

> TLE9243QK

Overview

Diagrams

Parametrics

Documents

Design Support

Order

Partners

Support

Overview

Diagrams

Parametrics

Documents

Order

Partners

Support

Overview

Diagrams

Parametrics

Documents

Order

Partners

Support

Products

Applications

Design Support Community

> Home → Products → Power → Power Management ICs (PMIC) & System Basis Chips (SBC) → Power Management ICs (PMIC) → OPTIREG[™] PMIC (Automotive)

Q

Newsletter Contact Where to Buy English ▼ 🆀 myInfineon ▼ 🃜 Cart

Careers

Follow

Share

> EN

MB

Download

Product Brief

01_00 | 2021-09-07 | pdf | 1.2

■ Found what you need?

About Infineon

TLE9243QK The TLE9243QK is an application specific multiple output system supply for transmission applications supplying 5 V-μC, transceivers, and sensors by an efficient and flexible pre-/post-regulator concept over a wide input voltage range.

> system cost optimization potential and FuSa harmonization for a specific application. The TLE9243QK offers the complete power supply functionality as well as application specific features for transmission systems. Beside the power supply functions, the TLE9243QK provides sensor interfaces for three channels including one 9V LDO per channel as well as three channels to drive external nchannel power switches.

Like other Application Specific PMICs, TLE9243QK is a power management IC that levers

The TLE9243QK has been developed according to ISO26262 targeting systems up to ASIL-D. Multiple safety features as window and functional watchdog and monitoring functions enable easy realization of ASIL-D together with the Infineon's AURIX[™] family and other

microcontrollers as well. The TLE9243QK is coming in a Grade 0 thermally enhanced LQFP-64 suitable for harsh environments. For datasheet and further support, please contact your sales representative.

Family Overview Functional Safety

Summary of Features **Benefits** Transmission Specific Functions · System cost savings by reduction of

· Three high side drivers to control external n-channel FETs Three 9.0V LDOs ±3%; 50mA for wheel

Three Sensor Channels for current based

speed sensors

Pre-/post-regulator concept: boost and buck/LDOs and trackers for

wheel speed sensing (3 level)

 μC (main, ADC/reference, I/O) Transceivers

- Integration of functional safety (features supporting ASIL-D)
- UV/OV-monitoring Flexible watchdogs

Protection

Potential Applications

Sensors

 Error-monitoring Safe state controller with three high side drivers to control external n-channel FETs

Support of Active Reverse Polarity

- Transmission Control · Electrohydraulically controlled transmissions
- Access to complete OPTIREG[™] PMIC technical documentation including data sheets, app notes, etc.:

· Electromechanically controlled transmissions

request access to the MyInfineon Collaboration Portal. (*If you are already registered at myinfineon.com, follow the guideline from page 6.)

2. Click here to see the step-by-step instructions to get registered.

Diagrams

Collaboration Portal

- 3. In case you need further assistance, please fill in the form to our Technical Assistance Center or contact support@infineon.com

Buck - Boost

Battery Voltage

Voltage Monitoring

Wake up

Watchdog

SPI

Sensor Interfaces

SSSS

SS2D SS2G

SS2SENSE

VPR1

VPR2

VPR3

VS1

VS2

DRG

RSH

RSL

BSG

SS1D

SS1G

PGND EP

TLE9243QK

SS1SENSE

1. To get access to the full technical documentation you need access to the MyInfineon

Please register* under myinfineon.com with your company e-mail address and with this,

PG1 Switch PG2 System Clock SW1 Monitoring SW2

Bridge Drivers

· Supporting extreme harsh environments

• Easy ISO26262 implementation by full

Fully interoperable with Infineon AURIX™

Transmission Constant Current Control

Solenoid Drivers and 3-phase MOSFET

microcontrollers, XENSIV™ sensors,

external components

Optimized system FuSa

documentation set

• Enables ASIL-D on system level

CLKMON

CSN

SCK

SI

SO

WS101

WS102

WS201

WS202

WS301

WS302

WS1I

WS2I

WS3I

VBS

VBATIN

Controller

Supply (5V)

Communication

Supply (5V)

2 X 5 V Tracker

1 X 5 V

Voltage Reference

3 X HS Driver

3 X 9 V LDO

SS3SENSE SS3D SS3G SS3S CHP WSGND V9S1 V9S2 V9S3 ENA





Parametrics

Parametrics |



Sales Product Name

Order

+ Material Content Sheet • Info

+ Application Brochure

+ Product Selection Guide

TLE9243QK

	TLE9243QKXUMA1
Product Status	active and preferred
nfineon Package name	PG-LQFP-64
Standard Package name	
Order online	
Completely lead free	yes
Halogen free	yes
RoHS compliant	yes
Packing Size	1900
Packing Type	TAPE & REEL
Moisture Level	3
Moisture Packing	DRY

Design Support

Product **Partner Description**

Family Embedded Power ICs (System-on-Chi > more

Partner Offering Services

Regions Americas

Downloaded from Arrow.com.

Partners 1 out of 1 Partner Partner MELITRON

Preferred Partner

Neutron Controls Neutron Controls is headquartered in Ottawa, Canada, with engineers lo....> more

Application Automotive, Body electronics and...> more