	.....\$196.88
ADIS16209/PCBZ-ND	NEW! Evaluation Board for ADIS16209	.....\$84.38			

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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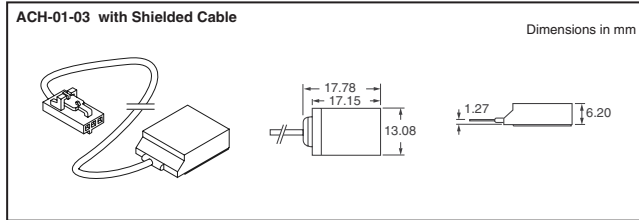
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ACH-01 Accelerometers

The ACH-01 Accelerometer is a robust, general purpose, linear single axis accelerometer featuring buffered electronic output.

Specifications:

- **Sensitivity:** 10mV/g • **Lower Frequency Limit (-3dB):** 2Hz • **Upper Frequency Limit (+3dB):** 20kHz
- **Dynamic Range:** ±150g • **Linearity:** 0.1% • **Resonant Frequency:** 35kHz • **Operating Temperature:** -40°C ~ 85°C • **Maximum Shock Level:** 1000g

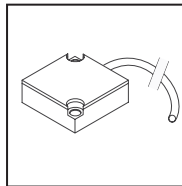


Description	Digi-Key Part No.	Price Each	1	10	100	Measurement Part No.
ACH-01-03 Sensor Accelerometer with 40" Single Coax Cable and Female Connector	MSP1001-ND	24.38	19.50	13.65		1-1001220-0
ACH-01-04 Sensor Accelerometer with Wires	MSP1002-ND	24.38	19.50	13.65		1-1001497-0

Model 4000 Accelerometers



The Model 4000 is an economical signal conditioned accelerometer with integral temperature compensation. The accelerometer incorporates a 2nd generation piezoresistive MEMS sensor providing outstanding performance. It is packaged in a lightweight thermoplastic housing ideal for transportation and instrumentation testing. The signal conditioned output incorporates a 2.5V reference that offers the user a differential or single-ended output.



"G" Range	Digi-Key Part No.	Price Each	Measurement Part No.
10	223-1079-ND	276.38	4000-010-060

Amplifier Box

For use with ACH-01-03 and ACH-01-04

- **Gain:** 10X • **Power Supply:** 9V Battery • **Supply Current:** 4.0mA • **Input Interface:** FET for ACH-01 • **Output Impedance:** 100Ω • **Output Connector:** BNC

Description	Digi-Key Part No.	Price Each	1	10	100	Measurement Part No.
IB-ACH-01 — Amplifier Box	MSP1003-ND	92.50	77.50	67.50		0-1003058-0

Pressure Sensors



The SCP1000 performs almost complete data processing on-chip. The communication between the SCP1000 and its host micro-controller (μC) is based on a serial interface, an interrupt line and specialized pins used to trigger special functions. Two different serial interfaces are available: SPI and TWI (TWI is very similar to I²C bus). The appropriate communication interface is pre-programmed in the factory.

The SCP1000 pressure demonstrator is designed to give a quick access and understanding on the performance and capabilities of the SCP1000 pressure component. The demo kit supports SCP1000-D01 and SCP1000-D11 sensors.

SCP1000 Demo Kit Includes: SCP1000-D01 sensor soldered on chip carrier PCB, USB interface card inside the demo box, USB cable, CD-ROM with documentation, drivers and GUI software running on PC

Description	Supply Voltage	Average Supply Current (μA)	Measuring Range (kPa)	Temperature Range	Package	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape and Reel		VTI Part No.
							1	10	25		Qty.	Pricing	
Absolute Pressure Sensor	2.4 ~ 3.3V	25	30 ~ 120	-20°C ~ 70°C	SPI Interface	551-1046-1-ND	20.30	18.89	17.47	551-1046-2-ND	500	6091.00	SCP1000-D01
Absolute Pressure Sensor	2.4 ~ 3.3V	25	30 ~ 120	-20°C ~ 70°C	I ² C Interface	551-1043-1-ND	20.30	18.89	17.47	551-1043-2-ND	500	6091.00	SCP1000-D11
SCP1000-D01 on PCB	2.4 ~ 3.3V	25	30 ~ 120	-20°C ~ 70°C	SPI Interface	551-1042-ND†	47.40	46.56	45.71	—	—	—	SCP1000 PCB1
SCP1000-D11 on PCB	2.4 ~ 3.3V	25	30 ~ 120	-20°C ~ 70°C	I ² C Interface	551-1044-ND†	47.40	46.56	45.71	—	—	—	SCP1000 PCB3
Sealing Gasket for SCP1000 Series Sensors						551-1049-ND	.40	.23	.19	—	—	—	SCP1000 GA1K
Demo Kit for SCP1000						551-1045-ND	337.50	—	—	—	—	—	SCP1000 Demo

† Bulk

LDT Vibration Sensors



Typically, a 0.005" (125μm) polyester layer is laminated to a 28μm piezo film element. When used in a "bending" mode, laminated film elements develop much higher voltage output when flexed than non-laminated elements. The piezo film is off the neutral axis in the laminate, and is strained more when flexed.

LDT0-028K High Sensitivity

LDTM

MiniSense

Description	Cap (nF)	Digi-Key Part No.	Price Each	1	10	100	Measurement Part No.
LDT0-028K, with Solder Tabs	.500	MSP1006-ND	1.20	.90	.50		1002794-0
LDTM-028K, with Mass and Solder Tabs	.420	MSP1007-ND	2.00	1.50	.83		0-1005447-1
MiniSense 100 (Horizontal)	—	MSP6914-ND	3.00	2.25	1.25		1005939-1
MiniSense 100 (Vertical)	—	MSP6915-ND	3.00	2.25	1.25		1005940-1

Basic Design Kit

This kit demonstrates the use of MSI piezo film sensors as microphones, speakers, switches and acoustic pickups. All components and film samples in the kit can be used for experimentation.

- **Kit Includes:** • Seven sensor elements • One piezo cable • One PCB for ACH-04-08 • Application/instruction specifications • Technical manual

Description	Digi-Key Part No.	Price Each	Measurement Part No.
Basic Design Kit	MSP1010-ND	113.75	0-1004308-0

N

More Product Available Online: www.digikey.com

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Accelerometers and Inclinometers

VTI Technologies is a forerunner in motion and pressure sensors and the world's leading designer and producer of acceleration sensors. VTI develops and produces silicon based capacitive sensors with unique 3D-MEMS (MicroElectroMechanical System) technology, with application areas in acceleration, inclination, shock, vibration and pressure measurement. **SCA3000 Demo Kit Includes:** Two inclinometers; SCA3000 sensor soldered on chip carrier PWB; USB interface card; USB cable and GUI software running on PC and powered from USB port. SCA3000 Demo runs on Windows XP and 2000 and requires USB connection for data transfer.

Dimensions in mm

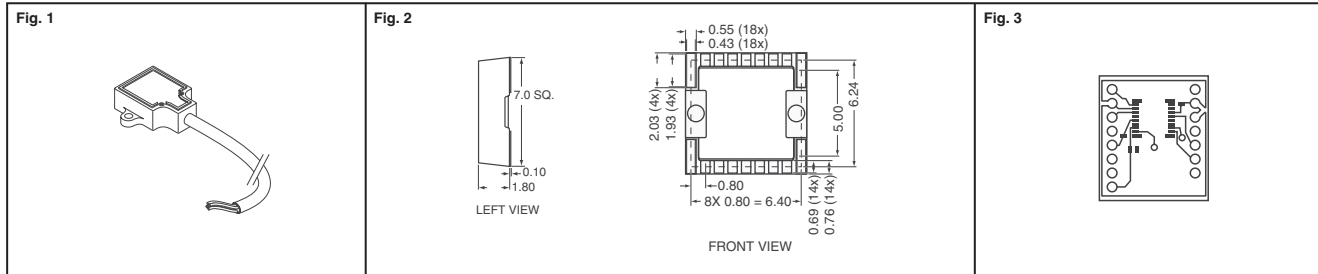


Fig.	Description	Supply Voltage (V)	Current Consumption	Measuring Range	Sensitivity	Frequency Response (Hz)	Temperature Range (°C)	Package	Digi-Key Part No.	Price Each			Tape and Reel†		VTI Part No.	
										1	10	25	Qty.	Pricing		
Inclinometers — RoHS Compliant																
—	Single Output, 1g	4.75 - 5.25	2.5mA	±90°	2V/g	8 - 28	-55 - 125	8-DIL SMD	551-1005-1-ND	50.76	48.23	45.82	100	3942.00	SCA61T-FA1H1G	
	Single Output, 0.5g	4.75 - 5.25	2.5mA	±30°	4V/g	8 - 28	-55 - 125	8-DIL SMD	551-1004-1-ND	50.76	48.23	45.82	100	3942.00	SCA61T-FAHH1G	
	Dual Output, 0.5g	4.75 - 5.25	4mA	±30°	4V/g	8 - 28	-55 - 125	12-DIL SMD	551-1002-1-ND	65.88	62.59	59.46	100	5184.00	SCA100T-D01	
	Dual Output, 1g	4.75 - 5.25	4mA	±90°	2V/g	8 - 28	-55 - 125	12-DIL SMD	551-1003-1-ND	65.88	62.59	59.46	100	5184.00	SCA100T-D02	
	Single Output, 0.26g	4.75 - 5.25	4mA	±15°	16V/g	8 - 28	-55 - 125	12-DIL SMD	551-1000-1-ND	65.88	62.59	59.46	100	5184.00	SCA103T-D04	
	Single Output, 0.5g	4.75 - 5.25	4mA	±30°	8V/g	8 - 28	-55 - 125	12-DIL SMD	551-1001-1-ND	65.88	62.59	59.46	100	5184.00	SCA103T-D05	
Accelerometers — RoHS Compliant																
—	Dual Output	4.75 - 5.25	5mA	±1.7g	1.2V/g	50±30	-55 - 125	12-DIL SMD	551-1007-1-ND	47.52	45.15	42.89	100	3564.00	SCA1000-D01	
	Dual Output	4.75 - 5.25	5mA	±1.7g	1.2V/g	50±30	-55 - 125	12-DIL SMD	551-1008-1-ND	57.24	54.38	51.66	100	4428.00	SCA1020-D02	
	Dual Output	4.75 - 5.25	4.5mA	±4g	.55V/g	115±55	-55 - 125	12-DIL SMD	551-1025-1-ND	76.95	73.11	69.45	100	6561.00	SCA1000-N1000070	
	Single Output	4.75 - 5.25	2mA	±0.5g	4V/g	18±10	-55 - 125	8-DIL SMD	551-1009-1-ND	45.36	43.10	40.94	600	14904.00	SCA610-CAHH1G	
	Single Output	4.75 - 5.25	2mA	±1g	2V/g	18±10	-55 - 125	8-DIL SMD	551-1010-1-ND	45.36	43.10	40.94	600	14904.00	SCA610-CA1H1G	
	Single Output	4.75 - 5.25	2mA	±1.5g	1.33V/g	400±150	-55 - 125	8-DIL SMD	551-1026-1-ND	37.80	34.02	32.33	—	—	SCA610-C13H1A	
	Single Output	4.75 - 5.25	2mA	±1g	2V/g	50±30	-55 - 125	8-DIL SMD	551-1027-1-ND	37.80	34.02	32.33	—	—	SCA610-C21H1A	
	Single Output	4.75 - 5.25	2mA	±1.5g	1.333V/g	50±30	-55 - 125	8-DIL SMD	551-1011-1-ND	37.80	34.02	32.32	600	11664.00	SCA610-C23H1A	
	Single Output	4.75 - 5.25	2mA	±3g	.75V/g	115±55	-55 - 125	8-DIL SMD	551-1028-1-ND	37.80	34.02	32.33	—	—	SCA610-CC5H1A	
	Single Output	4.75 - 5.25	2mA	±1.7g	1.2V/g	50±30	-55 - 125	8-DIL SMD	551-1012-1-ND	37.80	34.02	32.32	100	2700.00	SCA610-C28H1A	
	Single Output	4.75 - 5.25	2mA	±1.7g	1.2V/g	50±30	-55 - 125	8-DIL SMD	551-1013-1-ND	43.20	41.04	38.99	600	14580.00	SCA620-CF8H1A	
	Stand Alone Inclinometers and Accelerometers															
	1	Dual Axis	7 - 35	5mA	±90°	2V/g, 70mV/°≥4V/g	18	-40 - 85	Module	551-1017-ND◆	132.30	108.00	91.80	—	—	SCA121T-D03
		Dual Axis	4.75 - 5.25	5mA	±90°	2V/g, 70mV/°≥4V/g	18	-40 - 85	Module	551-1029-ND◆	139.05	113.40	95.85	—	—	SCA121T-D05
Dual Axis		7 - 35	5mA	±30°	2V/g, 70mV/°≥4V/g	18	-40 - 85	Module	551-1018-ND	132.30	108.00	91.80	—	—	SCA121T-D07	
Dual Axis		7 - 35	20mA	±30°	0.035°/LSB	10 - 28	—	Module	551-1015-ND	216.00	183.60	162.01	—	—	SCA125T-D08-A	
2	Triple Axis Digital	2.35 - 3.6	480µA	±2g	1333/g	45	-40 - 85	SPI Interface	551-1033-1-ND◆	27.00	25.11	23.22	1,000	16200.00	SCA3000-D01	
	Triple Axis Digital	2.35 - 3.6	650µA	±2g	1333/g	45	-40 - 85	I ² C Interface	551-1035-1-ND◆	27.00	25.11	23.22	1,000	16200.00	SCA3000-D02	
	Triple Axis Digital	2.35 - 3.6	120µA	±3g	1000/g	35	-40 - 85	SPI Interface	551-1037-1-ND◆	27.00	25.11	23.22	1,000	16200.00	SCA3000-E01	
	Triple Axis Digital	2.35 - 3.6	200µA	±3g	1000/g	40	-40 - 85	I ² C Interface	551-1039-1-ND◆	27.00	25.11	23.22	1,000	16200.00	SCA3000-E02	
	Triple Axis Digital	2.35 - 3.6	120µA	±6g	500/g	38	-40 - 85	SPI Interface	551-1047-1-ND◆	27.00	25.11	23.22	1,000	16200.00	SCA3000-E04	
	Triple Axis Digital	2.35 - 3.6	120µA	±18g	160/g	Selectable	-40 - 85	SPI Interface	551-1048-1-ND◆	23.33	21.70	20.07	100	1633.00	SCA3000-E05	
	Triple Axis Digital	2.35 - 3.6	120µA	±18g	160/g	Selectable	-40 - 85	SPI Interface	551-1050-ND◆	47.25	46.41	45.57	—	—	SCA3000-E05 PWB	
—	Dual Axis Subassembly	7 - 35	4.5mA	±10°	200mV/°	3	-40 - 85	PC Board	551-1020-ND◆	94.50	78.30	67.50	—	—	SCL1700-D01	
	Dual Axis Subassembly	4.75 - 5.25	4.5mA	±15°	150mV/°	3	-40 - 85	PC Board	551-1032-ND◆	94.50	78.30	67.50	—	—	SCL1700-D31	
—	4 Channel Sensor - Demo Kit	—	—	±1g	2V/g On Board	Up - 300	—	Demo Kit	551-1006-ND	486.00	—	—	—	—	DEMO KIT	
—	SCA3000 Demo w/D01 on PWB	—	—	±1.7g	1.2V/g	20	—	Demo Kit	551-1041-ND◆	337.50	—	—	—	—	SCA3000-D01DEMO	
3	SCA3000-D01 on PWB	2.35 - 3.6	480µA	±2g	1333/g	45	-40 - 85	SPI Interface	551-1034-ND◆	47.25	46.41	45.57	—	—	SCA3000-D01 PWB	
	SCA3000-D02 on PWB	2.35 - 3.6	650µA	±2g	1333/g	45	-40 - 85	I ² C Interface	551-1036-ND◆	47.25	46.41	45.57	—	—	SCA3000-D02 PWB	
	SCA3000-E01 on PWB	2.35 - 3.6	120µA	±3g	1000/g	35	-40 - 85	SPI Interface	551-1038-ND◆	47.25	46.41	45.57	—	—	SCA3000-E01 PWB	
	SCA3000-E02 on PWB	2.35 - 3.6	200µA	±3g	1000/g	40	-40 - 85	I ² C Interface	551-1040-ND◆	47.25	46.41	45.57	—	—	SCA3000-E02 PWB	
	SCA3000-E04 on PWB	2.35 - 3.6	120µA	±6g	500/g	38	-40 - 85	SPI Interface	551-1047-ND◆	47.25	46.41	45.57	—	—	SCA3000-E04 PWB	

† For Tape and Reel part number, change 1-ND to 2-ND. ◆ RoHS Compliant