

## TLE 6712G

### 2 Loop Firing IC



THE TLE 6712G is a 2 loop firing IC specially designed for automotive restraint applications. The device, located in the ECU (Electronic Control Unit) of the airbag system, provides two independent actuator channels for firing loops. Each channel is equipped with various diagnostic functions. Communication between the  $\mu$ C and TLE 6712G is performed via SPI and analog/digital interface pins.

#### Applications

- Automotive Restraint Applications

#### Features

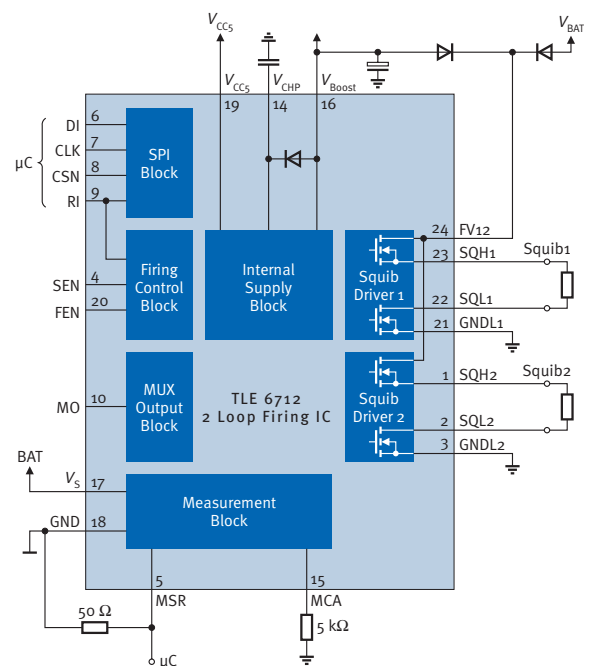
- 2 independent firing loops (each with Highside and Lowside Switch)
- Extra HW lines (safety lines) to enable firing
- Firing current detection
- Multiplexed analog output pin for measurement retrieval
- Unidirectional Serial Peripheral Interface (SPI) up to 4 MHz

#### Embedded Protection Functions

- Current limitation for each firing loop
- Thermal and short circuit protection for each switch

#### Embedded Diagnostic Functions

- Squib Resistance Measurement with programmable gain
- Leakage detection to GND and Battery
- Measurement of internal and external voltages



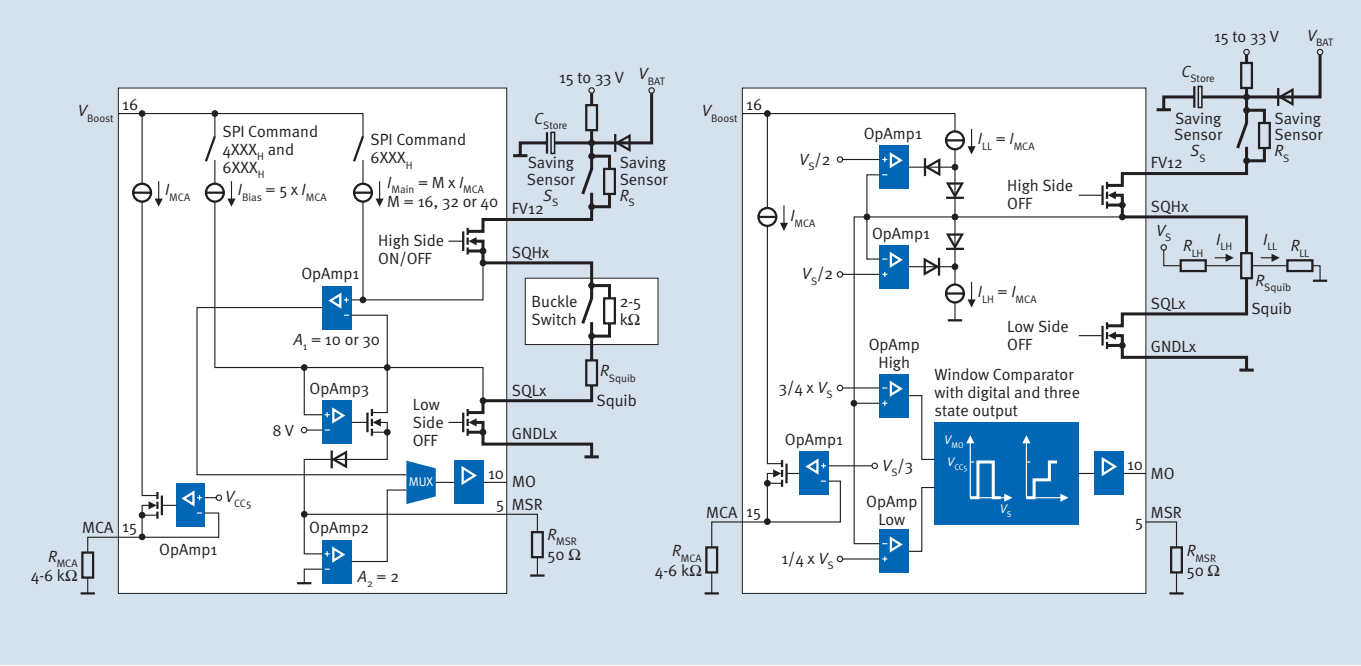
[www.infineon.com/restraint-system-IC](http://www.infineon.com/restraint-system-IC)

## Automotive Power



Never stop thinking

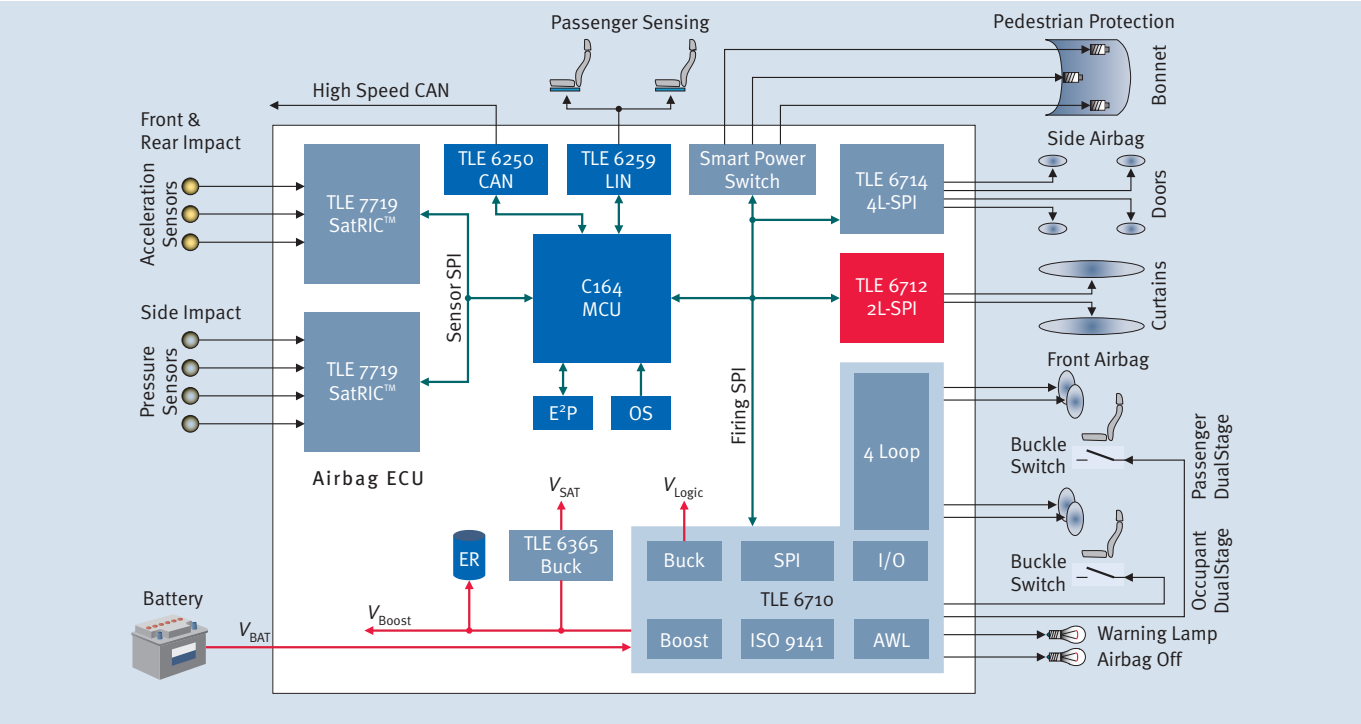
Diagnostic Examples (Resistance & Leakage Measurement)



Product Summary

Type	Sales Code	Description	Package
TLE 6712G	Available upon request	2 Loop Firing IC	P-DSO-24-1

System Overview



How to reach us:  
<http://www.infineon.com>

Published by  
Infineon Technologies AG  
81726 Munich, Germany

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Ordering No. B152-H8516-X-X-7600  
Printed in Germany  
PS 1106.5 nb

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