

Schematics

Figure 2. Schematic diagram (2 of 11)

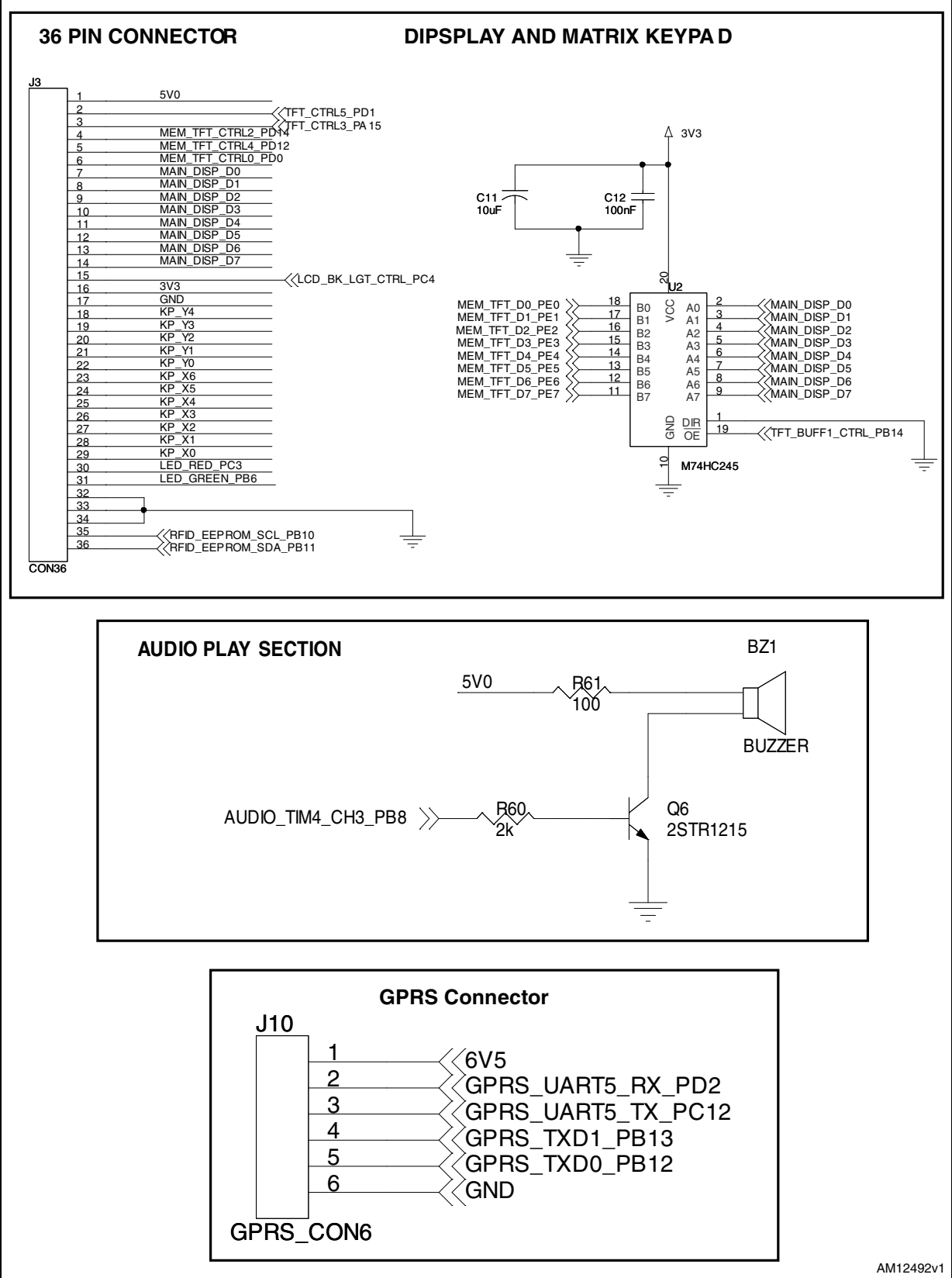
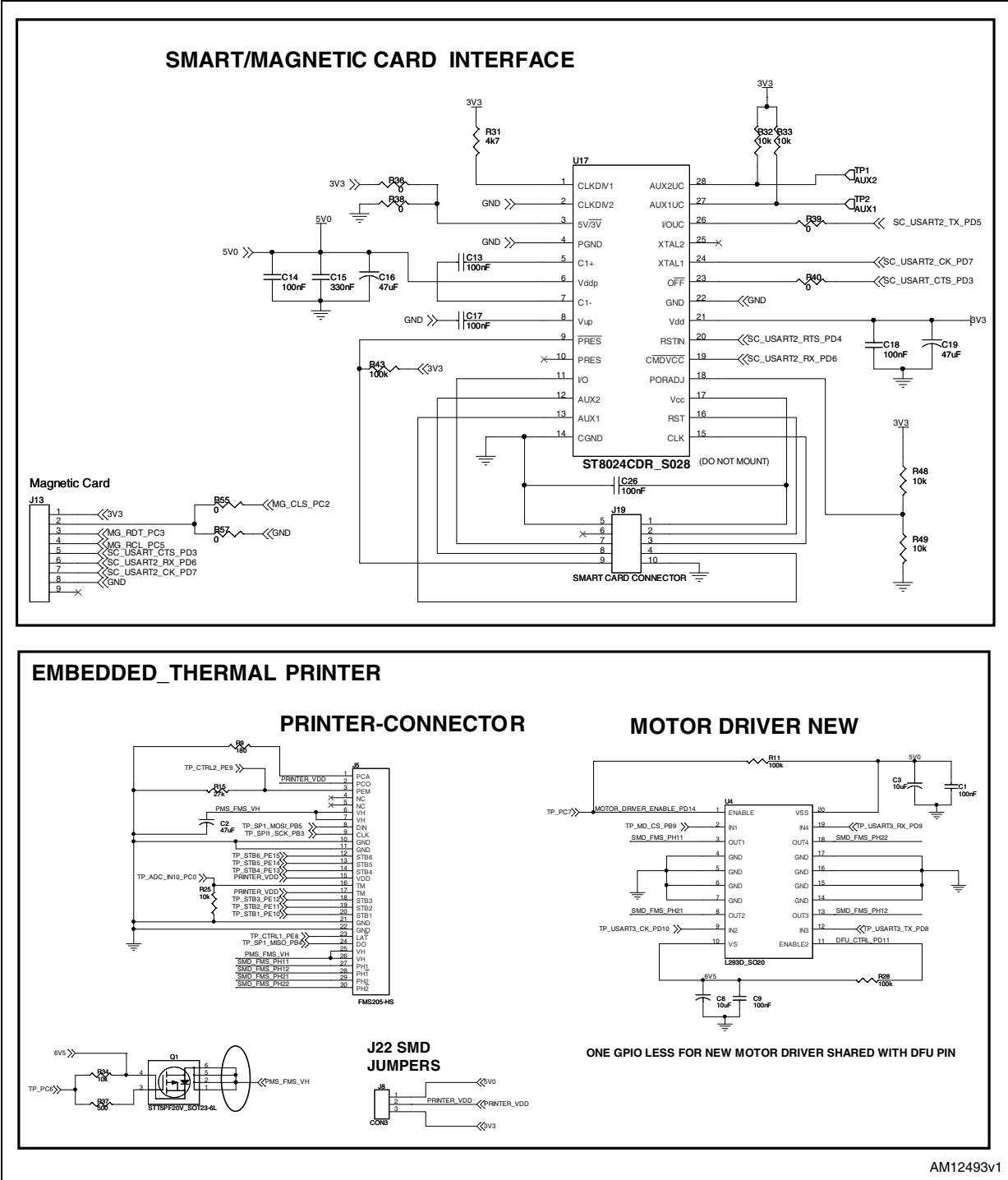


Figure 3. Schematic diagram (3 of 11)



SECURITY SUPERVISOR WITH BATTERY SWITCHOVER

The schematic shows a 3V3 power supply connected to a network of resistors (R45, R46, R47, R50, R51, R52, R81, R82, R85, R74, R79, R86, R89) and capacitors (C22, C27, C28, C23). A battery (VBAT) is connected to the circuit via a battery switch (SW2). The microcontroller (U20, STM1404ARN06F_QFN16) is connected to various signals including VCC, VBAT, VREF, VOUT, PFI, MR, TP1, TP2, TP3, TP4, RST, BLD, and SAL. The diagram is divided into sections: SECURITY SUPERVISOR WITH BATTERY SWITCHOVER, SWD SECTION, FINGER PRINT SECTION, and GENERIC_RS232.

SWD SECTION

The SWD SECTION shows the connection of the SWD_CONN_STM32W module to the microcontroller. It includes a 3V3 supply, a GND connection, and a RESET# signal. The module is connected to the microcontroller via pins 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10. The connections are as follows:

- Pin 1: 3V3
- Pin 2: JTAG_JTMS_PA 13
- Pin 3: GND
- Pin 4: JTAG_JTCK_PA 14
- Pin 5: 3V3
- Pin 6: 3V3
- Pin 7: 3V3
- Pin 8: 3V3
- Pin 9: RESET#
- Pin 10: RESET#

FINGER PRINT SECTION

The FINGER PRINT SECTION shows the connection of the fingerprint module (J1) to the microcontroller. It includes a 3V3 supply, a 5V0 supply, and a GND connection. The module is connected to the microcontroller via pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, and 14. The connections are as follows:

- Pin 1: FP_BUFF_DIR_CTRL_PA 7
- Pin 2: MEM_TFT_D0_PE0
- Pin 3: MEM_TFT_D1_PE1
- Pin 4: MEM_TFT_D2_PE2
- Pin 5: MEM_TFT_D3_PE3
- Pin 6: MEM_TFT_D4_PE4
- Pin 7: MEM_TFT_D5_PE5
- Pin 8: MEM_TFT_D6_PE6
- Pin 9: MEM_TFT_D7_PE7
- Pin 10: FP_BUFF_CTRL_PB1
- Pin 11: FP_CS_PA0
- Pin 12: FP_RDB_PA1
- Pin 13: FP_nRST_PA2
- Pin 14: FP_WRB_PA3

GENERIC_RS232

The GENERIC_RS232 section shows the connection of the RS232 module (J15) to the microcontroller. It includes a 3V3 supply, a GND connection, and a BR_UART4_TX_PC10 signal. The module is connected to the microcontroller via pins 1, 2, 3, and 4. The connections are as follows:

- Pin 1: 3V3
- Pin 2: BR_UART4_TX_PC10
- Pin 3: BR_UART4_RX_PC11
- Pin 4: GND

Figure 5. Schematic diagram (5 of 11)

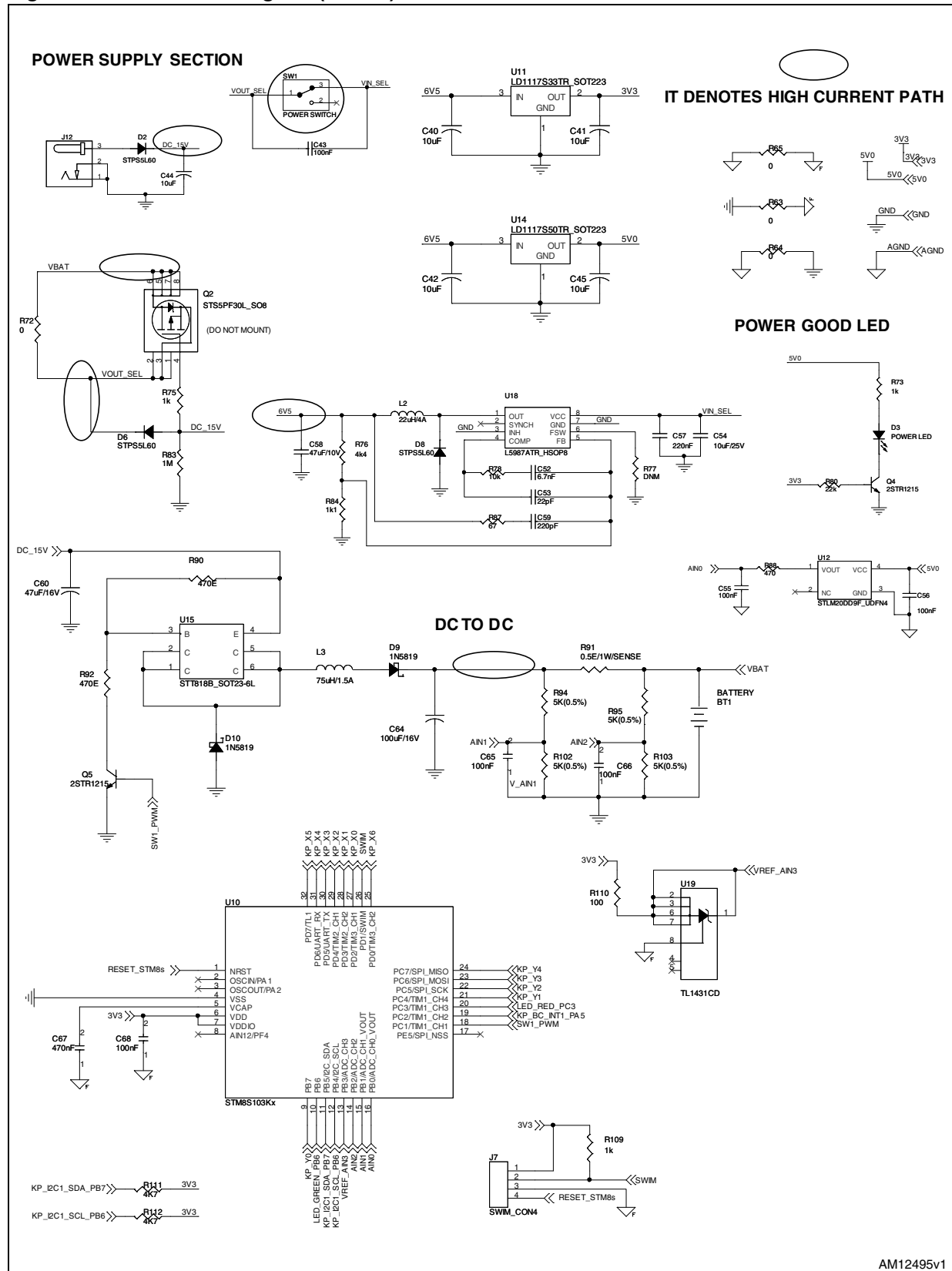


Figure 6. Schematic diagram (6 of 11)

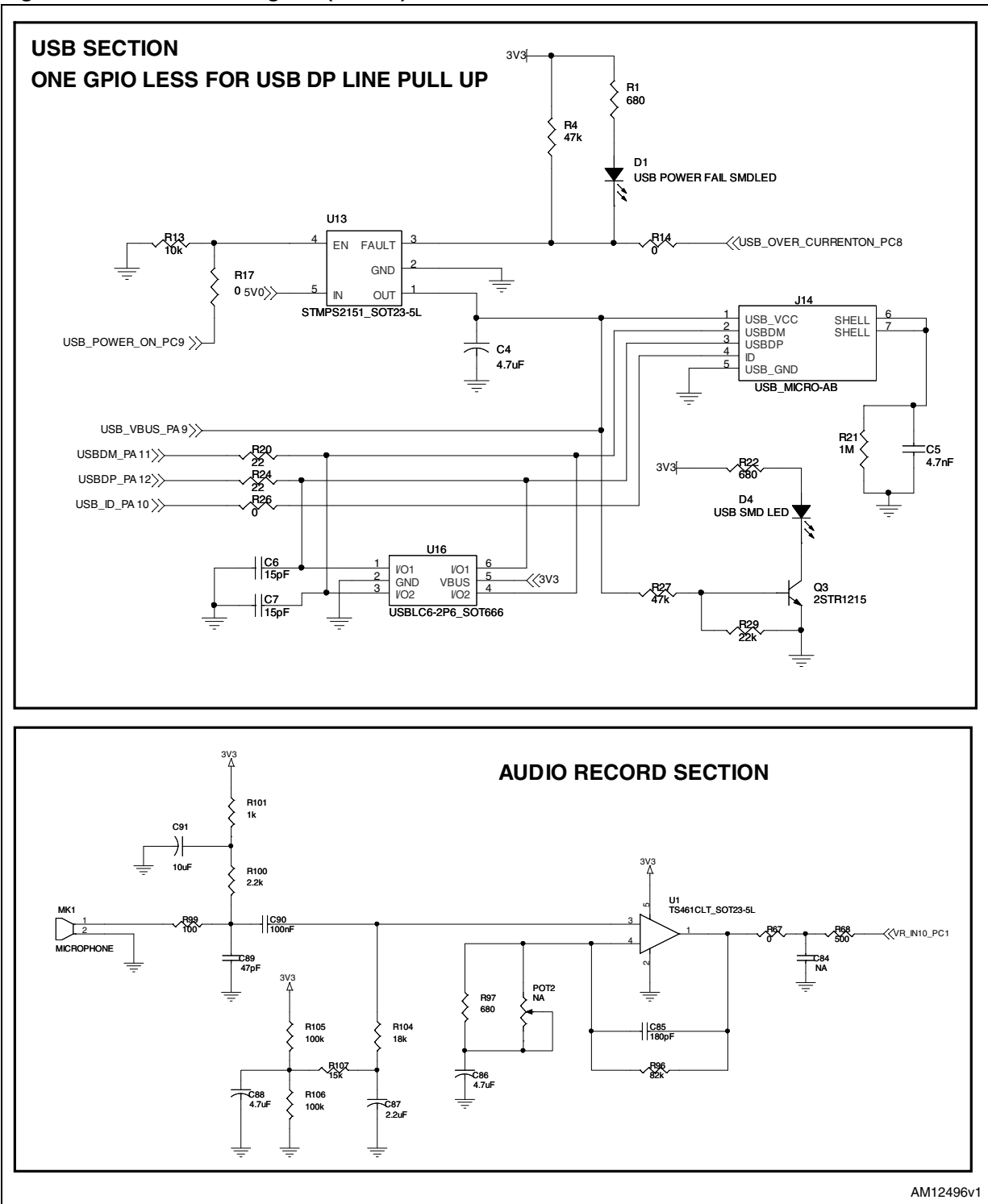


Figure 7. Schematic diagram (7 of 11)

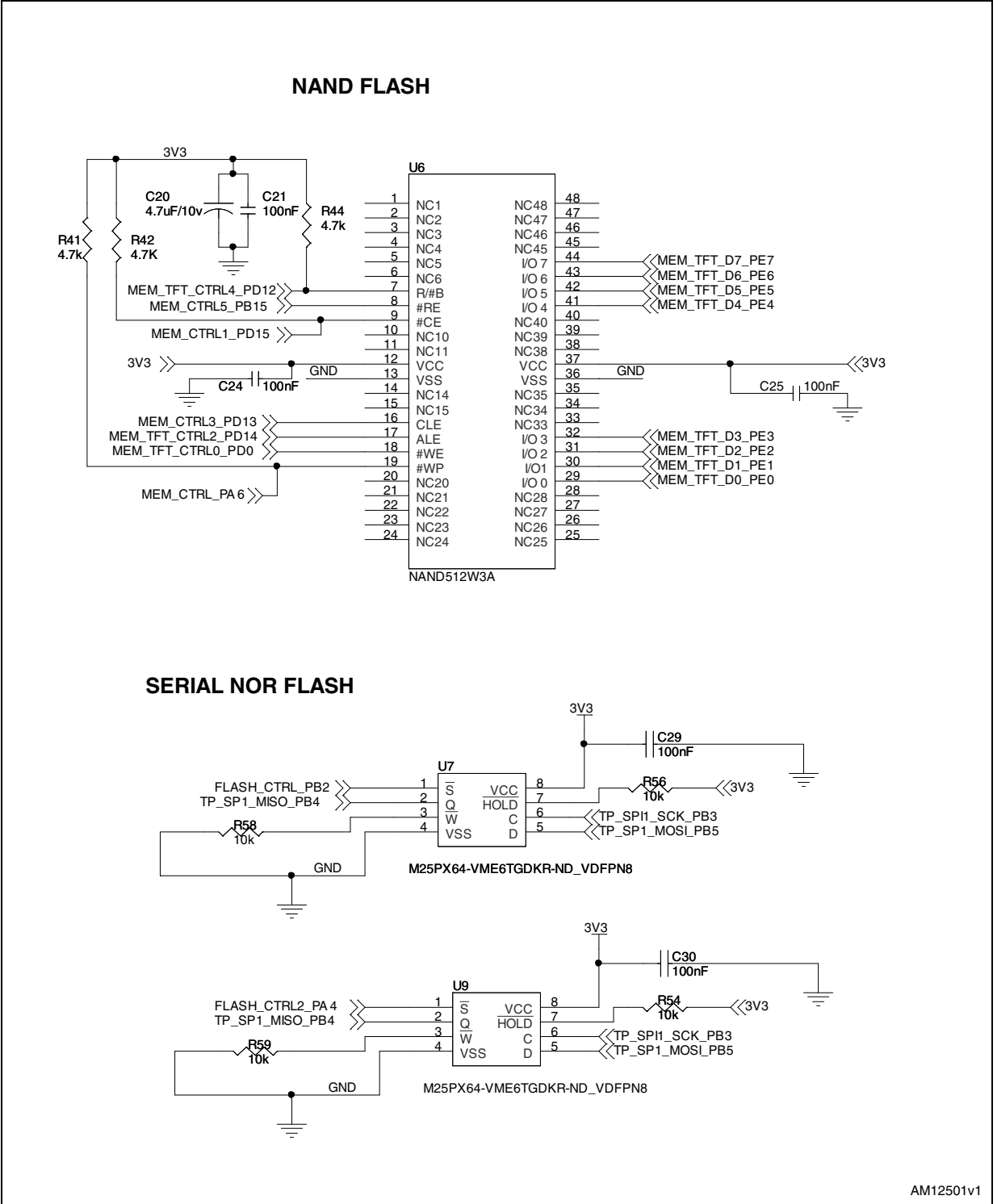


Figure 8. Schematic diagram (8 of 11)

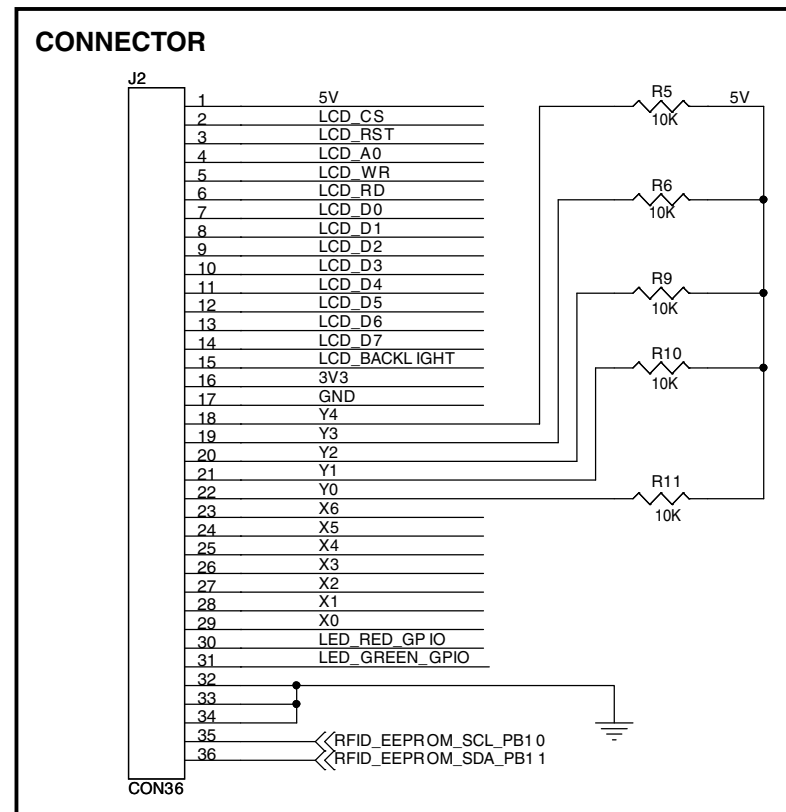
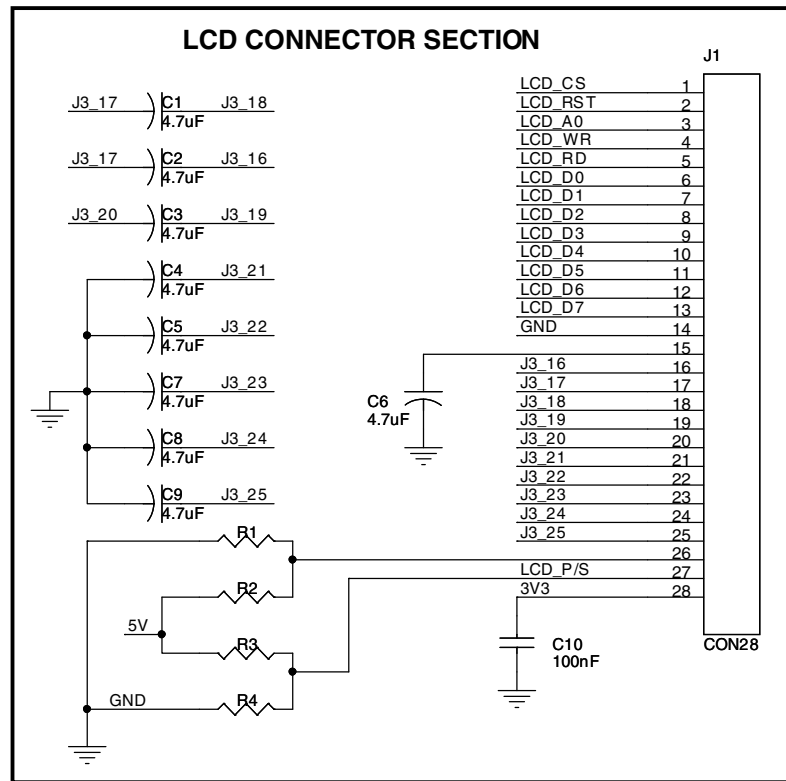


Figure 9. Schematic diagram (9 of 11)

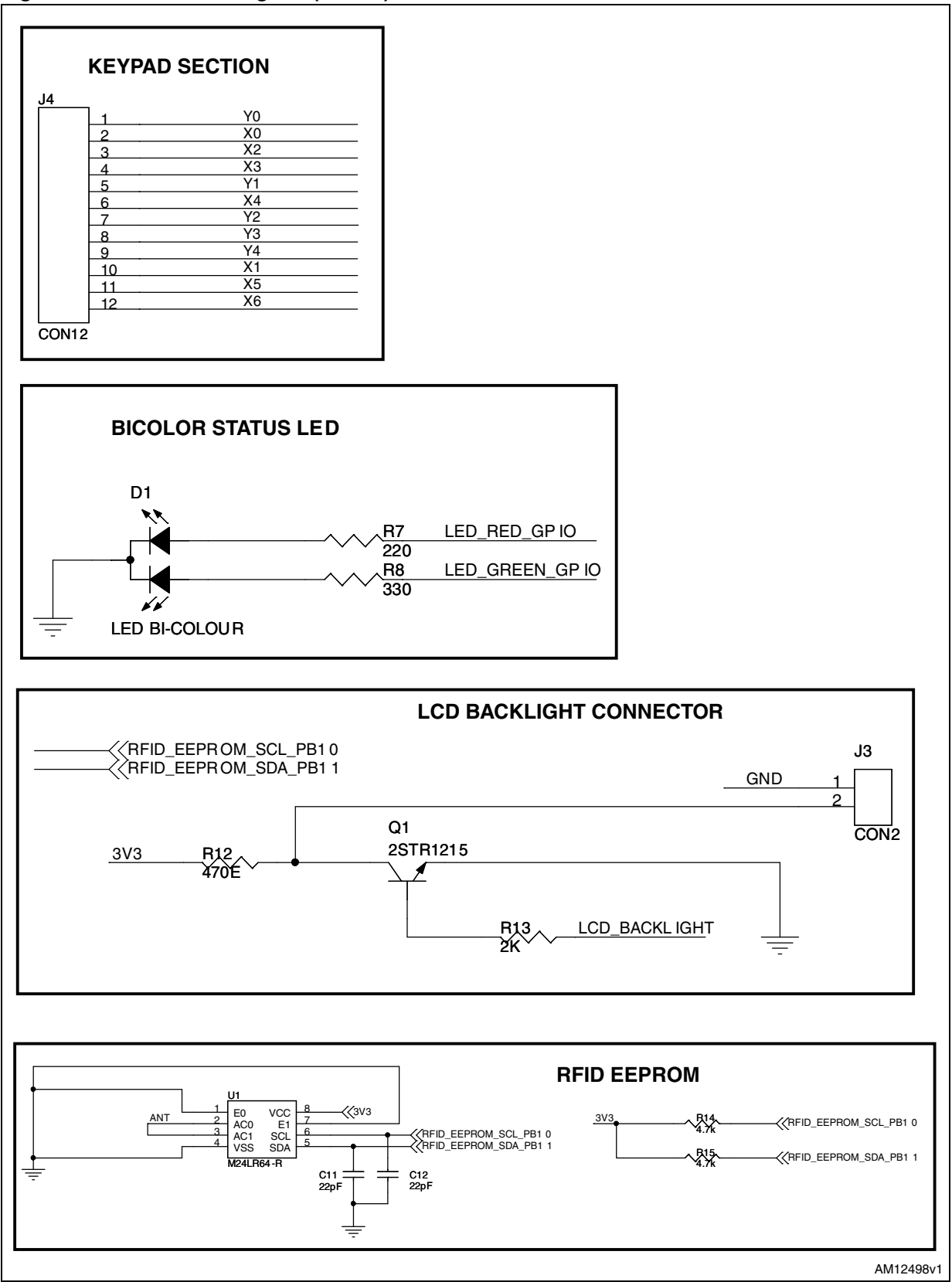
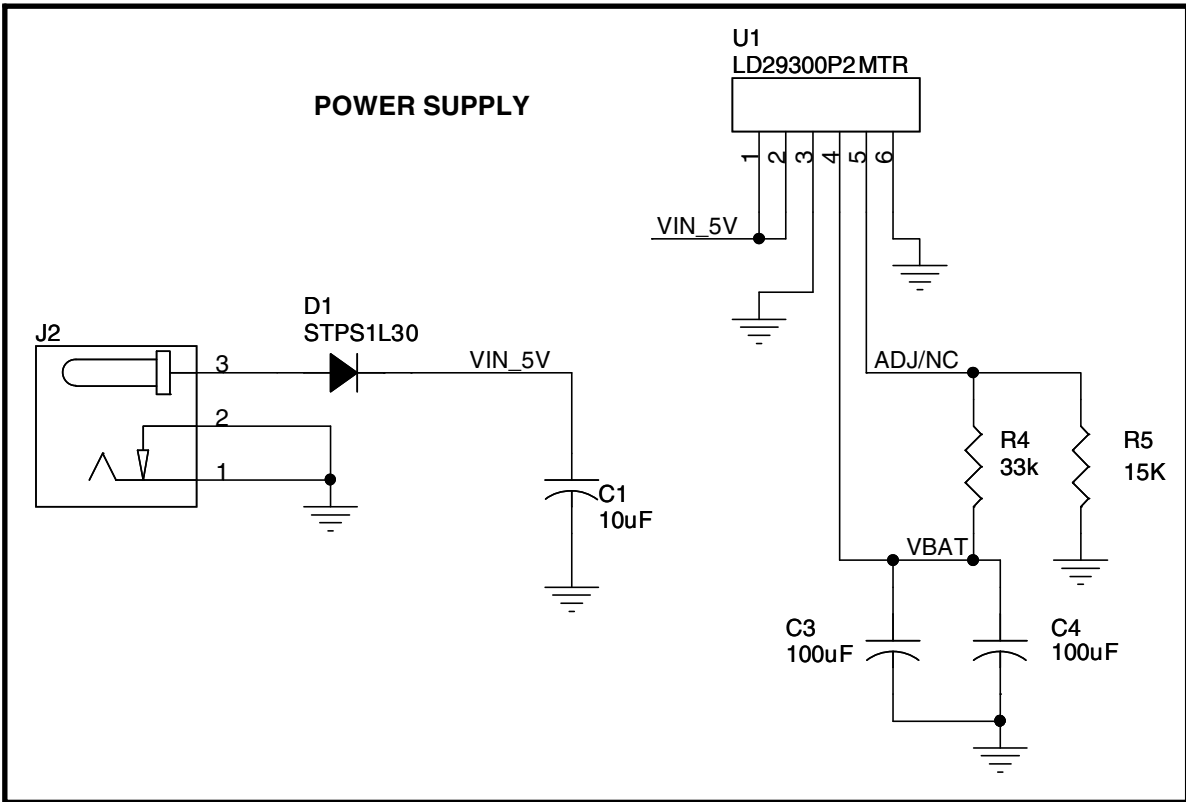


Figure 10. Schematic diagram (10 of 11)



This section must be placed very near to GSM pin connector
SIM CARD Section

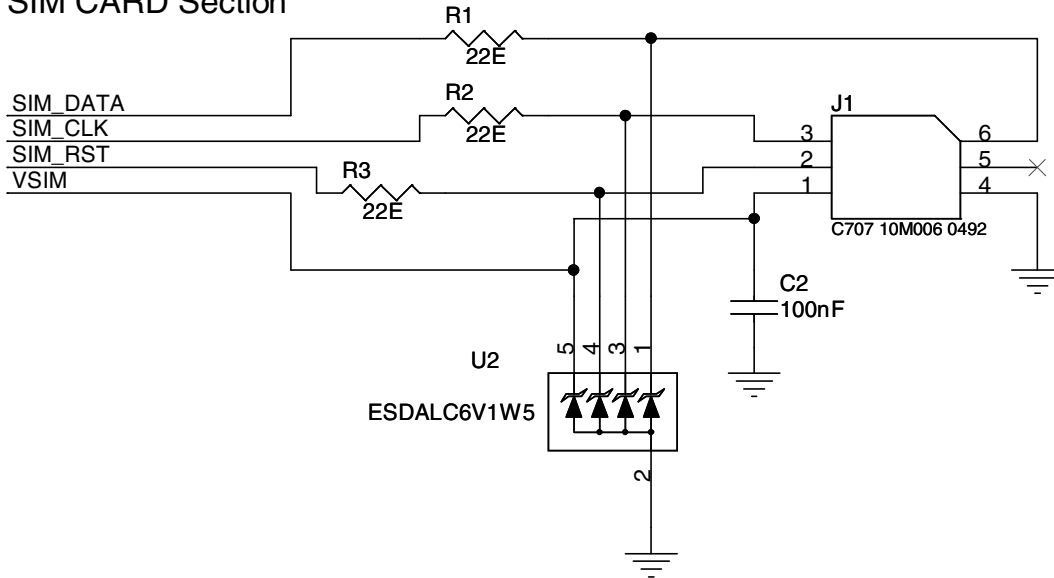


Figure 11. Schematic diagram (11 of 11)

