



STEVAL-IHM020V1

Demonstration board based on the STCC08 AC switch failure mode detector

Data Brief

Features

- ST7LITE39F2 MCU to:
 - drive the AC switch through the STCC08
 - analyze the AVF signals and detect an AC switch failure
- Mechanical switches to simulate AC switch failures (diode mode, short and open circuit)
- Mechanical control switch to turn ON or OFF the AC switch through the MCU
- LEDs used to indicate AC switch states
- STCC08 used to control ACS™, ACST and TRIAC up to 10 mA IGT and to monitor AC switch states
- Measure points for connecting voltage probes
- Capacitive power supply (5 V DC)
- 15 W (under 230 V) light bulb (load)

Description

The STEVAL-IHM020V demonstration board allows users to:

- evaluate the full ST solution (microcontroller + STCC08)
- test and analyze the AC switch failure detection features of the STCC08 device

This demonstration board provides a means to evaluate the performance of the STCC08, an AC switch failure mode detector and AC power switch driver. The device is dedicated to driving up to 10 mA IGT AC switches (ACS, ACST and TRIACs), and detecting any switch failures. This solution embeds a switch driver and an AC switch state detector. It contributes to system safety by monitoring AC switches driving sensitive loads

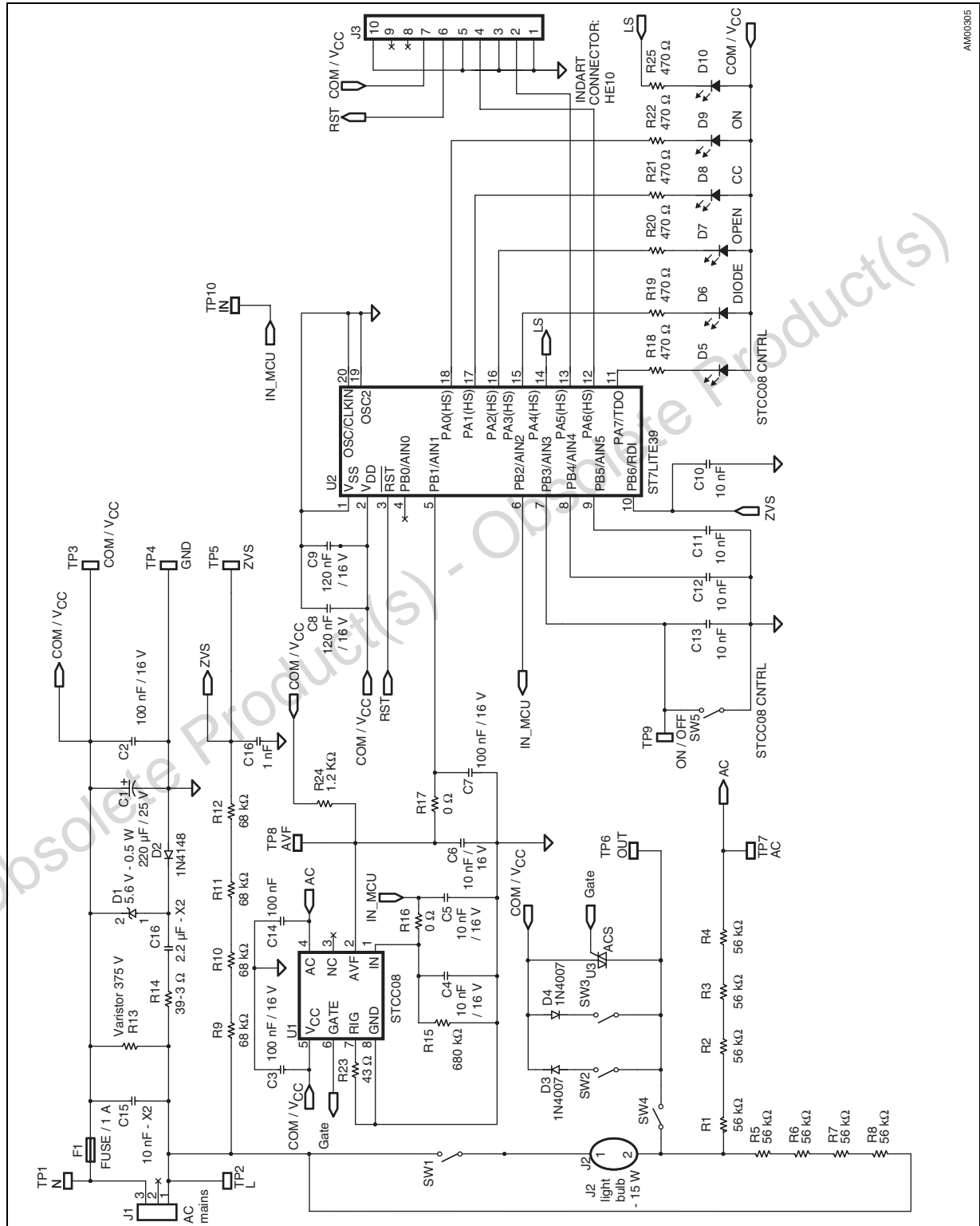


such as drain pumps, door locks, heaters, cooling fans and compressors.

For information regarding the setup and operation of the STEVAL-IHM020V demonstration board, refer to user manual UM0583.

1 Schematic diagram

Figure 1. Circuit schematic



AM00395



2 Revision history

Table 1. Document revision history

| Date | Revision | Changes |
|-------------|----------|------------------|
| 03-Nov-2008 | 1 | Initial release. |

Obsolete Product(s) - Obsolete Product(s)

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