BTM 7750G

Trilith IC

THE BTM 7750G is part of the Trilith IC family containing three dies in one package: One double high-side switch and two low-side switches. The drains of these three vertical DMOS chips are mounted on separated lead frames. The sources are connected to individual pins, so the BTM 7750G can be used in H-bridge- as well as in any other configuration. Both the double high-side and the two low-side switches of the BTM 7750G are manufactured in SMART SIPMOS® technology which combines low R_{DSon} vertical DMOS power stages with CMOS circuitry for control, protection and diagnosis.

Product Summary

Type	Package	Marking
BTM 7750G	PG-DSO-28-22	BTM 7750G

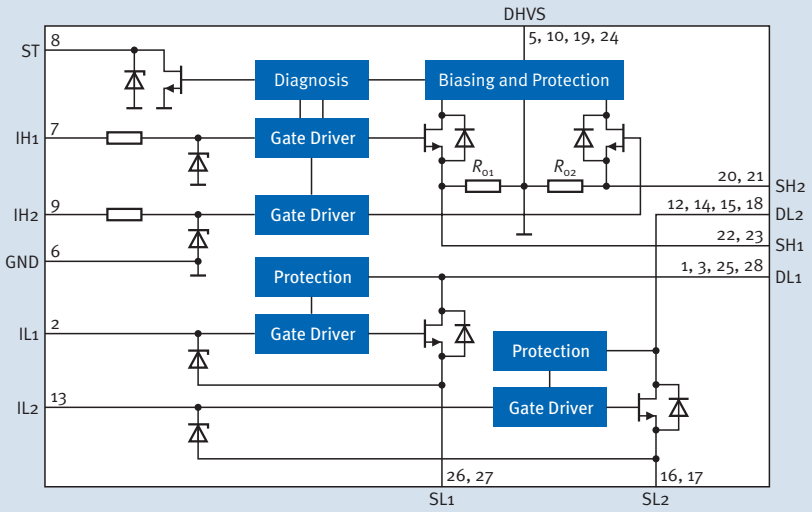
Applications

- Door lock
- Fuel flap lock
- Mirror flap
- Steering wheel lock
- Headrest adjustment
- Various industry applications

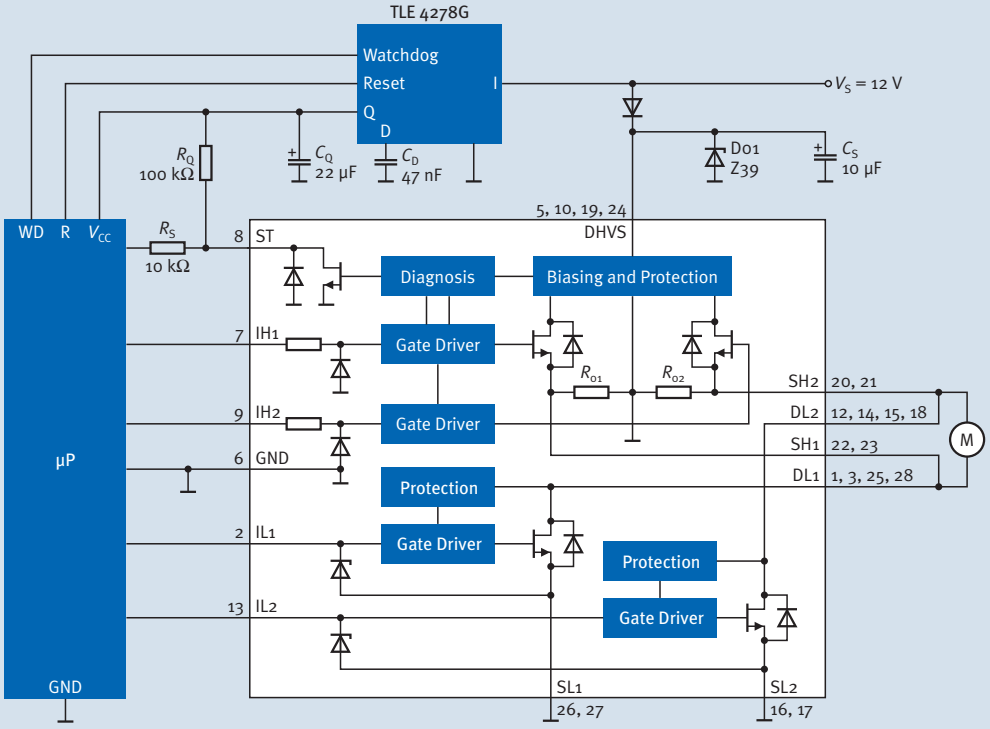
Features

- Quad D-MOS switch driver
- Free configurable as bridge or quad-switch
- Optimized for DC motor management applications
- Low R_{DSon}
  High side: 70 mΩ typ. @ 25°C,
  180 mΩ max. @ 150°C
  Low side: 45 mΩ typ. @ 25°C,
  105 mΩ max. @ 150°C
- Maximum peak current:
  typ. 12 A @ 25°C
- Very low quiescent current:
  typ. 5 µA @ 25°C
- Small outline, enhanced power PG-DSO-package
- Operates up to 40 V
- PWM frequencies up to 1 kHz
- Status flag diagnosis
- Short-circuit-protection
- Overtemperature shut down with hysteresis
- Internal clamp diodes
- Under-voltage detection with hysteresis
- Green product (RoHS compliant)
- AEC qualified

Block Diagram



Application Example



In case of V_{DSL} < -0.6 V or reverse battery the current into the µC might be limited by external resistors to protect the µC

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Published by
Infineon Technologies AG
81726 Munich, Germany

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Ordering No. B112-H9063-X-X-7600
NB07-1175