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KIT2407AUTOPM

Data brief

Power management for automotive sample kit



Features

- Immediate evaluation of power management for automotive AEC-Q100 Grade 1 compliant devices, with samples of 8 DC-DC converters, 6 LED drivers, and 8 low-dropout (LDO) linear voltage regulators
- The automotive power management for automotive sample kit includes a printed card providing overviews of the following:
  - Product families
  - New packaging
  - eDesignSuite and eDSim software tools

Applications

- Automotive

Description

The KIT2407AUTOPM provides a selection of automotive AEC-Q100 Grade 1 compliant monolithic DC-DC switching regulators, energy-ef¬ficient DC/DC powered LED driver ICs, and high performance low-dropout (LDO) linear voltage regulators, useful for evaluation.

Product status link
KIT2407AUTOPM

Resources
eDesignSuite
Automotive standard analog robustness and performance

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1 Overview

ST provides a wide range of analog products for power management and LED drivers supporting state-of-the-art applications for the automotive market. This booklet presents an overview of ST standard AEC-Q100 Grade 1 compliant DC-DC switching regulators, LED drivers, and high-performance linear voltage regulators (LDO) in a large variety of package options with a special focus on DFN/QFN wettable flanks (WF) with exposed pads.

Product	Package	Description
A7987TR	HTSSOP16 (exposed pad)	Automotive 61 V, 3 A asynchronous step-down switching regulator with adjustable current limitation
A6983CQTR	QFN16 (3x3, WF, exposed pad)	Automotive 38 V, 3 A synchronous step-down converter with 25 µA quiescent current
A6983IQTR	QFN16 (3x3, WF, exposed pad)	Automotive 38 V, 10 W synchronous iso-buck converter for isolated applications
A6986TR	HTSSOP16 (exposed pad)	Automotive 38 V, 2 A synchronous step-down switching regulator with 30 µA quiescent current
A6985FTR	HTSSOP16 (exposed pad)	Automotive 38 V, 500 mA synchronous step-down switching regulator with 30 µA quiescent current
A6984TR	VFDFPN10 (4x4)	Automotive 36 V, 400 mA synchronous step-down switching regulator
AST1S31HF	VFDFPN8 (3x3, exposed pad)	Automotive up to 4 V, 3 A step-down 2.3 MHz switching regulator
A6727BTR	SO-8	Automotive single-phase PWM controller
ALED1642GWXTTR	HTSSOP24 (exposed pad)	Automotive 16-channel LED driver with error detection, current gain control, and 12/16 bit-PWM brightness control
ALED7707TR	QFN24 (5x5, exposed pad)	Automotive 6-row, 85 mA LED driver with boost regulator for LCD panel backlights
ALED7709ATR	QFN24 (5x5, WF, exposed pad)	Automotive LED driver 4-channel, 200 mA with a DC-DC controller
ALED1262ZTTR	HTSSOP24 (exposed pad)	Automotive 12-channel LED driver with open detection, local dimming, and bus driven and standalone operations
ALED8102SXTTR	HTSSOP16 (exposed pad)	Automotive 8-channel LED driver with direct switch control
ALED6000PHTR	HTSSOP16 (exposed pad)	Automotive 3 A single channel LED driver with integrated DC-DC converter
LDL40PU33RY	DFN6 (2x2, WF, exposed pad)	Automotive 40 V, 200 mA low dropout LDO, 3.3 Vout
LDL40PU50RY	DFN6 (2x2, WF, exposed pad)	Automotive 40 V, 200 mA low dropout LDO, 5 Vout
LDH40PURY	DFN6 (2x2, WF, exposed pad)	Automotive 40 V, 200 mA low dropout LDO, up to 22 Vout
LDQ40PURY	DFN6 (2x2, WF, exposed pad)	Automotive 40 V, 250 mA low dropout LDO, up to 12 Vout
LD59150PURY	DFN10 (3x3, WF, exposed pad)	Automotive 1.5 A low dropout linear regulator with programmable soft start
LD39100PURY	DFN6 (3x3, WF, exposed pad)	Automotive 1 A low quiescent current low noise voltage regulator
LD49100PURY	DFN6 (3x3, WF, exposed pad)	Automotive 1 A, low quiescent current, and low noise voltage regulator with soft start
LDK130M11RY	SOT23-5L	Automotive 300 mA, low quiescent current, and very low noise LDO

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2 Ordering information

Table 1. **Order code**

Order code	Description
KIT2407AUTOPM	Power management for automotive sample kit

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Revision history

Table 2. **Document revision history**

Date	Revision	Changes
30-Oct-2024	1	Initial release.
04-Nov-2024	2	Minor text changes

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