

Sensors

Overview

Freescale's Global Interactive Blue Chip (GIBC) Attach Program is designed to drive sales of complementary analog, sensor, security and timing products in conjunction with our core microcontroller and embedded processor product families. The idea is simple: When Freescale's "Attach" products are designed in conjunction with our "Core" products in a system

approach, they offer a compelling solution for your customers' end applications.

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

SENSORS

Core Product	Attach Device												
	Pressure								Accelerometers				Safety and Alarm ICs
	MPXV5004	MPXV5050	MPXH6115	MPX2300	MPXV2010	MPXC2011	MPXM2053	MPXM2102	MMA1220D	MMA1260D	MMA2260D	MMA6261Q	MC14600
8-bit MCU													
MC68HC908	●	●	●	●	●	●	●	●	●	●	●	●	●
16-bit MCU													
MC9S12	●	●	●	●	●	●	●	●	●	●	●	●	●
MC68HC12	●	●	●	●	●	●	●	●	●	●	●	●	●
16-bit DSP													
DSP56F8xx	●	●	●	●	●	●	●	●	●	●	●	●	●
DSP5685xx	●	●	●	●	●	●	●	●	●	●	●	●	●
32-bit Controllers/ ColdFire®													
MCF5xxx	●	●	●	●	●	●	●	●	●	●	●	●	●
PowerPC™ISA													
MPC5xx	●	●	●	●	●	●	●	●	●	●	●	●	●

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

- 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.

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 Freescale processors
- > Ratiometric to supply voltage

Acceleration Sensors

- > Broad portfolio, offering 1.5 g to 250 g measurement capability

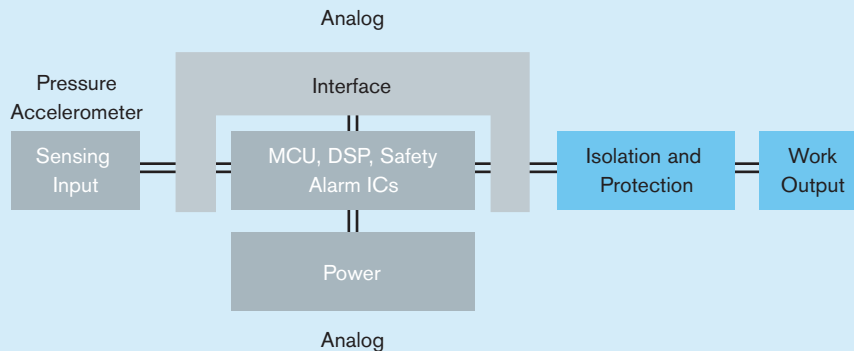
- > Integral signal conditioning
- > Interface seamlessly with Freescale processors
- > Cost-effectiveness
- > Multi-axis sensing capability on one board design
- > Robust design, high shock survivability
- > Calibrated self-test
- > Linear output
- > Ratiometric to supply voltage

Safety and Alarm ICs

- > Cost-effectiveness
- > Conform to NFPA standards

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

PRESSURE ACCELEROMETER SYSTEM DIAGRAM



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

Learn More: For more information about Freescale's sensor solutions, visit the following Web sites:

Applications: www.freescale.com/applications

Tools: www.freescale.com/tools

Sensor Overview: www.freescale.com/sensors