

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).

For further information contact your local STMicroelectronics sales office.

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.

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1 Schematic diagram



Figure 1. STEVAL-IHM015V1 circuit schematic

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2 Revision history

Table 1.Document revision history

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



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