

TLE6212

System-IC for ABS/TC/ESC

Automotive Power



Never stop thinking



Overview

Features

- Quad Wheelspeed sensor interface for active sensors
 - Active Wheel Speed Sensor supply
 - Active Wheel Speed signal conditioning
- Quad Wheelspeed sensor interface for passive sensors
 - Passive Wheel Speed signal conditioning
- Multi-Supply for Microcontroller
 - Control circuit for protected regulator pre-driver (8 V)
 - Control circuit for three voltage regulators (1.9 V, 3.3 V & 5 V)
 - Under-and overvoltage reset
- High Side Driver for Pump motor FET
- High Side Main FET driver
- Extended watchdog functionality
 - Window watchdog
 - Signature Watchdog
- Temperature monitoring
- 2 High voltage Enable outputs
- 2 High voltage general purpose outputs
- ISO conform K-line interface
- 8-bit SPI interface
- Green Product (RoHS compliant)
- AEC Qualified



PG-LQFP-64

Functional Description

The TLE6212 is a system IC intended for ABS, Traction Control and Electronic Stability Control Systems. It is especially designed for automotive use. The device is based on Infineon’s power technology SPT4 which allows bipolar and CMOS control circuitry to be integrated with DMOS power devices on the same monolithic circuitry.

The TLE6212 includes different functions needed for ABS, TC and ESC systems as Wheel Speed Sensor Interface both for active or passive sensors, multiple supply control for the micro controller and other components on the PCB, High Side Driver for Pump Motor and Main switch. High voltage enable and general purpose outputs and K-Line interface is available for off-board communication. A 8 bit SPI interface allows communication and programming from the micro controller.

For safety reasons a window watchdog / signature watchdog is included. In addition a logic backbone connects all sub-blocks and its supervision functions to each other and to the SPI communication interface.

| Type | Package | Marking |
|---------|------------|---------|
| TLE6212 | PG-LQFP-64 | TLE6212 |

1 Block Diagram and Pin Configuration

1.1 Block Diagram

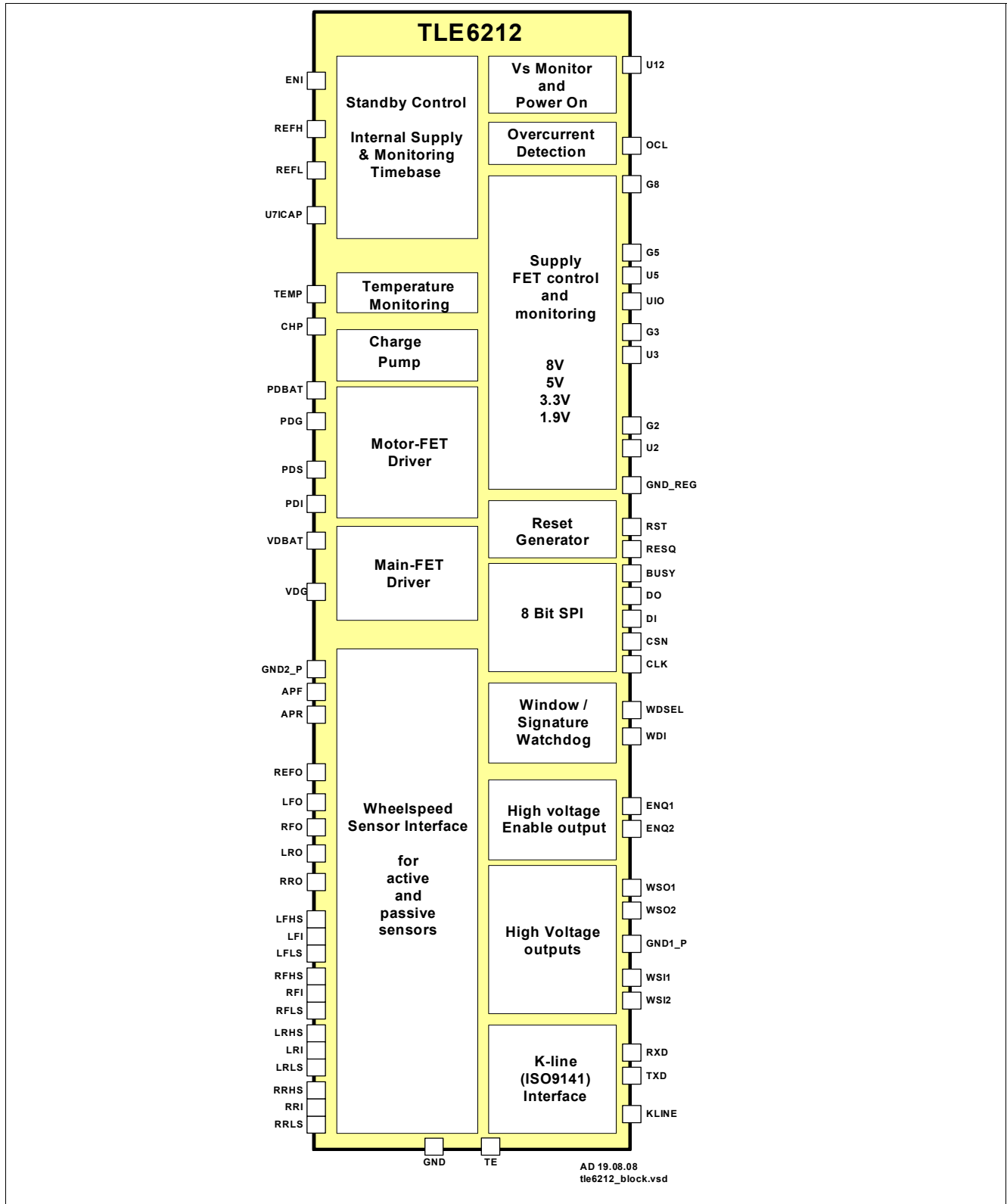


Figure 1 Block Diagram

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