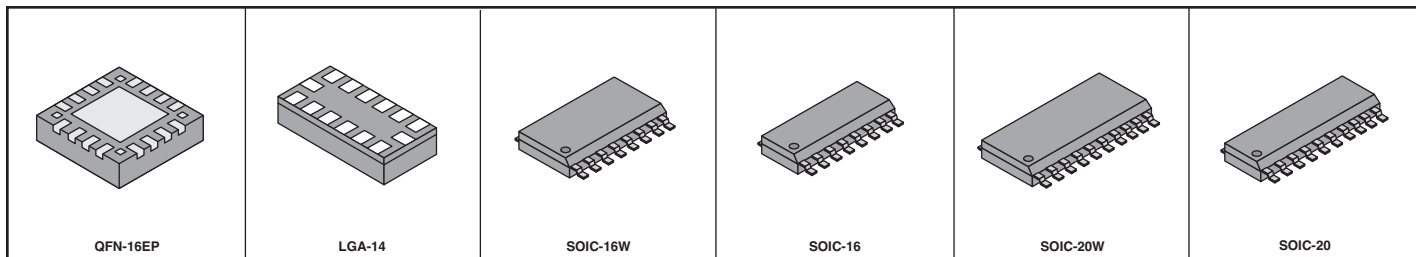


FREESCALE Accelerometers



RoHS Compliant This product is RoHS compliant.



Analog ICs

Freescale

FREESCALE ACCELEROMETERS

Freescale's extensive acceleration sensor portfolio includes 1.5g to 250g sensors that detect changes in force resulting from tilt, motion, positioning, shock, and vibration.

Features:

- X, XY, and Z axis of sensitivity
- 1.5 - 250g for a wide variety of applications
- Sensitivity as high as ±1200 mV/g
- Signal conditioned with internal filter
- Calibrated self-test for functional verification
- Linear output
- Ratiometric, ideally suited to interface with A to D converters
- Hermetically sealed g-cell
- Low-cost plastic packages in low-dimension Quad Flat No-Lead (QFN)
- Pb-free package (6 x 6 x 1.98mm) or SOIC-6 or 20 with through hole or surface mount available
- Interface seamlessly with Freescale processors



RoHS Compliant

Low g Acceleration Sensors

For quantities 500 and up, call for quote.

MOUSER STOCK NO.	Freescale Part No.	Package	Acceleration Sensitivity			Rolloff Frequency (Typ)(Hz)	Zero g Output (Typ)(V)	Supply Voltage (Typ.)(V)	Price Each			
			Acceleration (g)	Sensing Axis	Sensitivity (Typ.)(mV/g)				1	25	50	100
841-MMA1220EG	MMA1220EG	SOIC-16W	8	Z	250	250	2.5	5	14.05	12.93	11.90	10.95
841-MMA1250EG	MMA1250EG	SOIC-16W	5	Z	400	50	2.5	5	5.38	4.91	4.61	4.50
841-MMA1260EG	MMA1260EG	SOIC-16W	1.5	Z	1200	50	2.5	5	5.38	4.50	4.42	4.26
841-MMA2260EG	MMA2260EG	SOIC-16W	1.5	X	1200	50	2.5	5	18.42	16.02	14.58	13.38

Low g Three-Axis Analog Output Acceleration Sensors



For quantities 500 and up, call for quote.

MOUSER STOCK NO.	Freescale Part No.	Package	Acceleration Sensitivity	Sensing Axis	Maximum Acceleration (g)	Digital Output	Output Data Rate	Low Power Current Consumption (µA)			Price Each			
								Off	Standby	Active	1	25	50	100
841-MMA7260QT	MMA7260QT	QFN-16EP	Selectable (1.5 / 2 / 4 / 6)	X, Y, Z	800, 600, 300, 200	-	-	1.65	3.3	4.68	3.66	3.49	3.34	
841-MMA7331LT	MMA7331LT	LGA 14	Selectable (4 / 12)	X, Y, Z	308 / 83.6	400 (XY) / 300 (Z)	1.4	2.8	2.32	1.92	1.76	1.75		
841-MMA7341LT	MMA7341LT	LGA 14	Selectable (3 / 11)	X, Y, Z	440 / 117.8	400 (XY) / 300 (Z)	1.65	3.3	3.35	2.13	2.08	2.01		
841-MMA7361LT	MMA7361LT	LGA 14	Selectable (1.5 / 6)	X, Y, Z	800 / 206	400 (XY) / 300 (Z)	1.65	3.3	3.35	2.13	2.12	2.01		
841-MMA7368LT	MMA7368LT	LGA 14	1.5	X, Y, Z	800	400 (XY) / 300 (Z)	1.65	3.3	2.66	2.42	2.20	2.00		

Low Power, Low- g 3-Axis Digital Output Acceleration Sensor



For quantities 500 and up, call for quote.

MOUSER STOCK NO.	Freescale Part No.	Package	Acceleration Sensitivity	Maximum Acceleration (g)	Digital Output	Output Data Rate	Low Power Current Consumption (µA)			Price Each			
							Off	Standby	Active	1	25	50	100
841-MMA7660FCR1	MMA7660FCR1	DFN 10	1.5	10,000	I2C	User Select.	0.4	2	47	2.36	1.42	1.38	1.36

Low g Three-Axis Digital Output Acceleration Sensors

For quantities 500 and up, call for quote.

MOUSER STOCK NO.	Freescale Part No.	Package	Acceleration Sensitivity		Maximum Acceleration (g)	Digital Output	Analog Supply Voltage (Typ) (V)	Supply Current Drain (Typ) (µA)	Price Each			
			8-bit Mode (g)	10-bit Mode					1	25	50	100
841-MMA7455LT	MMA7455LT	LGA 14	Selectable (2 / 4 / 8)	8	5000	I2C / SPI	2.8	400	2.60	1.66	1.62	1.57
841-MMA7456LT	MMA7456LT	LGA 14	Selectable (2 / 4 / 8)	8	5000	I2C / SPI	2.8	437	5.27	4.52	3.87	3.44

Medium g Acceleration Sensors

For quantities 500 and up, call for quote.

MOUSER STOCK NO.	Freescale Part No.	Package	Acceleration Sensitivity			Rolloff Frequency (Typ)(Hz)	Zero g Output (Typ)(V)	Supply Voltage (Typ.)(V)	Price Each			
			Acceleration (g)	Sensing Axis	Sensitivity (Typ.)(mV/g)				1	25	50	100
841-MMA1210EG	MMA1210EG	SOIC-16W	100	Z	20	400	2.5	5	8.11	7.46	6.87	6.32
841-MMA1213EG	MMA1213EG	SOIC-16W	50	Z	40	400	2.5	5	8.11	7.46	6.87	6.32
841-MMA2201EG	MMA2201EG	SOIC-16W	40	X	50	400	2.5	5	4.86	4.46	4.08	4.07
841-MMA2202EG	MMA2202EG	SOIC-16	50	X	40	400	2.5	5	4.86	4.46	4.08	3.85
841-MMA2204EG	MMA2204EG	SOIC-16	100	X	20	400	2.5	5	4.86	4.44	4.29	4.07
841-MMA3201EG	MMA3201EG	SOIC-20W	40	X, Y	50	400	2.5	5	6.80	6.23	5.70	5.69
841-MMA3202EG	MMA3202EG	SOIC-20	100 and 50	X, Y	20 and 40	400	2.5	5	6.80	6.21	5.91	5.69
841-MMA3204EG	MMA3204EG	SOIC-20	100 and 30	Y, X	66 and 20	400	2.5	5	11.05	10.17	9.36	8.61

High g Acceleration Sensors

For quantities 500 and up, call for quote.

MOUSER STOCK NO.	Freescale Part No.	Package	Acceleration (g)	Sensing Axis	Sensitivity (Typ.)(mV/g)	Rolloff Frequency (Typ)(Hz)	Zero g Output (Typ)(V)	Supply Voltage (Typ.)(V)	1	25	50	100
841-MMA1200EG	MMA1200EG	SOIC-16W	250	Z	8	400	2.5	5	4.98	4.56	4.17	4.16
841-MMA1212EG	MMA1212EG	SOIC-16W	200	Z	10	400	2.5	5	8.11	7.46	6.87	6.32
841-MMA2301EG	MMA2301EG	SOIC-16	200	X	10	400	2.5	5	4.86	4.44	4.29	4.07

Accelerometer Development Tools

For quantities 500 and up, call for quote.

MOUSER STOCK NO.	Freescale Part No.	Description	Price Each
841-KIT3109MMA6280QE	KIT3109MMA6280QE	1.5-6 XZ-AXIS Evaluation Kit	45.49
841-KIT3109MMA7260QE	KIT3109MMA7260QE	1.5-6 XYZ AXIS Evaluation Kit	50.53
841-KIT3376MMA7331L	KIT3376MMA7331L	3-Axis Low g Analog Output Accelerometer Evaluation Kit	38.50
841-KIT3376MMA7341L	KIT3376MMA7341L	3-Axis Low g Analog Output Accelerometer Evaluation Kit	38.50
841-KIT3376MMA7361L	KIT3376MMA7361L	3-Axis Low g Analog Output Accelerometer Evaluation Kit	38.50
841-KIT3376MMA7368L	KIT3376MMA7368L	3-Axis Low g Analog Output Accelerometer Evaluation Kit	55.44
841-KIT3468MMA7455L	KIT3468MMA7455L	3-Axis Low g Digital Output Accelerometer Evaluation Kit	55.44
841-RD3803MMA7660FC	RD3803MMA7660FC	RD3803MMA7660 Evaluation Kit Board	150.79