ST7MC three-phase BLDC motor control software library
release 2.0.1

1 Preface

1.1 About this release note

This is Version 1.0 of the release notes for Release 2.0.1 of the ST7MC Three-phase BLDC Motor Control Software Library.

These release notes are updated periodically in order to keep you abreast of any problems or limitations found in this release. Check the ST Internet website at *www.st.com/mcu* to ensure that this is the latest version of these release notes.

Changes compared to release 2.0.0

New Feature	To allow debugging with tools like emulator, the software watchdog activation as been disable in the main.c file.

1.2 Customer support

For more information or help concerning this software, please contact the nearest sales office (see *Contact list*).

1.2.1 Software updates

You can get software updates from the ST Internet web site *www.st.com/mcu*. For information on firmware and hardware revisions, call your distributor or ST using the contact list provided below.

1.2.2 Contact list

Table 1. Contact list

North America	
Canada and East Coast STMicroelectronics Lexington Corporate Center 10 Maguire Road, Building 1, 3rd floor Lexington, MA 02421 Phone: (781) 402-2650 **West coast** STMicroelectronics, Inc. 1060 E. Brokaw Road San Jose, CA 95131 Phone: (408) 452-8585	**Mid West** STMicroelectronics 1300 East Woodfield Road, Suite 410 Schaumburg, IL 60173 Phone: (847) 585-3000
Note: For American and Canadian customers seeking technical support the US/Canada is split in 3 territories. According to your area, contact the appropriate sales office from the list above and ask to be transferred to an 8-bit microcontroller Field Applications Engineer.	
Europe	
France +33 (0)1 47 40 75 75 **Germany** +49 89 46 00 60 **U.K.** +44 162 889 0800	
Asia/Pacific Region	
Japan +81 3 3280 4120 **Hong-Kong** +85 2 2861 5700 **Sydney** +61 2 9580 3811 **Taipei** +88 6 2 2378 8088	

2 Read me first

This chapter provides important information about this software release.

2.1 Host PC system requirements

Not relevant for the library. Refer to STVD7 (or other selected IDE) user manuals for development tools requirements.

2.2 Software installation

BLDC_3PH_SL_2.1.zip for sensorless motor and BLDC_3PH_SR_2.0.zip for sensor motor must be unzipped completely in your working folder (recommended, providing the previous library source files were not modified), or few selected source files can be extracted according to application needs and current development state. See AN1905 for details.

2.3 Hardware support

The demo programs included in the main.c file has been written to work on the Softec Microsystems ST7MC starter Kit. The rest of the library has been designed to be modular and easily customized for any kind of hardware.

2.4 ST7MC AK control panel support

This library is compatible with the header files generated with release 2.1 of the ST7MC AK Control Panel.

3 What is new In ST7MC three-phase BLDC motor control software library?

Summary of changes in release 2.0.1

● New features

To allow debugging with tools like emulator, the software watchdog activation as been disable in the main.c file.

4 Information for major previous releases

4.1 Release 2.0.0 (November 2005)

● To comply with the new functionalities of version 2.0 of the ST7MC Control Panel, rotating direction can be chosen between Clockwise, Counterclockwise or toggle mode.

4.2 Release 1.0.1 (October 2004)

● Library delivered with STVD7 3.x workspace including two projects for Cosmic and Metrowerks compilers.

● Library can be compiled with the free 4K compiler version from Cosmic.

● The brake strategy has been changed to avoid short circuits on the bridge legs.

● The authorized change of PWM during demagnetization in Voltage mode is now working.

● The unwanted starting peak current has been suppressed

● This library is compatible with the header files generated with release 1.1 of the ST7MC AK Control Panel.

4.3 Release 1.0.0 (May 2004)

● First release

● This library is compatible with the header files generated with release 1.0 of the ST7MC AK Control Panel.

5 Revision history

Table 2. Document revision history

Date	Revision	Changes
Nov-2005	1	Initial release.
24-Mar-2009	2	Document reformatted.

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