UM1537
User manual

STM320518-EVAL evaluation board

Introduction

The STM320518-EVAL evaluation board is designed as a complete demonstration and development platform for STMicroelectronic's ARM cortex-M0 core-based STM32F051R8T6 microcontroller. It features two I2Cs, two SPIs, two USARTs, a 12-bit ADC, a 12-bit DAC, two GP comparators, internal 8 KB SRAM and 64 KB Flash, touch sensing, CEC and SWD debugging support.

The full range of hardware features on the board is able to help you evaluate all peripherals (motor control connector, RS-232, RS-485, audio DAC, linear sensor, microphone ADC, TFT LCD, IrDA, IR LED, IR receiver, LDR, MicroSD card, CEC on two HDMI connectors, RF E2PROM, temperature sensor and so on) and develop your own applications. Extension headers make it possible to easily connect a daughterboard or wrapping board for your specific application.

An ST-LINK/V2 is integrated on the board as an embedded in-circuit debugger and programmer for the STM32 MCU.

Figure 1. STM320518-EVAL evaluation board

Table 1. Applicable tools

Type	Part number
Evaluation tools	STM320518-EVAL

Figure 3. STM320518-EVAL evaluation board layout

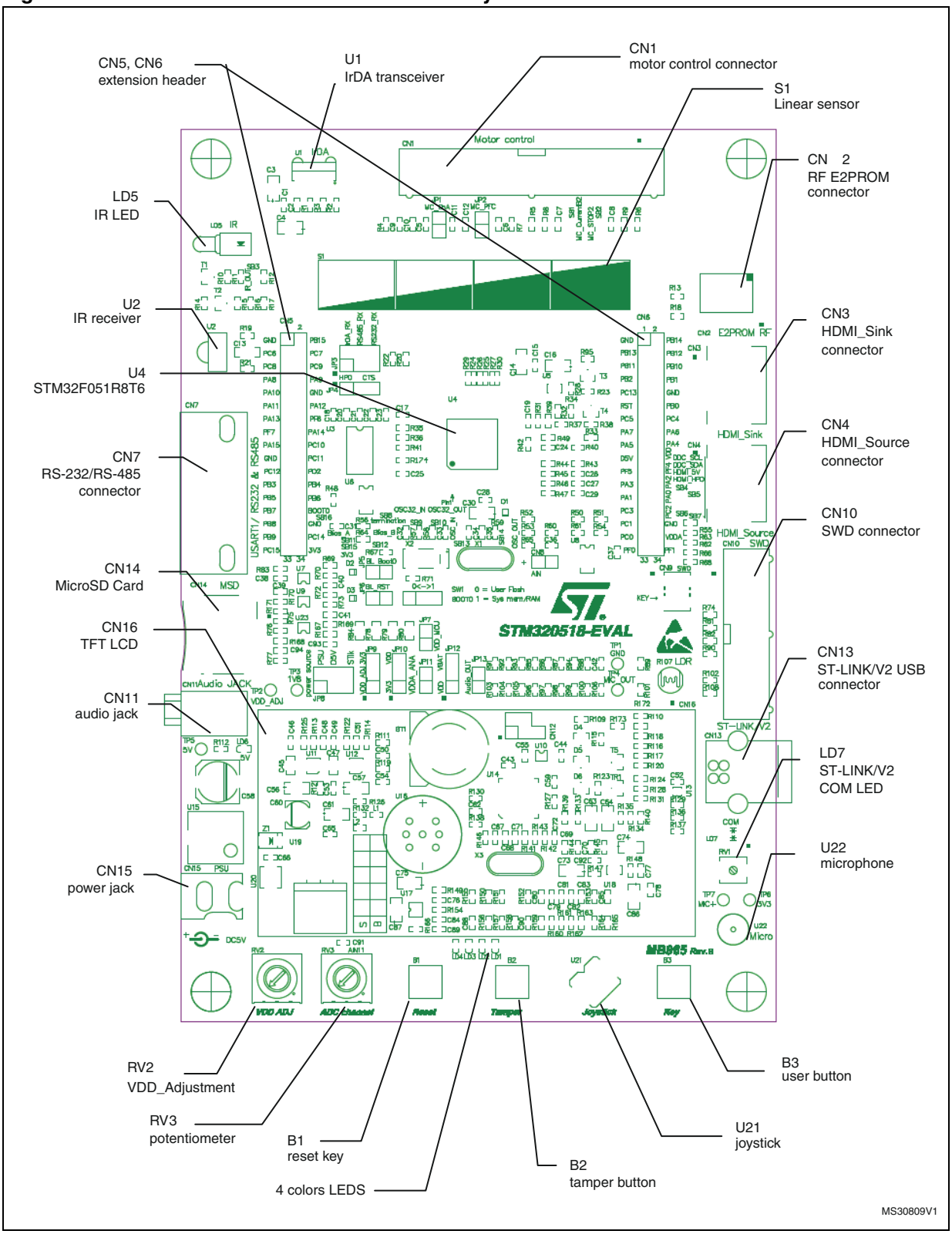

Figure 18. MCU

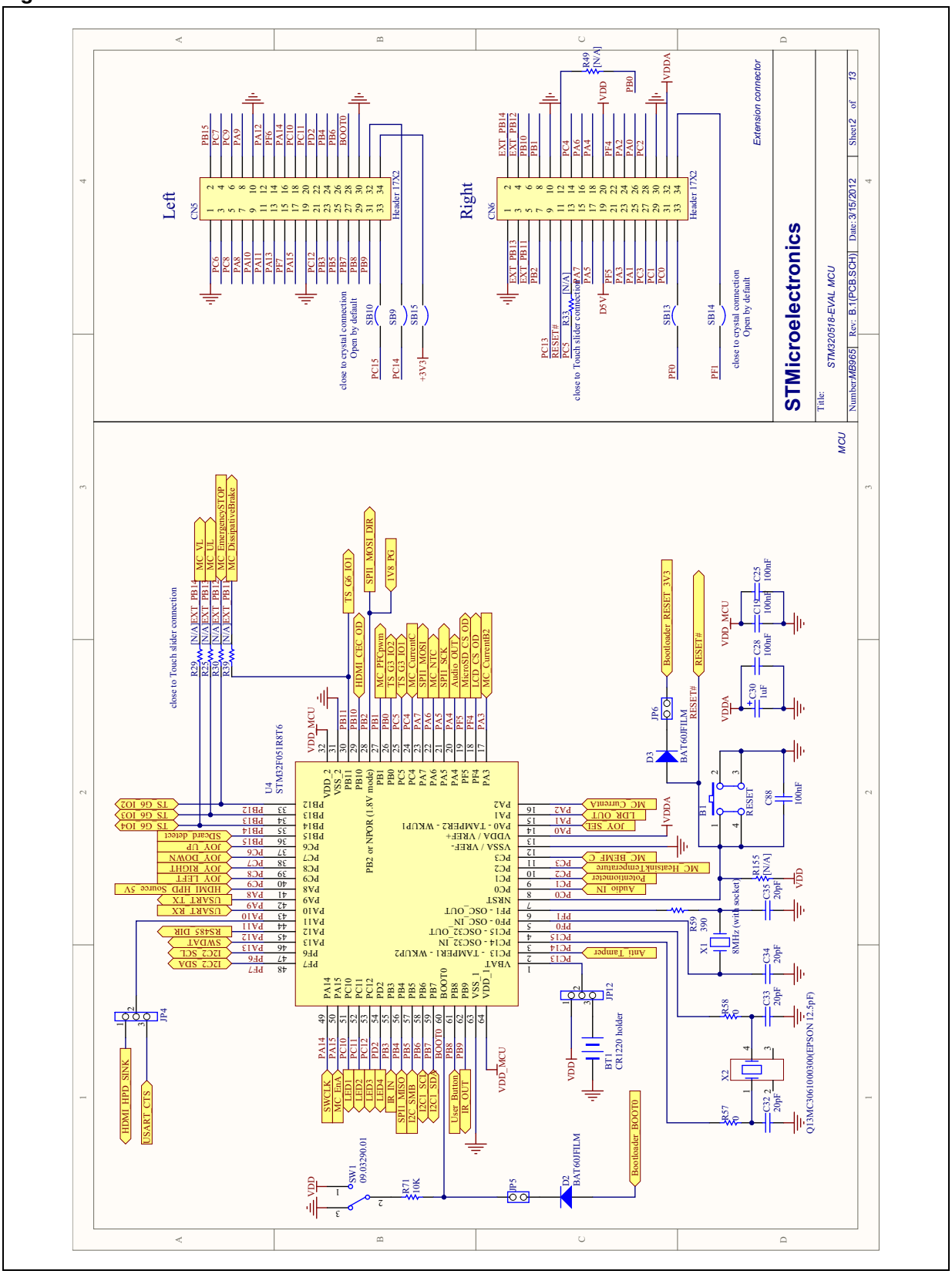

Figure 19. Audio

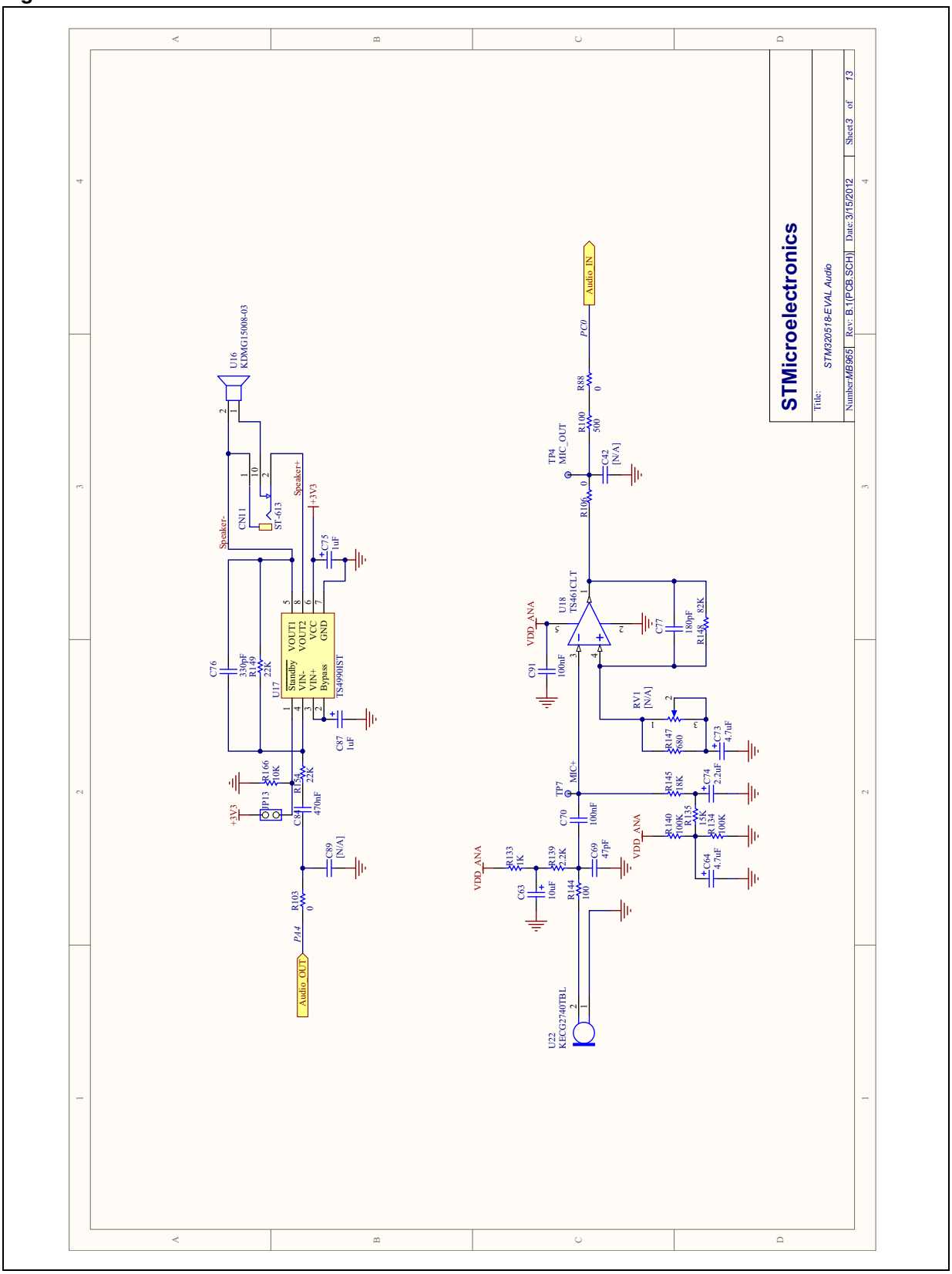

Figure 20. HDMI_CEC

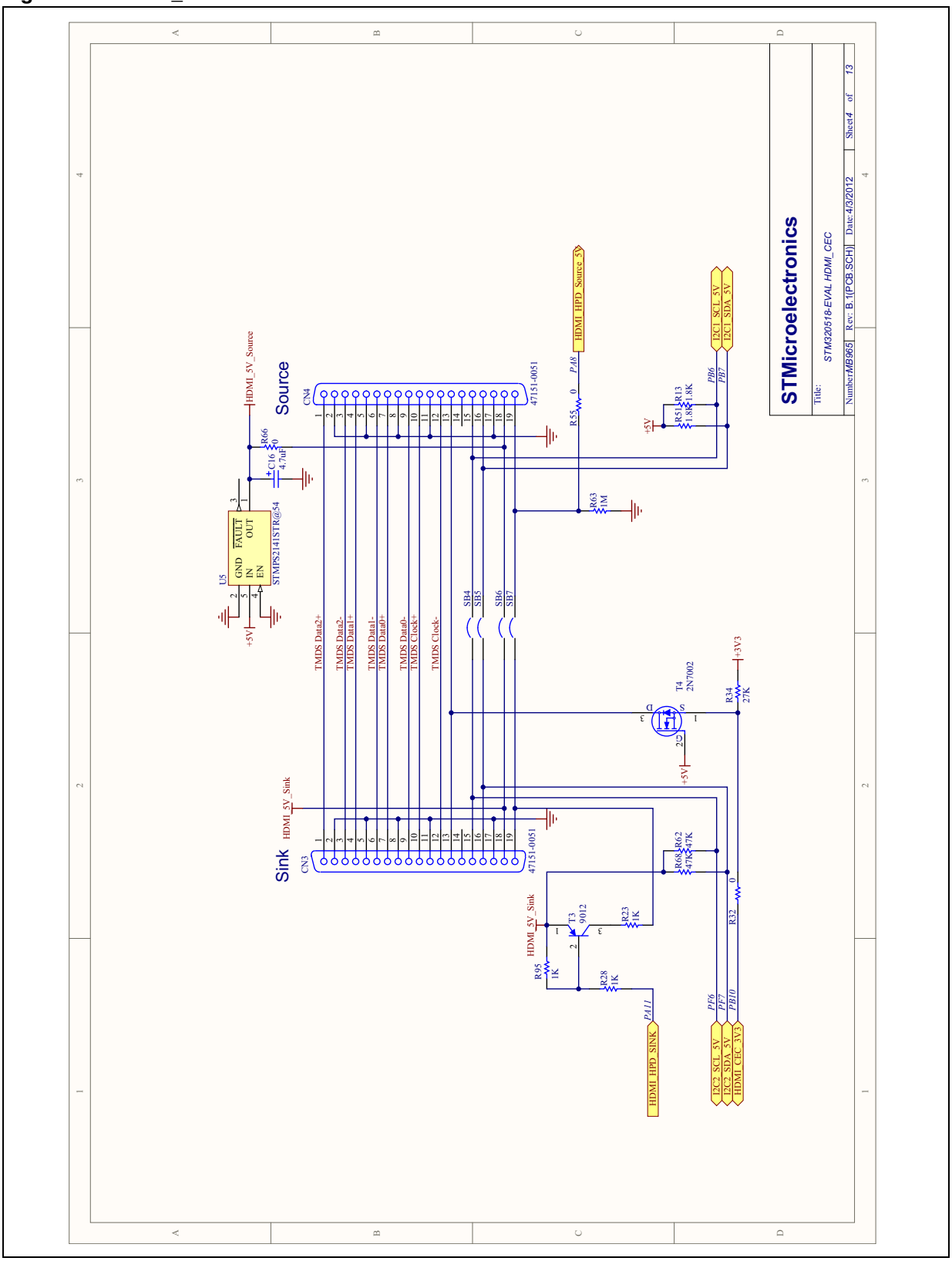

Figure 21. LCD and micro SD card

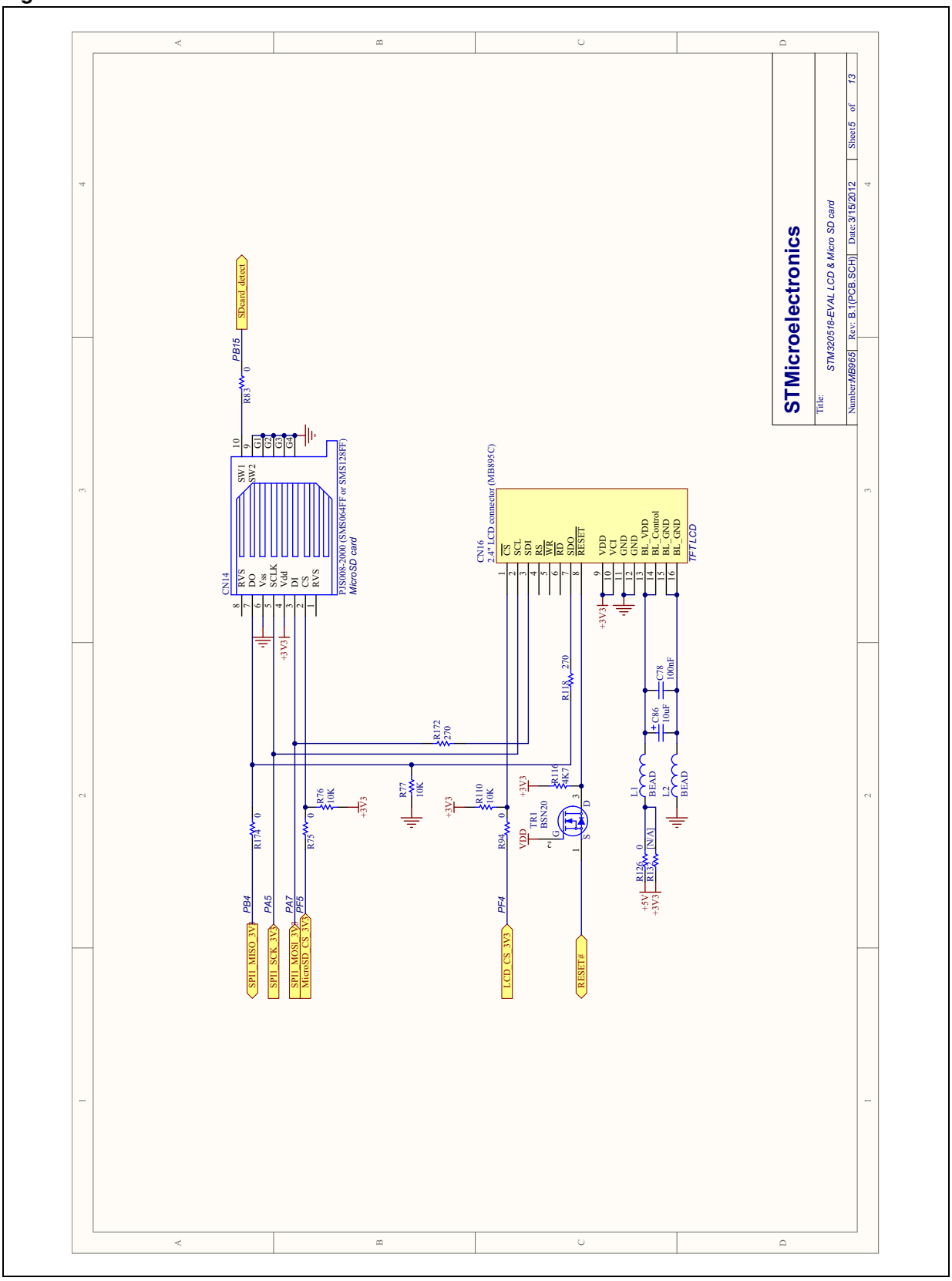

Figure 22. Peripherals

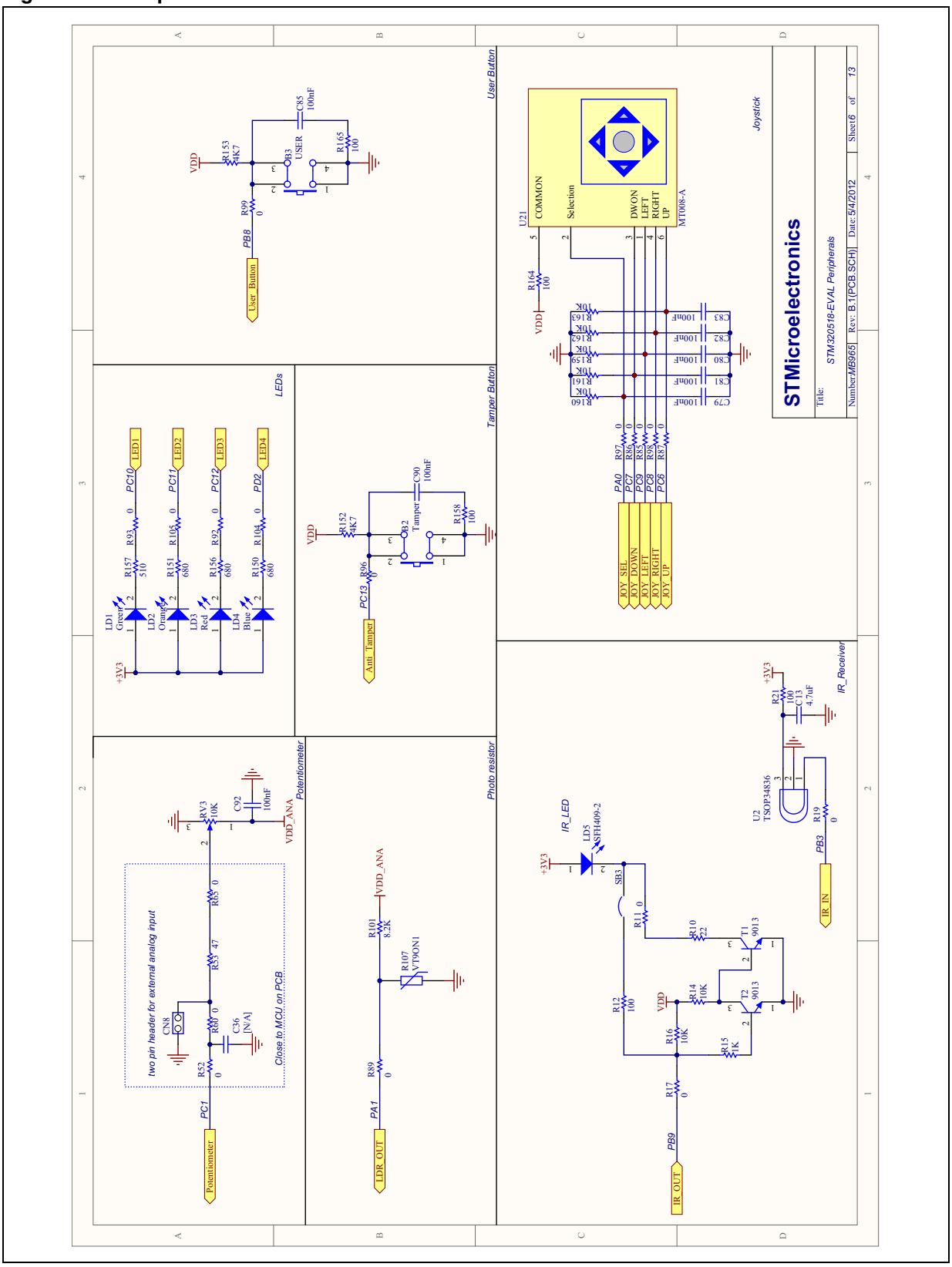

Figure 23. RS-232, RS-485 and IrDA

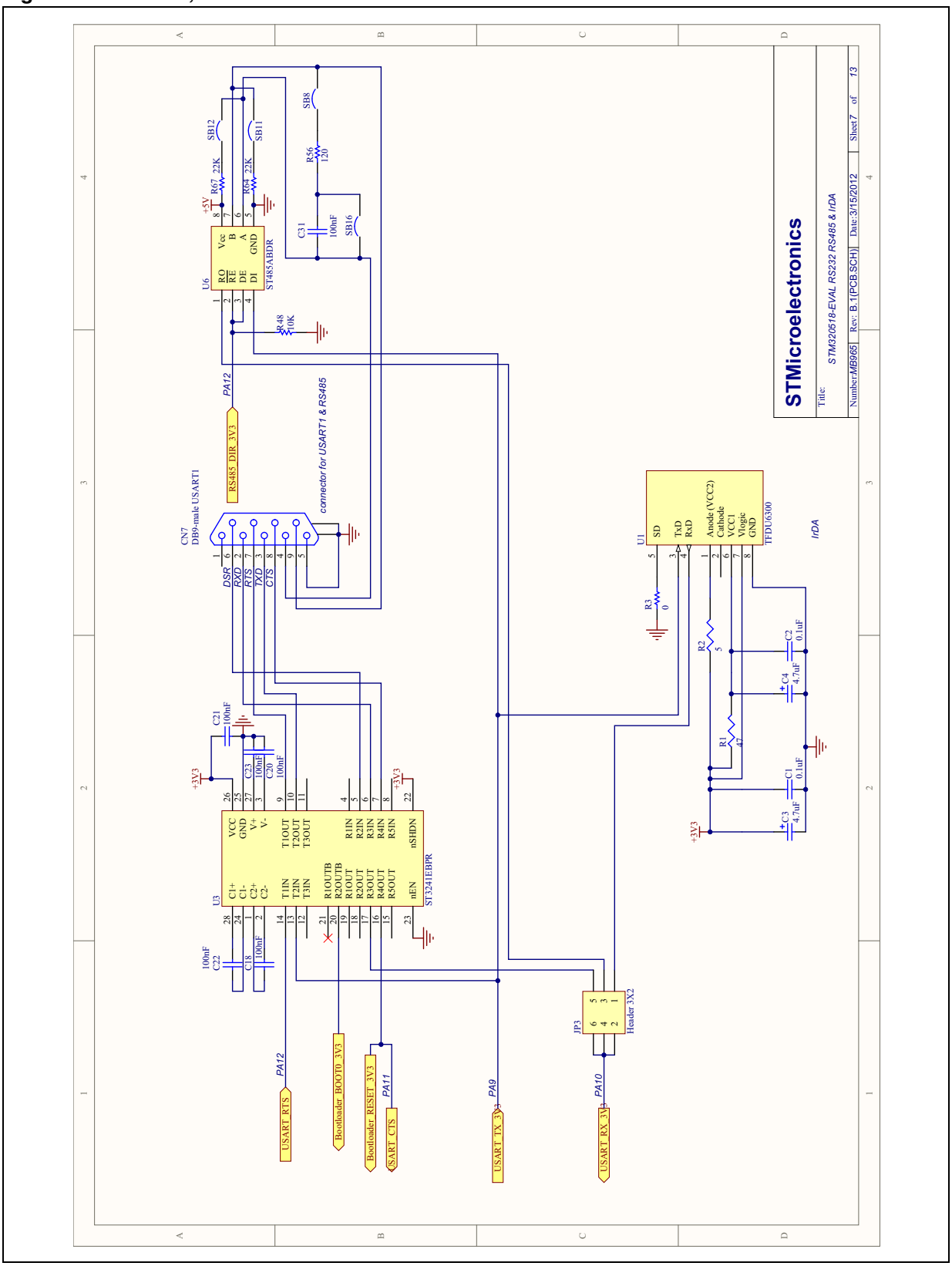

Figure 26. ST-LINK/V2 (SWD only)

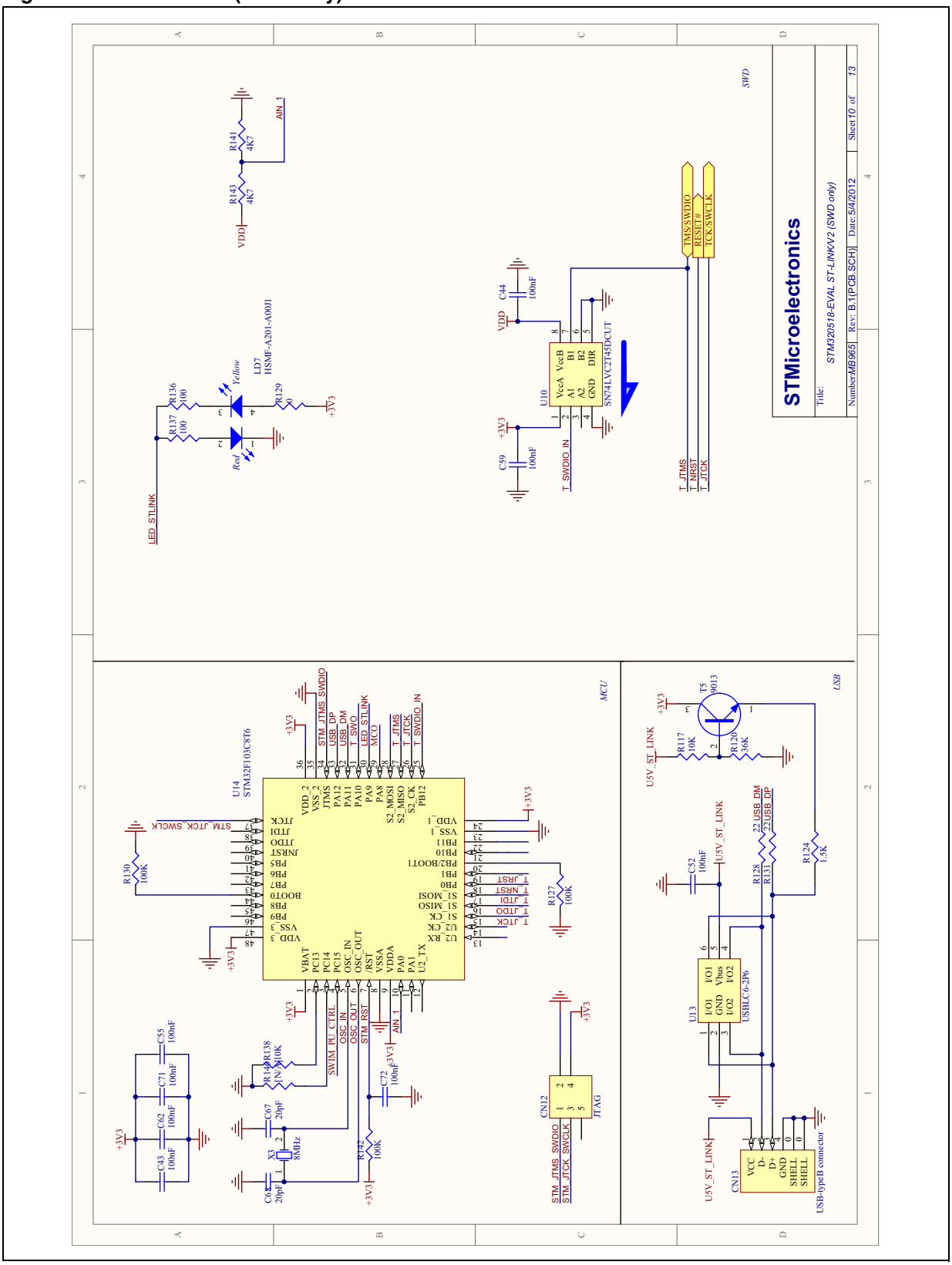

Figure 29. Power

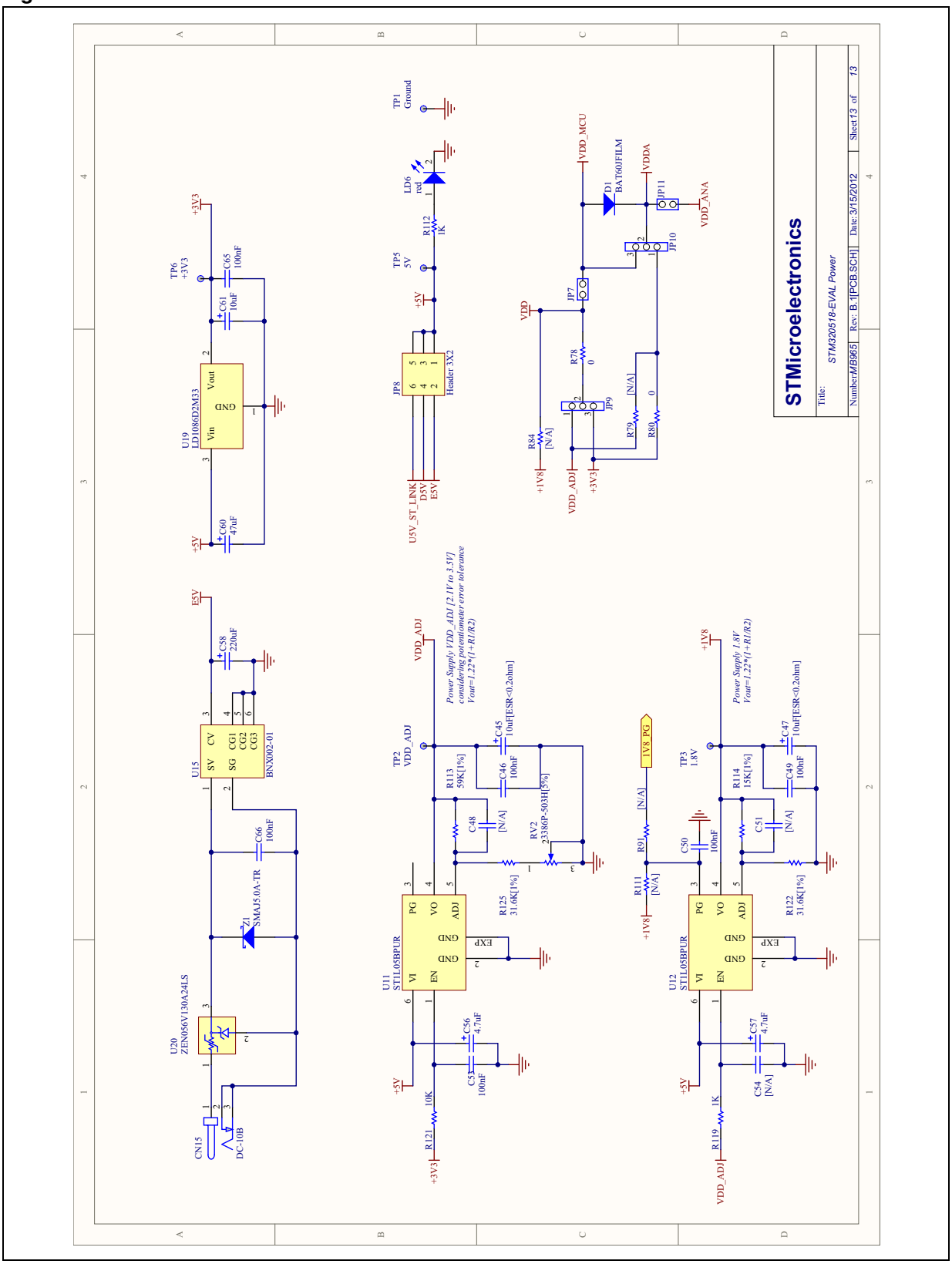
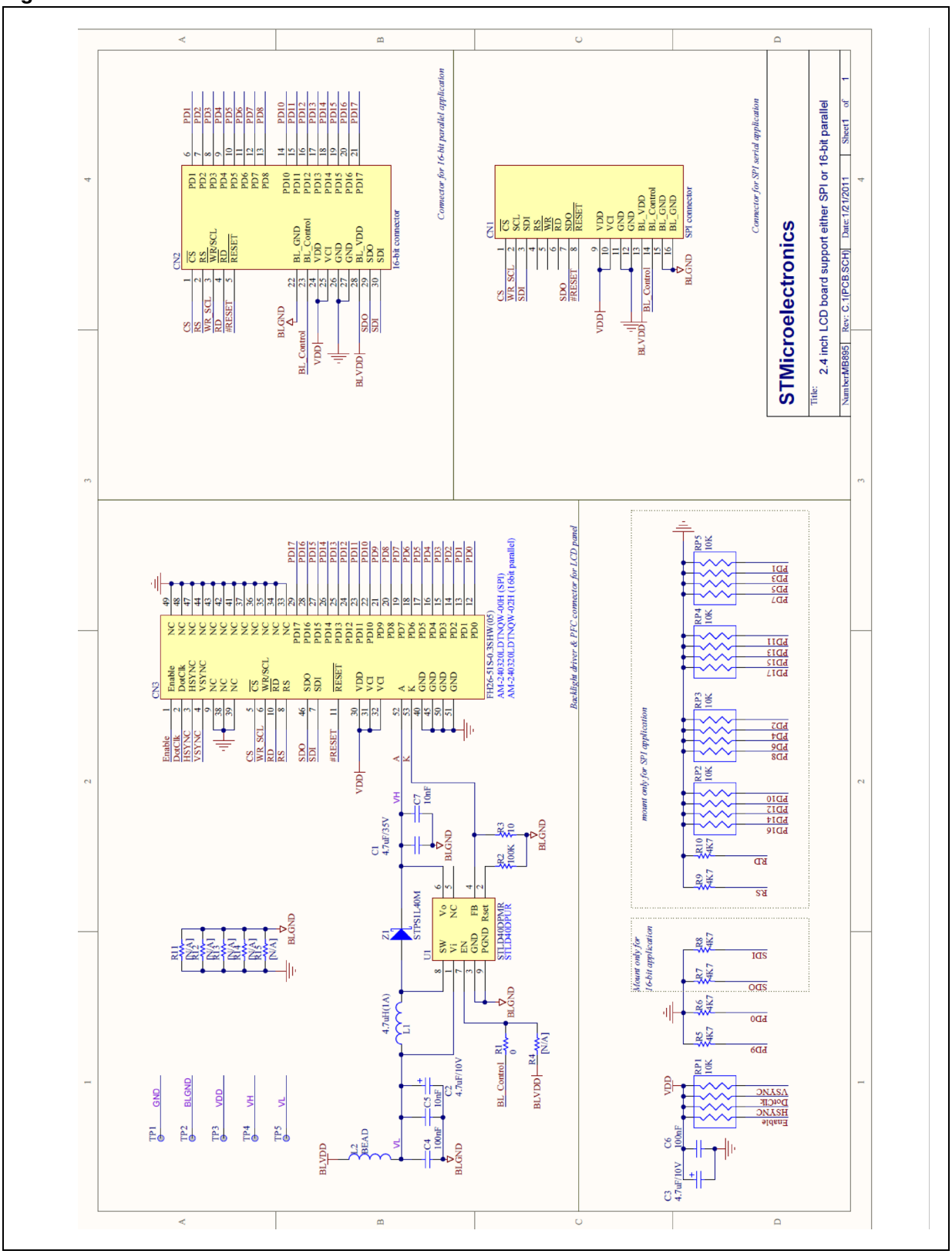
Figure 30. 2.4 inch LCD module