STEVAL-PCC009V2

IBU universal interface based on the STM32x

Data brief

Features

- Supports two modes:
  - application mode: the PC GUI allows SPI, I^2C and UART interfacing and control of the communication parameters
  - DFU mode: allows the user to change the firmware if required to suit specific applications
- Board power supplied through a USB Mini B-type connector
- DLL files provided to allow users to create a customized PC GUI
- RoHS compliant

STEVAL-PCC009V2

Description

The STEVAL-PCC009V2 board implements an IBU universal interface (IBUUI), which is an STM32x-based USB-to-serial interface bridge consisting of a configurable 10-pin interface and a 30-pin interface.

The STM32x microcontroller is used as an interface between the PC and another end system. Various communication peripherals are multiplexed with GPIOs, ADC and PWM channels in both the 10-pin and 30-pin interfaces.

With these interfaces, there is a provision to connect a device which can communicate using I^2C, SPI and UART. Thus, the IBUUI tool allows users to connect a serial communication-based device to a PC. At the same time, it allows user control of some GPIOs available in 10-pin and 30-pin interfaces, and sets them to input/output mode as per application requirements.

1 Schematic diagram

Figure 1. Microcontroller section

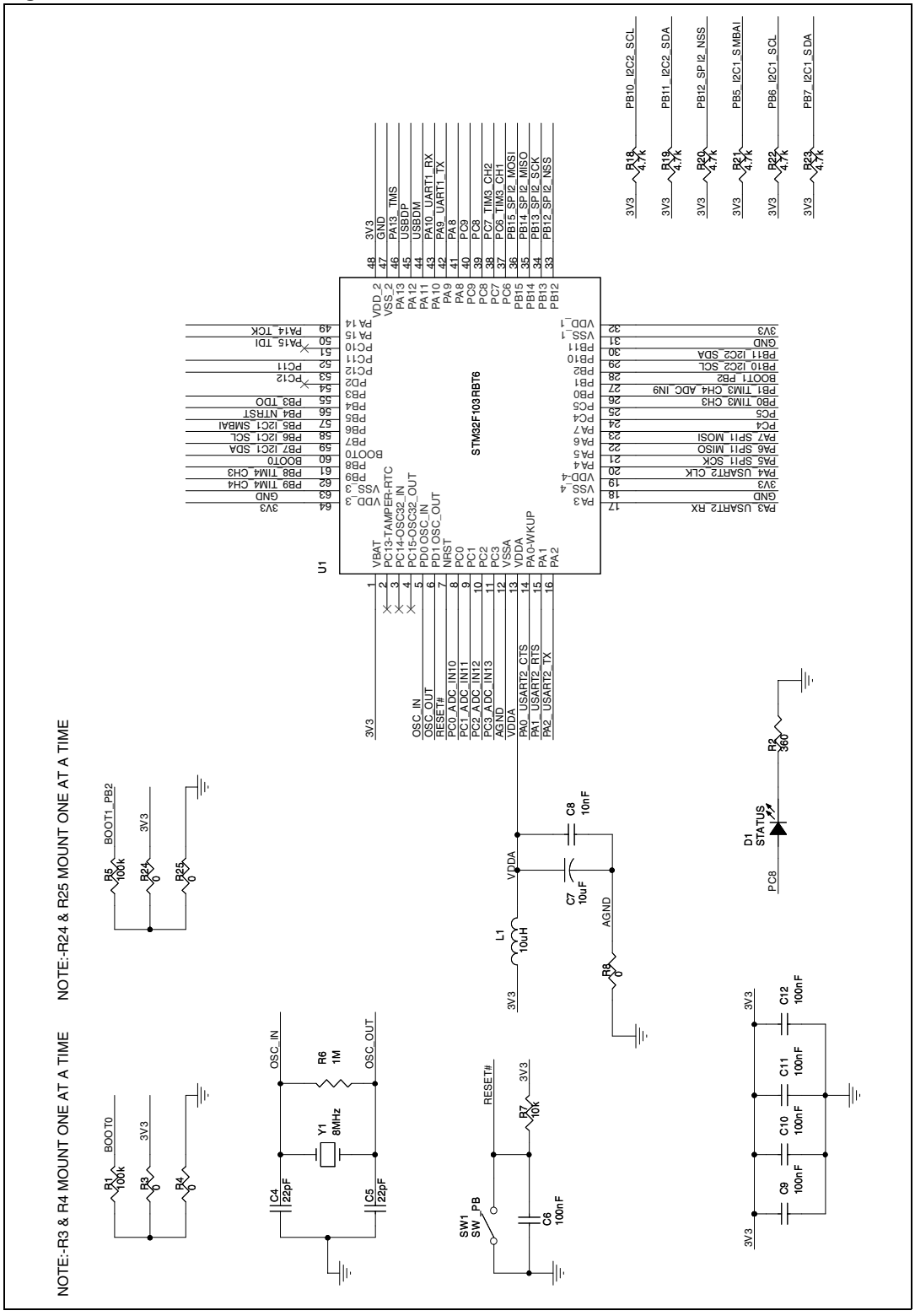


Figure 2. 30 pin COM interface

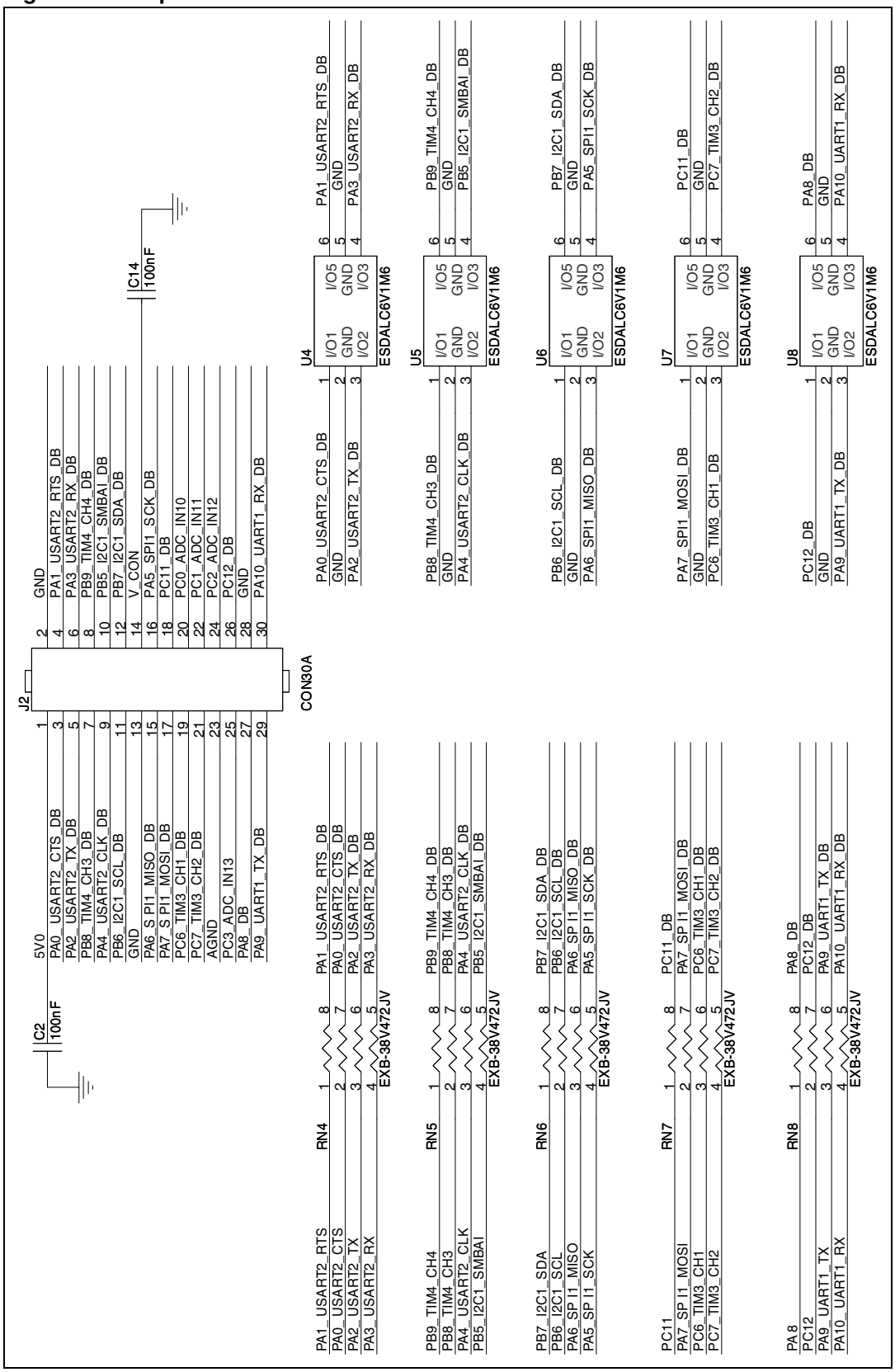


Figure 3. 10 pin COM interface

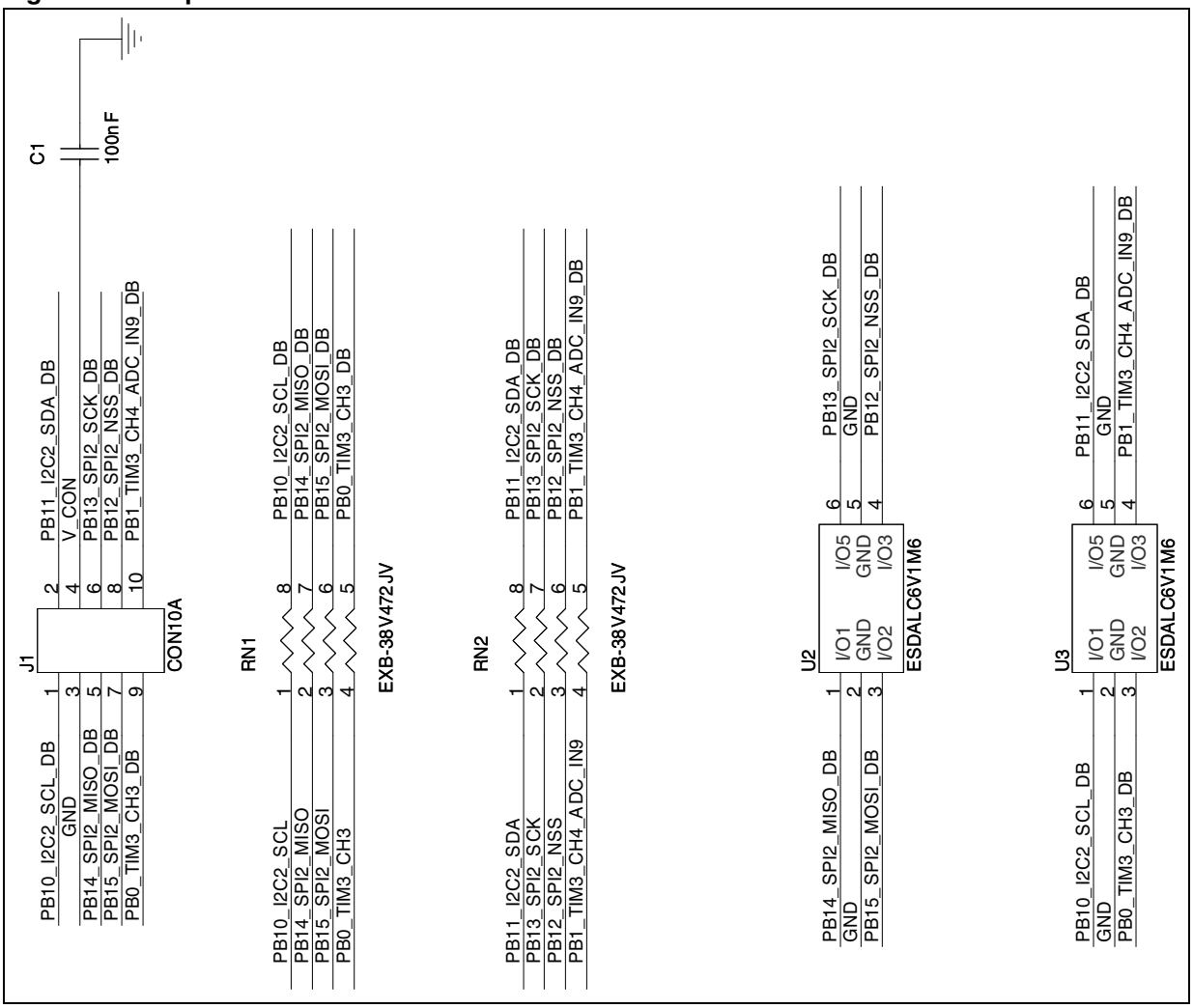
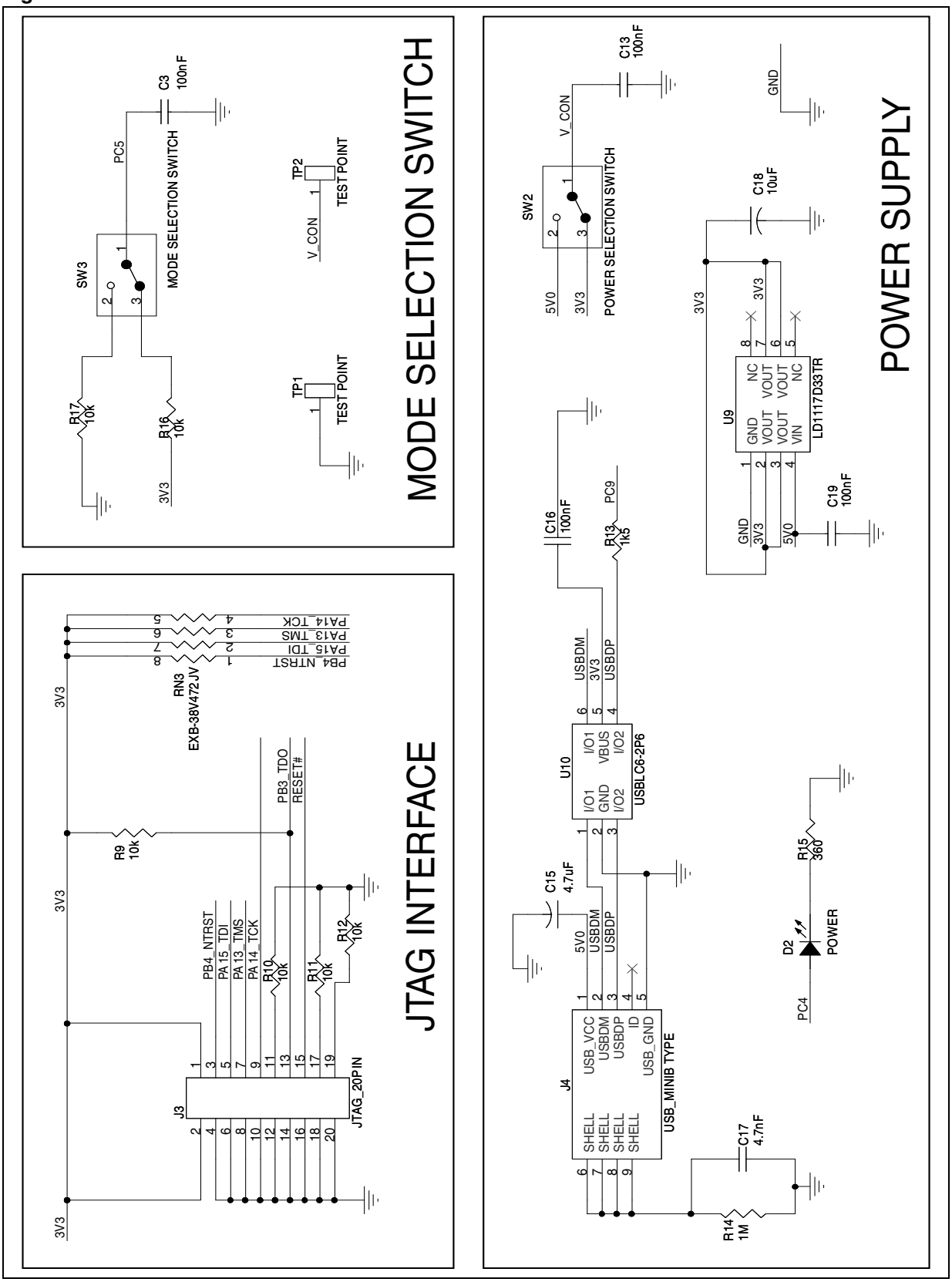


Figure 4. Other blocks



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
28-Jun-2010	1	Initial release.