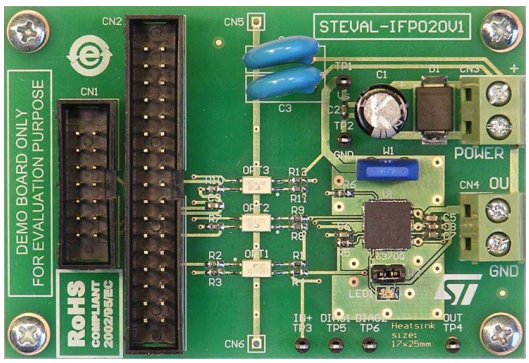
STEVAL-IFP020V1

PLC (for industrial automation) digital output solution using a 2.5 A single high-side smart power switch based on the L6370Q

Data brief

Features

- Single-channel topology
- Galvanic isolation
- 2.5 A output current
- 9.5 V to 35 V supply voltage range
- Short-circuit, overload, and thermal protections
- Loss of ground and V_S protections
- Fast demagnetization of inductive loads
- Open load, output short to V_S detection
- Two diagnostic outputs
- Output status LED driver
- EMC immunity against burst, surge, and ESD
- RoHS compliant



STEVAL-IFP020V1

Description

The STEVAL-IFP020V1 demonstration board is based on the L6370Q, a single-channel high-side driver chip intended for driving resistive, inductive or capacitive loads in an industrial environment. It provides an embedded fast demagnetization feature for inductive load switch-off.

The device evaluates load disconnection (during channel on-state), output short to V_{CC} or GND, overtemperature, undervoltage of supply voltage, and provides feedback to a control unit.

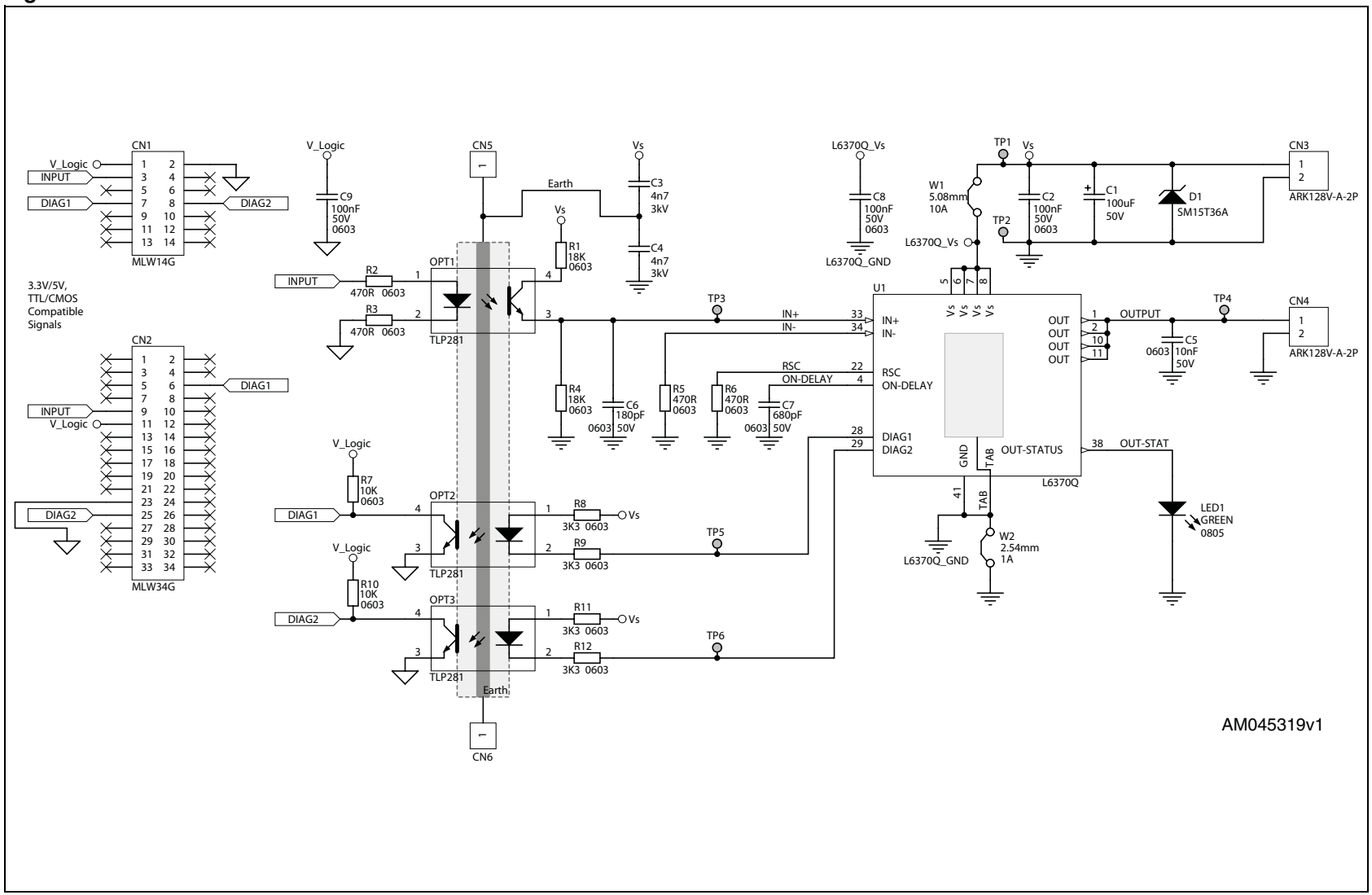
Integrating an extensive set of electrical protections makes the application safe and reliable for use in harsh conditions.

The STEVAL-IFP020V1 demonstration board is an example of application design using the L6370Q. It is used to guide the designer in choosing external components for applications while providing an appropriate PCB design.

For further information contact your local STMicroelectronics sales office. www.st.com

1 Schematic

Figure 1. STEVAL-IFP020V1 schematic



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
22-Dec-2011	1	Initial release.

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