

## Sensors

### ATTACH SYSTEM SOLUTIONS FROM MOTOROLA: SENSOR SOLUTIONS



#### OVERVIEW

Motorola's Attach System Solutions is a system approach to designing with Motorola's core products. The idea is simple. Whatever target application you're designing, Motorola's attach products, including our robust analog, sensor, security and timing devices, can help you reduce system development time, lower overall system costs, simplify overall system design and ultimately, speed your time-to-market.

Motorola offers sensor solutions in the following three areas: pressure sensors, acceleration sensors and alarm ICs. Each sensor is compatible with our microprocessor portfolio, offering key building blocks for an intelligent sensor solution.

In the chart below, you can see at a glance specific sensor devices that can be designed with Motorola's controllers and processors into your end solutions. Use this diagram as a tool to help you "attach" relevant clock driver products to our core products.

*Each sensor is compatible with our microprocessor portfolio, providing your customers with the key building blocks for an intelligent sensor solution.*

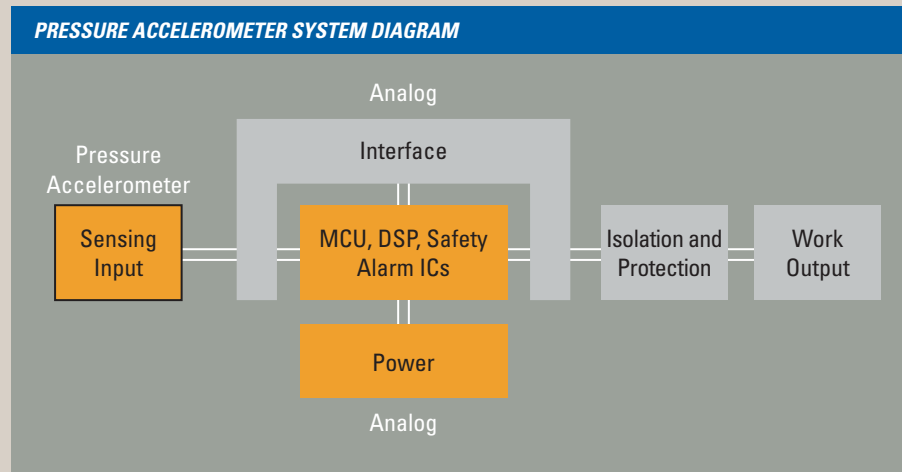
SENSORS	Attach Device										
	Pressure								Accelerometers		Safety and Alarm ICs
	MPXV5004	MPXV5050	MPXH6115	MPX2300	MPXV2010	MPXC2011	MPXM2053	MPXM2102	MMA1220D	MMA1260D	MC14600
Core Product											
8-bit MCU											
MC68HC908	●	●	●	●	●	●	●	●	●	●	●
16-bit MCU											
MC9S12	●	●	●	●	●	●	●	●	●	●	●
MC68HC12	●	●	●	●	●	●	●	●	●	●	●
16-bit DSP											
DSP56F8xx	●	●	●	●	●	●	●	●	●	●	●
DSP5685x	●	●	●	●	●	●	●	●	●	●	●
32-bit Controllers/ ColdFire®											
MCF5xxx	●	●	●	●	●	●	●	●	●	●	●
PowerPC™ ISA											
MPC5xx	●	●	●	●	●	●	●	●	●	●	●

● This device offers the highest sensitivity for the specific Core product in the left column.

● This device can attach to any of the Core products in the left column.

● This device can potentially be used as a stand-alone solution.

This pressure accelerometer system diagram is one example of the system diagrams available for sensor products. For more information about Motorola's sensor solutions, visit the Web sites listed under the Learn More section below.



Motorola Solutions Available

## BENEFITS

### Pressure Sensors

- Broad portfolio of packaging and porting options for design flexibility
- Cost-effectiveness
- Wide operating temperature range of -40°C to 125°C
- Fully signal conditioned, compensated and calibrated
- Interface seamlessly with Motorola processors
- Ratiometric to supply voltage

### Acceleration Sensors

- Broad portfolio, offering 1.5g to 250g measurement capability
- Integral signal conditioning
- Interface seamlessly with Motorola processors
- Cost-effectiveness
- Multi-axis sensing capability on one board design
- Robust design, high shock survivability
- Calibrated self-test
- Linear output
- Ratiometric to supply voltage

## Safety and Alarm ICs

- Cost-effectiveness
- Conform to NFPA standards

## LEARN MORE

For more information about Motorola's sensor solutions, visit the following Web sites:

Applications:

[www.motorola.com/semiconductors/applications](http://www.motorola.com/semiconductors/applications)

Tools:

[www.motorola.com/semiconductors/tools](http://www.motorola.com/semiconductors/tools)

Sensor Overview:

[www.motorola.com/semiconductors/sensorsolutions](http://www.motorola.com/semiconductors/sensorsolutions)



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