

FREESCALE Sensors and Analog ICs



RoHS Compliant This product is RoHS compliant.

XTRINSIC™ ACCELERATION SENSORS

Xtrinsic sensing solutions represent products across the automotive, consumer and industrial markets where contextual sensing is achieved because the sensors have integrated algorithms and/or computation to help make decisions or the sensor is an integrated platform with multiple sensors and a processor providing a high-degree of contextual awareness through decision making.

Low Power, Low g - Xtrinsic Three-Axis Digital Output Acceleration Sensors

For quantities greater than listed, 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	1.44	1.35	.957	.843
841-MMA8450QT	MMA8450QT	QFN-16	2	10,000	I2C	User Select.	<1	3	42	1.70	1.49	1.39	1.21
841-MMA8450QR1	MMA8450QR1	QFN-16	2	10,000	I2C	User Select.	<1	3	42	3.15	3.00	2.88	2.58

Low Power, Low Noise, Low g - Xtrinsic MMA845xQ Acceleration Sensors

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Freescale Part No.	Package	Resolution (bits)	Power Consumption (µA)	Supply Voltage	Output Data Rate (Hz)	Output Noise Low Noise Mode (at 400Hz ODR)	Price Each			
								1	25	50	100
841-MMA8451QT	MMA8451QT	QFN 16	14	6	1.95 - 3.6	1,563 - 800	99 µg/Hz	1.55	1.41	1.25	1.08
841-MMA8451QR1	MMA8451QR1	QFN 16	14	6	1.95 - 3.6	1,563 - 800	99 µg/Hz	2.32	1.69	1.45	1.40
841-MMA8452QR1	MMA8452QR1	QFN 16	12	6	1.95 - 3.6	1,563 - 800	99 µg/Hz	1.50	1.44	1.38	.88
841-MMA8453QR1	MMA8453QR1	QFN 16	10	6	1.95 - 3.6	1,563 - 800	99 µg/Hz	1.37	1.22	1.15	1.10
841-MMA8453QT	MMA8453QT	QFN-16	8, 10	6	1.95-3.6	1.56-800	99 µg/Hz	1.21	1.00	.921	.874

Low g - Three-Axis Digital Output Acceleration Sensors

For quantities greater than listed, 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	1.90	1.79	1.66	1.40
841-MMA7455LR1	MMA7455LR1	LGA-14	Selectable (2/4/8)	64 LSB/g@2 & 8	5000	I2C / SPI	2.8	400	1.92	1.80	1.50	1.13

High Accuracy, Three Axis Xtrinsic Digital Magnetometer



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Freescale Part No.	Magnetic Field Sensitivity (Gauss)	Maximum Applied Magnetic Field (µT)	Sampling Rate	Bus	Supply Current Max (µA)	Voltage Supply (V)	Price Each			
								1	25	50	100
841-MAG3110FCR1	MAG3110FCR1	10	100000	80	I2C	900	.95-3.6	2.29	2.17	1.82	1.78

Accelerometer Development Tools

MOUSER STOCK NO.	Freescale Part No.	Description	Price Each
841-KIT3376MMA7368L	KIT3376MMA7368L	3-Axis Low g Analog Output Accelerometer Evaluation Kit	37.19
841-RD3803MMA7660FC	RD3803MMA7660FC	MMA7660 Evaluation Kit Board	119.00
841-RD3965MMA7660FC	RD3965MMA7660FC	ZSTAR3 featuring the MMA7660FC digital accelerometer	99.00
841-RD3924MMA8450Q	RD3924MMA8450Q	MMA8450Q Sensor Toolbox Kit	99.00
841-LFSTBEB8450	LFSTBEB8450	MMA8450Q Evaluation Development Board	75.00
841-KIT3803MMA7660FC	KIT3803MMA7660FC	MMA7660 Evaluation Kit Daughter Board	35.00
841-LFSTBEB845X	LFSTBEB845X	MMA8450Q TripleAxis Digital Evaluation Kit	75.00
841-RDMMA845X	RDMMA845X	Acceleration Sensor Development Tool Kit for LFSTBUSB/E845X	99.00

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 greater than listed, 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	.87	.82	.808	.787
841-MPR121QR2	MPR121QR2	QFN-20	12	64	I2C	29	3	1.71 to 3.6	1.52	1.43	1.40	1.37
841-MPR083EJ	MPR083EJ	TSSOP-16	8	32	I2C	41	2	1.8-3.6	2.29	2.15	2.00	1.66
841-MPR084EJ	MPR084EJ	TSSOP-16	8	32	I2C	41	2	1.8-3.6	2.30	2.15	2.00	1.35

Development Tools

MOUSER STOCK NO.	Freescale Part No.	Description	Price Each
841-DEMOMPR031	DEMOMPR031	Demo board for MPR031	25.00
841-KITMPR03XEVM	KITMPR03XEVM	Evaluation Kit for MPR03X series	99.00
841-TSSEVB	TSSEVB	Touch Sensing Software Evaluation Board	99.99
841-KITMPR121EVM	KITMPR121EVM	Sensor Toolbox MPR121 Evaluation Kit	99.00

ENGINE CONTROL ANALOG POWER IC

For quantities greater than listed, 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	4.06	3.61	3.34	2.78

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 greater than listed, 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-MPC17C724EP	MPC17C724EP	QFN 16	2.7 to 5.5	2.7 to 5.5	0.4	2	-	-	Parallel	1.01	.95	.858	.594

FREESCALE ANALOG AND MIXED SIGNAL DEVELOPMENT TOOLS

MOUSER STOCK NO.	Freescale Part No.	Description	Price Each
841-KIT34704AEPEVBE	KIT34704AEPEVBE	Evaluation Kit -34704A - 8 Channel DC-DC Power Management IC	194.70
841-KIT34704BEPEVBE	KIT34704BEPEVBE	Evaluation Kit -34704B - 5 Channel DC-DC Power Management IC	194.70
841-KITLEDCLKL16EVBE	KITLEDCLKL16EVBE	Evaluation KIT-16 Ch LED driver board (256 LEDs)	442.50
841-KIT33812KEVBE	KIT33812KEVBE	Multifunctional Ignition and Injector Driver Evaluation board	78.00
841-KIT33812ECUEVME	KIT33812ECUEVME	Small Engine Control Reference Design featuring the 33812 and the S12P	258.84