

## MEMSIC



MEMSIC (MEMS + IC), based in Andover, USA develop MEMS sensors components and system integration technologies. Their broad range of products target diverse market segments, from consumer electronics to industrial automation to aerospace. The unique thermal technology uses heated gas molecules to detect acceleration and is the fundamental principle behind our accelerometer IC products.

### Acceleration Sensors

	Axes	Range	Output	Sens'ty	Offset Drift	BW	Noise	Supply Volt-age	Sleep Mode	Size
		(+/- g)			(mg/°C)			(Hz)		(mg rms)
<b>MXP7205VF</b>	2(XY)	5	SPI	800 c/g	1	29	2.7	4.5 - 5.2		5 x 5
<b>MXP7205VW</b>	2(XZ)	5	SPI	800 c/g	1	29	2.7	4.5 - 5.3		5.5 x 5.5
<b>MXR7305VF</b>	2(XY)	5	Analog	0.25 V/g	2	27	3.1	4.5 - 5.3		5 x 5
<b>MXR7250VW</b>	2 (XZ)	5	Analog	0.25 V/g	1.3	27	3.1	4.5 - 5.3		5.5 x 5.5
<b>MXR9150MZ</b>	3(XYZ)	5	Analog	0.15 V/g	1	17	2.5	2.7 - 3.6	Y	7 x 7
<b>MXC6232xMP</b>	2(XY)	2	I <sup>2</sup> C	512 c/g	0.8	17	0.7	2.7 - 3.6	Y	5 x 5
<b>MXC6255XU</b>	2(XY)	2	I <sup>2</sup> C	64 c/g	0.3	10	0.6	2.5 - 5.5	Y	3 x 3
<b>MXC6255XC</b>	2(XY)	2	I <sup>2</sup> C	64 c/g	0.6	10	0.9	2.5 - 5.5	Y	1.2 x 1.7
<b>MXD6235MP</b>	2(XY)	2	PWM	12.5%/g	1.5	17	1.6	2.7 - 3.6		5 x 5
<b>MXC6232xEP</b>	2(XY)	1.5	I <sup>2</sup> C	512 c/g	0.8	17	2.9	2.7 - 3.6	Y	5.5 x 5.5
<b>MXR6500MP</b>	2(XY)	1.7	Analog	0.5 V/g	1.5	17	1.6	2.7 - 3.6		5 x 5
<b>MXR9500MZ</b>	3(XYZ)	1.7	Analog	0.5 V/g	1	17	2.5	2.7 - 3.6	Y	7 x 7
<b>MXD2020EL</b>	2(XY)	1	PWM	20 %/g	0.4	17	0.8	3.0 - 5.3		5 x 5
<b>MXR7900CF</b>	2(XY)	1	Analog	0.9 V/g	0.3	19	1.3	4.5 - 5.3		5 x 5
<b>MXA2500EL</b>	2(XY)	1	Analog	0.5 V/g	0.4	17	0.8	3.0 - 5.5		5 x 5
<b>MXR2999EL</b>	2(XY)	0.5	Analog	1 V/g	0.4	17	0.8	3.0 - 5.3		5 x 5
<b>MXC4005XC</b>	3(XYZ)	2, 4, 8	I <sup>2</sup> C	1024 c/g	0.8	10	3	1.6 - 3.6	Y	1.7 x 1.2
<b>MXD6240/41AU</b>	Roll	0 +/- 90	1-Wire			3.125		3 - 5		3 x 3
<b>MXC6244AU</b>	2	8	I <sup>2</sup> C	1024 c/g	0.1	11	0.75	2.7 - 5.5	Y	3 x 3
<b>MXC6245XU</b>	2 (XY)	2	I <sup>2</sup> C	1024	0.1	11	1.5	2.7 - 5.5	Y	3 x 3

### Magnetometers

MEMSIC's family of magnetometer components are available in both dual-axis and three-axis versions. They are based on anisotropic magnetoresistive (AMR) Permalloy technology sensors, which have superior accuracy and response time characteristics, while consuming significantly less power than alternative technologies.

	Axe s	FSR	Inter-face	Sensitiv-ity	Noise	Supply Volt-age	Supply Cur-rent	Sleep Mode	Size
		(+/- G)			(mG rms)	(V)	(mA @ 7cps)		(mm)
<b>MMC3416xPJ</b>	3	16	I2C	2048 c/G	1.5	1.62 - 3.6	0.14	Y	1.6 x 1.6
<b>MMC5883MA</b>	3	8	I2C	4096 c/G	0.6	1.62 - 3.6	0.1		3 x 3

# ACEINNA



Headquartered in Andover MA, ACEINNA delivers Powerful Sensing Solutions that improve the size, performance, and cost of our customers' end products. They supply MEMS thermal mass Flow sensor & Tilt sensor modules and AMR based current sensors. ACEINNA is a spinoff of MEMSIC, Inc.

## Tilt Sensor Modules

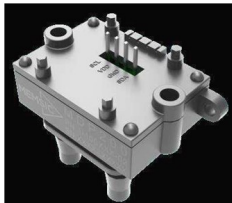
The Tilt Sensor Modules are in rugged 1-axis and 2-axis versions with built-in signal conditioning which support a wide range of applications and performance levels.

Part Number	Axes	Range	Output	Sensitivity	Bandwidth	Resolution	Supply Voltage	Temp Range	Package Type	Dimensions
		(+/- deg)		(mV/deg)	(Hz)	(deg rms)	(V)	(°C)		(cm)
CXTA01-T	1(X)	75	0-5V	35	DC-50	0.05	6 to 30	-40 to +85	Nylon	4.5 x 2.7
CXTLA02-T	2(XY)	20	0-5V	100	DC-6	0.05	6 to 30	-40 to +85	Nylon	4.5 x 2.7
CXTA02-T	2(XY)	75	0-5V	35	DC-50	0.05	6 to 30	-40 to +85	Nylon	4.5 x 2.7
CXTILT02EC	2(XY)	75	RS-232	Selectable	Selectable	Selectable	8 to 30	-40 to +85	Aluminium	10.2 x 5.7
MTLT110S-R	2(XY)	90 / 180	RS-232	N/A	DC-50	0.05	9 to 32	-40 to +70	Plastic	5.4 x 4.0
MTLT105S-R	2 (XY)	90 / 180	RS-232	N/A	DC-50	0.05	9 to 32	-40 to +70	Plastic	5.4 x 4.0
MTLT105D-R	2(XY)	90 / 180	RS-232	N/A	DC-50	0.05	9 to 32	-40 to +70	Plastic	5.4 x 4.0

## Flow & Differential Sensors

ACEINNA's flow and differential pressure sensors are highly customizable for different applications, flow / pressure ranges, and form factors.

Part Number	Type	Range	Accuracy	Output	Sleep Mode	Supply Voltage
					(mA)	(V)
MFC2030	Flow	+/- 30 SLM	3%MV (3 - 30 SLM) 0.3%FSR (< 3 SLM)	Digital (I2C) or Analog (PWM)	0.05	2.7 - 5.5
MDP200	Pressure	+/-500 Pa	+/-3% m.v.	I2C	0.001	2.7 - 5.5



## Broadband Technology 2000 Ltd Product Areas

<b>Semiconductors</b> Mixed Signal IC's Powerline Communications RF Interface Mixed Signal Active Filter	<b>Wireless/M2M</b> Antennae GSM, GPRS & 3G Modems 3G Routers 3G & GPRS Gateways 4G/LTE GPS Tracking Units RF Cables Connectors	<b>Sensors</b> MEMS Accelerometers MEMS Magnetic Sensors MEMS Gyroscopes MEMS Pressure Sensors <b>RF Microwave</b> Amplifiers Attenuators Switches	<b>Power</b> Super Capacitors Power Modules Solid State Batteries <b>Interconnect</b> Magnetics Cable Assembly Connectors	<b>Internet of Things</b> Powerline Communications Narrow & Broadband
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