

Control stage based on the STM32F100CB microcontroller
for motor control with serial communication user interface

Features

- Compact size
- Based on STMicroelectronics ARM™ Cortex-M3 core-based STM32F100CB microcontroller
- Connector for interfacing with any STMicroelectronics demonstration powerboard equipped with an MC connector (such as the STEVAL-IHM032V1) with alternate functions (current reference, current limitation/regulation, method selection, current boost)
- Compatible with sinusoidal and trapezoidal control
- Insulated USART communication interface
- Non-insulated UUSCI interface (see STEVAL-PCC009V4)
- External oscillator
- Reset button
- SWD for programming/debugging
- DAC outputs test points



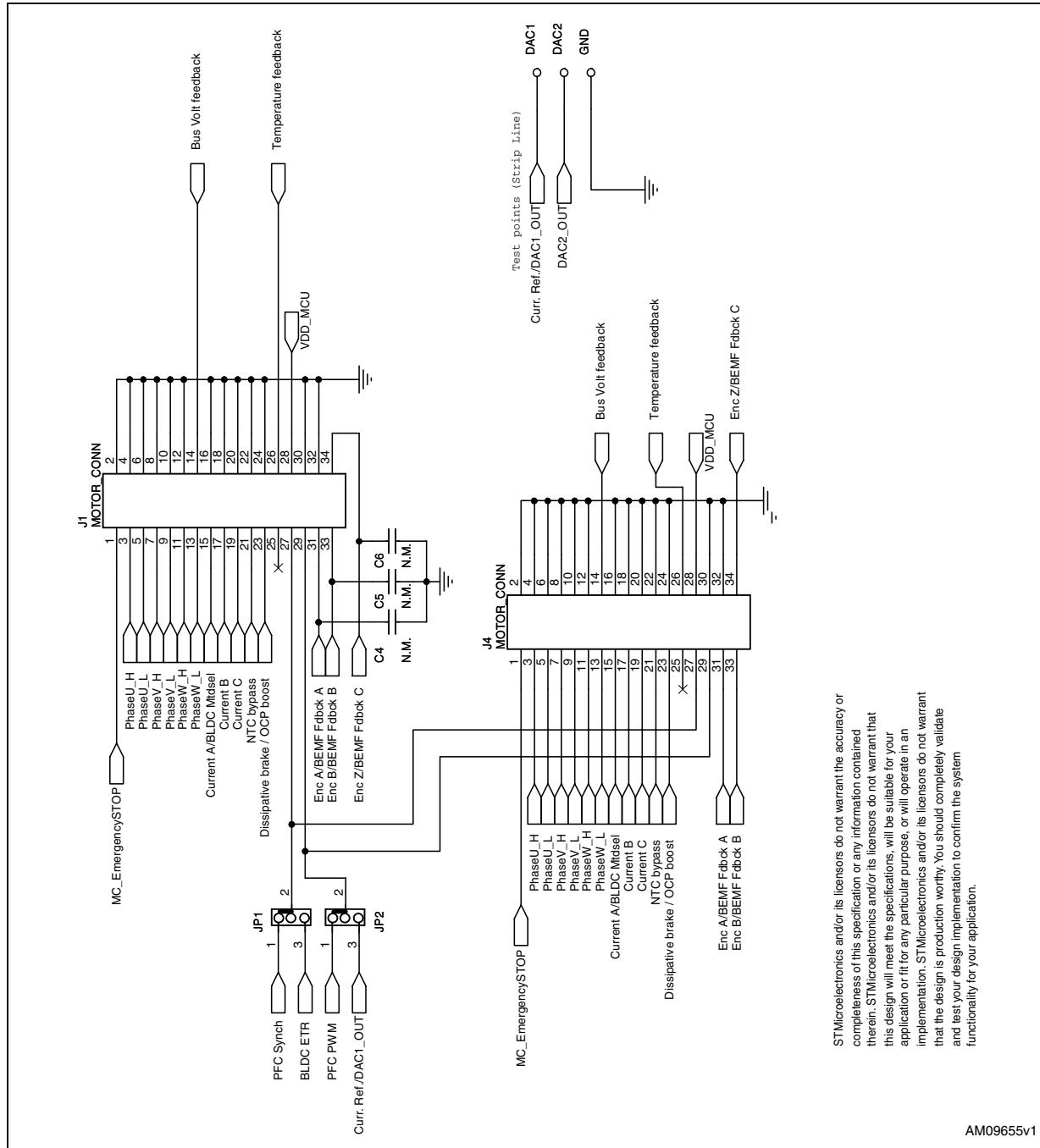
Description

The STEVAL-IHM033V1 is a control stage demonstration board based on the STM32F100CB microcontroller. The board has been designed as an evaluation environment for motor control.

The demonstration board can be used together with the STM32 PMSM single/dual FOC SDK v3.0 and an STMicroelectronics demonstration powerboard equipped with an MC connector (such as the STEVAL-IHM032V1) for a complete motor control evaluation and development platform.

1 Schematics

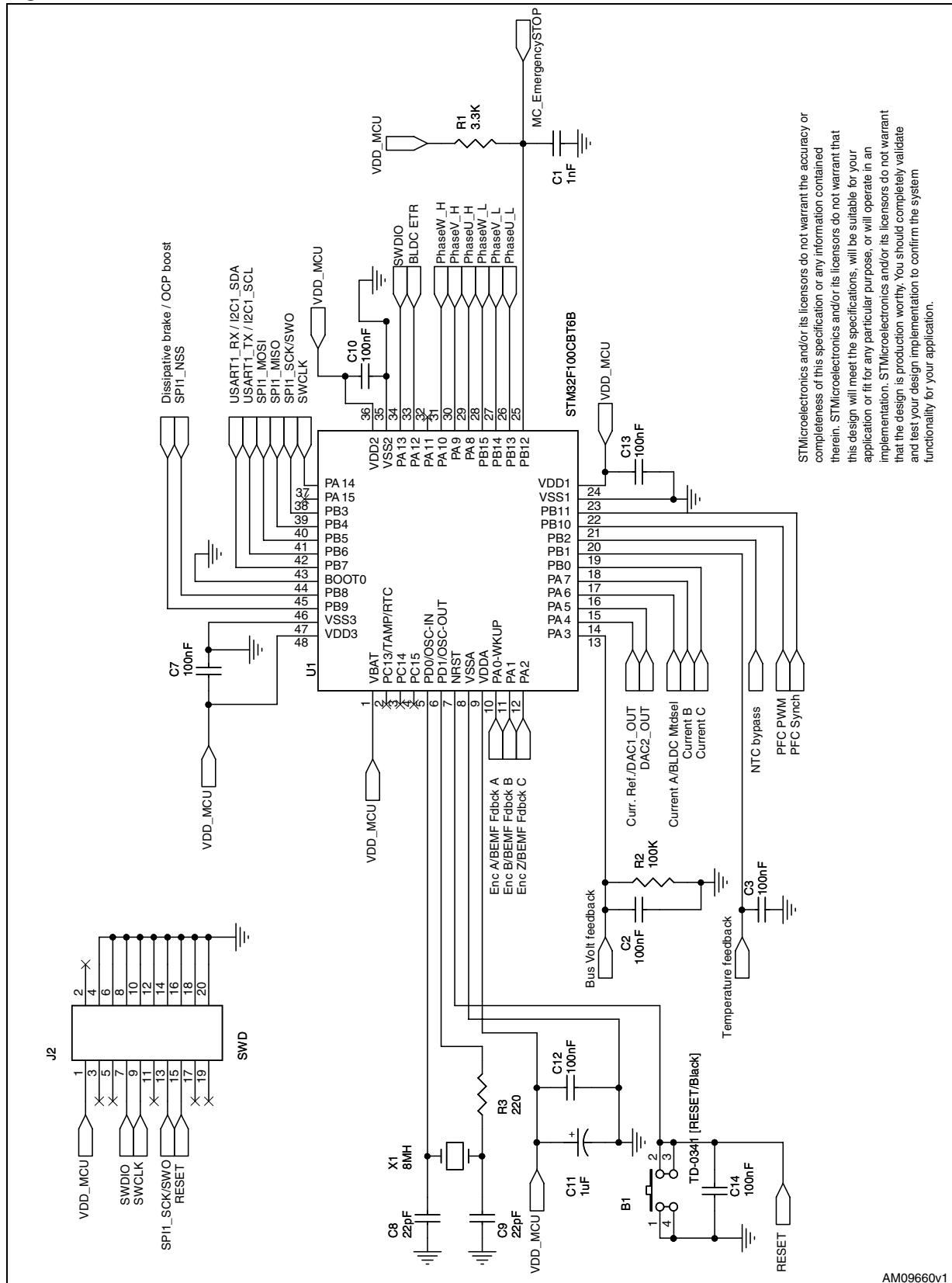
Figure 1. Connectors



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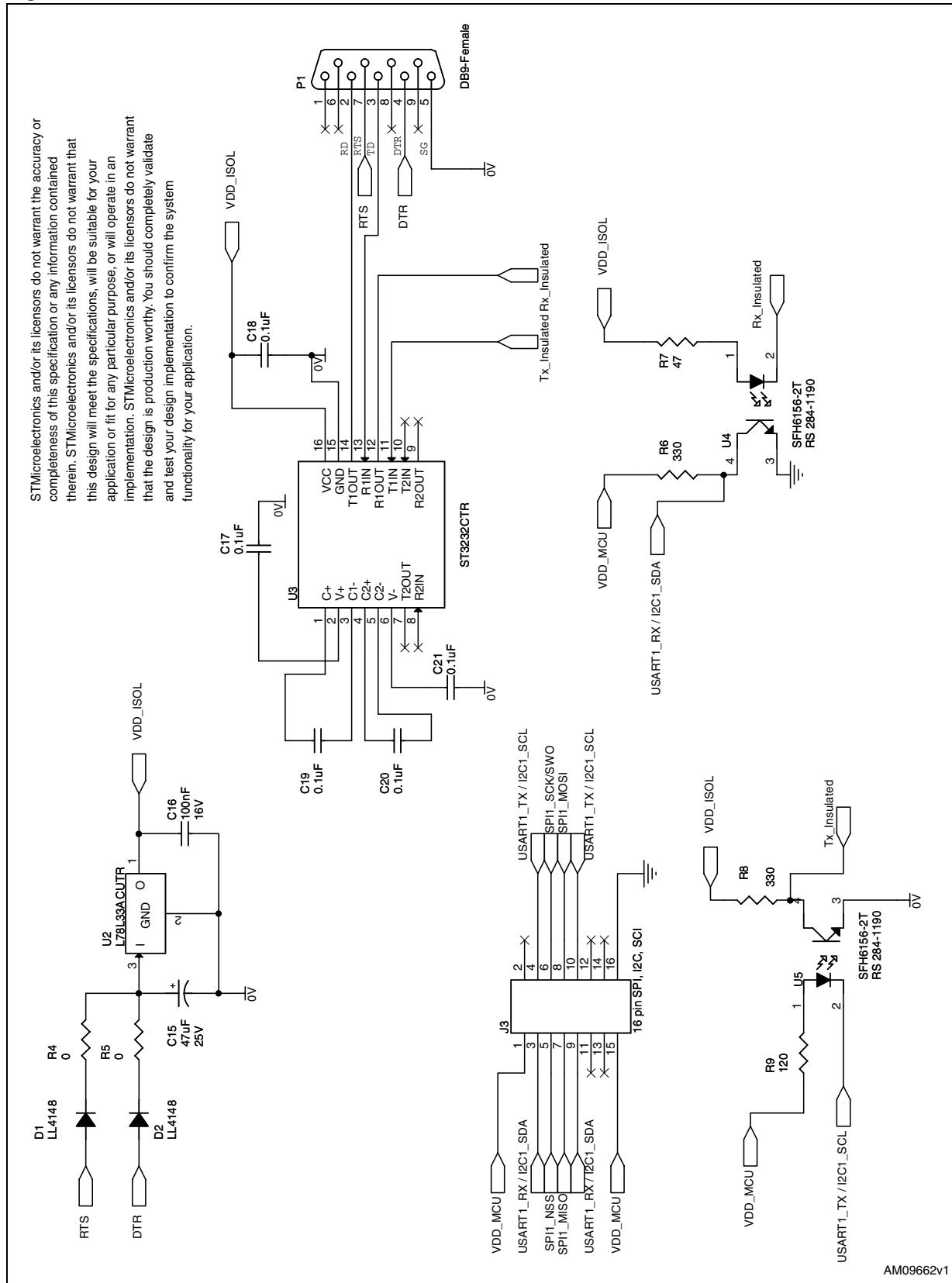
AM09655v1

Figure 2. Microcontroller



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Figure 3. Communication interface



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
19-Sep-2011	1	Initial release.
20-Oct-2011	2	Updated title in cover page.

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