THE BTS 7960B is a fully integrated high current half bridge for motor drive applications. It is part of the NovalithIC™ family containing one p-channel highside MOSFET and one n-channel lowside MOSFET with an integrated driver IC in one package. The power switches utilize vertical MOS technologies to ensure optimum on state resistance. Due to the p-channel highside switch the need for a charge pump is eliminated thus minimizing EMI. Interfacing to a microcontroller is made easy by the integrated driver IC which features logic level inputs, diagnosis with current sense, slew rate adjustment, dead time generation and protection against overtemperature, overvoltage, undervoltage, overcurrent and short circuit.

THE BTS 7960B provides a cost optimized solution for protected high current PWM motor drives with very low board space consumption.

Applications
High current DC- or brushless DC (BLDC) motor drives for use in applications like
- Power Windows
- Sun Roof
- Central Door Lock
- Seat Positioning
- Wiper
- Washer Pump
- 4 Wheel Transfer Case
- Electronically Controlled Manual Transmission (ECMT)
- Cooling Fan

Features
- High peak current capability of min. 33 A
- Path resistance of typ. 16 mΩ @ 25°C
- Low quiescent current of typ. 7 µA @ 25°C
- PWM capability of up to 25 kHz with active freewheeling
- Switched mode current limitation for reduced power dissipation in overcurrent
- Status flag diagnosis with current sense capability
- Overtemperature shut down with latch behaviour
- Overvoltage and undervoltage shut down
- Driver circuit with logic level inputs
- Adjustable slew rates for optimized EMI
Product Summary

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<th>Type</th>
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<td>Q67060-S6160</td>
<td>High Current PN Half Bridge</td>
<td>P-TO263-7-6</td>
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Application Example

Microcontroller
XC 866
I/O I/O I/O I/O I/O

Voltage Regulator
TLE 4278G
Q D

Reverse Polarity Protection
V_{BAT}

SPD 50P03L

Ordering No. B152-H8512-G1-X-7600
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Information
For further information on technology, delivery terms and conditions and prices please contact your nearest Infineon Technologies Office.

Warnings
Due to technical requirements components may contain dangerous substances. For information on the types in question please contact your nearest Infineon Technologies Office.

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