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^2C interfaces
- Run-time application firmware upgrade using DFU
- RoHS compliant

STEVAL-ICB004V1

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 I2C 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® 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^2C 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.

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1 Schematic diagrams

Figure 1. Touchscreen controller

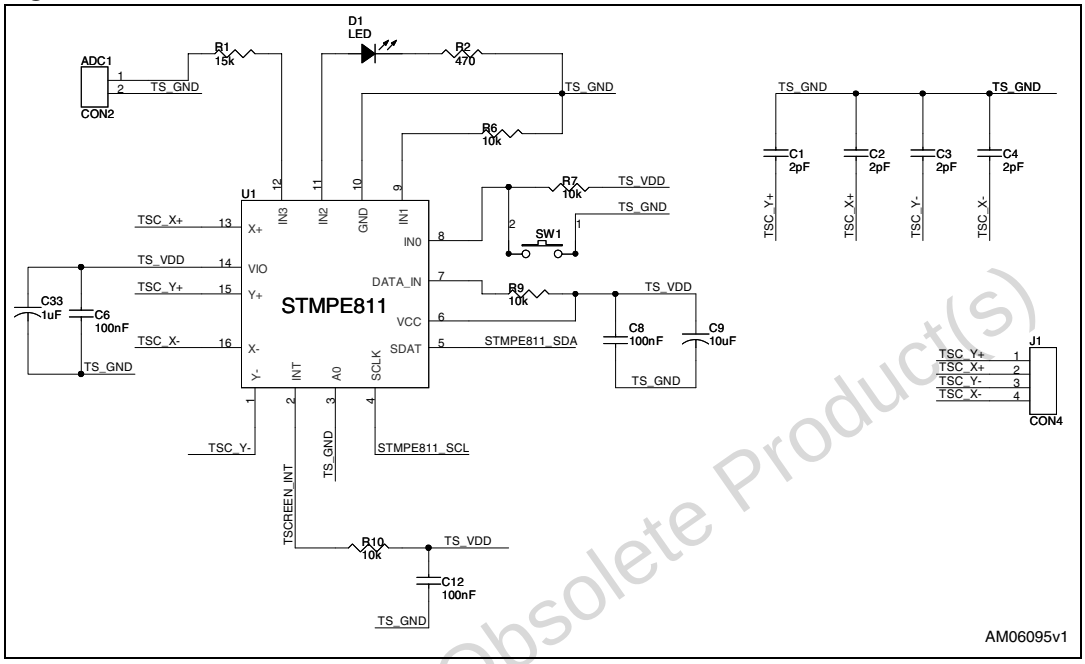

Figure 2. Microcontroller section

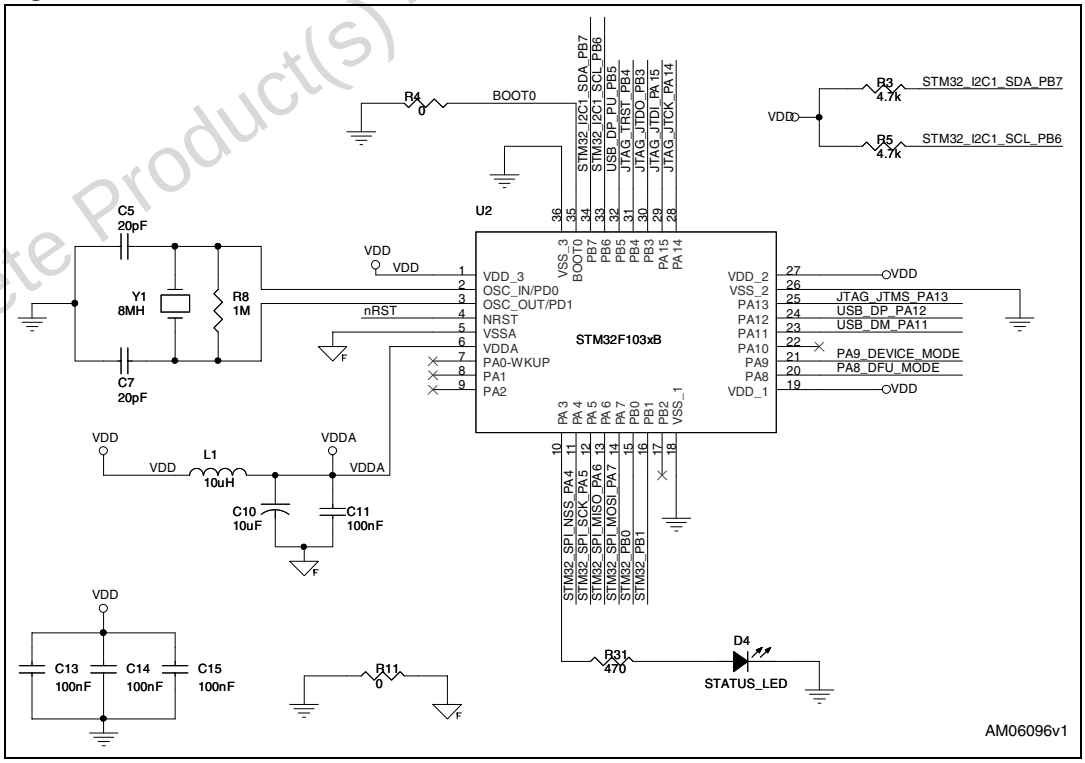

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Figure 3. JTAG connector

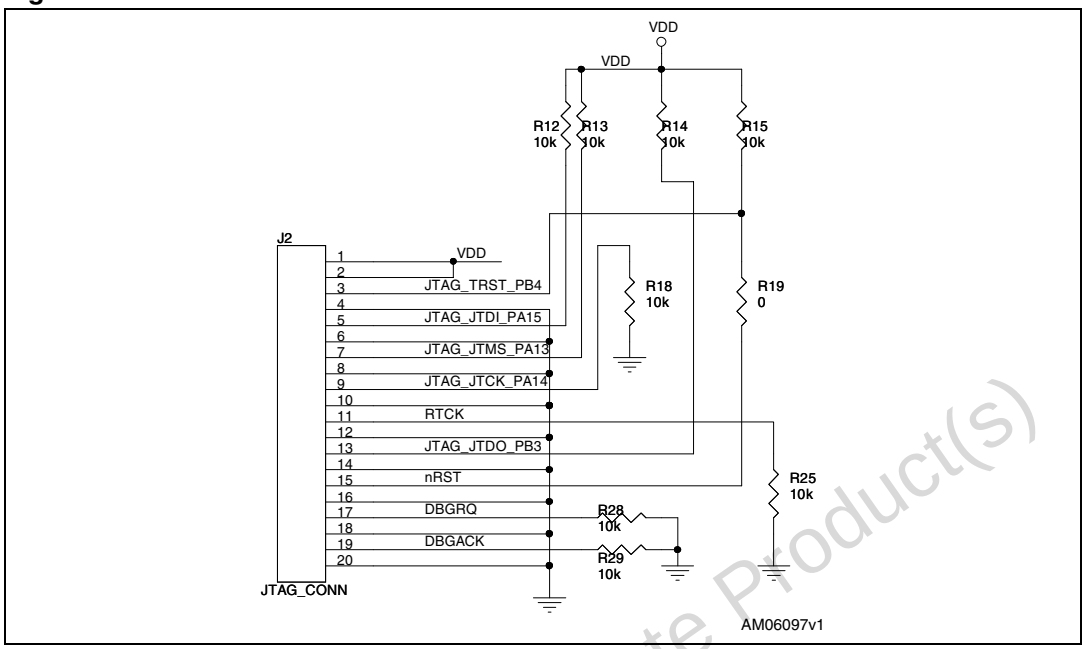

Figure 4. Voltage regulator section

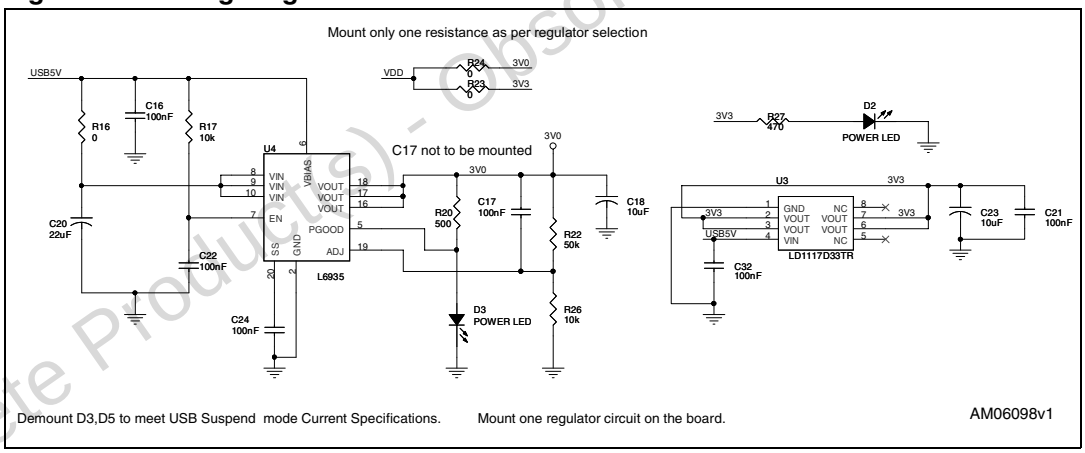

Figure 5. Connectors section

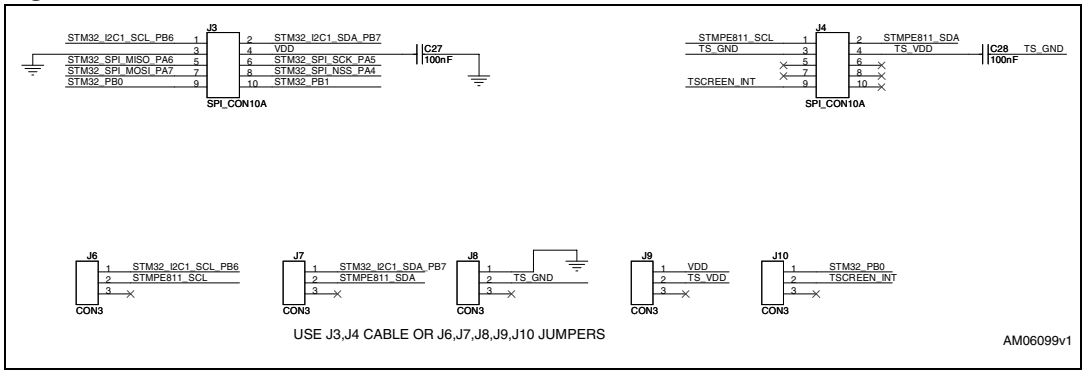

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Figure 6. USB section

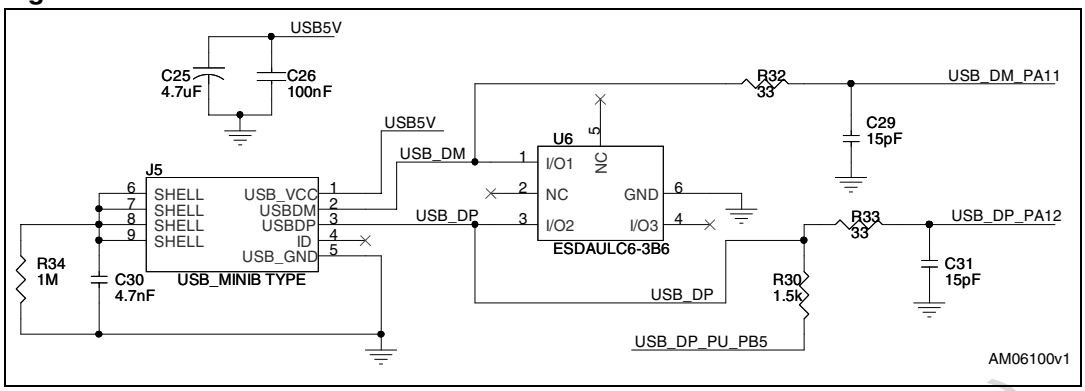


Figure 7. Reset section

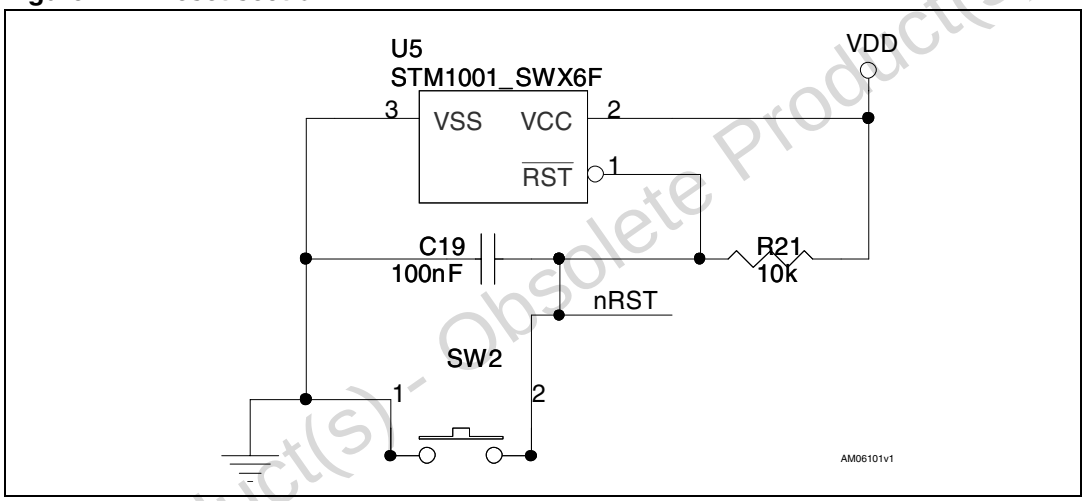
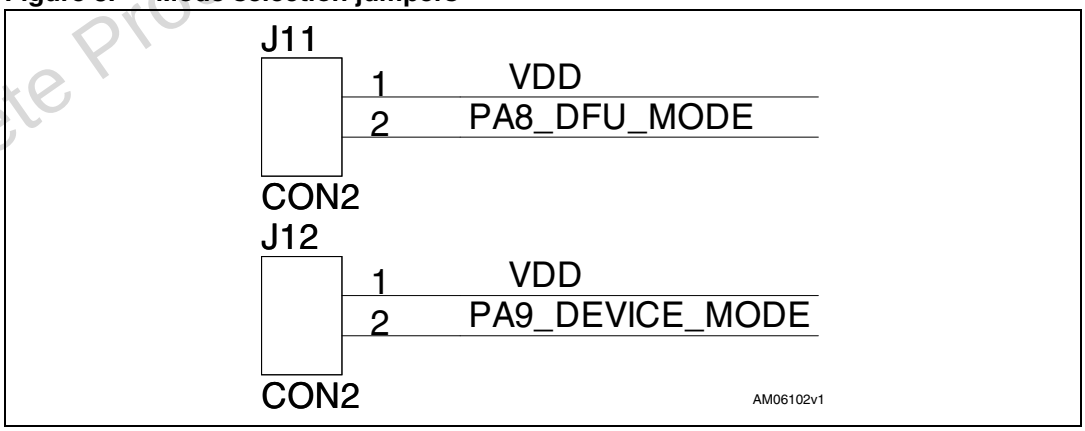


Figure 8. Mode selection jumpers



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2 Revision history

Table 1. Document revision history

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

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