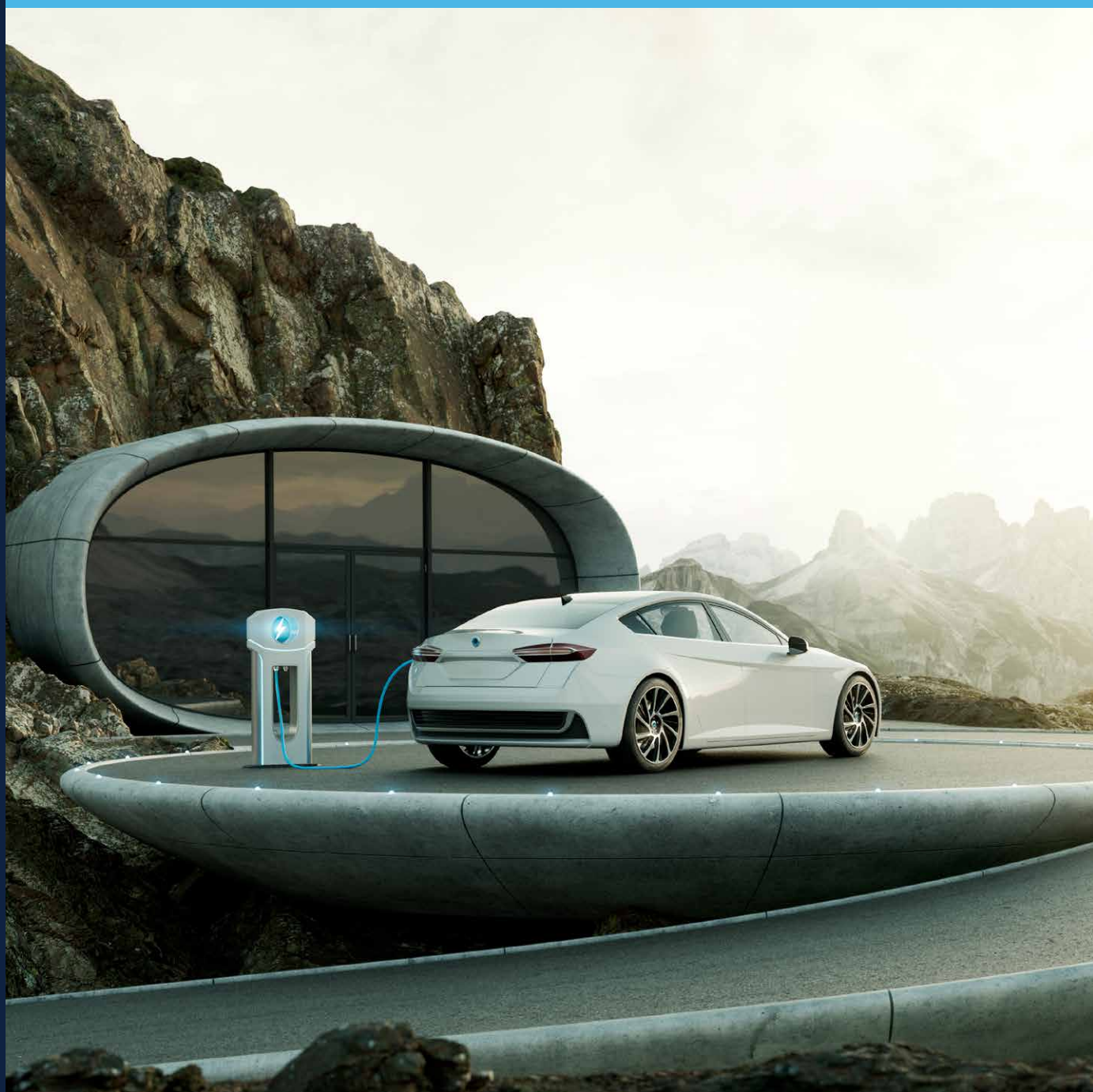




Secure sensing solutions for automotive and industrial IoT



Important notice

This brochure contains information originally developed by NXP prior to its acquisition by STMicroelectronics. While the cover page has been updated to reflect our brand, the content within has not yet been revised or updated. We are currently in the process of integrating and aligning the materials to ensure the most accurate and up-to-date information.

Thank you for your understanding and continued interest.

NXP's Sensor solutions include a breadth of inertial, pressure and hall-effect solutions covering different performances, sensing ranges and form factors. The portfolio is complemented with class leading development and enablement support spanning hardware tools, software tools and reference algorithms.

Motion sensors

| Part number | Description | Interface | Other | Package |
|--------------------------------|---------------------------------|-----------|--|--------------|
| High g accelerometers | | | | |
| NXLS95130AES | 1-axis, Z, ± 50 to 500 g | SPI, DSI3 | Automotive grade 1, -40 °C to 125 °C, ISO 26262:2018 ASIL B rating | QFN 4 x 4 mm |
| NXLS95230AES | 1-axis, X, ± 50 to 500 g | SPI, DSI3 | Automotive grade 1, -40 °C to 125 °C, ISO 26262:2018 ASIL B rating | QFN 4 x 4 mm |
| NXLS95630AES | 1-axis, Y, ± 50 to 500 g | SPI, DSI3 | Automotive grade 1, -40 °C to 125 °C, ISO 26262:2018 ASIL B rating | QFN 4 x 4 mm |
| NXLS96130AES | 1-axis, Z, ± 50 to 500 g | PSI5 | Automotive grade 1, -40 °C to 125 °C, ISO 26262:2018 ASIL B rating | QFN 4 x 4 mm |
| NXLS96230AES | 1-axis, X, ± 50 to 500 g | PSI5 | Automotive grade 1, -40 °C to 125 °C, ISO 26262:2018 ASIL B rating | QFN 4 x 4 mm |
| NXLS96630AES | 1-axis, Y, ± 50 to 500 g | PSI5 | Automotive grade 1, -40 °C to 125 °C, ISO 26262:2018 ASIL B rating | QFN 4 x 4 mm |
| NXLS95333AES | 2-axis, XY, ± 50 to 500 g | SPI, DSI3 | Automotive grade 1, -40 °C to 125 °C, ISO 26262:2018 ASIL B rating | QFN 4 x 4 mm |
| NXLS95433AES | 2-axis, XZ, ± 50 to 500 g | SPI, DSI3 | Automotive grade 1, -40 °C to 125 °C, ISO 26262:2018 ASIL B rating | QFN 4 x 4 mm |
| NXLS95733AES | 2-axis, YZ, ± 50 to 500 g | SPI, DSI3 | Automotive grade 1, -40 °C to 125 °C, ISO 26262:2018 ASIL B rating | QFN 4 x 4 mm |
| NXLS96333AES | 2-axis, XY, ± 50 to 500 g | PSI5 | Automotive grade 1, -40 °C to 125 °C, ISO 26262:2018 ASIL B rating | QFN 4 x 4 mm |
| NXLS96433AES | 2-axis, XZ, ± 50 to 500 g | PSI5 | Automotive grade 1, -40 °C to 125 °C, ISO 26262:2018 ASIL B rating | QFN 4 x 4 mm |
| NXLS96733AES | 2-axis, YZ, ± 50 to 500 g | PSI5 | Automotive grade 1, -40 °C to 125 °C, ISO 26262:2018 ASIL B rating | QFN 4 x 4 mm |
| Medium g accelerometers | | | | |
| NXLS95120AES | 1-axis, Z, ± 15.5 to 150 g | SPI, DSI3 | Automotive grade 1, -40 °C to 125 °C, ISO 26262:2018 ASIL B rating | QFN 4 x 4 mm |
| NXLS95220AES | 1-axis, X, ± 15.5 to 150 g | SPI, DSI3 | Automotive grade 1, -40 °C to 125 °C, ISO 26262:2018 ASIL B rating | QFN 4 x 4 mm |
| NXLS95620AES | 1-axis, Y, ± 15.5 to 150 g | SPI, DSI3 | Automotive grade 1, -40 °C to 125 °C, ISO 26262:2018 ASIL B rating | QFN 4 x 4 mm |
| NXLS96120AES | 1-axis, Z, ± 15.5 to 150 g | PSI5 | Automotive grade 1, -40 °C to 125 °C, ISO 26262:2018 ASIL B rating | QFN 4 x 4 mm |
| NXLS96220AES | 1-axis, X, ± 15.5 to 150 g | PSI5 | Automotive grade 1, -40 °C to 125 °C, ISO 26262:2018 ASIL B rating | QFN 4 x 4 mm |
| NXLS96620AES | 1-axis, Y, ± 15.5 to 150 g | PSI5 | Automotive grade 1, -40 °C to 125 °C, ISO 26262:2018 ASIL B rating | QFN 4 x 4 mm |
| NXLS95322AES | 2-axis, XY, ± 15.5 to 150 g | SPI, DSI3 | Automotive grade 1, -40 °C to 125 °C, ISO 26262:2018 ASIL B rating | QFN 4 x 4 mm |
| NXLS95422AES | 2-axis, XZ, ± 15.5 to 150 g | SPI, DSI3 | Automotive grade 1, -40 °C to 125 °C, ISO 26262:2018 ASIL B rating | QFN 4 x 4 mm |
| NXLS95722AES | 2-axis, YZ, ± 15.5 to 150 g | SPI, DSI3 | Automotive grade 1, -40 °C to 125 °C, ISO 26262:2018 ASIL B rating | QFN 4 x 4 mm |

| Part number | Description | Interface | Other | Package |
|------------------------------|---|-----------------------|---|--------------------------------|
| High g accelerometers | | | | |
| NXLS95421AES | 2-axis, XZ, X-Axis: ± 15.5 to 150 g Z-Axis ± 1.5 g to ± 24 g | SPI, DSI3 | Automotive grade 1, -40 °C to 125 °C, ISO 26262:2018 ASIL B rating | QFN 4 x 4 mm |
| NXLS96322AES | 2-axis, XY, ± 15.5 to 150 g | PSI5 | Automotive grade 1, -40 °C to 125 °C, ISO 26262:2018 ASIL B rating | QFN 4 x 4 mm |
| NXLS96422AES | 2-axis, XZ, ± 15.5 to 150 g | PSI5 | Automotive grade 1, -40 °C to 125 °C, ISO 26262:2018 ASIL B rating | QFN 4 x 4 mm |
| NXLS96722AES | 2-axis, YZ, ± 15.5 to 150 g | PSI5 | Automotive grade 1, -40 °C to 125 °C, ISO 26262:2018 ASIL B rating | QFN 4 x 4 mm |
| NXLS96421AES | 2-axis, XZ, X-Axis: ± 15.5 to 150 g Z-Axis ± 1.5 g to ± 24 g | PSI5 | Automotive grade 1, -40 °C to 125 °C, ISO 26262:2018 ASIL B rating | QFN 4 x 4 mm |
| Low g accelerometers | | | | |
| FXLS8964AFR3* | ± 2 to 16 g, low-power 12-bit 3-axis accelerometer for automotive KeyFob application | I ² C, SPI | Automotive qualification, -40 °C to 105 °C | DFN 2 x 2 x 0.95 mm |
| FXLS8967AFR3* | ± 2 to 16 g, low-power 12-bit 3-axis accelerometer for automotive security and convenience applications | I ² C, SPI | Automotive qualification, -40 °C to 105 °C | DFN 2 x 2 x 0.95 mm |
| FXLS8961AFR1* | ± 2 to 16 g, high performance 12-bit 3-axis accelerometer for automotive security and convenience applications that require excellent offset and sensitivity stability over temperature | I ² C, SPI | Automotive qualification, -40 °C to 105 °C | QFN 12-pin, 3 x 3 x 1.25 mm |
| FXLS8974CFR3* | ± 2 to 16 g, low-power 12-bit 3-axis accelerometer for use in a wide range of industrial and medical IoT applications. | I ² C, SPI | Industrial qualification, -40 °C to 105 °C | DFN 2 x 2 x 0.95 mm |
| FXLS8971CFR1* | ± 2 to 16 g, high performance 12-bit 3-axis accelerometer for Industrial/IoT applications that require excellent offset and sensitivity stability over temperature | I ² C, SPI | Industrial qualification, -40 °C to 105 °C | QFN 12-pin, 3 x 3 x 1.25 mm |

* Mass market ready

Angular rate sensors

| Part number | Description | Interface | Other | Package |
|--|---|----------------------------|---|------------------------|
| Angular rate and acceleration combination sensors | | | | |
| NCS10133** | Ω Z angular rate ± 125 to ± 350 dps and 3-Axis XYZ ± 1.5 g to ± 34 g | 32-bit SPI: SafeSPI 2.0 | Automotive grade 2, -40 °C to 105 °C, ISO 26262:2018 ASIL B rating | QFN 6 x 6 x 1.90 mm |
| NCS10128** | Ω Z angular rate ± 125 to ± 350 dps and 2-Axis XY ± 1.5 g to ± 34 g | 32-bit SPI: SafeSPI 2.0 | Automotive grade 2, -40 °C to 105 °C, ISO 26262:2018 ASIL B rating | QFN 6 x 6 x 1.90 mm |
| NCS10122** | Ω X angular rate ± 125 to ± 350 dps and 2-Axis YZ ± 1.5 g to ± 34 g | 32-bit SPI: SafeSPI 2.0 | Automotive grade 2, -40 °C to 105 °C, ISO 26262:2018 ASIL B rating | QFN 6 x 6 x 1.90 mm |
| NCS1012A** | Ω X angular rate ± 125 to ± 350 dps and 2-Axis XY ± 15.5 g to ± 150 g | 32-bit SPI: SafeSPI 2.0 | Automotive grade 2, -40 °C to 105 °C, ISO 26262:2018 ASIL B rating | QFN 6 x 6 x 1.90 mm |

**NOT mass market ready yet

Pressure sensors

| Part number | Description | Interface | Other | Package |
|------------------------------------|--|------------------|--|---|
| Barometric pressure sensors | | | | |
| MPL3115A2ST1* | 20-110 kPa, 1.5 Pa or 30 cm resolution | I ² C | 2 interrupts on pressure, altitude, temperature, -40 °C to 85 °C operating temperature | LGA 3 x 5 mm |
| MPL3150A2ST1* | 50-150 kPa, 1.5 Pa | I ² C | 2 interrupts on pressure, temperature, -40 °C to 85 °C operating temperature | LGA 3 x 5 mm |
| Absolute pressure sensors | | | | |
| FXPS7115DS4ST1* | 40 kPa to 115 kPa | SPI | 4.67 %FSS accuracy over entire temperature range and life, media resistant gel, -40 °C to 130 °C operating temperature, automotive grade 1 qualification | 4 x 4 x 1.98 mm QFN-FAM (Wettable Flanks) |
| FXPS7115DI4ST1* | 40 kPa to 115 kPa | I ² C | 4.67 %FSS accuracy over entire temperature range and life, media resistant gel -40 °C to 130 °C operating temperature, automotive grade 1 qualification | 4 x 4 x 1.98 mm QFN-FAM (Wettable Flanks) |
| FXPS7165DS4ST1* | 60 kPa to 165 kPa | SPI | 3.3 %FSS accuracy over entire temperature range and life, media resistant gel -40 °C to 130 °C operating temperature, automotive grade 1 qualification | 4 x 4 x 1.98 mm QFN-FAM (Wettable Flanks) |
| FXPS7165DI4ST1* | 60 kPa to 165 kPa | I ² C | 3.3 %FSS accuracy over entire temperature range and life, media resistant gel -40 °C to 130 °C operating temperature, automotive grade 1 qualification | 4 x 4 x 1.98 mm QFN-FAM (Wettable Flanks) |
| FXPS7250DS4ST1* | 20 kPa to 250 kPa | SPI | 1.5 %FSS accuracy over entire temperature range and life, media resistant gel -40 °C to 130 °C operating temperature, automotive grade 1 qualification | 4 x 4 x 1.98 mm QFN-FAM (Wettable Flanks) |
| FXPS7250DI4ST1* | 20 kPa to 250 kPa | I ² C | 1.5 %FSS accuracy over entire temperature range and life, media resistant gel -40 °C to 130 °C operating temperature, automotive grade 1 qualification | 4 x 4 x 1.98 mm QFN-FAM (Wettable Flanks) |
| FXPS7400DS4ST1* | 20 kPa to 400 kPa | SPI | 1.5 %FSS accuracy over entire temperature range and life, media resistant gel -40 °C to 130 °C operating temperature, automotive grade 1 qualification | 4 x 4 x 1.98 mm QFN-FAM (Wettable Flanks) |
| FXPS7400DI4ST1* | 20 kPa to 400 kPa | I ² C | 1.5 %FSS accuracy over entire temperature range and life, media resistant gel -40 °C to 130 °C operating temperature, automotive grade 1 qualification | 4 x 4 x 1.98 mm QFN-FAM (Wettable Flanks) |
| FXPS7550DS4ST1* | 20 kPa to 550 kPa | SPI | 1.5 %FSS accuracy over entire temperature range and life, media resistant gel -40 °C to 130 °C operating temperature, automotive grade 1 qualification | 4 x 4 x 1.98 mm QFN-FAM (Wettable Flanks) |
| FXPS7550DI4ST1* | 20 kPa to 550 kPa | I ² C | 1.5 %FSS accuracy over entire temperature range and life, media resistant gel -40 °C to 130 °C operating temperature, automotive grade 1 qualification | 4 x 4 x 1.98 mm QFN-FAM (Wettable Flanks) |
| FXPS7250A4ST1* | 20 kPa to 250 kPa | Analog | 3 %FSS accuracy over entire temperature range and life, media resistant gel -40 °C to 130 °C operating temperature, automotive grade 1 qualification | 4 x 4 x 1.98 mm QFN-FAM (Wettable Flanks) |
| FXPS7400A4ST1* | 20 kPa to 400 kPa | Analog | 3 %FSS accuracy over entire temperature range and life, media resistant gel -40 °C to 130 °C operating temperature, automotive grade 1 qualification | 4 x 4 x 1.98 mm QFN-FAM (Wettable Flanks) |
| FXPS7550A4ST1* | 20 kPa to 550 kPa | Analog | 3 %FSS accuracy over entire temperature range and life, media resistant gel -40 °C to 130 °C operating temperature, automotive grade 1 qualification | 4 x 4 x 1.98 mm QFN-FAM (Wettable Flanks) |
| MPXHZ6115A6T1* | 15 kPa to 115 kPa | Analog | 1.5 %FS accuracy | SOP8, SSOP8 |
| MPXHZ6400AC6T1* | 20 kPa to 400 kPa | Analog | 1.5 %FS accuracy | SOP8, SSOP8 |
| Automotive safety sensors | | | | |
| FXPS71407ST1 | 40 kPa to 132.8 kPa | DSI3 or PSI5 | ±7.0 % (PREL), ISO 26262:2011 ASIL B rating, automotive grade 1 qualification, temperature range from -40 °C to 125 °C | 4 x 4 x 1.98 mm QFN-FAM (Wettable Flanks) |
| FXPS7140P7ST1 | 40 kPa to 132.8 kPa | PSI5 | ±7.0 % (PREL), ISO 26262:2011 ASIL B rating, automotive grade 1 qualification, temperature range from -40 °C to 125 °C | 4 x 4 x 1.98 mm QFN-FAM (Wettable Flanks) |
| FXPS71407BPST1** | 50.9 kPa to 126.5 kPa | PSI5 | ±7.0 % (PREL), ISO 26262:2011 ASIL B rating, automotive grade 1 qualification, temperature range from -40 °C to 125 °C | 4 x 4 x 1.98 mm QFN-FAM (Wettable Flanks) |

| Part number | Description | Interface | Other | Package |
|--|-------------------|------------------------------|---|---|
| Tire pressure monitoring | | | | |
| NTM88Hxx5* | 90 to 930 kPa | RF, LF, SPI, GPIO | Dual-axis accelerometers, S08 CPU with 16 kB flash, 512 B RAM, 315/434 MHz transmitter, 125 kHz LF receiver, temperature and voltage monitoring, automotive grade 1 qualification | 4 x 4 x 1.98 mm QFN-FAM (Wettable Flanks) |
| NTM88Jxx5* | 90 to 1110 kPa | RF, LF, SPI, GPIO | Dual-axis accelerometers, S08 CPU with 16 kB flash, 512 B RAM, 315/434 MHz transmitter, 125 kHz LF receiver, temperature and voltage monitoring, automotive grade 1 qualification | 4 x 4 x 1.98 mm QFN-FAM (Wettable Flanks) |
| NTM88Kxx5* | 90 to 1518 kPa | RF, LF, SPI, GPIO | Dual-axis accelerometers, S08 CPU with 16 kB flash, 512 B RAM, 315/434 MHz transmitter, 125 kHz LF receiver, temperature and voltage monitoring, automotive grade 1 qualification | 4 x 4 x 1.98 mm QFN-FAM (Wettable Flanks) |
| Battery pressure monitoring | | | | |
| NBP8FD4ST1* | 40 kPa to 250 kPa | SPI | Absolute, relative and rate-of-change detections, pressure FIFO, host wake-up, automotive grade 1 qualification | 4 x 4 x 1.98 mm QFN-FAM (Wettable Flanks) |
| NBP9FD4ST1* | 40 kPa to 250 kPa | SPI, PWM | Absolute, relative and rate-of-change detections, pressure FIFO, host wake-up, automotive grade 1 qualification | 4 x 4 x 1.98 mm QFN-FAM (Wettable Flanks) |
| Vacuum pressure sensors | | | | |
| MP3V5050* | -50 kPa to 0 kPa | Analog 0.06 V to 2.82 V | 2 % accuracy | SOP ported, SOP dual port |
| MPXV6115V* | -115 kPa to 0 kPa | Analog 0.2 V to 4.6 V output | 1.5 % accuracy, auto qual | SOP and SOP ported |
| MPXV5050VC6U* | -50 kPa to 0 kPa | Analog 0.1 V to 4.6 V | 2.5 % accuracy | SOP ported |
| MP3V7002DP* | -2 kPa to 2 kPa | Analog 0.5 V to 4.5 V | 2.5 % accuracy | SOP ported and dual port |
| MPXV7007* | -7 kPa to 7 kPa | Analog 0.5 V to 4.5 V | 5 % accuracy | SOP ported, SOP dual port |
| MPXV7025* | -25 kPa to 25 kPa | Analog 0.2 V to 4.7 V | 5 % accuracy | SOP ported, SOP dual port |
| Differential/gauge pressure sensors < 10 kPa | | | | |
| MP3V5004* | 0 kPa to 3.92 kPa | Analog 0.6 V to 3 V | 1.5 % accuracy | SOP, SOP dual port, SOP ported |
| MP3V5010* | 0 kPa to 10 kPa | Analog 0.1 V to 3.1 V | 5 % accuracy | SOP, SOP dual port, SOP ported |
| MPXV10GCxx* | 0 kPa to 10 kPa | Analog 35 mV | Uncompensated | SOP & ported SOP |
| MPXV2010* | 0 kPa to 10 kPa | Analog | 1 % accuracy | SOP dual port |
| MPXV(Z)4006* | 0 kPa to 10 kPa | Analog | 1 % accuracy | SOP dual port |
| MPX10DP* | 0 kPa to 6 kPa | Analog 0.2 V to 4.8 V | 2.5 % accuracy | SOP, SOP dual port, SOP ported |
| MPXV(Z)5004* | 0 kPa to 3.92 kPa | Analog 1.0 V to 4.9 V | 1.5 % accuracy | SOP, SOP dual port, SOP ported |
| MPXV5010* | 0 kPa to 10 kPa | Analog 0.2 V to 4.7 V | 5 % accuracy | SOP, SOP dual port, SOP ported |
| MPX10DP* | 0 kPa to 10 kPa | Analog | | Unibody package |
| Differential/gauge pressure sensors up to 115 kPa | | | | |
| MPXx2053* | 0 kPa to 50 kPa | Analog 40 mV | Compensated and calibrated | x=V SOP and ported SOP, x=M MPAK |
| MPXx2102* | 0 kPa to 100 kPa | Analog 40 mV | Compensated and calibrated | x=V SOP and ported SOP, x=M MPAK |
| MPX2300DT1* | 0 kPa to 40 kPa | Analog | Disposable bio compatible system | ChipPak package |

| Part number | Description | Interface | Other | Package |
|---|-------------------|-----------------------|----------------------------|----------------------------------|
| MPXM2051G* | 0 kPa to 50 kPa | Analog 40 mV | Compensated and calibrated | MPAK |
| MPXV5050* | 0 kPa to 50 kPa | Analog 0.2 V to 4.7 V | 2.5 % accuracy | SOP ported and dual port |
| MPXV5100GC6U* | 0 kPa to 100 kPa | Analog 0.2 V to 4.7 V | 2.5 % accuracy | SOP ported |
| Differential/gauge pressure sensors up to 1000 kPa | | | | |
| MPXx2202* | 0 kPa to 200 kPa | Analog 40 mV | Compensated | x=V SOP and ported SOP, x=M MPAK |
| MPX5500* | 0 kPa to 500 kPa | Analog 0.2 V to 4.7 V | 2.5 % accuracy | Unibody packages |
| MPX5700* | 0 kPa to 700 kPa | Analog 0.2 V to 4.7 V | 2.5 % accuracy | Unibody packages |
| MPX5999* | 0 kPa to 1000 kPa | Analog 0.2 V to 4.7 V | | Unibody packages |

* Mass market ready **NOT passed FML yet

Magnetic switch sensors

| Part number | Description | Interface | Other | Package |
|-------------------------------|---|---------------------------------|---|-------------------------|
| Magnetic switch sensor | | | | |
| NMH1000* | Z-axis hall-effect magnetic switch sensor for industrial and medical applications | I ² C or stand alone | Ultra-low power (down to 75nA @ 1 Hz) and low-voltage (down to 1.2 V) | DFN 1.4 x 1.4 x 0.85 mm |

* Mass market ready

At STMicroelectronics we create technology that starts with You



Order code: **BR2601SENSPROSG**

For more information on ST products and solutions, visit www.st.com

© STMicroelectronics - January 2026 - Printed in the United Kingdom - All rights reserved
ST and the ST logo are registered and/or unregistered trademarks of STMicroelectronics International NV or its affiliates in the EU and/or elsewhere. In particular, ST and the ST logo are Registered in the US Patent and Trademark Office. For additional information about ST trademarks, please refer to www.st.com/trademarks.
All other product or service names are the property of their respective owners.

