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## ST7MC Three Phases BLDC Motor Control Software Library Release 2.0.1

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### 1 Preface

#### 1.1 About these release notes

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](http://www.st.com/mcu) to ensure that this is the latest version of these release notes.

#### Changes in this version of the Release Notes...

New Features	• Disable Software Watchdog activation, in the main.c file, to allow work with emulator.
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### 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 *mcu.st.com*. For information on firmware and hardware revisions, call your distributor or ST using the contact list provided below.

#### 1.2.2 Contact list

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##### North America

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###### Canada and East Coast

STMicroelectronics  
Lexington Corporate Center  
10 Maguire Road, Building 1, 3rd floor  
Lexington, MA 02421  
Phone: (781) 402-2650

###### Mid West

STMicroelectronics  
1300 East Woodfield Road, Suite 410  
Schaumburg, IL 60173  
Phone: (847) 585-3000

###### West coast

STMicroelectronics, Inc.  
1060 E. Brokaw Road  
San Jose, CA 95131  
Phone: (408) 452-8585

**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.

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##### Europe

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**France** +33 (0)1 47 40 75 75

**Germany** +49 89 46 00 60

**U.K.** +44 162 889 0800

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##### Asia/Pacific Region

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**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 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's New In ST7MC Three-phase BLDC Motor Control Software Library?**

### **3.1 Summary of changes in Release 2.0.1**

#### **New Features**

- To allow debugging with tools like emulator, the Software Watchdog activation has been disabled in the main.c file.

## 4 Information For Major Previous Releases

### Release 2.0.0 (November 2005)

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

### 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 demagnetisation 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.

### 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.

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