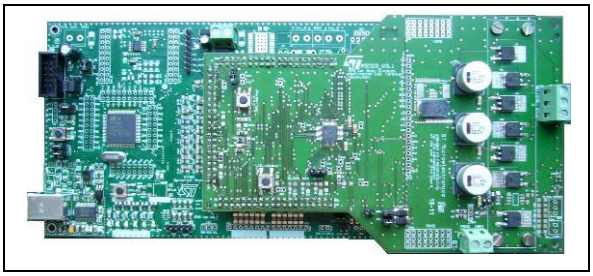
EVAL-L99ASC03

L99ASC03 Evaluation Board

Data brief



Features

- Two separated and signal shielded stages: driver & power
- ISO pulse protection (not soldered)
- Reverse polarity protection available on each battery voltage input: Vs, VSREG, power stage
- Current reference comparator
- PCB temperature sensor
- Hall sensors connector and conditioning circuit
- INH_wake-up button
- Microcontroller configured to be supplied by L99ASC03 5V LDO
- Flash mode configurable
- Compatible with external power boards

Description

The EVAL-L99ASC03 is an evaluation board designed for sensorless 3Phase BLDC motor control. It's composed by a mother-board and a daughter-board on which is pre-assembled the L99ASC03. The system features an enhanced power management power supply functionalities including various standby modes.

The motherboard, based on STM8 microcontroller, provides the logic section for monitoring and driving the L99ASC03 assembled in the daughterboard.

With the aim to make the board usage and settings simpler, ST provides a dedicated user-friendly software with a Graphic User Interface (GUI). This enables the user to set L99ASC03 parameters and at the same time it shows real time device information as the current evolution, motor speed (RPM), the fault flags, the board temperature and much more.

Table 1. Device summary

Order code	Reference
EVAL-L99ASC03	L99ASC03 evaluation board

For further information contact your local STMicroelectronics sales office. www.st.com

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1 Demonstration software

A software GUI (Graphical User Interface) for easy demonstration of the L99ASC03 is available on www.st.com.

1.1 System requirements

- Windows OS (XP, 7, 8)
- USB type B

Appendix A Application schematics and layouts

A.1 L99ASC03 daughterboard

Figure 1. EVAL-L99ASC03 top layer

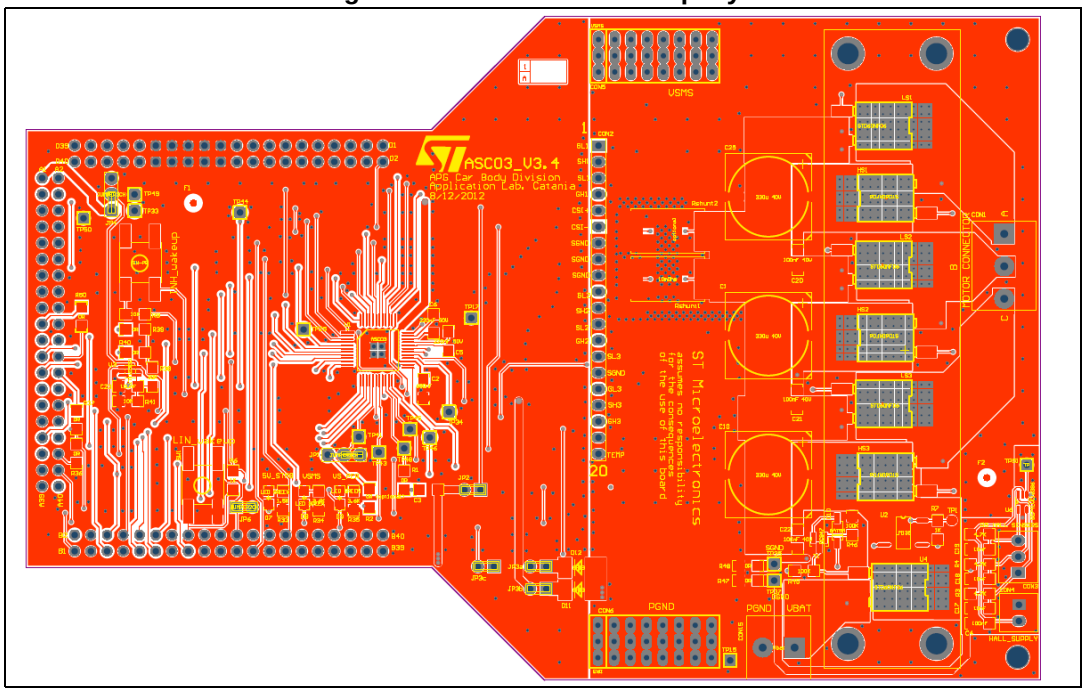


Figure 2. EVAL- L99ASC03 bottom layer

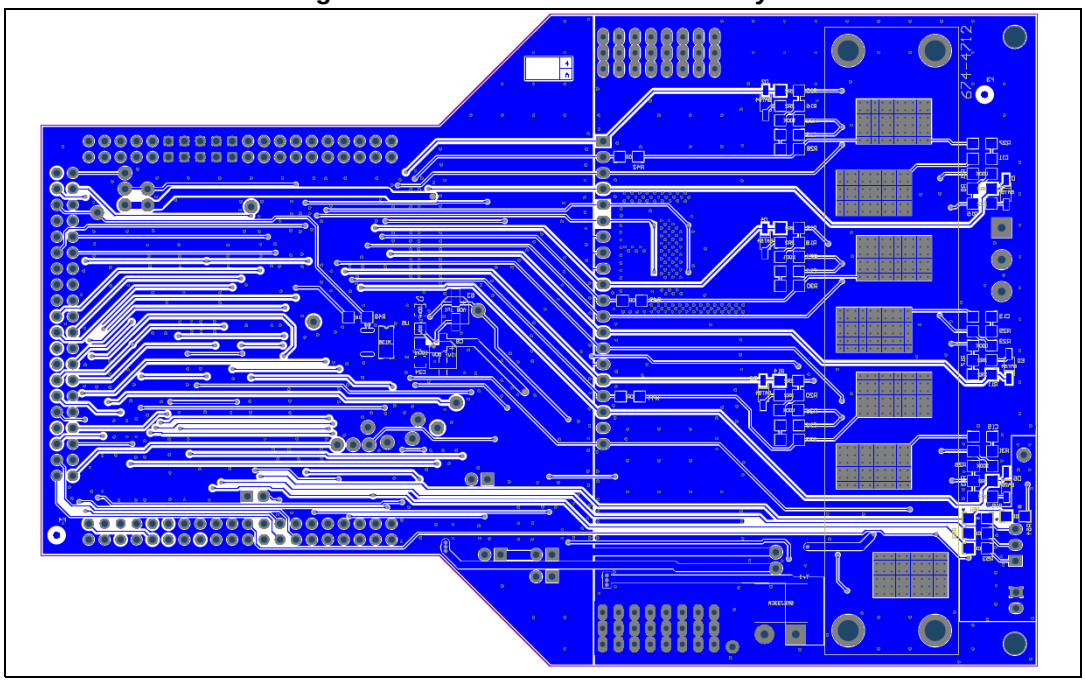
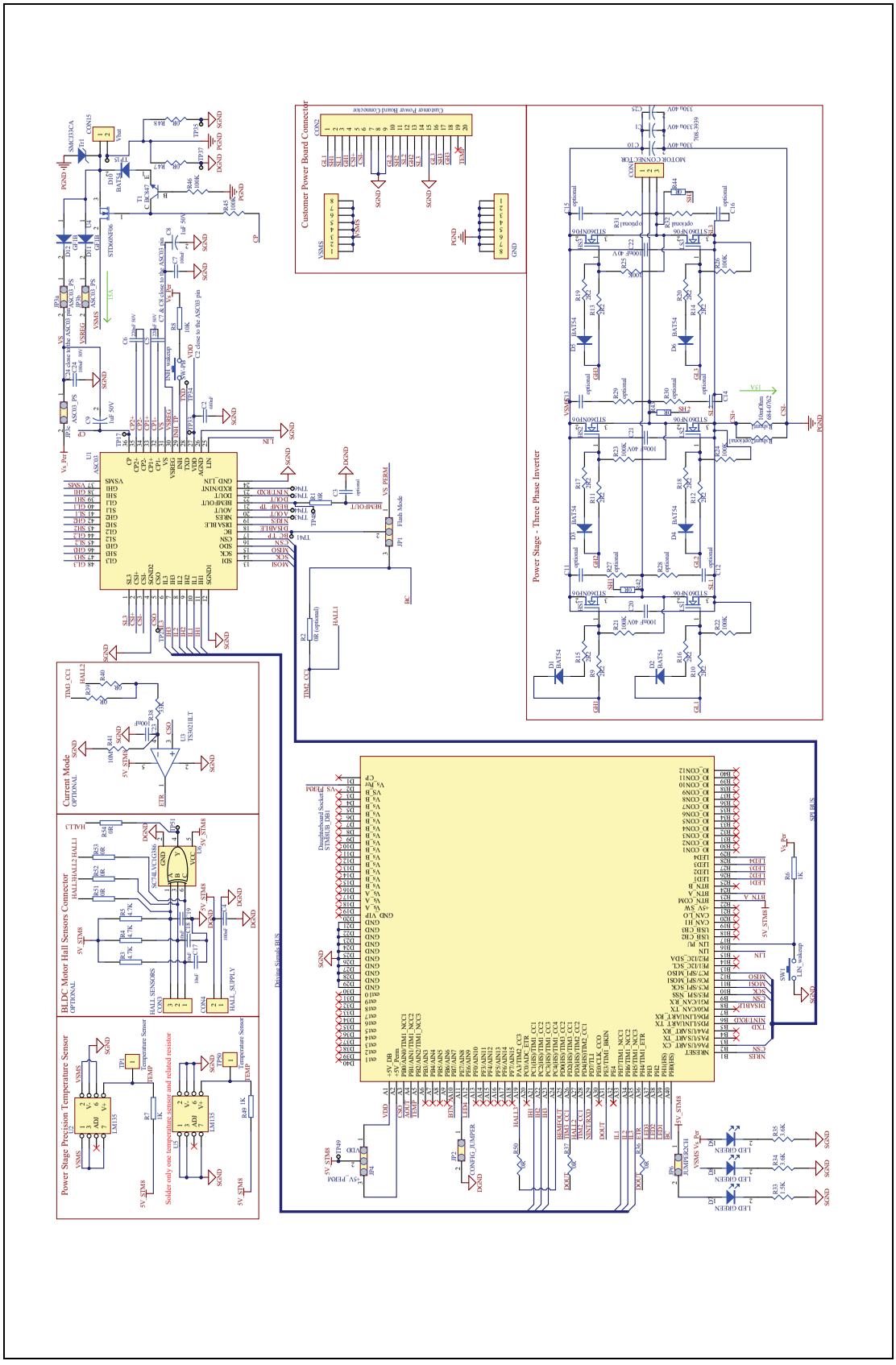


Figure 3. EVAL-L99ASC03 schematic



Revision history

Table 2. Document revision history

Date	Revision	Changes
14-Dec-2017	1	Initial release.