



## Sensors

# Xtrinsic Sensing Solutions

## A new era of sensing experience

### Overview

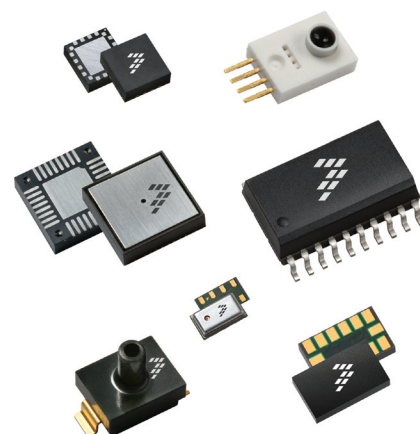
For over thirty years, Freescale Semiconductor's sensor products have helped make the world a safer and more interactive place with continuous sensor innovation. Globally, we have delivered more than 1 billion micro-electromechanical systems (MEMS)-based and CMOS state machine-based touch-sensing components and touch-sensing software on hundreds of microcontrollers (MCUs).

Building on our heritage of sensor innovation, Freescale is proud to announce Xtrinsic sensing solutions. Sensor products that go beyond translating a signal, Xtrinsic sensing solutions begin a new era of sensing experience for our customers.

### Intelligent Contextual Sensing

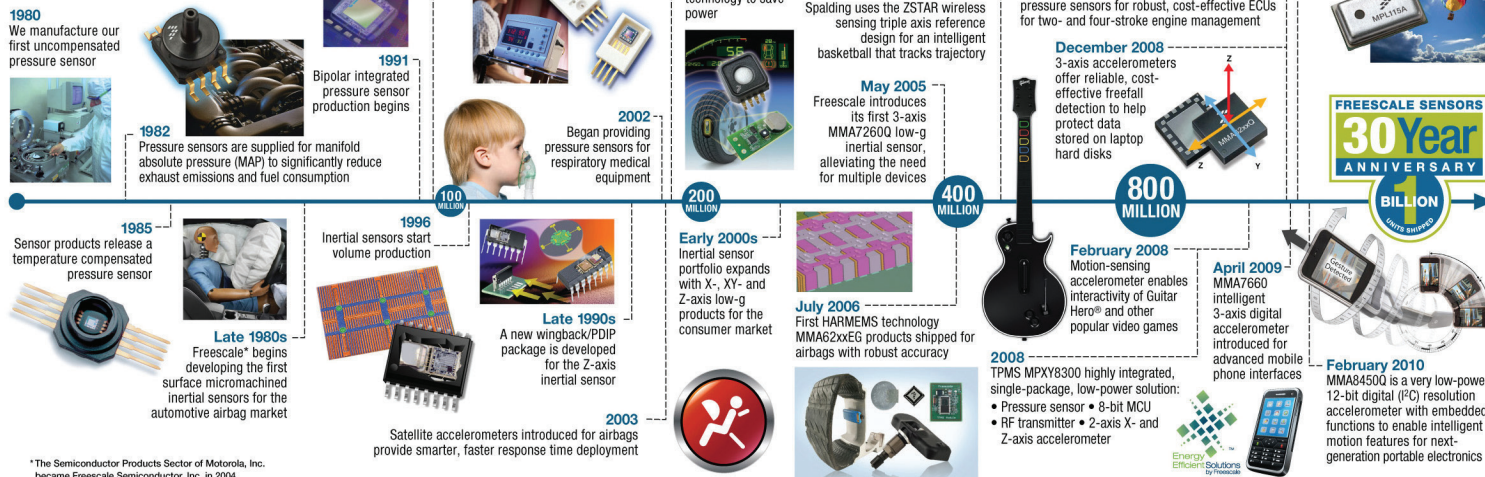
Freescale's Xtrinsic sensing solutions offer increased levels of modular integration combined with multiple sensor inputs, logic and other building blocks to bring greater value and decision making to the overall sensing solution. Multiple sensor inputs are leveraged within the platform to perform multiple application functions. With Freescale's Xtrinsic sensors, customers can choose among a wider range of scalable products at varying levels of integration, performance and price points.

Freescale Xtrinsic sensors feature customizable software that extends sensor use cases through algorithms and analysis to reduce complexity and provide processing assistance. Design time can be accelerated through use of common software platform and common tools, including the Sensor Toolbox, Sensor Tower Modules and CodeWarrior. Program and innovate with software for sensor platforms that allow you to design exactly what you *want* and *need* the application to be.



## One Billion in 30 Years

From 1980 to 2010 Freescale has designed, produced and shipped innovative sensor products to global customers



Creating new technologies that can sense and interact with the systems around them are becoming essential. With designers facing new challenges to create smarter products, Freescale's Xtrinsic sensing solutions are ideal to meet the needs of a constantly evolving and expanding world of technology. Our core competency is new product development using current processes to shorten the development cycle time. Our goal is to design products that ensure customer satisfaction and provide value the first time, every time.

Freescale Xtrinsic sensing solutions are able to go beyond single-die products and leverage complementary technologies from the corporation. Our broad portfolio of ZigBee® technology, MCUs, microprocessors, digital signal processors, analog and power ICs and development tools can enable even more complete system solutions for our customers.

No one can match our history of success or our vision for the future. Contact Freescale today to get more information on our Xtrinsic sensing solutions.

## Dimensions of Intelligent Contextual Sensing

### Building on a Strong Portfolio of Diverse Sensor Types

- Inertial, pressure and touch sensors
- Provide a multiplicity of sensor inputs for greater value to the overall solution
- Extract the maximum context from the environment

### Intelligent Integration

- The right combination of leading sensor types, logic and other building blocks to solve use case needs efficiently
- Advanced, modular integration that can include multiple sensor types, connectivity and low power
- Enables fusion of applications and high re-use of sensor data

### Amplifying Sensing

- Adds contextual analysis to sensor performance by including algorithms for decision making
- Sensor can be a final or sub-level decision maker that feeds into a central point
- Providing interpreted sensing information and control over a number of sensing decisions allows developers to focus on higher levels of innovation

### Ingenuity of Design

- Novel ways for how the solution is designed and delivered that leverage Freescale's remarkable sensor portfolio, IP, expertise and innovation
  - System partitioning
  - Packaging
  - Power management
  - Connectivity

### Learn More:

For current information about Freescale products and documentation, please visit [www.freescale.com/sensors](http://www.freescale.com/sensors).