EN - For pricing and availability in your local country please visit one of the below links:

DE - Informationen zu Preisen und Verfügbarkeit in Ihrem Land erhalten Sie über die unten aufgeführten Links:

FR - Pour connaître les tarifs et la disponibilité dans votre pays, cliquez sur l'un des liens suivants:

KITMPXSHOWEVK

EN
This Datasheet is presented by the manufacturer

DE
Dieses Datenblatt wird vom Hersteller bereitgestellt

FR
Cette fiche technique est présentée par le fabricant

Pressure Sensors

KITMPXSHOWEVK

Pressure Sensor Functional Package Board

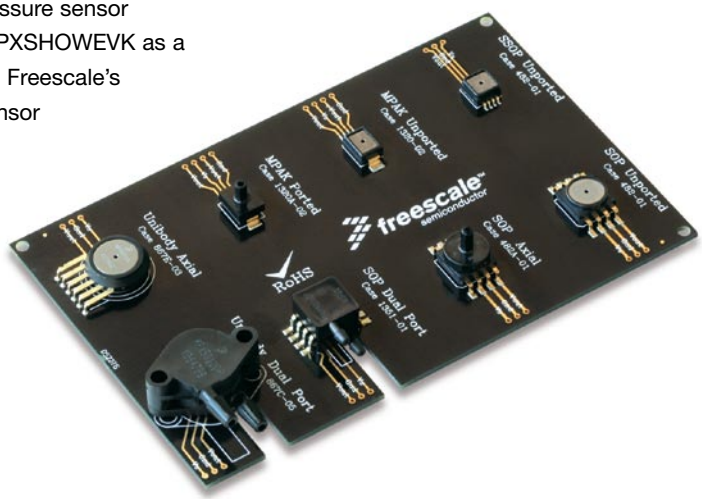
Overview

Freescale Semiconductor's pressure sensors are designed for interfacing and monitoring the atmosphere around you. To achieve this functionality, customers need the most flexible packaging options possible. In terms of package options, Freescale's pressure sensors feature unique size choices with or without porting, a single or dual port, and the option of axial or side porting.

To enhance your evaluation experience, Freescale is offering a pressure sensor package board, the KITMPXSHOWEVK as a marketing tool that shows Freescale's most popular pressure sensor package types mounted to a PCB board.

The pressure sensors are functional and include the following package configurations:

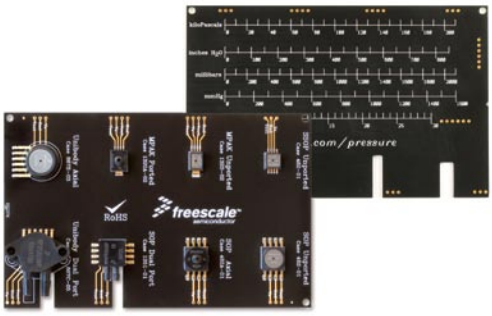
Unibody Package	
• Basic element	• Dual port
Small Outline Package (SOP) devices	
• Axial port	• Dual sided port
Super Small Outline Package (SSOP)	
• Unported	
MPAK Package	
• Axial port	• Unported



Target Applications for Pressure Sensors

- Barometric and altimetric measurements
- Barometric absolute pressure (BAP)
- Manifold absolute pressure (MAP)
- Blood pressure monitors
- Dialysis and drug delivery systems
- Health care equipment
- Heating, ventilation and air conditioning
- Hospital and air mattresses
- Industrial control
- Motorcycle engines
- Patient monitoring systems
- Physical therapy equipment
- Remote monitoring devices
- Respiratory and spirometer
- Sports diagnostic systems
- Vacuum cleaners
- Appliance water-level measurement
- Weather forecasting stations
- Wound management

freescale semiconductor



The KITMPXSHOWEVK is conveniently packaged in a padded, embossed plastic case to allow customers to visualize and sample the parts. All of the parts are functional with pads connecting the necessary device pins to the board edge. A simplified pressure converter table is located on the reverse side for quick reference.

Development Tool

Part Number	Description	Current Pricing
KITMPXSHOWEVK	Marketing tool that features functional pressure sensor packages	$65

Suggested Pressure Sensor Products*

Part Number	Packaging	Pressure Rating *Maximum (PSI)*	Pressure Rating *Maximum (kPa)*	Pressure Rating *Maximum (in H2O)*	Pressure Rating *Maximum (cm H2O)*	Pressure Rating *Maximum (mm Hg)*	Full Scale Span *(Typ) (Vdc)*	Sensitivity *(mV/kPa)*	Accuracy 0°C to 85°C *(% of VFSS)*
MPXV7002	Small Outline Package (SOP)	±0.3	±2	±8	±20	±15.2	4.5	1000	±2.5
MPXV5004	Small Outline Package (SOP)	0.57	4	16	40	29	3.9	1000	±2.5
MPX12	Unibody Package	1.45	10	40	102	75	55	3.5	1.0
MPXM2010	MPak Package	1.45	10	40	102	75	25	2.5	-
MPX5050	Small Outline Package (SOP) & Unibody Package	7.25	50	201	510	375	4.5	90	±2.5
MPXM2102	MPak Package	14.5	100	400	1020	750	40	0.4	-
MPX4115	Unibody Package	16.7	115	462	1174	863	4.6	46	±1.5
MPXH6115	Super-Small Outline Package (SSOP)	16.7	115	462	1174	863	4.6	46	±1.5
MPX5700	Unibody Package	102	700	2810	7140	5250	4.5	6.0	±2.5

* Products in this table are not necessarily on the KITMPXSHOWEVK board, but represent some of the breadth of the Freescale Pressure Sensor product portfolio.

Freescale is a leading provider of acceleration, pressure and proximity sensors and has offered MEMS-based sensors for more than 25 years. The sensor ICs complement Freescale's broad portfolio of ZigBee™ technology, microcontrollers, microprocessors, digital signal processors, analog ICs, and development tools to offer system solutions to customers.

Learn More: For more information about Freescale products, please visit **www.freescale.com/sensors or www.freescale.com/pressure**

Freescale™ and the Freescale logo are trademarks of Freescale Semiconductor, Inc.
All other product or service names are the property of their respective owners.
© Freescale Semiconductor, Inc. 2008
KITMPXSHOWEVKFS /REV 0

freescale™ semiconductor

EN - For pricing and availability in your local country please visit one of the below links:

DE - Informationen zu Preisen und Verfügbarkeit in Ihrem Land erhalten Sie über die unten aufgeführten Links:

FR - Pour connaître les tarifs et la disponibilité dans votre pays, cliquez sur l'un des liens suivants:

KITMPXSHOWEVK

EN
This Datasheet is presented by the manufacturer

DE
Dieses Datenblatt wird vom Hersteller bereitgestellt

FR
Cette fiche technique est présentée par le fabricant