



STEVAL-IHM015V1

Low voltage motor control demonstration kit
based on the ST7MC2S4 and STS8DNH3LL

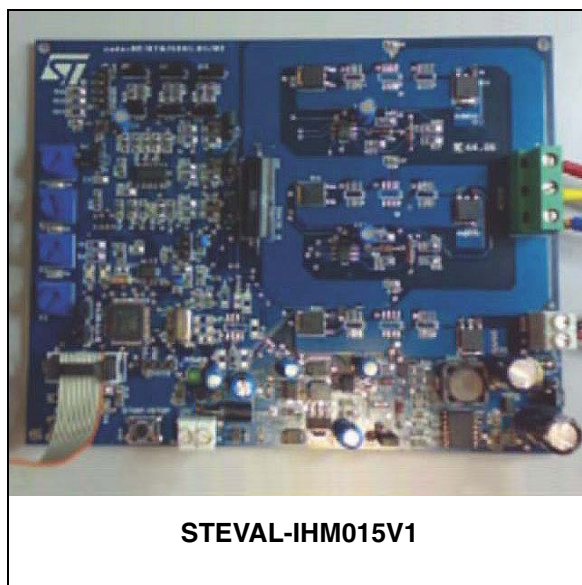
Data Brief

Features

- Voltage range from 5 V to 48 V
- Current up to 25 A
- 8 A, 30 V power MOSFET STS8DNH3LL (dual device) included
- Compatible with power MOSFETs in SO-8 and DPAK packages
- 10 V auxiliary power supply connector
- SCI (serial communication interface) connector
- Programming and debug support via 10-pin ICC connector
- On-board 2 Kb (256 byte) serial memory
- Four potentiometers for runtime settings
- Start/stop button
- Reset button
- Debug pins available

Description

The STEVAL-IHM015V1 demonstration board is a complete development platform for low voltage motor control applications. Based on a cost effective, flexible and open design, it allows easy demonstration of the ST7MC2S4 capabilities to drive low voltage synchronous motors. The ST7MC2S4 is an 8-bit microcontroller with 16 Kb internal Flash memory. The STEVAL-IHM015V1 features complete hardware for developing motor control applications based on ST7MC peripherals including motor control peripherals (MTC), and serial communication interface (SCI).

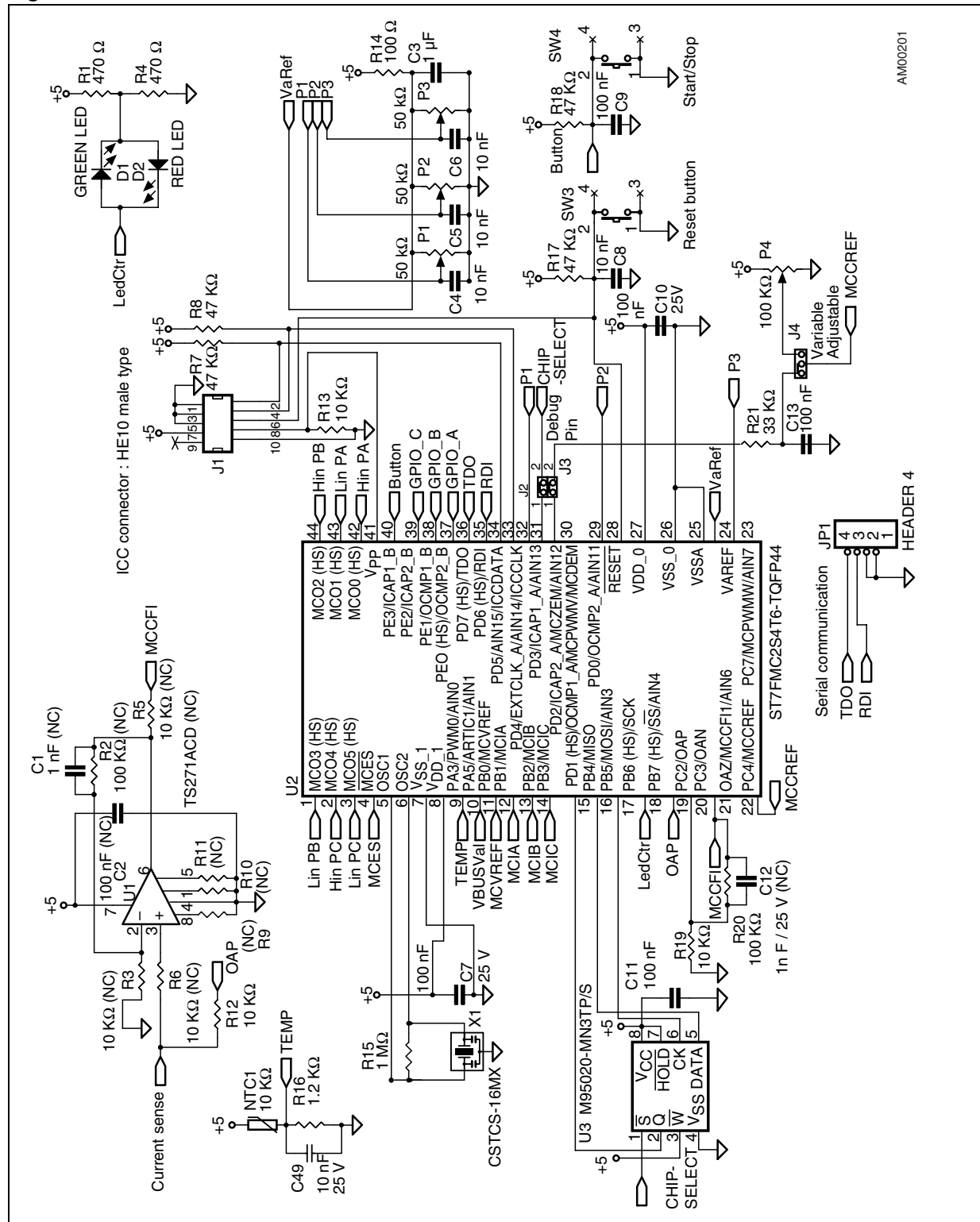


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The STEVAL-IHM015V1 uses an in-circuit communication (ICC) standard interface to connect to the host PC via in-circuit debuggers/programmers such as the inDART-STX board from Softec. The power stage of the board is designed to support up to 25 A and up to 50 V. It is possible to use the STS8DNH3LL devices included on the board, or replace them with different devices in the SO-8 package (dual or single devices for chip) or DPAK. Power supply stages can be easily configured for a wide range of bus voltages.

1 Schematic diagram

Figure 1. STEVAL-IHM015V1 circuit schematic



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
01-Sep-2008	1	Initial release.

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