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Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





# STEVAL-ICB004V1

## Advanced resistive touchscreen controller demonstration board based on the STMPE811

Data brief

### Features

- Four-wire resistive touch-sensing demonstration GUI
- Configurable touch-sensing parameters
- STMPE811 GPIO expander functionality hardware support
- Hardware configurable jumper headers offer freedom for easy interfacing of touchscreen controller in user designs
- USB universal dongle functionality for STM32 microcontroller SPI and I<sup>2</sup>C interfaces
- Run-time application firmware upgrade using DFU
- RoHS compliant

### Description

The STEVAL-ICB004V1 board demonstrates the high-speed resistive touch-sensing functionality of the STMPE811 advanced resistive touchscreen controller. The board offers the added functionality of a USB universal dongle for I<sup>2</sup>C and SPI interfaces, and DFU (device firmware upgrade) protocol for run-time firmware upgrades. The STEVAL-ICB004V1 includes the STMPE811 demonstration GUI software (for Windows<sup>®</sup> XP) to capture writing/drawing events on the touchscreen. The board also includes an additional UUSCI (universal USB-to-serial communication interface) GUI for evaluation of different I<sup>2</sup>C and SPI sensors, and a DFU GUI for run-time firmware upgrades. The many functions integrated in this single board render the STEVAL-ICB004V1 a multi-purpose demonstration platform for evaluating the STMPE811 advanced touchscreen controller.



# 1 Schematic diagrams

Figure 1. Touchscreen controller

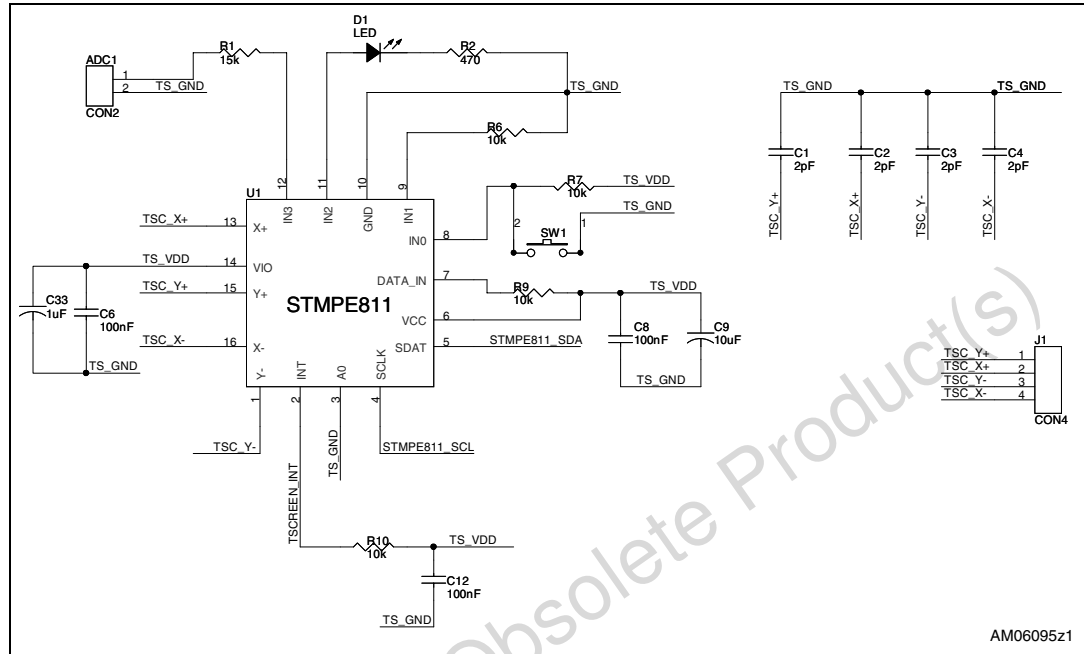


Figure 2. Microcontroller section

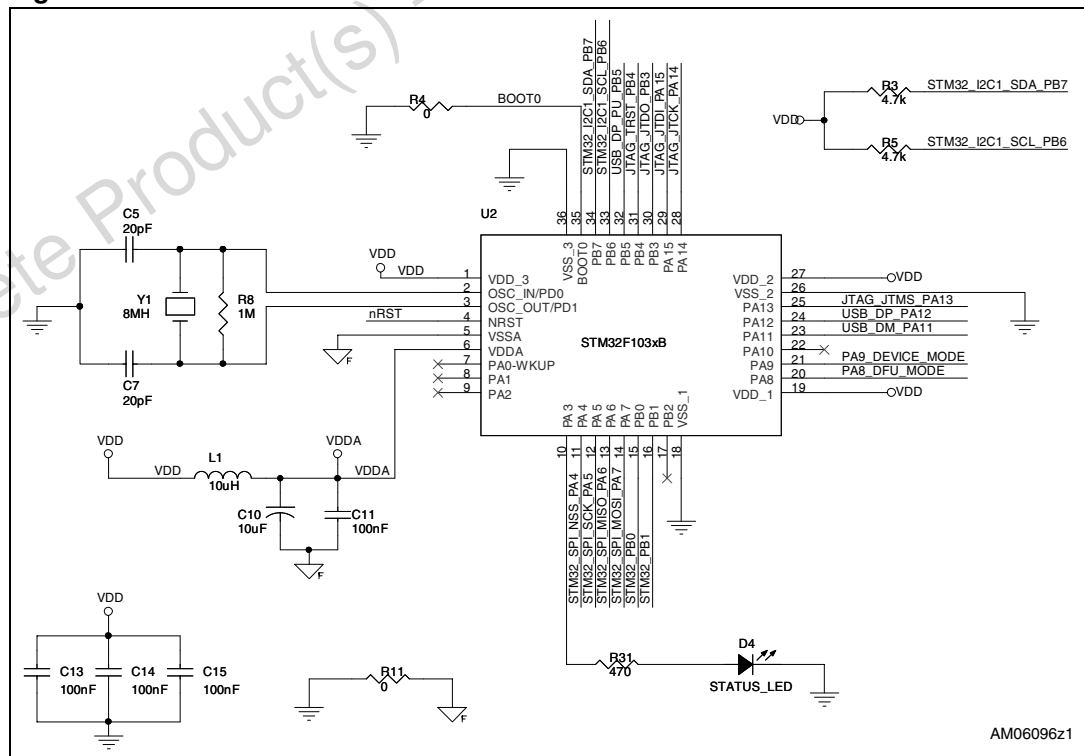


Figure 3. JTAG connector

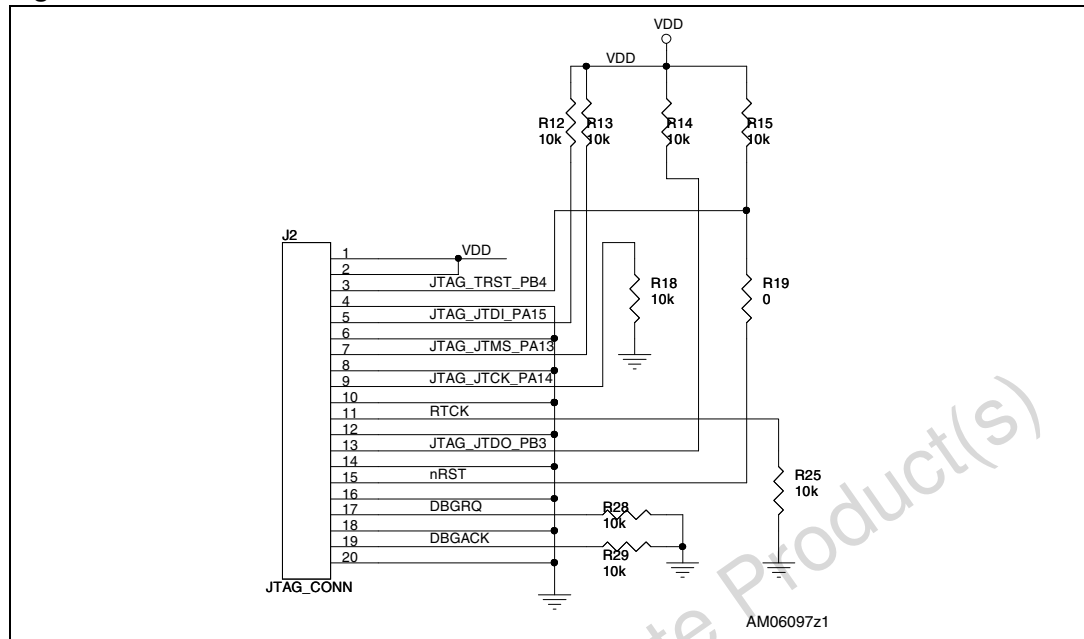


Figure 4. Voltage regulator section

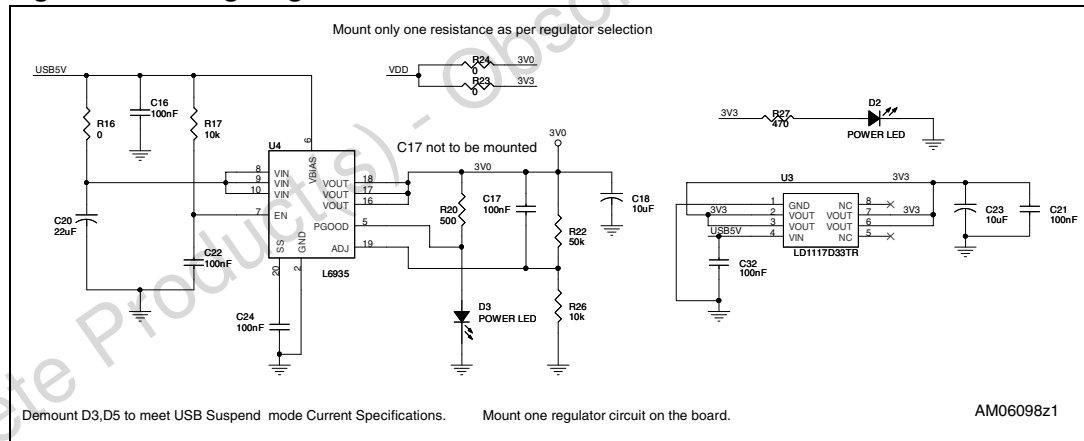


Figure 5. Connectors section

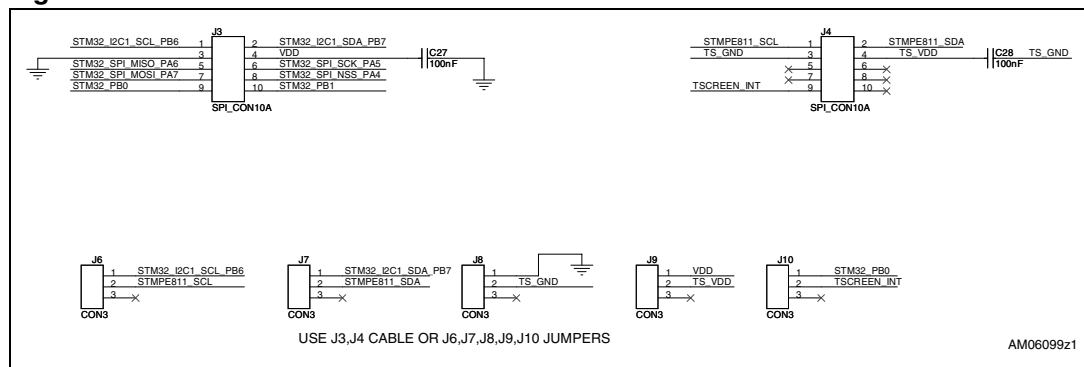


Figure 6. USB section

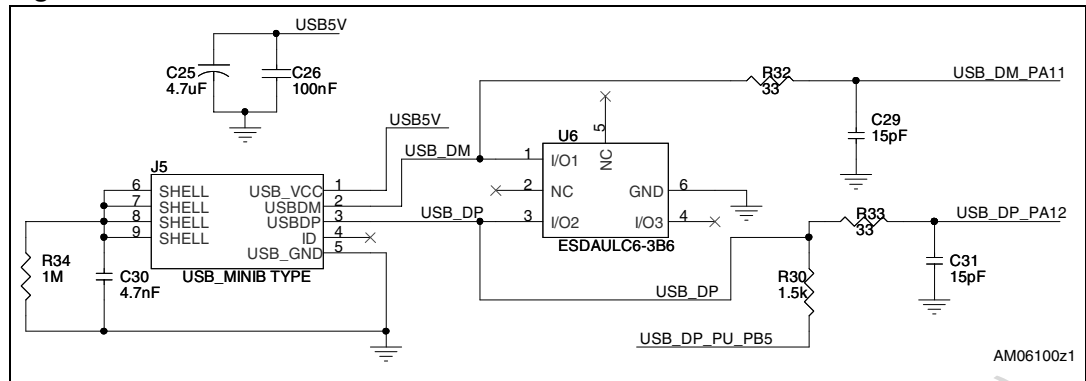


Figure 7. Reset section

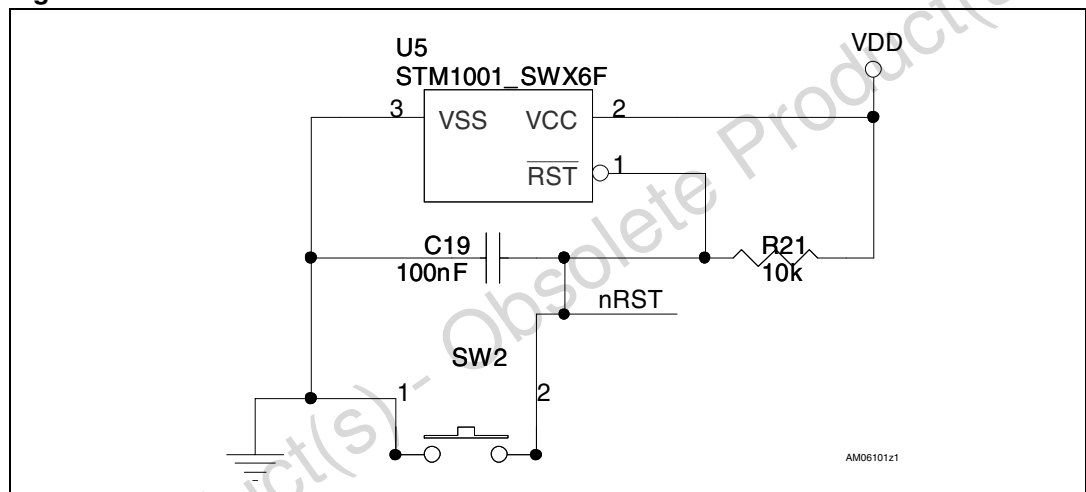
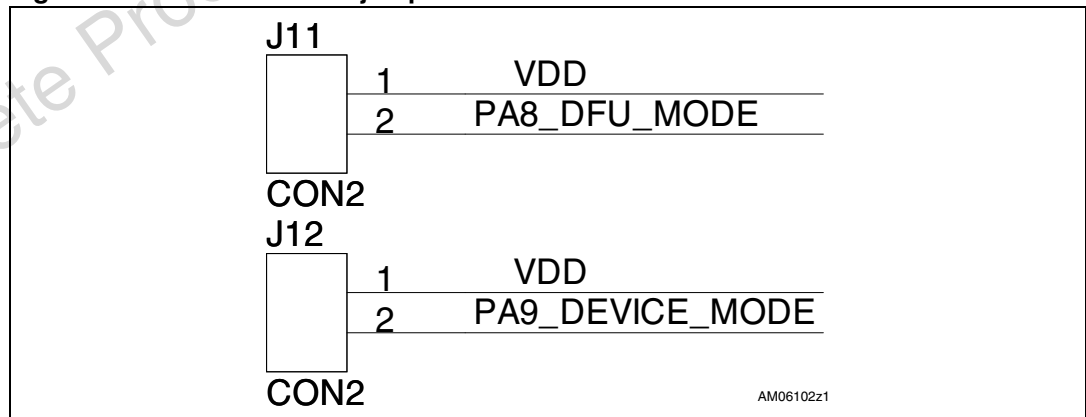


Figure 8. Mode selection jumpers



## 2 Revision history

Table 1. Document revision history

Date	Revision	Changes
23-Feb-2011	1	Initial release.

Obsolete Product(s) - Obsolete Product(s)

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