



FXPS7140X Automotive Safety Pressure Sensor DSI3 and PSI5

FXPS7140X

Last Updated: May 30, 2025

FXPS71407ST1 and FXPS7140P7ST1 are the recommend devices for new designs as the FXPS71407T1 and FXPS7140P7T1 are discontinued.

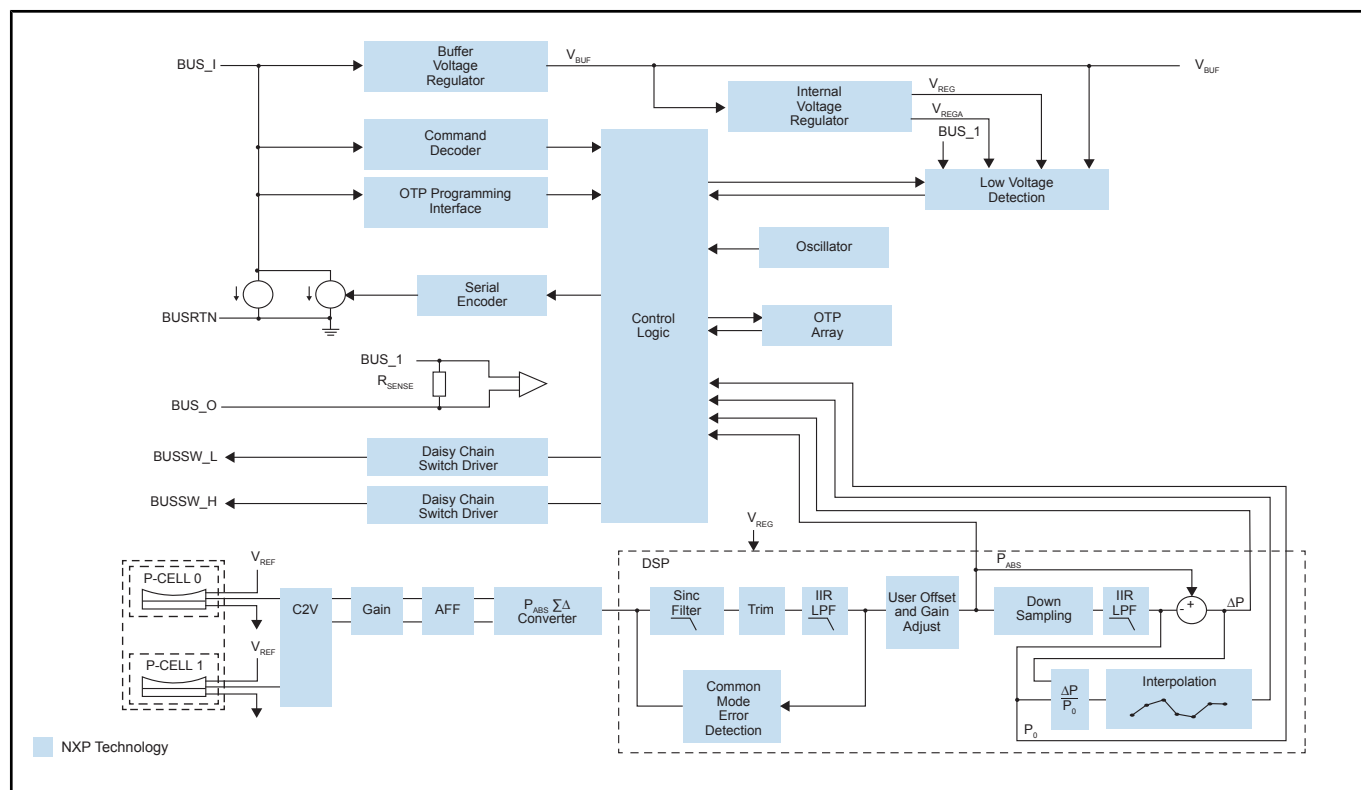
The FXPS7140X family is the latest generation of airbag crash sensors from NXP. The devices are designed using NXP proprietary MEMS sensing technology coupled with a signal conditioning digital integrated circuit (IC) in a QFN 4 x 4 x 1.98 mm package.

The architecture benefits from redundant pressure transducers as an expanded quality measure. Two pressure range options are available: 40 kPa to 132.8 kPa and 50.9 kPa to 126.5 kPa. The sensor supports user configurable DSI3 and PSI5 interfaces and embeds a DSP with digital low pass filtering.

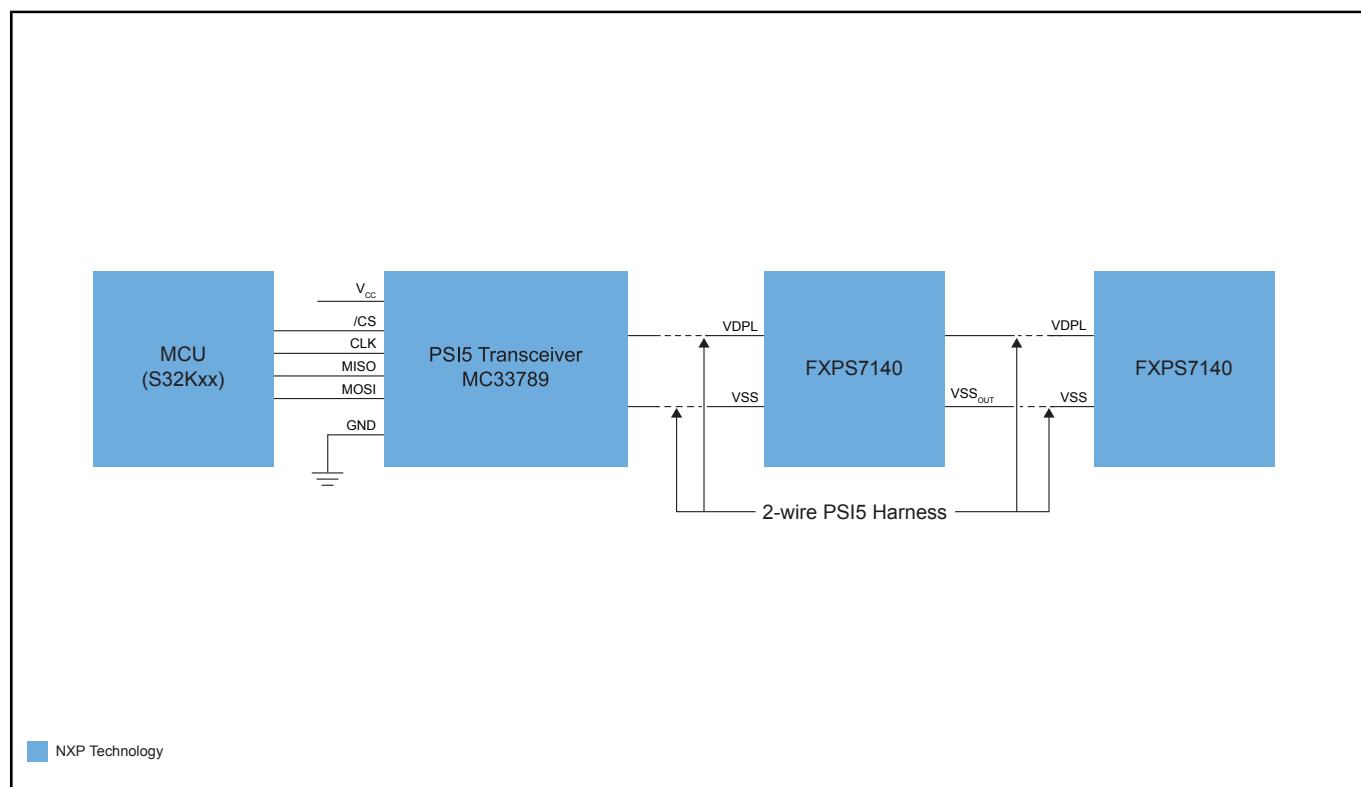
The FXPS7140X family is fully AEC-Q100 qualified up to 125 °C operating temperature and is compliant with the AK LV 29 requirements. The package has wettable flanks for solder join inspection. FXPS7140X products have been developed following following ISO26262 2011 edition and can be used in up to ASIL D system.

For additional information and sample availability, contact support or your local sales representative.

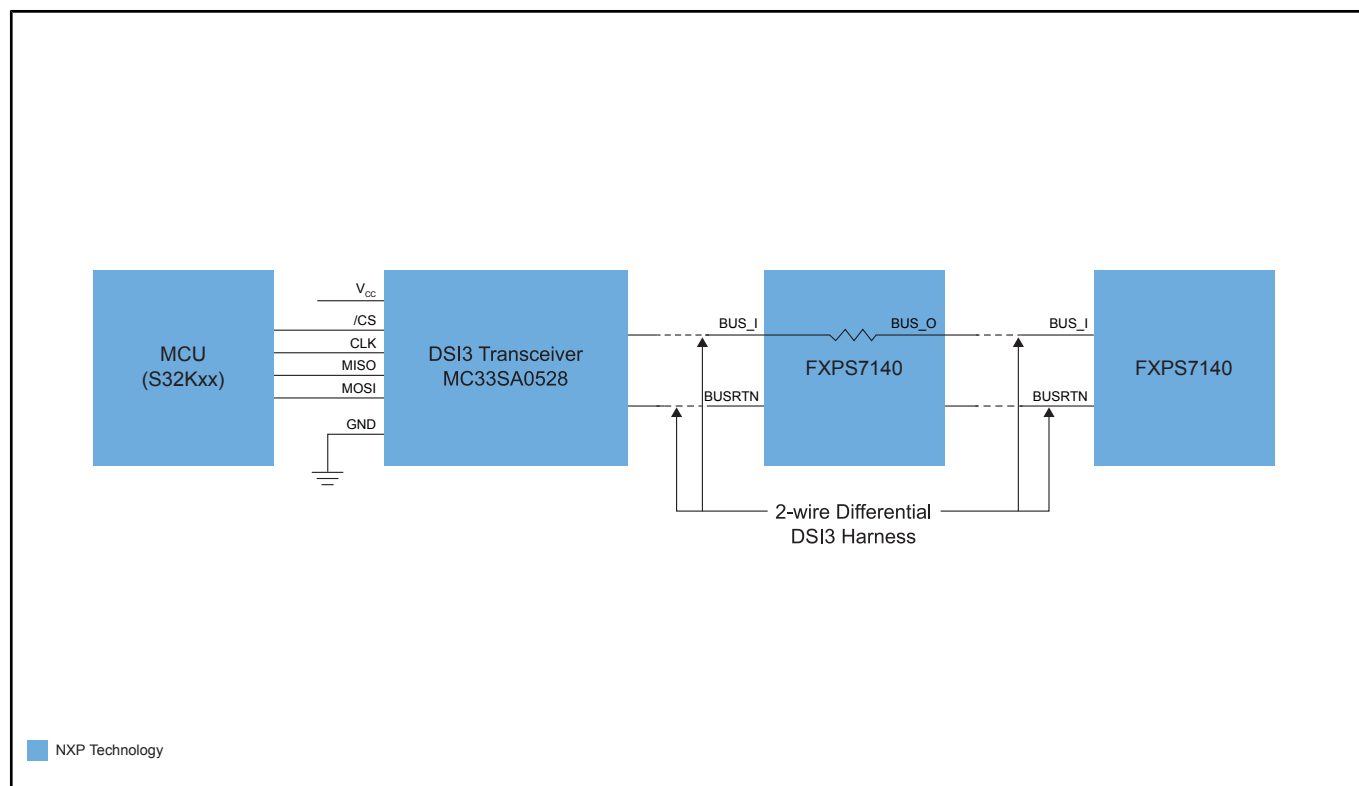
FXPS7140X Automotive Safety Pressure Sensor Block Diagram Block Diagram



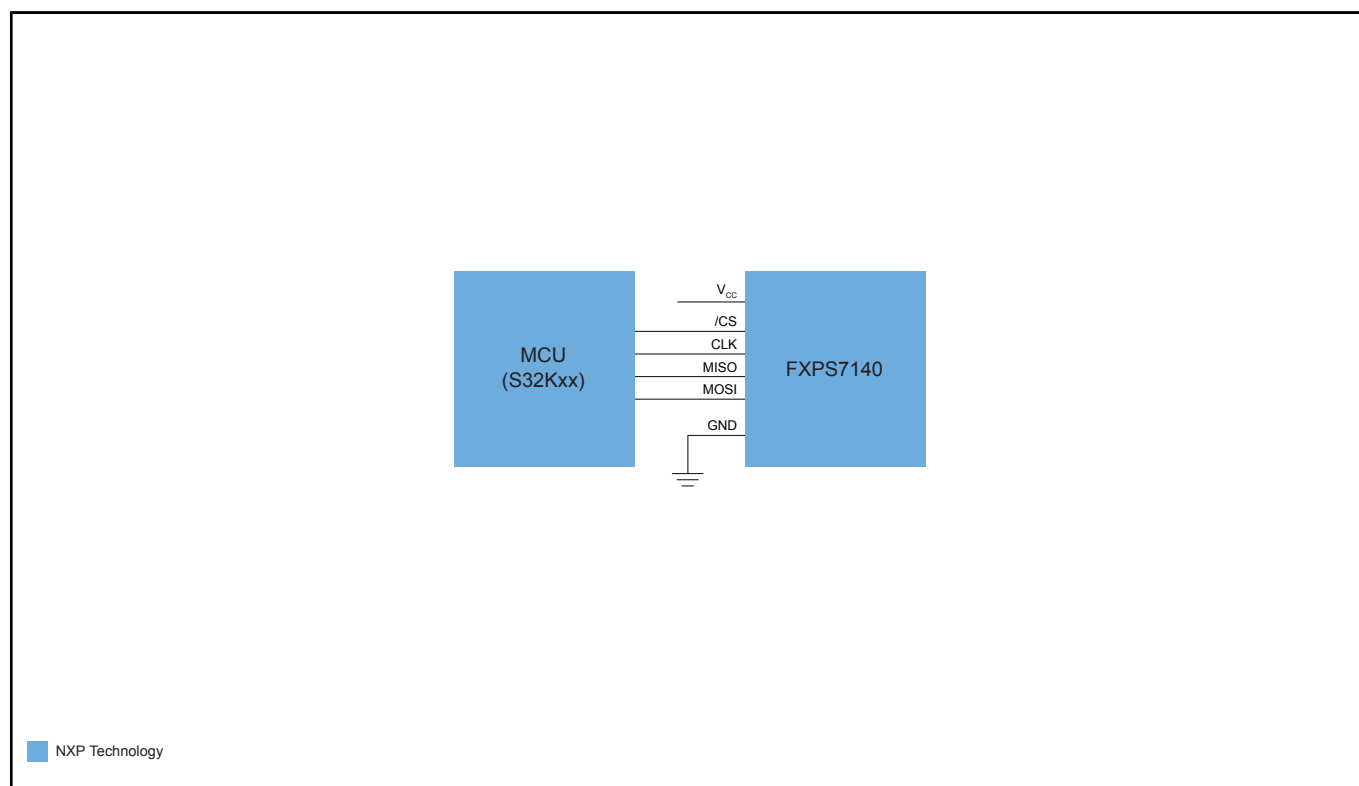
FXPS7140X PSI5 Transceiver Diagram Block Diagram



FXPS7140 DSI3 Application Diagram Block Diagram



FXPS7140 SPI Application Diagram Block Diagram



View additional information for [FXPS7140X Automotive Safety Pressure Sensor DSI3 and PSI5](#).

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

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