

Multi-channel power switch CJ970



DESCRIPTION

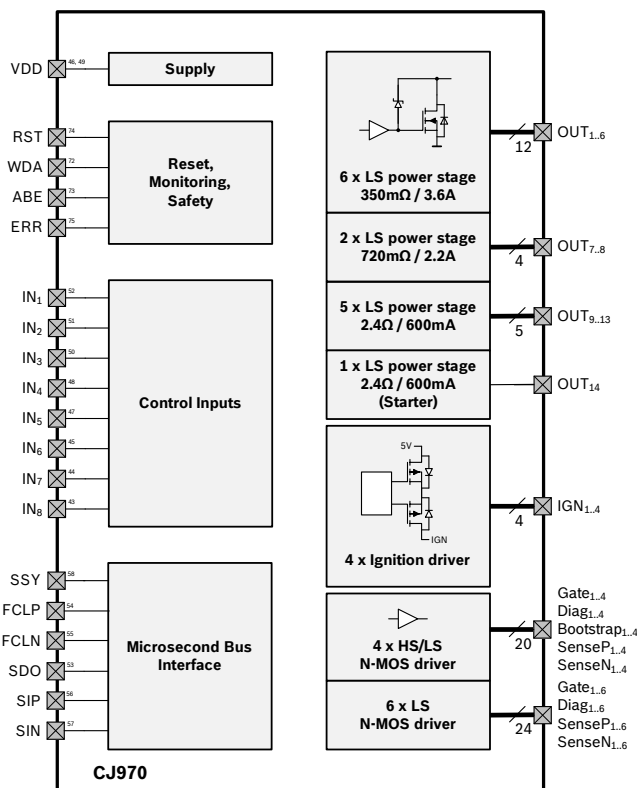
The CJ970 is a multi-channel power switch IC, to meet the needs of electronic powertrain control units, with focus on combustion engine and fuel cell applications. It provides the flexibility to combine the power stages to form a half-bridge, an H-bridge (“push-pull”) or a B6 bridge to drive a brushless DC motor.

The CJ970 and the system basis chip CY329 are an ideal combination for implementing various applications.

APPLICATIONS

- ▶ Engine Control Units
- ▶ Fuel Cell Powertrain

BLOCK DIAGRAM



FEATURES

- ▶ 14 integrated Low Side switches
 - 55V clamping
 - 6 stages with 3.6 A / max. $R_{on} = 350 \text{ m}\Omega$ configurable for 2.2 A
 - 2 stages with 2.2 A / max. $R_{on} = 720 \text{ m}\Omega$ configurable for 0.6 A
 - 5 stages with 0.6 A for LEDs, relays, etc.
 - 1 stage with 0.6 A for starter control applications
- ▶ 10 N channel Power-MOSFET driver stages
 - 6 LS drivers
 - 4 HS/LS drivers, configurable
 - Combine HS/LS to form e.g.
 - Four half bridges
 - Two H bridges
 - One B6 bridge for motor control
- ▶ 4 ignition pre-drivers
- ▶ MSC Microsecond Bus interface
- ▶ Extended safety concept
- ▶ Developed according to ISO26262
- ▶ TQFP100ePad



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