

Digital Absolute Pressure Sensor (20 to 550 kPa)

FXPS7xxxDx4

Last Updated: Oct 29, 2025

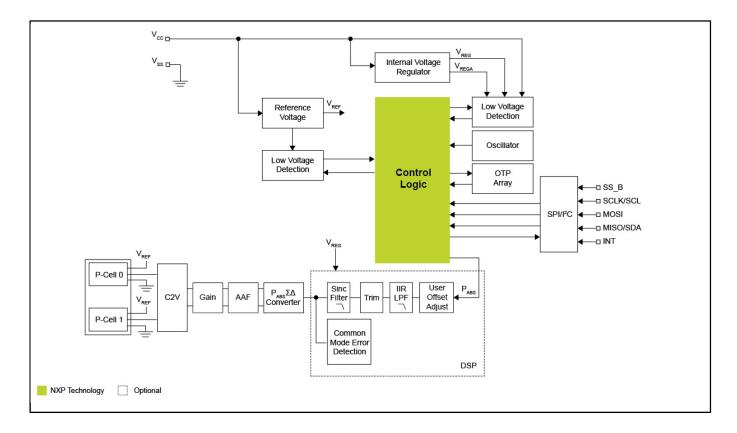
FXPS7xxxDI4ST1 and FXPS7xxxDS4ST1 are the recommend devices for new designs as the FXPS7xxxDI4T1 and FXPS7xxxDS4T1 are discontinued.

The FXPS7xxxDx4 high-performance, high-precision barometric absolute pressure (BAP) sensor consists of a compact capacitive micro-electro-mechanical systems (MEMS) device coupled with a digital integrated circuit (IC) producing a fully calibrated digital output.

The sensor is based on NXP's high-precision capacitive pressure cell technology. The architecture benefits from redundant pressure transducers as an expanded quality measure. This sensor delivers highly accurate pressure and temperature readings through either a serial peripheral interface (SPI) or an inter-integrated circuit (I²C) interface.

The FXPS7xxxDx4 uses either a 3.3 V or 5.0 V power supply. Furthermore, the sensor employs an on-demand digital self-test for the digital IC and the MEMS transducers.

FXPS7xxxDx4 Block Diagram Block Diagram



View additional information for Digital Absolute Pressure Sensor (20 to 550 kPa).

Note: The information on this document is subject to change without notice.

www.nxp.com

NXP and the NXP logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. The related technology may be protected by any or all of patents, copyrights, designs and trade secrets. All rights reserved. © 2025 NXP B.V.