EVAL-L99MOD5xXP

Data brief

L99MOD5xXP family evaluation kit for automotive applications



Features

- MOSFET and diode reverse battery protection network
- Possibility of powering at 12 V through daughterboard connector
- Half-bridge and high-side outputs available depending on the specific device

Applications

- Multiple brushed DC motors and additional loads in high-side configuration, such as bulbs, LEDs or protected supply

Description

The EVAL-L99MOD5xXP evaluation kit consists in a motherboard and a daughterboard on which the L99MOD5xXP device is assembled. Both of these evaluation boards provide electronic control modules with enhanced power management functionalities including a standby mode.

The motherboard, based on the SPC56 microcontroller, provides the logic section for driving and monitoring the L99MOD5xXP device assembled on the daughterboard.

With the aim of facilitating the use and configuration of the board, ST provides a dedicated user-friendly software with a graphic user interface (GUI) which can be downloaded from STMicroelectronics's website.

The GUI enables the user to set the L99MOD5xXP parameters and get real time information from the device, such as registers status, analog current sense, fault flags and much more.

Product status links
EVAL-L99MOD5xXP family
EVAL-L99MOD50XP
EVAL-L99MOD51XP
EVAL-L99MOD53XP
EVAL-L99MOD54XP

1 Application schematics and layout

Figure 1. EVAL-L99MOD5xXP top layer and Figure 2. EVAL-L99MOD5xXP bottom layer show the top and bottom layer of the L99MOD5xXP daughterboard.

Figure 3. EVAL-L99MOD5xXP schematic shows the EVAL-L99MOD5xXP schematic.

Figure 1. EVAL-L99MOD5xXP top layer

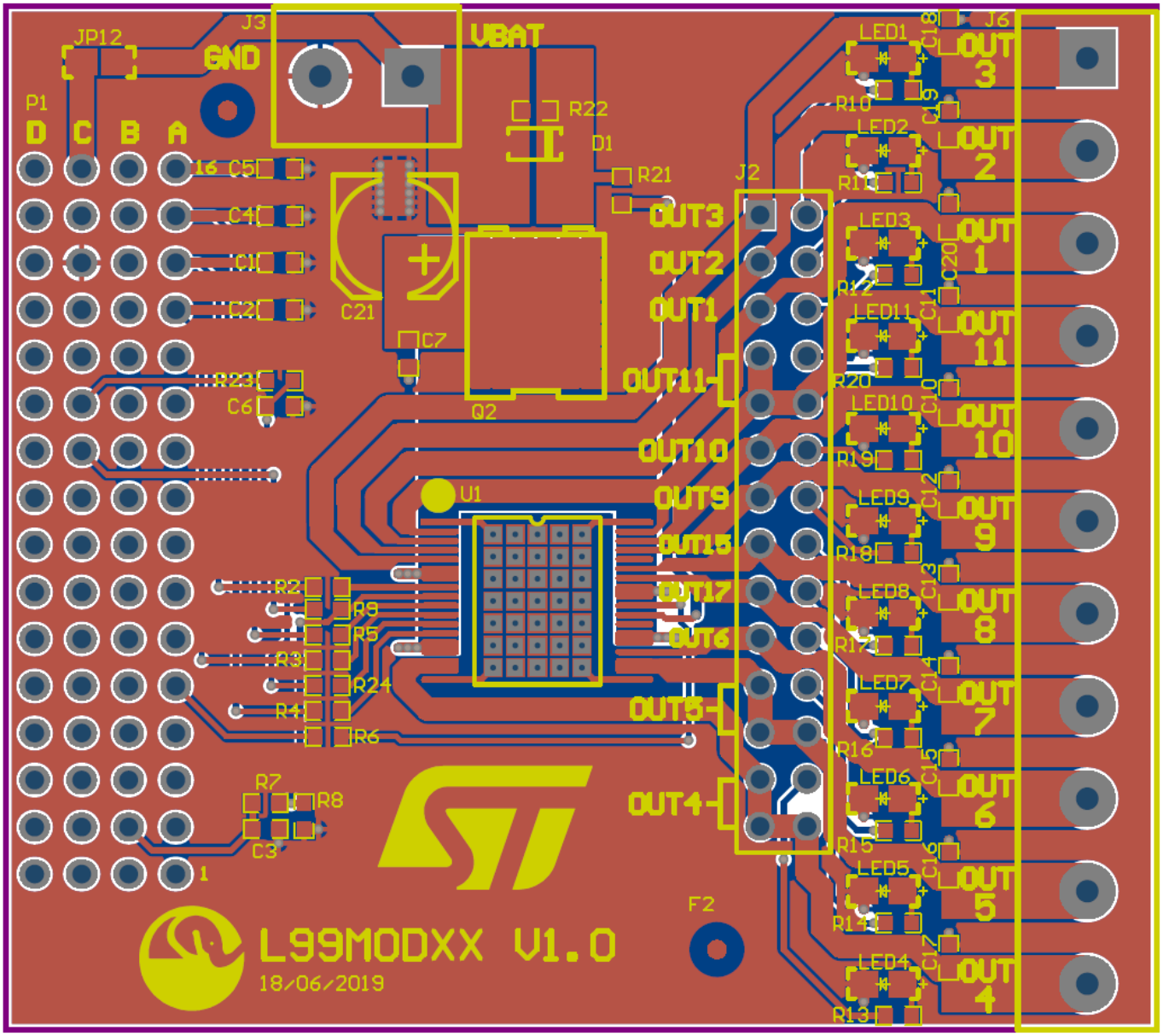


Figure 2. **EVAL-L99MOD5xXP bottom layer**

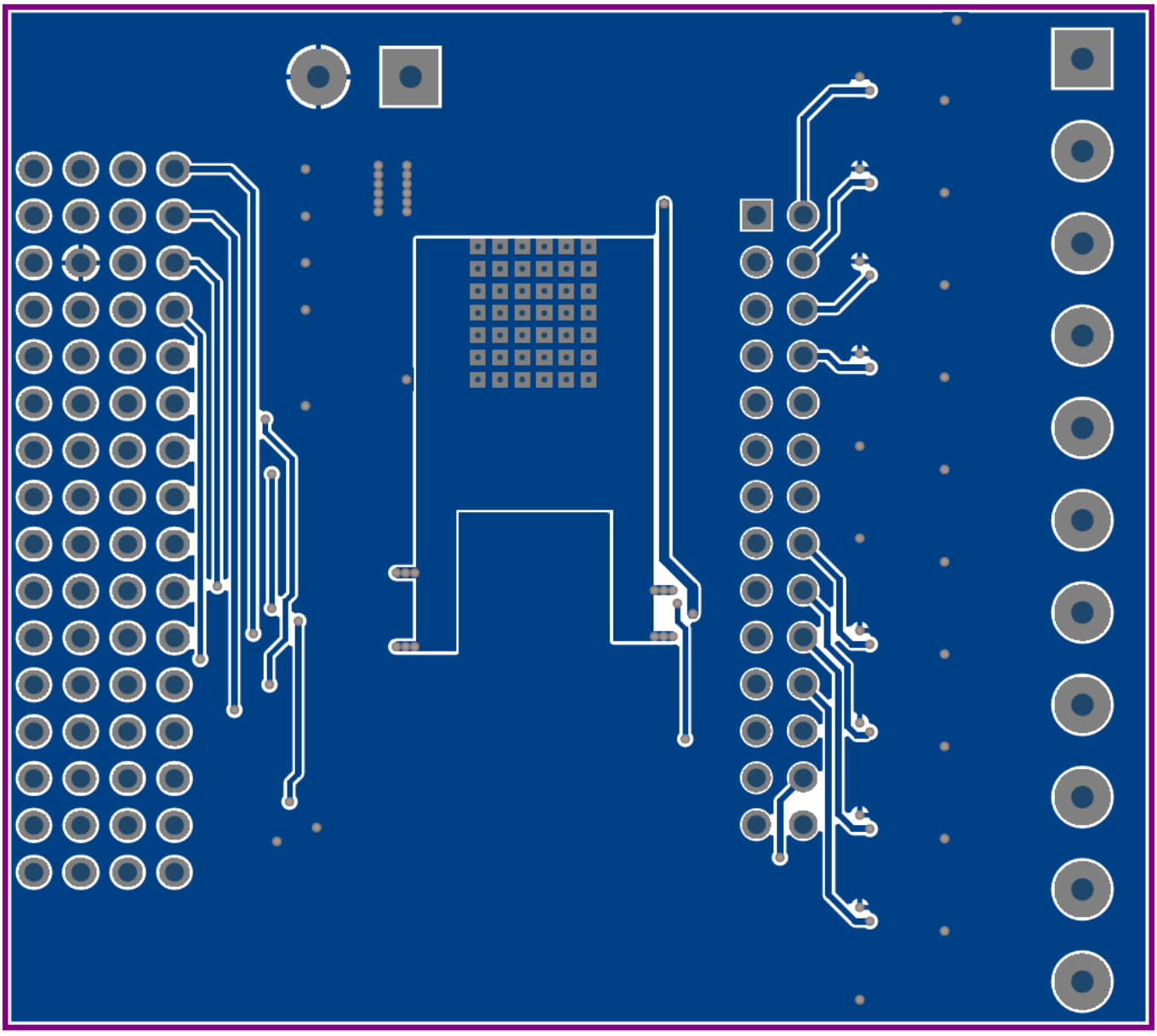
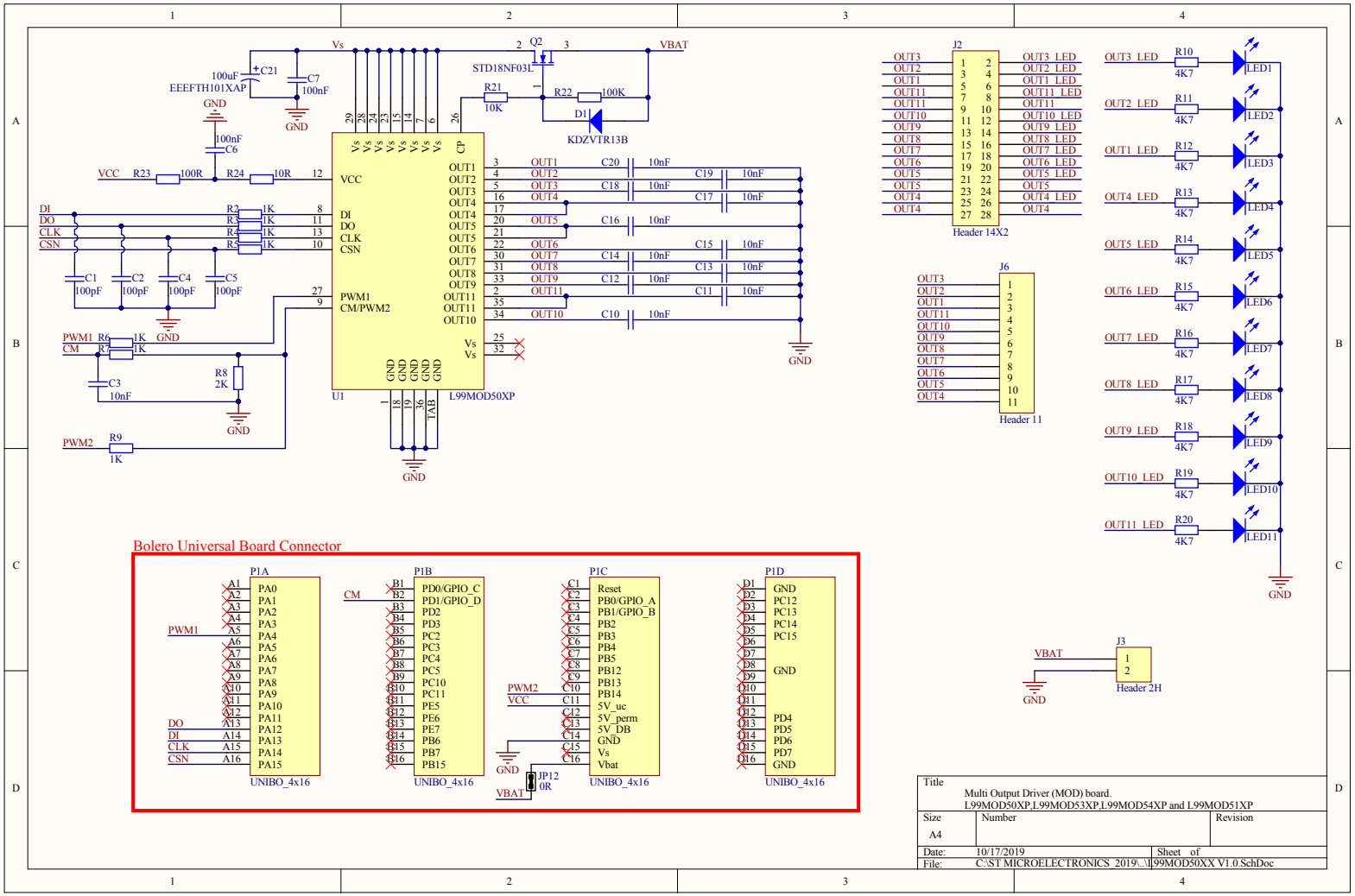


Figure 3. **EVAL-L99MOD5xXP schematic**



2 Demonstration software

A software graphical user interface (GUI) for easy demonstration of the L99MOD5xXP features is available for download on www.st.com, under product code **STSW-L99MOD5xXP**.

To use the demonstration software, it is necessary to download and install the VISA and LabVIEW Run-Time Engine software from the supplier's website.

3 System requirements

- Windows OS (XP, 7, 8, 10)
- USB port

4 Ordering information

Table 1. **Ordering information**

Part number	Order code	Reference
EVAL-L99MOD50XP	EVAL-L99MOD50XP	L99MOD50XPTR evaluation board
EVAL-L99MOD51XP	EVAL-L99MOD51XP	L99MOD51XPTR evaluation board
EVAL-L99MOD53XP	EVAL-L99MOD53XP	L99MOD53XPTR evaluation board
EVAL-L99MOD54XP	EVAL-L99MOD54XP	L99MOD54XPTR evaluation board

Revision history

Table 2. **Document revision history**

Date	Version	Changes
20-Nov-2019	1	First release.

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