

Power management for automotive sample kit

Power management for automotive

DC-DC regulators, LED drivers, and LDOs
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-efficient 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](#)

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 μ A 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 μ A quiescent current
A6985FTR	HTSSOP16 (exposed pad)	Automotive 38 V, 500 mA synchronous step-down switching regulator with 30 μ A 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 V _{out}
LDL40PU50RY	DFN6 (2x2, WF, exposed pad)	Automotive 40 V, 200 mA low dropout LDO, 5 V _{out}
LDH40PURY	DFN6 (2x2, WF, exposed pad)	Automotive 40 V, 200 mA low dropout LDO, up to 22 V _{out}
LDQ40PURY	DFN6 (2x2, WF, exposed pad)	Automotive 40 V, 250 mA low dropout LDO, up to 12 V _{out}
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

2 Ordering information

Table 1. Order code

Order code	Description
KIT2407AUTOPM	Power management for automotive sample kit

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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