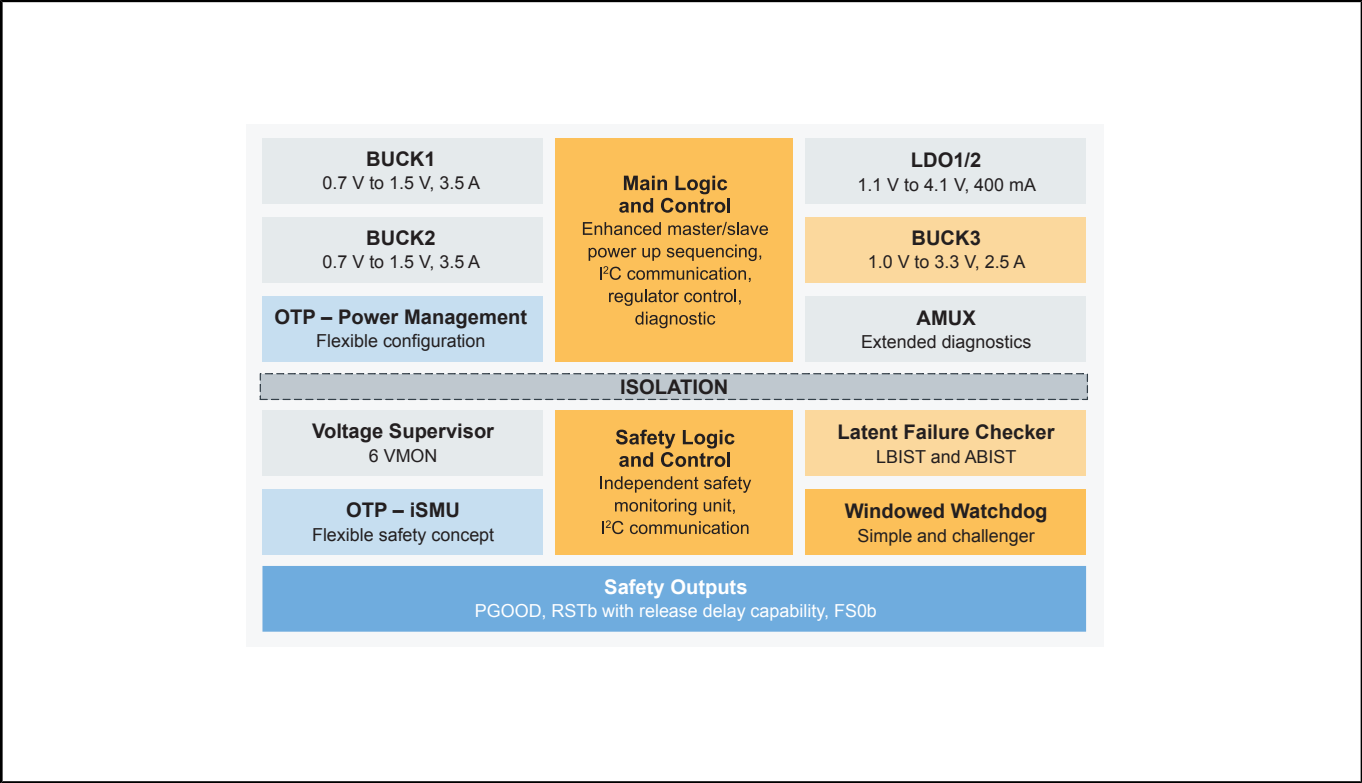# PF5030 Safety PMIC Programming Socket Board

KITPF5030SKTEVM

Last Updated: Dec 23, 2025

The KITPF5030SKTEVM provides easy customer configuration of the PF5030 device family, thanks to a QFN40 socket and flexibility to play with all the features of the device and make measurements on the main part of the application. All regulators are accessible through connectors. Nonuser signals, like DC/DC switcher node, are mapped on test points.

The PF5030 is a power management integrated circuit (PMIC) designed for S32Z2/E2 processors, offering scalability in power and safety, ideally attached to NXP front system supply families (FS86, FS6x, other). The KL25Z FRDM connected to the board, combined with the PF5030 NXP GUI software, allows to fully configure and control PF5030 PMIC. The board can be used in a standalone mode and controlled with an USB interface. Devices can be easily placed on socket to OTP emulation, functional testing or program OTP (one time programming) fuses when ready. In addition to the OTP programming, the customer can test all features (with power delivery limitation due to the socket). No extra tools or board are needed for PF5030 OTP programming.

Multi-Channel PMIC for Automotive Applications Block Diagram

BUCK1 0.7 V to 1.5 V, 3.5 A	Main Logic and Control Enhanced master/slave power up sequencing, I²C communication, regulator control, diagnostic	LDO1/2 1.1 V to 4.1 V, 400 mA
BUCK2 0.7 V to 1.5 V, 3.5 A		BUCK3 1.0 V to 3.3 V, 2.5 A
OTP – Power Management Flexible configuration		AMUX Extended diagnostics

ISOLATION

Voltage Supervisor 6 VMON	Safety Logic and Control Independent safety monitoring unit, I²C communication	Latent Failure Checker LBIST and ABIST
OTP – iSMU Flexible safety concept		Windowed Watchdog Simple and challenger

Safety Outputs
PGOOD, RSTb with release delay capability, FS0b

View additional information for PF5030 Safety PMIC Programming Socket Board.

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