

Sensors

Quarter 2, 2006
SG1010Q22006 Rev 0

About This Revision—Q2/2006

When new products are introduced, a summary of the new products will be provided in this section. However, the *New Product* section will only appear on this page when new products have been introduced during the quarter.

In addition, a change bar appears in the left margin of every page in this selector guide that contains new or revised information.

If products are discontinued, a *What's EOL?* page is included at the end of this guide. The *What's EOL?* page lists end-of-life products along with their respective last order date, last ship date, and suggested possible replacement information.

NEW PRODUCT

New Product	Page Number	Description
MC33941	SG1010-9	Electric Field Sensing IC with 5 V regulator, extended temperature range
MC34940	SG1010-9	Electric Field Sensing IC
MMA7261Q	SG1010-3	Triple axis (XYZ) selectable sensitivity 2.5g/3.3g/6.7g/10g
MMA6281Q	SG1010-3	Dual axis (XZ) selectable sensitivity 2.5g/3.3g/6.7g/10g acceleration sensor
MMA6280Q	SG1010-3	Dual axis (XZ) selectable sensitivity 1.5g/2g/4g/6g acceleration sensor
MMA6271Q	SG1010-9	Dual axis (XY) selectable sensitivity 2.5g/3.3g/6.7g/10g acceleration sensor
MMA6270Q	SG1010-3	Dual axis (XY) selectable sensitivity 1.5g/2g/4g/6g acceleration sensor

ACCELERATION SENSORS

Low g Consumer Acceleration Sensors

Product	Sensing Range (g)	Sensing Axis	Sensitivity (mV/g)	I _{DD} (Typ) (mA)	Sleep Mode (Typ) I _{DD} (μA)	Sleep Mode Response Time (Typ) (ms)	Start Up Response Time (Typ) (ms)	Rolloff Frequency (Hz)	V _{DD} Supply Voltage (V)	Zero g Output (Typ) (V)	Packaging
MMA7260Q	1.5/2/4/6	XYZ	800/600/300/200	0.5	3.0	0.5	1.0	350 (XY)/150 (Z)	2.2 – 3.6	1.65	6 x 6 x 1.45 mm QFN
MMA7261Q	2.5/3.3/6.7/10	XYZ	480/360/180/120	0.5	3.0	0.5	1.0	350 (XY)/150 (Z)	2.2 – 3.6	1.65	6 x 6 x 1.45 mm QFN
MMA6280Q	1.5/2/4/6	XZ	800/600/300/200	0.5	3.0	0.5	1.0	350 (X)/150 (Z)	2.2 – 3.6	1.65	6 x 6 x 1.45 mm QFN
MMA6281Q	2.5/3.3/6.7/10	XZ	480/360/180/120	0.5	3.0	0.5	1.0	350 (X)/150 (Z)	2.2 – 3.6	1.65	6 x 6 x 1.45 mm QFN
MMA6270Q	1.5/2/4/6	XY	800/600/300/200	0.5	3.0	0.5	1.0	350 (XY)	2.2 – 3.6	1.65	6 x 6 x 1.45 mm QFN
MMA6271Q	2.5/3.3/6.7/10	XY	480/360/180/120	0.5	3.0	0.5	1.0	350 (XY)	2.2 – 3.6	1.65	6 x 6 x 1.45 mm QFN
MMA6260Q	1.5	XY	800	1.2	N/A	N/A	14	50 (XY)	2.7 – 3.6	1.65	6 x 6 x 1.98 mm QFN
MMA6261Q	1.5	XY	800	1.2	N/A	N/A	2.0	300 (XY)	2.7 – 3.6	1.65	6 x 6 x 1.98 mm QFN
MMA6262Q	1.5	XY	800	2.2	N/A	N/A	4.0	150 (XY)	2.7 – 3.6	1.65	6 x 6 x 1.98 mm QFN
MMA6263Q	1.5	XY	800	2.2	N/A	N/A	0.7	900 (XY)	2.7 – 3.6	1.65	6 x 6 x 1.98 mm QFN
MMA6231Q	10	XY	120	1.2	N/A	N/A	2.0	300 (XY)	2.7 – 3.6	1.65	6 x 6 x 1.98 mm QFN
MMA6233Q	10	XY	120	2.2	N/A	N/A	0.7	900 (XY)	2.7 – 3.6	1.65	6 x 6 x 1.98 mm QFN

Low g Industrial Acceleration Sensors

Product	Sensing Range (g)	Sensing Axis	Sensitivity (mV/g)	Rolloff Frequency (Hz)	V _{DD} Supply Voltage (Typ) (V)	Zero g Output (Typ) (V)	Packaging
MMA2260EG	1.5	X	1200	50	5.0	2.5	16-pin SOIC
MMA1260EG	1.5	Z	1200	50	5.0	2.5	16-pin SOIC
MMA1270EG	2.5	Z	750	50	5.0	2.5	16-pin SOIC
MMA1250EG	5.0	Z	400	50	5.0	2.5	16-pin SOIC
MMA1220EG	8.0	Z	250	250	5.0	2.5	16-pin SOIC

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ACCELERATION SENSORS

ACCELERATION SENSORS (continued)

Medium g Acceleration Sensors

Product	Sensing Range (g)	Sensing Axis	Sensitivity (mV/g)	Rolloff Frequency (Hz)	V _{DD} Supply Voltage (Typ) (V)	Zero g Output (Typ) (V)	Packaging
MMA3201EG	40/40	XY	50/50	400	5.0	2.5	20-pin SOIC
MMA2201EG	40	X	50	400	5.0	2.5	16-pin SOIC
MMA2202EG	50	X	40	400	5.0	2.5	16-pin SOIC
MMA3204EG	100/30	XY	20/66.67	400	5.0	2.5	20-pin SOIC
MMA3202EG	100/50	XY	50/100	400	5.0	2.5	20-pin SOIC
MMA2204EG	100	X	20	400	5.0	2.5	16-pin SOIC
MMA1213EG	50	Z	40	400	5.0	2.5	16-pin SOIC
MMA1210EG	100	Z	20	400	5.0	2.5	16-pin SOIC

High g Acceleration Sensors

Product	Sensing Range (g)	Sensing Axis	Sensitivity (mV/g)	Rolloff Frequency (Hz)	V _{DD} Supply Voltage (Typ) (V)	Zero g Output (Typ) (V)	Packaging
MMA1211EG	150	Z	13	400	5.0	2.5	16-pin SOIC
MMA2301EG	200	X	10	400	5.0	2.5	16-pin SOIC
MMA1212EG	200	Z	10	400	5.0	2.5	16-pin SOIC
MMA2300EG	250	X	8.0	400	5.0	2.5	16-pin SOIC
MMA1200EG	250	Z	8.0	400	5.0	2.5	16-pin SOIC

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PRESSURE SENSORS

Integrated Pressure Sensors

Product Family ¹	Pressure Rating Maximum (PSI)	Pressure Rating Maximum (kPa)	Pressure Rating Maximum (in H ₂ O)	Pressure Rating Maximum (cm H ₂ O)	Pressure Rating Maximum (mm Hg)	Full Scale Span (Typ) (Vdc)	Sensitivity (mV/kPa)	Accuracy 0°C to 85°C (% of VFSS)	Pressure Type ²			
									A	D	G	V
MPX4080	11.6	80	321	815	600	4.3	54	±3.0		•		
MPX4100	15.2	105	422	1070	788	4.6	54	±1.8	•			
MPX4101	14.8	102	410	1040	765	4.6	54	±1.8	•			
MPXH6101	14.8	102	410	1040	765	4.6	54	±1.8	•			
MPX4105	15.2	105	422	1070	788	4.6	51	±1.8	•			
MPX4115	16.7	115	462	1174	863	4.6	46	±1.5	•			
	16.7	115	462	1174	863	4.0	38	±1.5				•
MPX6115	16.7	115	462	1174	863	4.6	46	±1.5	•			
MPX4200	29	200	803	2040	1500	4.6	26	±1.5	•			
MPX4250	36	250	1000	2550	1880	4.7	20	±1.5	•			
	36	250	1000	2550	1880	4.7	19	±1.4		•	•	
MPXH6250	36	250	1000	2550	1880	4.7	19	±1.5	•			
MPXV4006	0.87	6.0	24	61	45	4.6	766	±5.0		•		•
MPXV5004	0.57	4.0	16	40	29	3.9	1000	±2.5		•		•
MPX5010	1.45	10	40	102	75	4.5	450	±5.0		•		•
MPX5050	7.25	50	201	510	375	4.5	90	±2.5		•	•	•
MPX5100	14.5	100	401	1020	750	4.5	45	±2.5		•	•	
	16.7	115	462	1174	863	4.5	45	±2.5	•			
MPX5500	72.5	500	2000	5100	3750	4.5	9.0	±2.5		•	•	
MPX5700	102	700	2810	7140	5250	4.5	6.0	±2.5	•	•	•	
MPX5999	150	1000	4150	10546	7757	4.5	5.0	±2.5		•		
MPXH6300	44	300	1200	3060	2250	4.7	16	±1.8	•			
MPXH6400	60	400	1600	4000	3000	4.7	12	±1.5	•			
MPXV7002	±0.3	±2	±8	±20	±15.2	4.5	1000	±2.5				
MPXV7007	±1.0	±7	±28	±70	±53	4.0	286	±5.0		•	•	•
MPXV7025	±3.5	±25	±100	±254	±190	4.5	90	±5.0		•	•	•

¹The primary core pressure sensor families are listed above. For orderable parts, please see Page 14.

²A = Absolute, D = Differential, G = Gauge, V = Vacuum

• = Available

A change bar appears in the left margin to mark the location of new or revised information.

PRESSURE SENSORS

PRESSURE SENSORS (continued) Compensated Pressure Sensors

Product Family	Pressure Rating Maximum (PSI)	Pressure Rating Maximum (kPa)	Pressure Rating Maximum (in H ₂ O)	Pressure Rating Maximum (cm H ₂ O)	Pressure Rating Maximum (mm Hg)	Offset (mV)	Full Scale Span (Typ) (mV)	Sensitivity (mV/kPa)	Linearity Minimum (% of VFSS)	Linearity Maximum (% of VFSS)	Pressure Type ^{Note}			
											A	D	G	V
MPX2010	1.45	10	40	102	75	±1.0	25	2.5	-1.0	1.0		•	•	
MPX2053	7.0	50	201	510	375	±1.0	40	0.8	-0.6	0.4		•		•
MPX2102	14.5	100	400	1020	750	±2.0	40	0.4	-1.0	1.0	•	•		•
	14.5	100	400	400	750	±1.0	40	0.4	-0.6	0.4				
MPX2202	29	200	800	2040	1500	±1.0	40	0.2	-1.0	1.0	•	•		•
	29	200	800	800	1500	±1.0	40	0.2	-0.6	0.4				
MPX2050	7.0	50	201	510	375	±1.0	40	0.8	-0.3	-0.3		•	•	
MPX2100	14.5	100	400	1020	750	±2.0	40	0.4	-1.0	-1.0	•	•		•
	14.5	100	400	400	750	±1.0	40	0.4	-0.3	-0.3				
MPX2200	29	200	800	2040	1500	±1.0	40	0.2	-1.0	-1.0	•	•		•
	29	200	800	800	1500	±1.0	40	0.2	-0.3	-0.3				

Note: A = Absolute, D = Differential, G = Gauge, V = Vacuum

Compensated Medical Grade Pressure Sensors

Product Family	Pressure Rating Maximum (PSI)	Pressure Rating Maximum (kPa)	Pressure Rating Maximum (in H ₂ O)	Pressure Rating Maximum (cm H ₂ O)	Pressure Rating Maximum (mm Hg)	Supply Voltage (Typ) (Vdc)	Offset Maximum (mV)	Sensitivity (mV/kPa)	Linearity Minimum (% of VFSS)	Linearity Maximum (% of VFSS)	Pressure Type ^{Note}			
											A	D	G	V
MPXC2011	1.45	10	40	102	75	10.0	1.0	2.5	-1.0	1.0			•	
MPX2300	5.8	40	161	408	300	6.0	0.75	5.0	-2.0	2.0			•	

Note: A = Absolute, D = Differential, G = Gauge, V = Vacuum

Uncompensated Pressure Sensors

Product Family	Pressure Rating Maximum (PSI)	Pressure Rating Maximum (kPa)	Pressure Rating Maximum (in H ₂ O)	Pressure Rating Maximum (cm H ₂ O)	Pressure Rating Maximum (mm Hg)	Offset (Typ) (mV)	Full Scale Span (Typ) (mV)	Sensitivity (mV/kPa)	Linearity Minimum (% of VFSS)	Linearity Maximum (% of VFSS)	Pressure Type ^{Note}			
											A	D	G	V
MPX10	1.45	10	40	102	75	20	35	3.5	-1.0	1.0		•	•	
MPX12	1.45	10	40	102	75	20	55	3.5	-1.0	1.0		•	•	
MPX53	7.0	50	200	510	375	20	60	1.2	-0.6	0.4		•	•	

Note: A = Absolute, D = Differential, G = Gauge, V = Vacuum

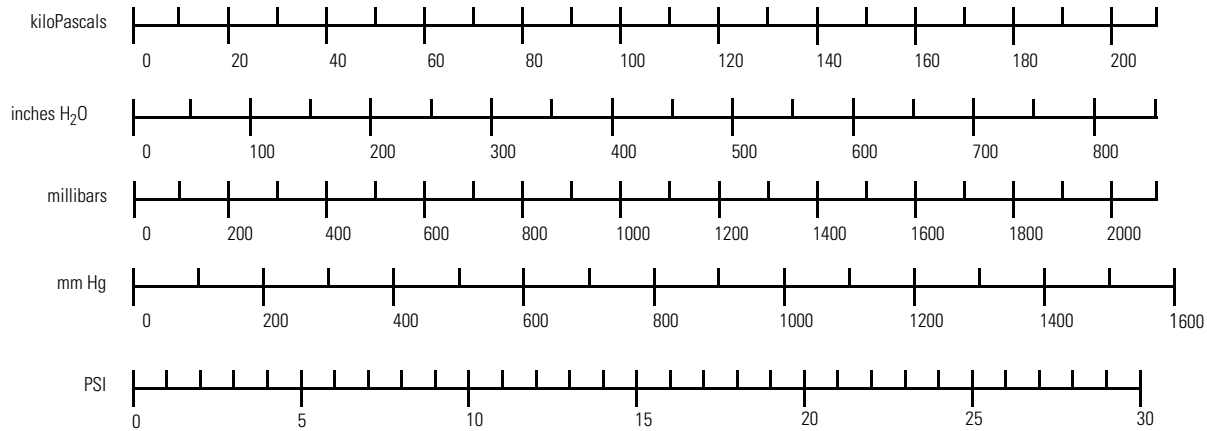
• = Available

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PRESSURE SENSORS (continued)
Conversion Table for Common Units of Pressure

Units of Conversion	kiloPascals	mm Hg	millibars	Inches H ₂ O	PSI
1 atm	101.325	760.000	1013.25	406.795	14.6960
1 kiloPascal	1.00000	7.50062	10.0000	4.01475	0.145038
1 mm Hg	0.133322	1.00000	1.33322	0.535257	0.0193368
1 millibar	0.100000	0.750062	1.00000	0.401475	0.0145038
1 inch H ₂ O	0.249081	1.86826	2.49081	1.00000	0.0361
1 PSI	6.89473	51.7148	68.9473	27.6807	1.00000
1 hectoPascal	0.100000	0.75006	1.00000	0.401475	0.0145038
1 cm H ₂ O	0.09806	0.7355	9.8×10^{-7}	0.3937	0.014223

Quick Conversion Chart for Common Units of Pressure



SAFETY AND ALARM INTEGRATED CIRCUITS

Smoke Ion

Product	Operating Voltage (V)	Horn Tone	Interconnectable	Primary Power Source	Ordering Suffix ^{Note}
MC14467	6 to 12	Continuous - Old Tone - 4/6	No	DC	P1
MC14468	6 to 12	Continuous - Old Tone - 4/6	Yes	AC/DC	P
MC14568	6 to 12	Continuous - Old Tone - 4/6	Yes	AC/DC	P
MC145017	6 to 12	Temporal - New Tone - NFPA Tone	No	DC	P
MC145018	6 to 12	Temporal - New Tone - NFPA Tone	Yes	AC/DC	P

Smoke Photo

Product	Operating Voltage (V)	Horn Tone	Interconnectable	Primary Power Source	Ordering Suffix ^{Note}
MC145010	6 to 12	Continuous - Old Tone - 4/6	Yes	AC/DC	P, DW, DWR2
MC145011	6 to 12	Continuous - Old Tone - 4/6	Yes	AC	P, DW, DWR2
MC145012	6 to 12	Temporal - New Tone - NFPA Tone	Yes	AC/DC	P, DW, DWR2

Comparator

Product	Description	Operating Voltage (V)	Horn Modulation	Primary Power Source	Ordering Suffix ^{Note}
MC14578	Micro-Power Comparator Plus Voltage Follower	3.5 to 14	No Horn Driver	AC/DC	P

General Alarm

Product	Description	Operating Voltage (V)	Horn Tone(ms)	Primary Power Source	Ordering Suffix ^{Note}
MC14600	Alarm Detection, Horn Driver, Low Battery Detection, LED Driver	6.0 to 12	Continuous - Old Tone - 4/6	AC/DC	P, DW, DWR2

Note: P or P1 = 16-pin DIP, DW = SOIC 16-pin, DWR2 = SOIC 16-pin tape & reel

SIGNAL CONDITIONING AND SENSING SOLUTIONS — ELECTRIC FIELD SENSING

Product	Description	Main Characteristics	No. of Channels	5 V Reg. Current Limit (mA)	Max Voltage (V)	Operating Temp Range (°C)	Communications	Packaging	Status
MC33794DWBR2	Electric Field Imaging Device	120 kHz generator, shield driver, 9 electrodes + 2 V _{REF} outputs, 5 V regulator, MCU support	11	75	40	-40 – 85	ISO-9141	54-pin SOICW	EVB Available
MC33941EGR2	Electric Field Imaging Device	Selectable from 60 kHz to 240 kHz generator, shield driver, 7 electrodes, 5 V regulator	7	75	40	0 – 110	N/A	24-pin SOICW	EVB Available
MC34940EGR2	Electric Field Imaging Device	Selectable from 60 kHz to 240 kHz generator, shield driver, 7 electrodes	7	N/A	40	0 – 90	N/A	24-pin SOICW	EVB Available

ZIGBEE™-COMPLIANT PLATFORM

Zigbee-Compliant and Proprietary RF Transceivers

Product	Data Rate (kbps)	Operating Voltage (V)	Band (MHz)	MCU Interface	Packaging	Status	Additional Information
MC13193FCR2	250 (max)	2.0 to 3.4	2.4 -2.5 GHz	SPI	32-pin QFN 5x5	Available	2.4 GHz RF transceiver data modem for ZigBee™ applications (tape and reel)
MC13192FCR2	250 (max)	2.4 to 3.4	2.4 GHz	SPI	32-pin QFN 5x5	Available	2.4 GHz RF transceiver data modem for ZigBee™ applications
MC13191FCR2	250 (max)	2.4 to 3.4	2.4 GHz	SPI	32-pin QFN 5x5	Available	2.4 GHz Proprietary RF transceiver data modem for Point-to-Point and Star applications

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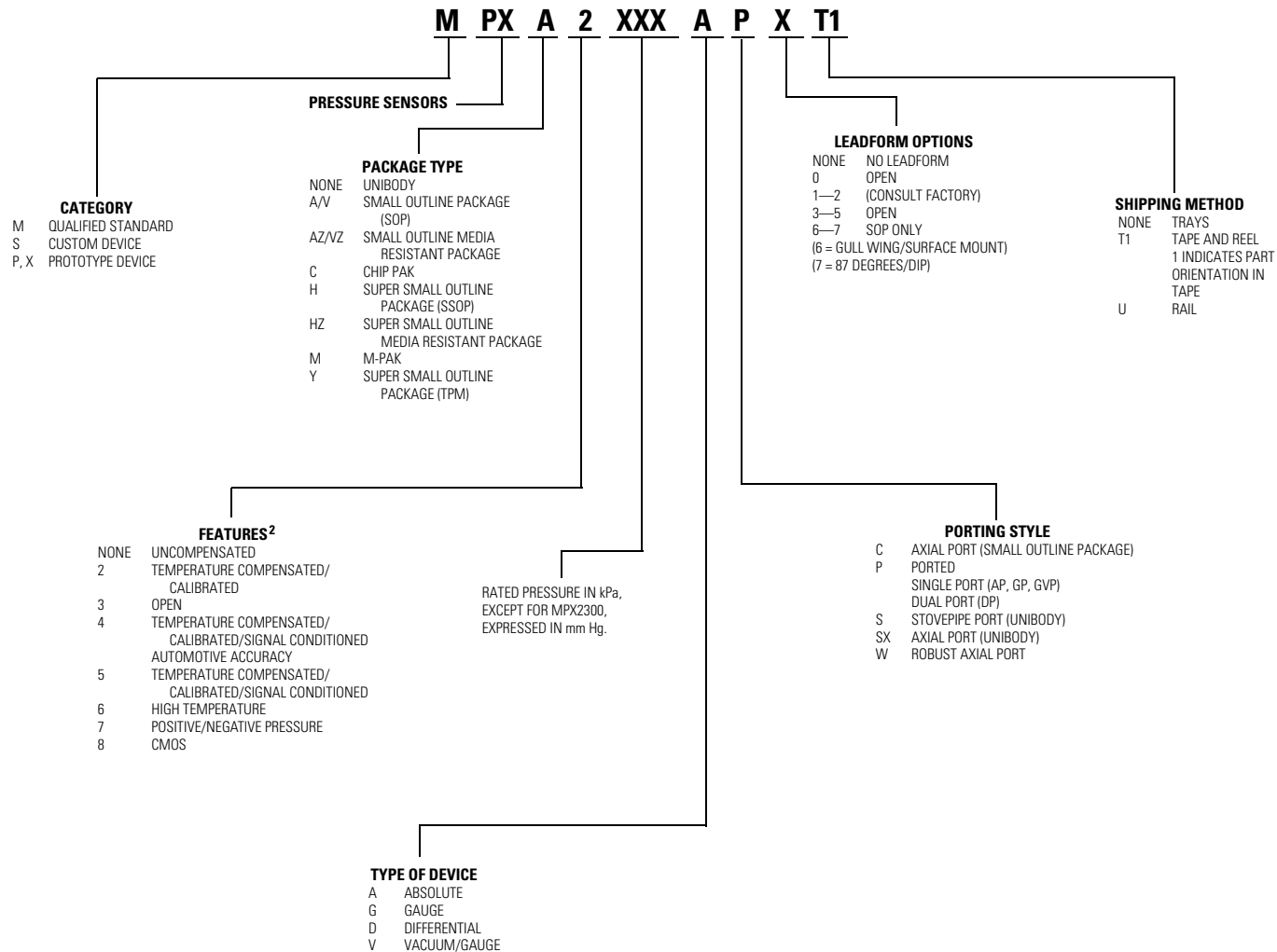
DEVELOPMENT TOOLS

SENSORS DEVELOPMENT TOOLS

Product	Description	Status
13192DSK-A00	MC13191/92 Developer's Starter Kit used to implement wireless network designs compatible with the IEEE® 802.15.4 standard	Available
13192RFC-A00	A low-cost development board that provides a simple interface to Freescale's MC13192 transceiver	Available
RD3152MMA7260Q	ZigBee™ Sensing Triple Axis Reference Design (ZSTAR) provides a cost-effective low-power wireless sensing connection using Freescale's MC13191 transceiver	Available
RD3112MMA7260Q	Sensing Triple Axis Reference Design (STAR) — Using One Component — 1 XYZ-axis	Available
DEMO1985MC34940E	Demonstration Kit for the MC34940 Electric Field Sensing Device	Available
KIT33794DWBEVM	Evaluation Kit using the MC33794 Electric Field Sensing Device	Available
RD1986MMA6260Q	3-Axis Acceleration Sensing Reference Design — Using Two Components — 1 XY-axis, 1 Z-axis	Available
RD1986MMA2260D	3-Axis Acceleration Sensing Reference Design — Using Three Components — 2 X-axis with 1 Device Rotated 90°, 1 Z-axis	Available
RD1979MPXM2102A	Altimeter Barometer Reference Design	Available
RD1950MPXM2010D	Water Level Reference Design	Available
KIT3109MMA7260Q	Evaluation Kit using the 3-axis sensor	Available
KIT3109MMA7261Q	Evaluation Kit using the 2.5g - 10g 3-axis sensor	Available
KIT3109MMA6280Q	Evaluation Kit using the 1.5g - 6g XZ-axis sensor	Available
KIT3109MMA6270Q	Evaluation Kit using the 1.5g - 6g XY-axis sensor	Available
KIT1925MMA1250D	Evaluation Kit for 5g z-axis Evaluation Board	Available
KIT1925MMA1260D	Evaluation Kit for 1.5g z-axis Evaluation Board	Available
KIT1925MMA1270D	Evaluation Kit for 2.5g z-axis Evaluation Board	Available
KIT1925MMA2260D	Evaluation Kit for 1.5g x-axis Evaluation Board	Available
KIT1925MMA6231Q	Evaluation Kit for 10g, 300Hz XY-axis Evaluation Board	Available
KIT1925MMA6233Q	Evaluation Kit for 10g, 900Hz XY-axis Evaluation Board	Available
KIT1925MMA6260Q	Evaluation Kit for 1.5g, 50Hz XY-axis Evaluation Board	Available
KIT1925MMA6261Q	Evaluation Kit for 1.5g, 300Hz XY-axis Evaluation Board	Available
KIT1925MMA6262Q	Evaluation Kit for 1.5g, 150Hz XY-axis Evaluation Board	Available
KIT1925MMA6263Q	Evaluation Kit for 2.5g, 900Hz XY-axis Evaluation Board	Available

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PRODUCT NUMBERING SYSTEM FOR PRESSURE SENSORS¹



¹Actual product marking may be abbreviated due to space constraints but packaging label will reflect full part number.

²Only applies to qualified and prototype products. This does not apply to custom products.

Examples:

MPX10DP 10 kPa uncompensated, differential device in minibody package, ported, no leadform, shipped in trays.

MPXA4115A6T1 115 kPa automotive temperature compensated and calibrated device with signal conditioning, SOP surface mount with gull wing leadform, shipped in tape and reel.

PACKAGING

PACKAGING (Sizes not to scale)

Preferred Pressure Sensor Packaging Options



SOP
Case 482
Suffix A6/G6



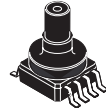
SOP Axial Port
Case 482A
Suffix AC6/GC6



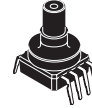
SOP
Case 482B
Suffix G7U



SOP Axial Port
Case 482C
Suffix GC7U



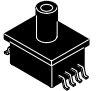
SOP Robust
Vertical Axial Port
Case 1735-01
Suffix GW6U



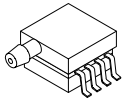
SOP Robust
Vertical Axial Port
Case 1560-02
Suffix GW7U



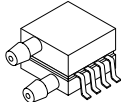
MPAK
Case 1320
Suffix A/D



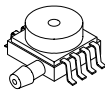
MPAK Axial Port
Case 1320A
Suffix AS/GS



SOP Side Port
Case 1369
Suffix AP/GP



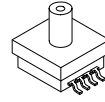
SOP Dual Port
Case 1351
Suffix DP



SOP Vacuum Port
Case 1368
Suffix GVP

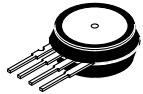


SSOP
Case 1317
Suffix A6



SSOP Axial Port
Case 1317A
Suffix AC6

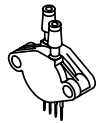
Pressure Sensor Packaging



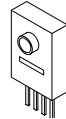
Unibody
Basic Element
Case 344
Suffix A/D



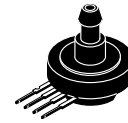
Unibody
Single Port
Case 344B
Suffix AP/GP



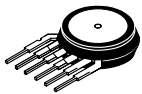
Unibody
Dual Port
Case 344C
Suffix DP



Medical
Chip Pak
Case 423A
Suffix DT1



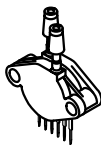
Unibody
Stovepipe Port
Case 344E
Suffix AS/GS



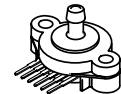
Unibody
Basic Element
Case 867
Suffix A/D



Unibody
Single Port
Case 867B
Suffix AP/GP



Unibody
Dual Port
Case 867C
Suffix DP



Unibody
Axial Port
Case 867F
Suffix ASX/GSX



Unibody
Stovepipe Port
Case 867E
Suffix AS/GS

PACKAGING (continued)
(Sizes not to scale)

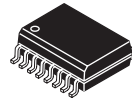
Acceleration Sensors Packaging



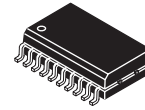
Quad Flat No-Lead
Case 1622-01
QFN Suffix



Quad Flat No-Lead
Case 1477-01
QFN Suffix



16-Pin SOIC
Case 475
D Suffix

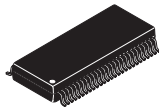


20-Pin SOIC
Case 475A
D Suffix

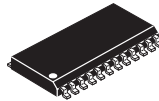
Electric Field Sensing Integrated Circuits Packaging



44-Pin HSOP
Case 1291-02
DH Suffix

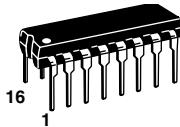


54-Pin SOICW
Case 1390-02
DWB Suffix

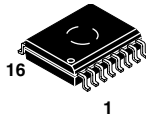


24-Pin SOICW
Case 751E-04
PB-Free

Safety and Alarm Integrated Circuits Packaging



Plastic DIP
Case 648
P Suffix



SOIC Package
Case 751G
DW Suffix

Note: P or P1 = 16-pin DIP, DW = SOIC 16-pin, DWR2 = SOIC 16-pin tape and reel

A change bar appears in the left margin to mark the location of new or revised information.

PRESSURE SENSOR ORDERABLE PART NUMBERS

PRESSURE SENSOR ORDERABLE PART NUMBERS

Uncompensated

MPX10D
MPX10DP
MPX10GP
MPX10GS
MPXV10GC6U
MPXV10GC7U
MPX12D
MPX12DP
MPX12GP
MPX53D
MPX53DP
MPX53GP
MPXM53GS
MPXM53GST1
MPXV53GC6U
MPXV53GC7U

Compensated

MPX2300DT1
MPX2301DT1
MPX2010D
MPX2010GP
MPX2010DP
MPX2010GS
MPX2010GSX
MPXM2010D
MPXM2010DT1
MPXM2010GS
MPXM2010GST1
MPXC2011DT1
MPXC2012DT1
MPXV2010GP
MPXV2010DP
MPXM2051GS
MPXM2051GST1
MPX2053D
MPX2053GP

MPX2053DP
MPX2053GVP
MPXM2053D
MPXM2053DT1
MPXM2053GS
MPXM2053GST1
MPXV2053GP
MPXV2053DP
MPX2050D
MPX2050GP
MPX2050DP
MPX2050GSX
MPX2102D
MPX2102GP
MPX2102DP
MPX2102GVP
MPXM2102D
MPXM2102DT1
MPXM2102GS
MPXM2102GST1
MPXV2102GP
MPXV2102DP
MPX2102A
MPX2102AP
MPX2102ASX
MPXM2102A
MPXM2102AT1
MPXM2102AS
MPXM2102AST1
MPX2100D
MPX2100GP
MPX2100DP
MPX2100GVP
MPX2100A
MPX2100AP
MPX2100ASX
MPX2202D
MPX2202GP

MPX2202DP
MPXV2202GC6T1
MPXV2202GC6U
MPXM2202D
MPXM2202DT1
MPXM2202GS
MPXM2202GST1
MPXV2202GP
MPXV2202DP
MPX2202A
MPX2202AP
MPXM2202A
MPXM2202AT1
MPXM2202AS
MPXM2202AST1
MPX2200D
MPX2200GP
MPX2200DP
MPX2200GSX
MPX2200A
MPX2200AP

Integrated

MPXV7002DP
MPXV7002DPT1
MPVZ5004GW6U
MPVZ5004GW7U
MPVZ5004G6U
MPVZ5004G6T1
MPVZ5004G7U
MPXV5004GC6T1
MPXV5004GC6U
MPXV5004GC7U
MPXV5004G6U
MPXV5004G7U
MPXV5004GP
MPXV5004GP1
MPXV5004DP

MPXV5004GVP
MPVZ4006GW6U
MPVZ4006G6U
MPVZ4006G6T1
MPVZ4006G7U
MPVZ4006GW7U
MPXV4006GC6T1
MPXV4006GC6U
MPXV4006GC7U
MPXV4006G6U
MPXV4006G7U
MPXV4006GP
MPXV4006DP
MPXV7007DP
MPXV7007GP
MPXV7007G6T1
MPXV7007G6U
MPXV7007GC6U
MPXV7007GC6T1
MPVZ5010GW6U
MPVZ5010G6U
MPVZ5010G6T1
MPVZ5010G7U
MPVZ5010GW7U
MPX5010D
MPX5010DP
MPX5010DP1
MPX5010GP
MPX5010GS
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MPXV5010GC6U
MPXV5010GC7U
MPXV5010G6U
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MPXV5010GP
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MPXV7025DP

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MPX5700AS
MPX5700ASX
MPX5700D
MPX5700DP
MPX5700GP
MPX5700GP1
MPX5700GS
MPX5999D

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Technical Information Center
Schatzbogen 7
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Japan:

Freescale Semiconductor Japan Ltd.
Headquarters
ARCO Tower 15F
1-8-1, Shimo-Meguro, Meguro-ku
Tokyo 153-0063
Japan
0120 191014 or +81 3 5437 9125
support.japan@freescale.com

Asia/Pacific:

Freescale Semiconductor Hong Kong Ltd.
Technical Information Center
2 Dai King Street
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