

# FREESCALE Accelerometers and Analog ICs



RoHS Compliant **This product is RoHS compliant.**

## FREESCALE ACCELEROMETERS

Acceleration sensors are designed to detect changes in force resulting from tilt, motion, positioning, shock and vibration. For consumer electronics that require a fast response time, high sensitivity, low-current consumption, low-voltage operation and a standby mode in a small profile package, Freescale's acceleration sensors are an ideal solution.

### 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			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-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 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	Output Data Rate	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
841-MMA8450QT	MMA8450QT	QFN-16	2	10,000	I2C	User Select.	<1	3	42	4.22	4.02	3.86	3.46
841-MMA8450QR1	MMA8450QR1	QFN-16	2	10,000	I2C	User Select.	<1	3	42	4.22	4.02	3.86	3.46

### 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

### Accelerometer Development Tools

MOUSER STOCK NO.	Freescale Part No.	Description	Price Each
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	MMA7660 Evaluation Kit Board	150.79
841-RD3965MMA7660FC	RD3965MMA7660FC	ZSTAR3 featuring the MMA7660FC digital accelerometer	133.66
841-RD3924MMA8450Q	RD3924MMA8450Q	MMA8450Q Sensor Toolbox Kit	168.30
841-LFSTBEB8450	LFSTBEB8450	MMA8450Q Evaluation Development Board	127.50

## PROXIMITY & CAPACITIVE TOUCH SENSOR CONTROLLERS

Freescale has a broad portfolio of hardware and software touch sensing solutions help you choose the best fit for your design. Touch sensing technology can reliably replace mechanical buttons and switches to eliminate mechanical wear and tear. Freescale touch sensors can be configured into simple sliders, rotary wheels and touch pads to offer significant advantages for more intuitive user interfaces, allowing greater freedom for designers while reducing overall system cost.

For quantities 250 and up, call for quote.

MOUSER STOCK NO.	Freescale Part No.	Package	Touch Pads	Response Time (ms)	Interface & Input Control	Supply Current (µA)	Shut Down Current (µA)	Supply Voltage (V)	Price Each			
									1	25	50	100
841-MPR031EPR2	MPR031EPR2	QFN-D 8	3	32	I2C	8	4	1.71 to 2.75	.82	.56	.55	.53
841-MPR121QR2	MPR121QR2	QFN-20	12	64	I2C	29	3	1.71 to 3.6	1.72	1.10	1.03	1.01

### Development Tools

MOUSER STOCK NO.	Freescale Part No.	Description	Price Each
841-DEMOMPR031	DEMOMPR031	Demo board for MPR031	27.50
841-KITMPR03XEVM	KITMPR03XEVM	Evaluation Kit for MPR03X series	108.90
841-TSSEVB	TSSEVB	Touch Sensing Software Evaluation Board	84.99
841-KITMPR121EVM	KITMPR121EVM	Sensor Toolbox MPR121 Evaluation Kit	105.19

## ENGINE CONTROL ANALOG POWER IC

For quantities 250 and up, call for quote.

MOUSER STOCK NO.	Freescale Part No.	Package	Power Output Load - Current Typ(A)	Supply Voltage (V)	Power Output Load - Current Limit per Output - Min (A)	Power Output Load - Number of Channels	Drain-to-Source On Resistance Typ (Ω)	Price Each			
								1	25	50	100
841-MCZ33812EK	MCZ33812EK	SOIC 32	1, 0.3	4.9/36	3, 1	2, 1	0.25	5.23	3.66	3.34	3.23

## FREESCALE H-BRIDGES AND CONFIGURABLE SWITCHES

Freescale's H-Bridge and Configurable switches are a selection of devices that provide Half Bridge, Full H-Bridge and configurable High and Low side switch capabilities. The devices are designed to service automotive as well as consumer/battery power loads. SMARTMOS™ technology provides the low rDS(on) MOSFET switches and control logic.

For quantities 250 and up, call for quote.

MOUSER STOCK NO.	Freescale Part No.	Package	Load Supply Voltage (V)	Supply Voltage (V)	Power Output Load Current (A)	Power Output Channels	Drain-to-Source On Resistance Typ (Ω)	Current Limit per Output Min. (A)	Interface Control	Price Each			
										1	25	50	100
841-MC33886VW	MC33886VW	HSOP 20	0 to 30	5 to 30	3	2	-	-	Parallel	5.36	3.73	3.63	3.49
841-MC33887PNB	MC33887PNB	PWR QFN 36	0 to 30	5 to 30	3	2	0.24	5.2	Parallel	5.05	3.23	3.13	3.03
841-MCZ33880EG	MCZ33880EG	SOIC-28W	0 to 45	9 to 24.5	0.25	8	0.55	2	SPI	3.18	2.54	2.50	2.23
841-MPC17510EJ	MPC17510EJ	TSSOP 24	0 to 15	2 to 15	3	1	-	-	Parallel	3.01	2.01	2.00	1.91
841-MPC17C724EP	MPC17C724EP	QFN 16	2.7 to 5.5	2.7 to 5.5	0.4	2	-	-	Parallel	.92	.66	.64	.60

## FREESCALE ANALOG AND MIXED SIGNAL DEVELOPMENT TOOLS

MOUSER STOCK NO.	Freescale Part No.	Description	Price Each
841-KIT34700EPEVBE	KIT34700EPEVBE	Evaluation Kit - 34700 Four Output, Integrated P/S	149.46
841-KIT34704AEPEVBE	KIT34704AEPEVBE	Evaluation Kit -34704A - 8 Channel DC-DC Power Management IC	182.04
841-KIT34704BEPEVBE	KIT34704BEPEVBE	Evaluation Kit -34704B - 5 Channel DC-DC Power Management IC	182.04
841-KIT34844EPEVME	KIT34844EPEVME	Evaluation Kit - 34844, 10 Ch LED Backlight Driver with Integrated Power Supply	110.31
841-KITLEDCLK16EVBE	KITLEDCLK16EVBE	Evaluation KIT-16 Ch LED driver board (256 LEDs)	470.16
841-KIT33812EKEVBE	KIT33812EKEVBE	Multifunctional Ignition and Injector Driver Evaluation board	122.35
841-KIT33812ECUEVME	KIT33812ECUEVME	Small Engine Control Reference Design featuring the 33812 and the S12P	266.68