

面向高性能应用的9通道PMIC,符合ASIL D和SIL 2安全等级

PF09

Active

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PF09电源管理集成电路(PMIC)专为基于i.MX95的高性能应用而设计。它拥有5个高效的降压转换器和4个线性稳压器,为处理器、存储器和其他外设供电。PF09在待机和低功耗模式下提供低静态电流。

PF09是根据汽车ISO26262和工业IEC61508安全标准开发的,包括功能安全特性,具有故障安全输出和综合自检机制,是功能安全型系统分区的一部分,目标是提供较高的安全级别,达到车规级ASIL D和工业SIL 2标准。

面向i.MX95的PF09多通道PMIC Block Diagram

LD01

(Load Switch)

(0.75 V to 3.3 V, 500 mA)

LDO2

(Load Switch)

(0.65 V to 3.3 V, 200 mA)

LDO3

(Load Switch)

(0.65 V to 3.3 V, 200 mA)

VA ON

(Always-On Supply)

(1.8 V to 3.3 V, 10 mA)

AMUX

(Diagnostics)

Clock Management

Logic and Control

High Speed I²C MCU Interface Regulator Control

Fault Detection

ASIL-D SIL-2

Safety Monitoring

Voltage monitoring System monitoring WD management System self-test ABIST/LBIST FCCU monitoring

FCCU monitoring
Safety output
Digital Supervisor

SW1 (LVBUCK)

(0.5 V to 3.3 V, 3.5 A)

SW2

(MPH_LVBUCK)

(0.3 V to 3.3 V, 2.5 A)

SW3

(MPH LVBUCK)

(0.3 V to 3.3 V, 2.5 A)

SW4

(MPH_LVBUCK)

(0.3 V to 3.3 V, 2.5 A)

SW5

(MPH_LVBUCK)

(0.3 V to 3.3 V, 2.5 A)

MTP

(Flexible Configuration)

View additional information for 面向高性能应用的9通道PMIC,符合ASIL D和SIL 2安全等级.

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