

Catch our keynote at Computex: NXP CTO Lars Reger unveils our "Brighter Together" approach

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Sensor Toolbox Development Platform for MPXV5004DP Differential Pressure Sensor

FRDMSTBCDP5004 [Receive alerts](#) ⓘ

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Sensor Toolbox provides a wide variety of sensor boards with compatible software tools for the MPXV5004 differential pressure sensor.

Sensor Boards:

- Demonstration (Demo) Kits: For an updated list of all the supported hardware, you can refer to the ISSDK Release Notes (</docs/en/release-note/RN00010.pdf#page=6>)
- Shield Board: FRDMSTBCDP5004 (</part/FRDMSTBCDP5004>)
- Breakout Board: BRKTSTBCDP5004 (</part/BRKTSTBCDP5004>)

Embedded Software Framework:

- IoT Sensing SDK (</design/design-center/software/sensor-toolbox/iot-sensing-software-development-kit-issdk-embedded-software-framework:IOT-SENSING-SDK>) (ISSDK): Provides Embedded sensor projects for the Demo Kit through MCUXpresso (<https://mcuxpresso.nxp.com/en/welcome>) (Find under 'Kits')

Evaluation and Visualization Software:

- Sensor Toolbox-Community Edition (</design/design-center/software/sensor-toolbox/freedom-sensor-toolbox-community-edition-sensor-evaluation-and-visualization-software:SENSOR-TOOLBOX-CE>) (STB-CE): Provides an Out-of-Box Demos for all the sensor available on the demo kit with this sensor expansion board.

Less ^

Product Details

Supported Devices | Features

Supported Devices

Sensors

Differential/Gauge Up to 10 kPa

- **MPXx5004** (/products/sensors/pressure-sensors/differential-gauge-up-to-10-kpa/differential-and-gauge-integrated-pressure-sensor-0-to-3-92-kpa:MPXx5004): Differential and Gauge, Integrated Pressure Sensor (0 to 3.92 kPa)

Features

FRDMKE06DP5004

Demonstration Kit (MPXV5004DP Sensor Shield Development Board and a modified FRDM-KE06 Board):

- Enables the demo using the Sensor Toolbox – CE software.
- Enables quick and easy visualization of sensor data and results.
- Enables detailed sensor evaluation and development using the Sensor Toolbox – CE software.

BRKTSTBCDP5004

- Small form factor with the same design as the MPXV5004DP sensor shield board.
- Enables easy prototyping: Can be easily wired or clipped onto host systems