

Applicable Country & Regions:

All Regions

Product Service Manual – Level 3

Service Manual for BenQ:
Projector/MW814ST
<9H.J4S77.000>



Version: 00a
Date:2011/05/12

Notice:

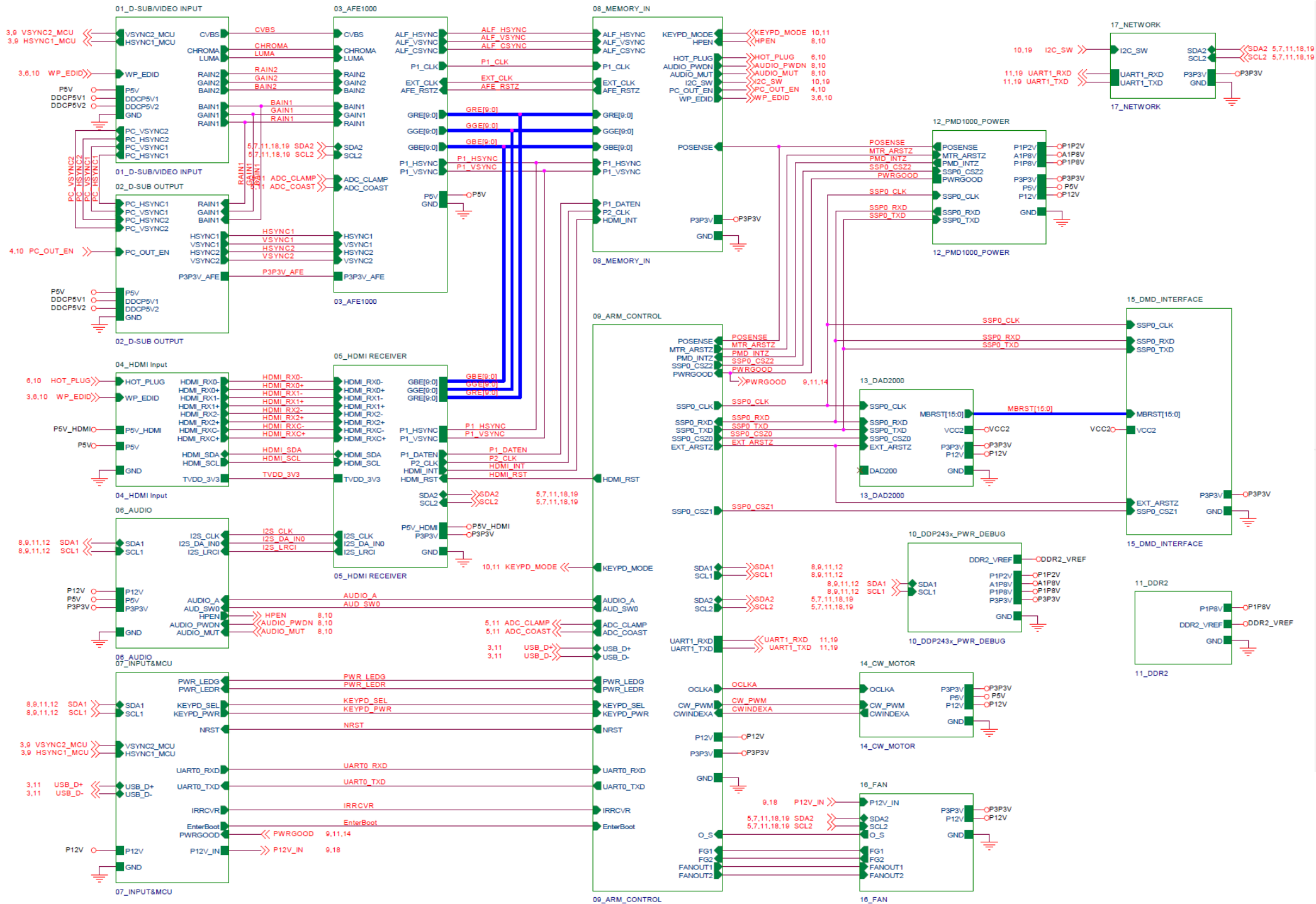
For RO to input specific “Legal Requirement” in specific NS regarding to responsibility and liability statements.

Please check BenQ's eSupport web site, <http://esupport.benq.com>, to ensure that you have the most recent version of this manual.

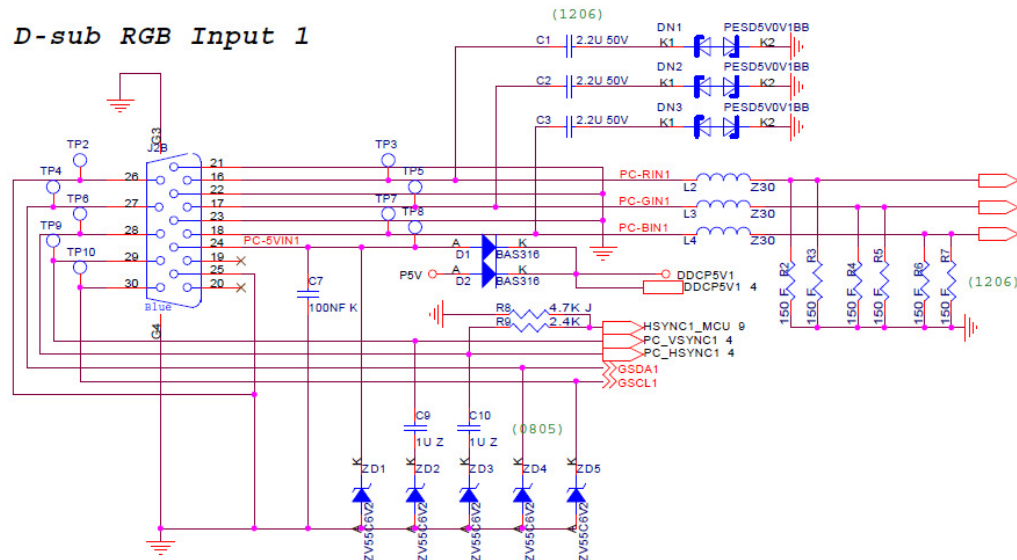
First Edition (May 2011)

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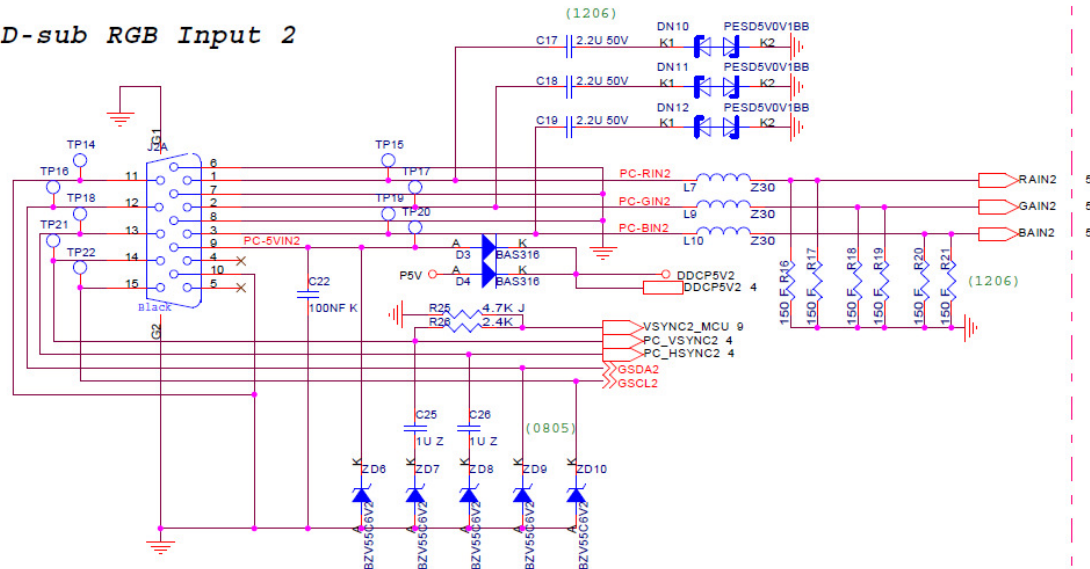
Schematics—Main board:



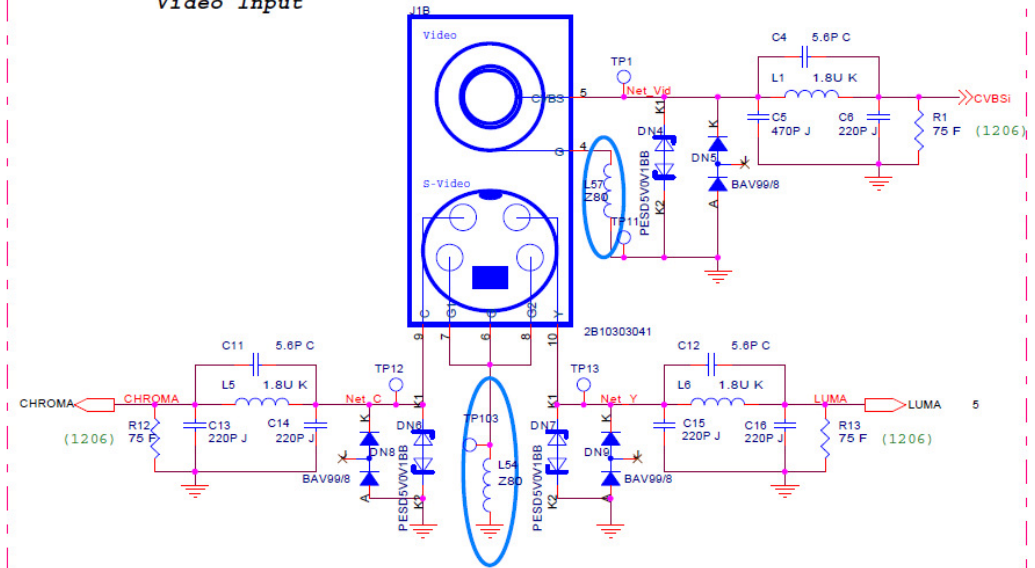
D-sub RGB Input 1



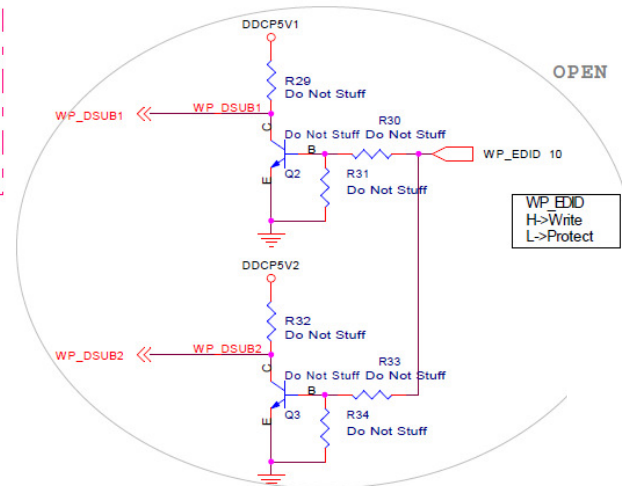
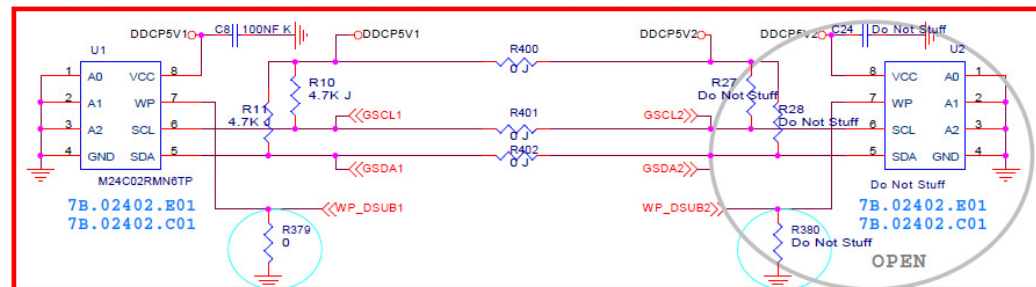
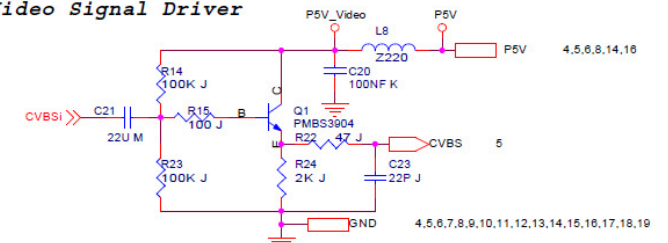
D-sub RGB Input 2



Video Input



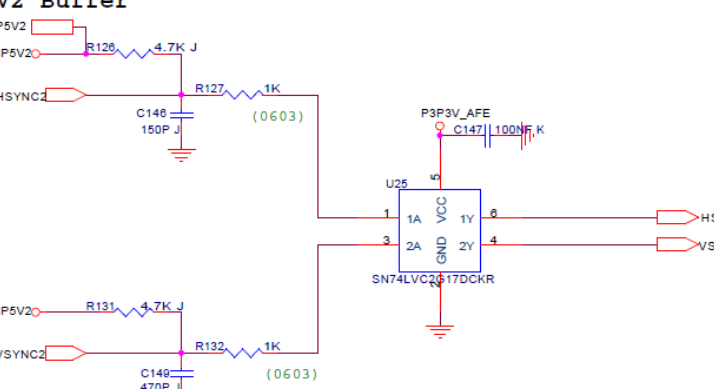
Video Signal Driver



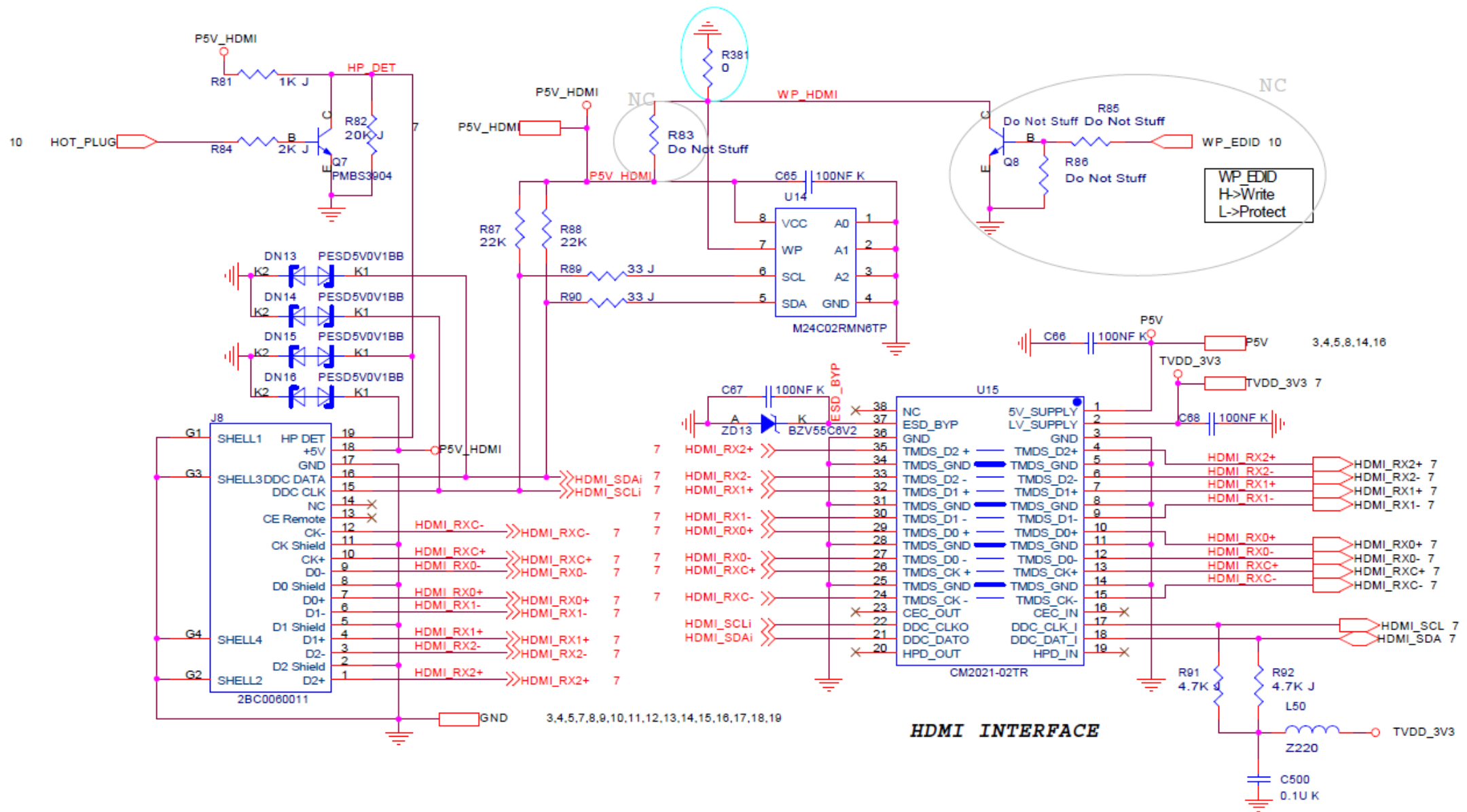
H1,V1 Buffer

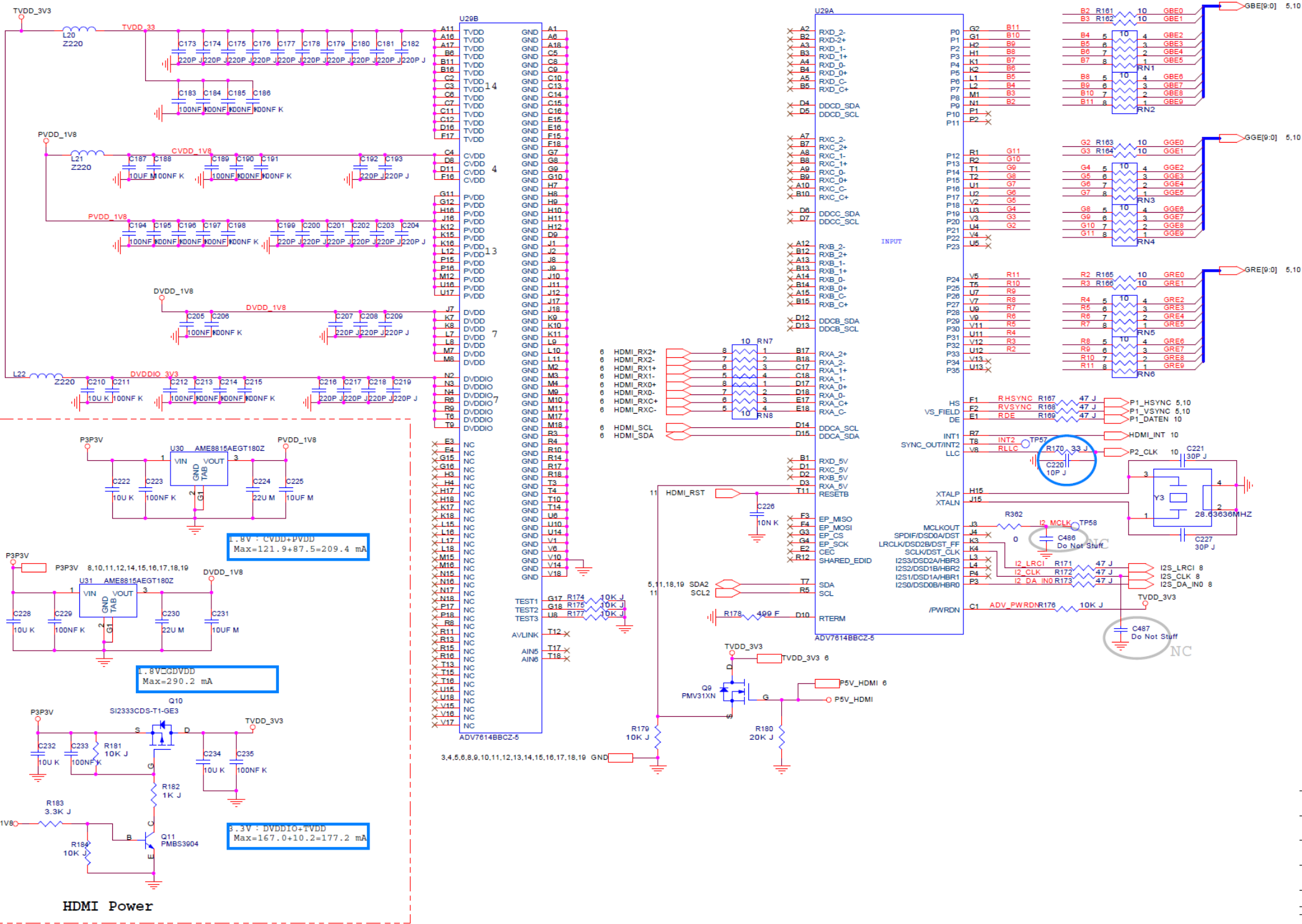
The schematic diagram illustrates the H1,V1 Buffer circuit. It features two input signals, PC_HSYNC and PC_VSYNC, each connected to a 4.7K resistor (R112, R120) and a 1K resistor (R113, R122). The 4.7K resistors are connected to DDCP5V1 and DDCP5V1O. The 1K resistors are connected to the inputs of a 74LVC2517DCKR buffer (U22). The buffer's VCC is connected to P3P3V_AFE and its GND is connected to GND. The buffer has two outputs: HSYNC1 and VSYNC1, each connected to a 100nF capacitor (C139, C142) and a 1K resistor (R113, R122). The outputs are also connected to HSYNC1 and VSYNC1 signals.

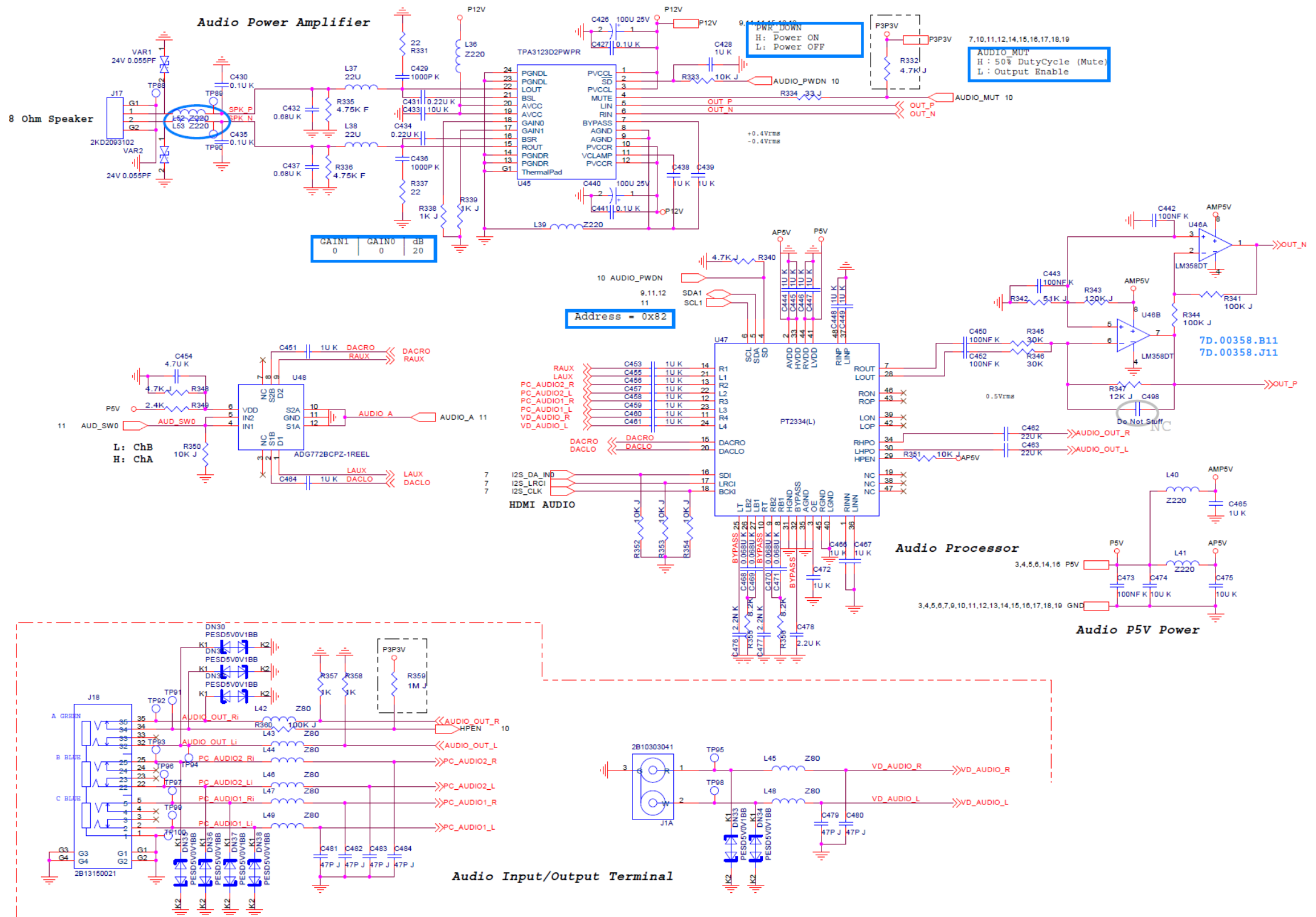
H2,V2 Buffer

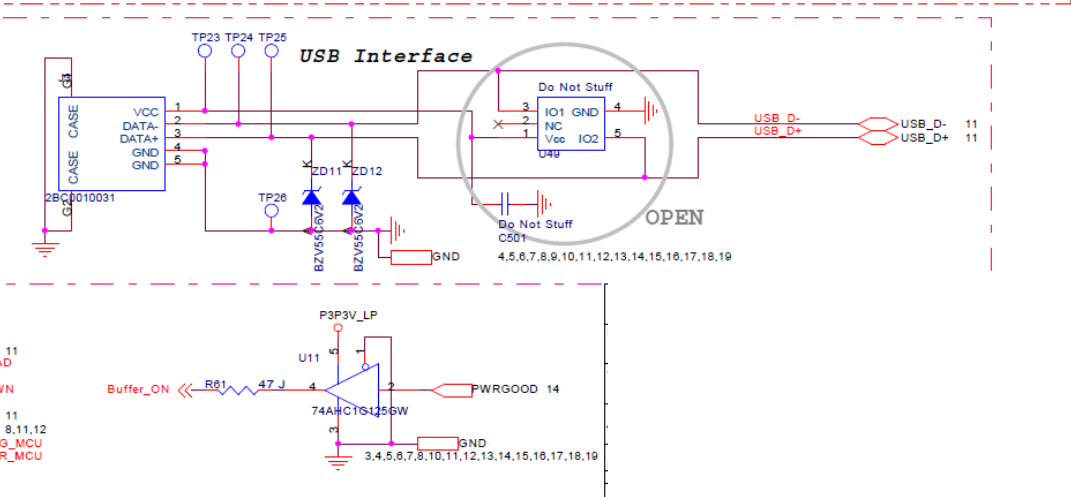
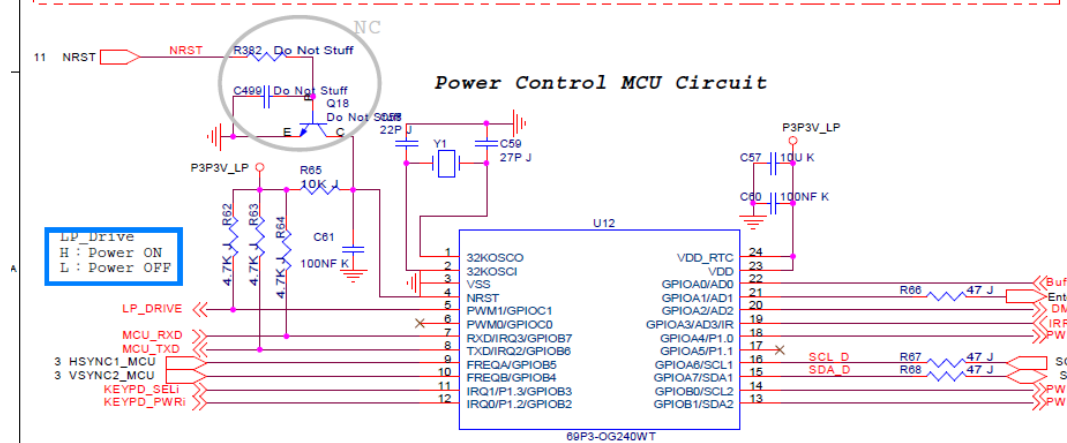
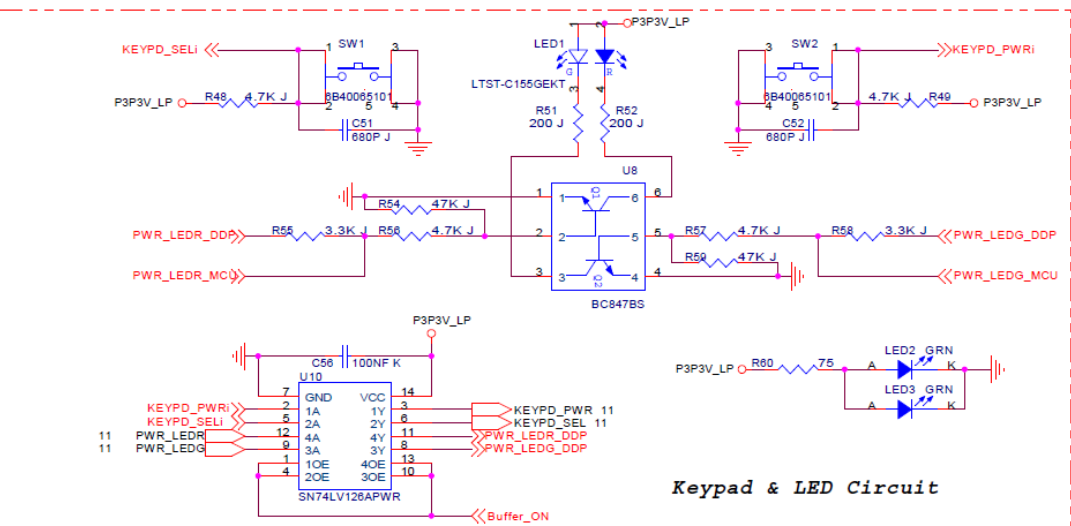
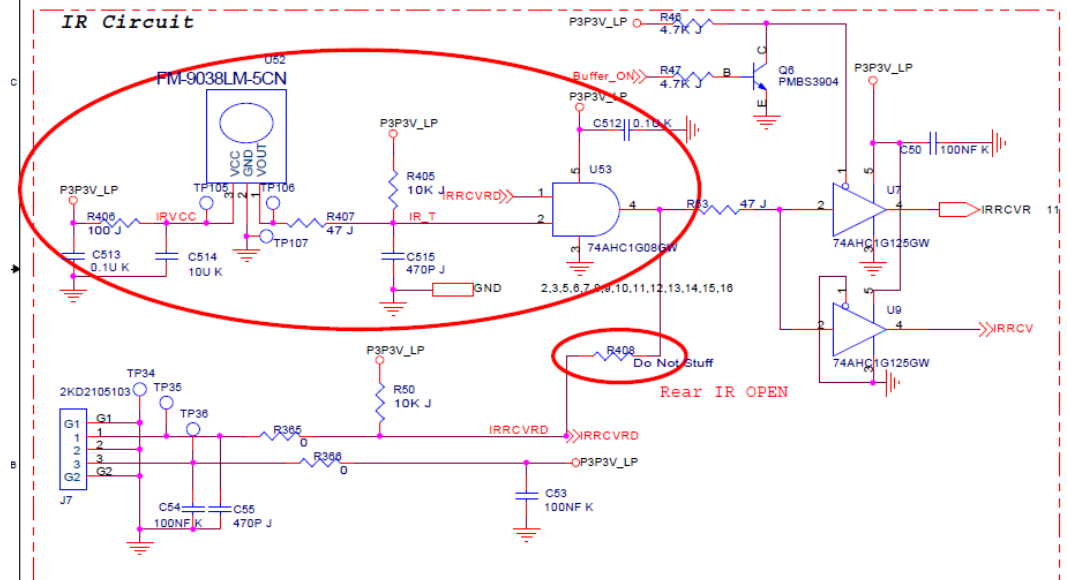
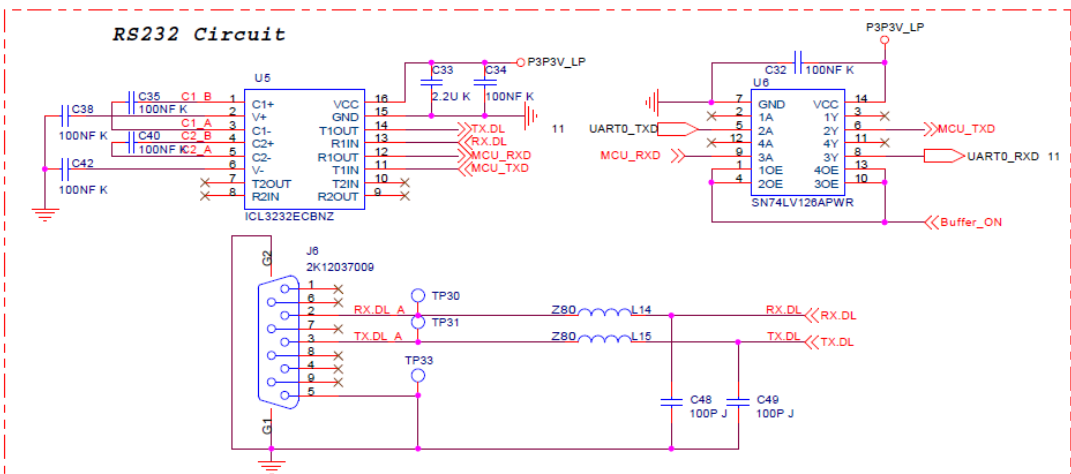
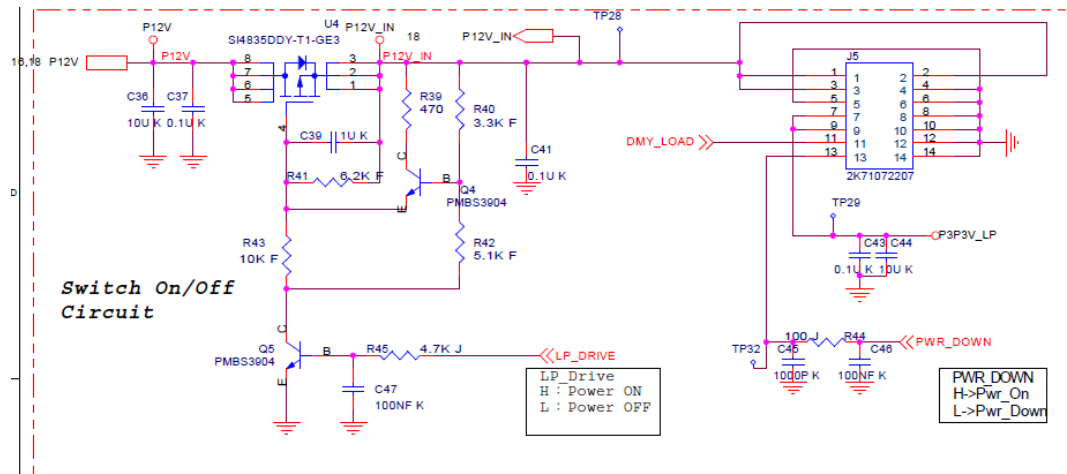


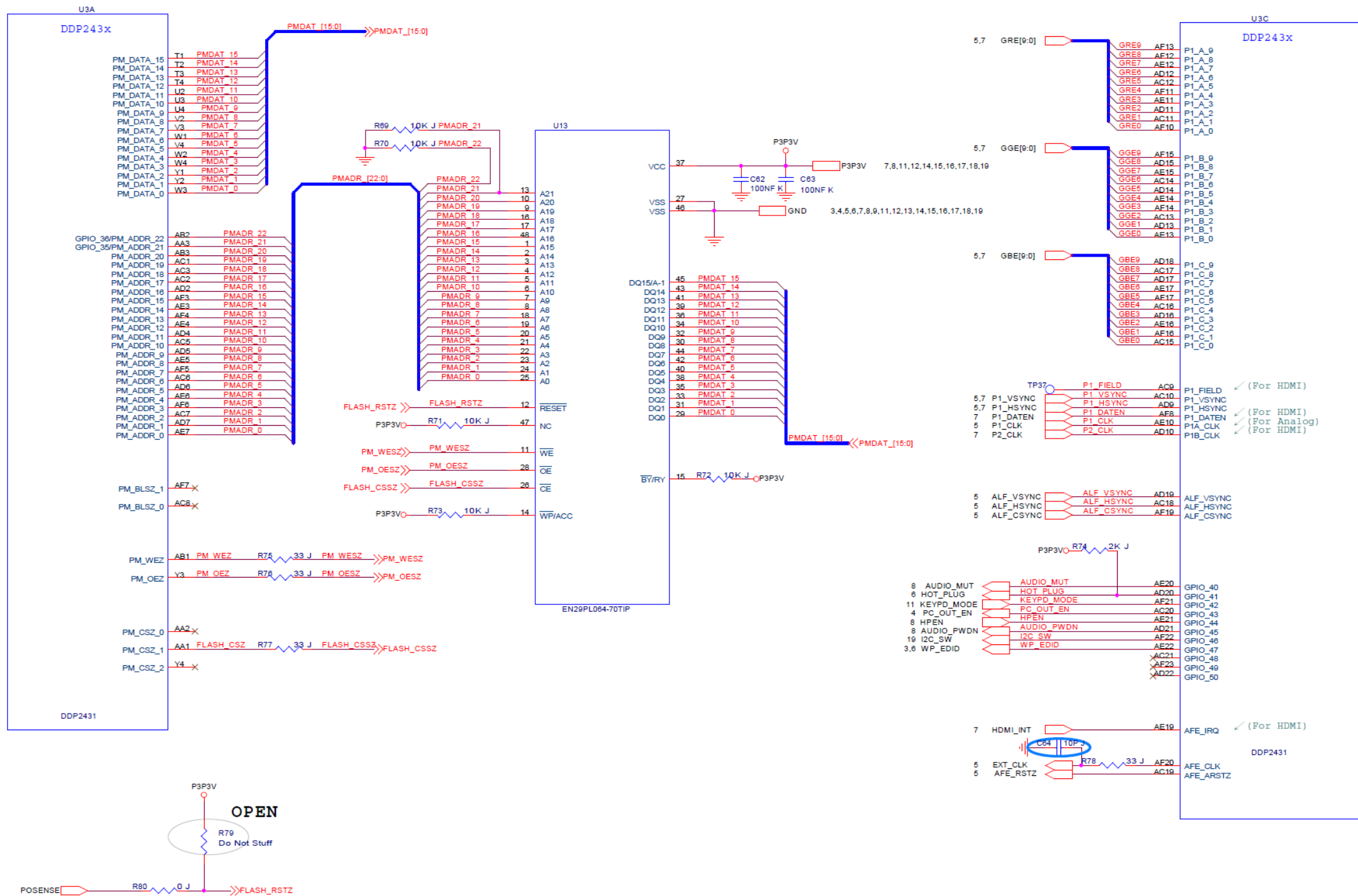
The diagram shows a PCB layout for an H2,V2 Buffer. It features two input signals, PC_HSYNC2 and PC_VSYNC2, each connected to a buffer circuit. The buffers are implemented using SN74LVC24517DCKR chips (U25 and U26). The input signals are connected to the 1A and 2A pins of the buffers, respectively. The output signals, HSYNC2 and VSYNC2, are connected to the 1Y and 2Y pins. The buffers are powered by a 3.3V supply (P3P3V_AFE) and ground. The layout includes various components such as resistors (R126, R127, R131, R132), capacitors (C146, C147, C148, C149), and a 100nF capacitor (C147) connected to the 3.3V supply. The components are labeled with their values and footprints (e.g., 4.7K J, 1K, 150P J, 470P J, 0603).

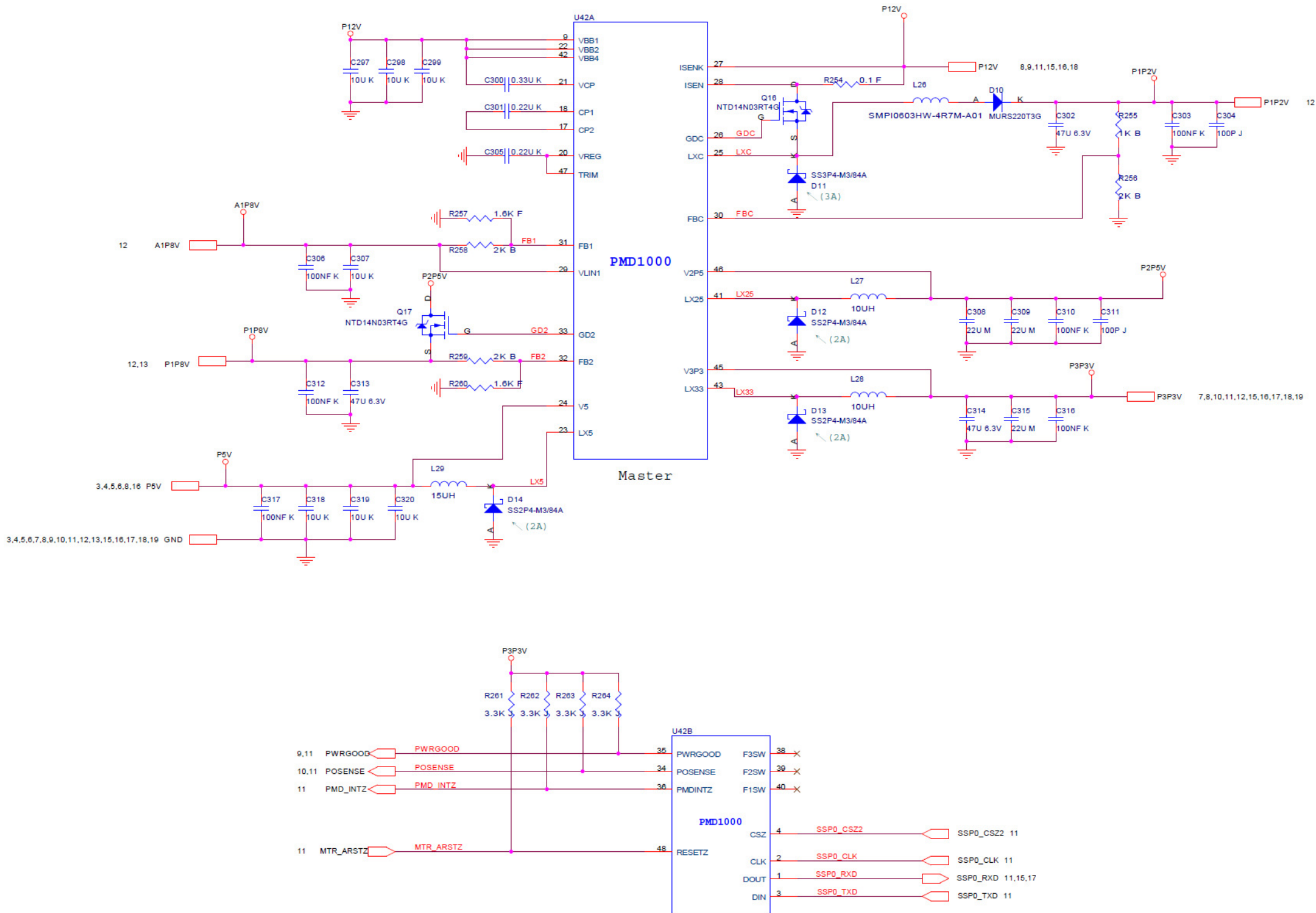


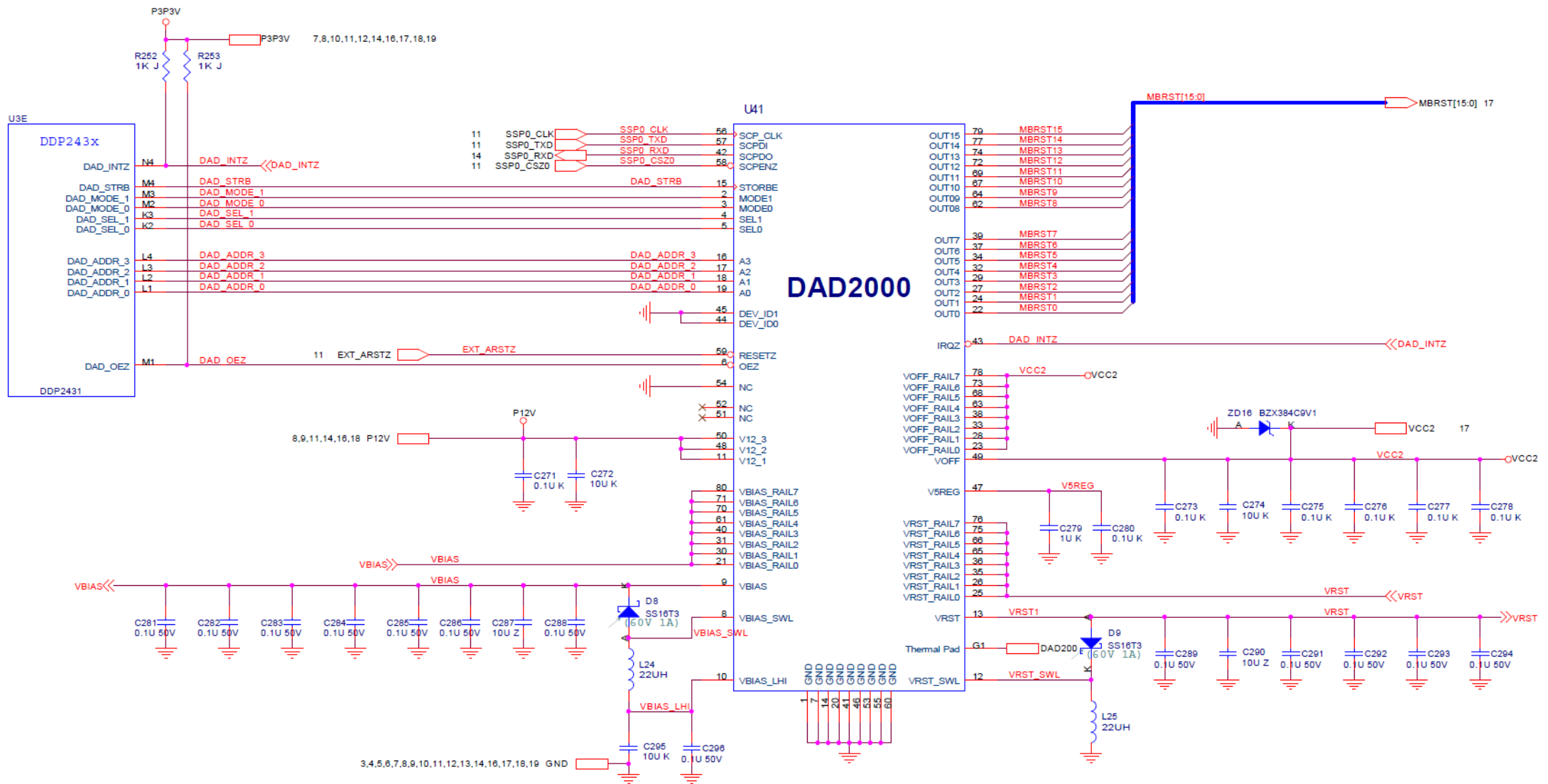


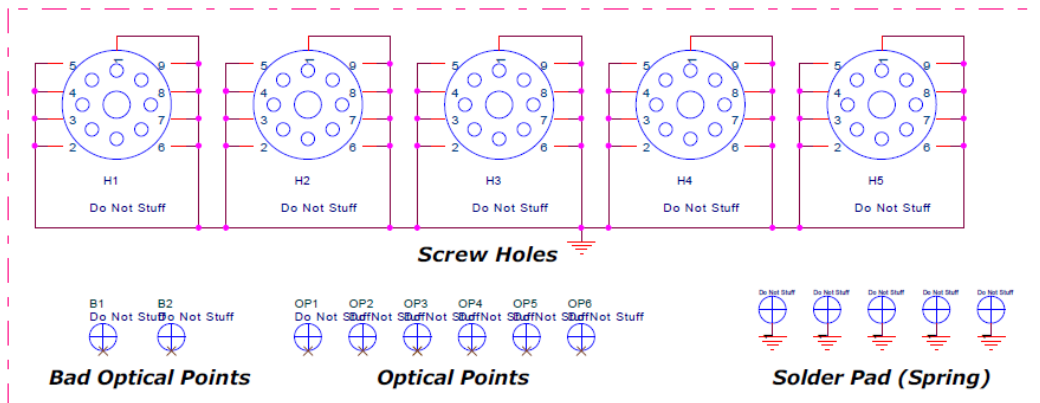
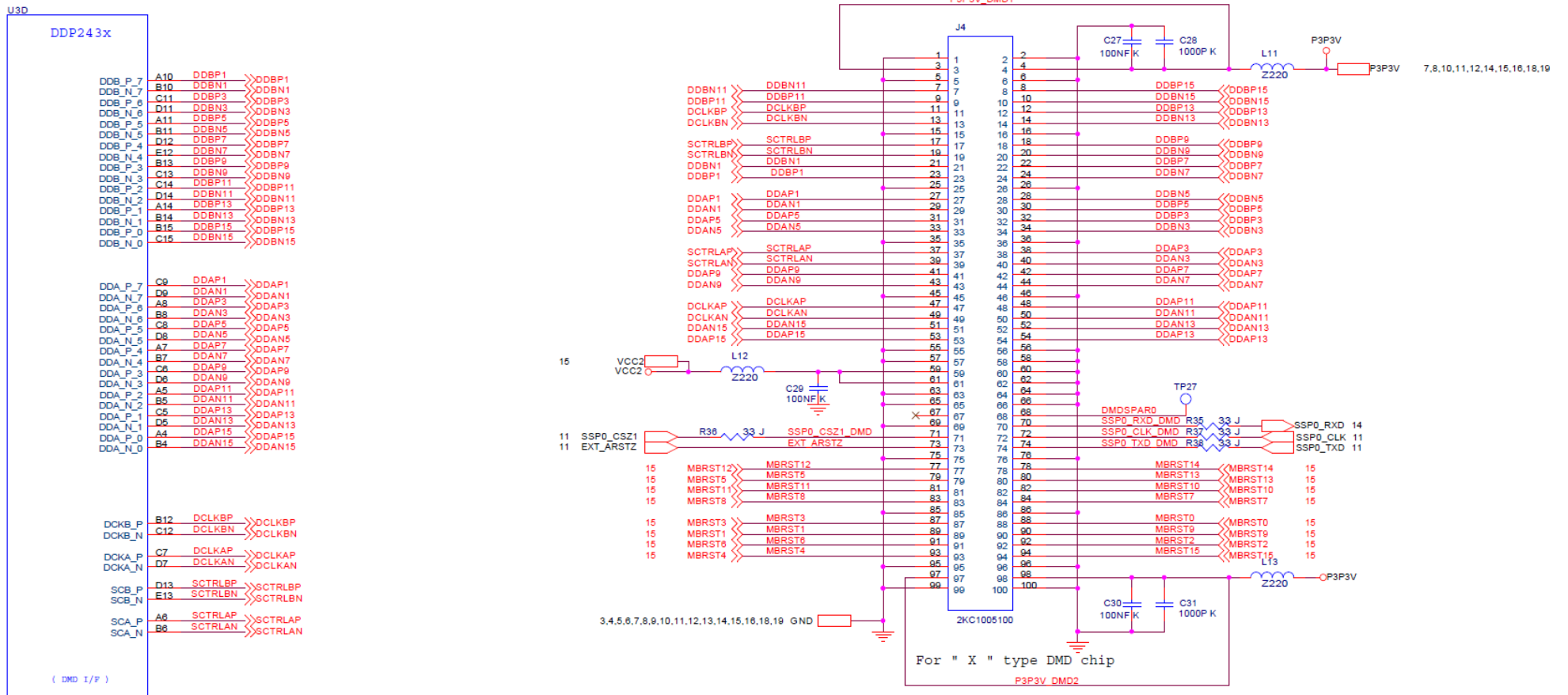


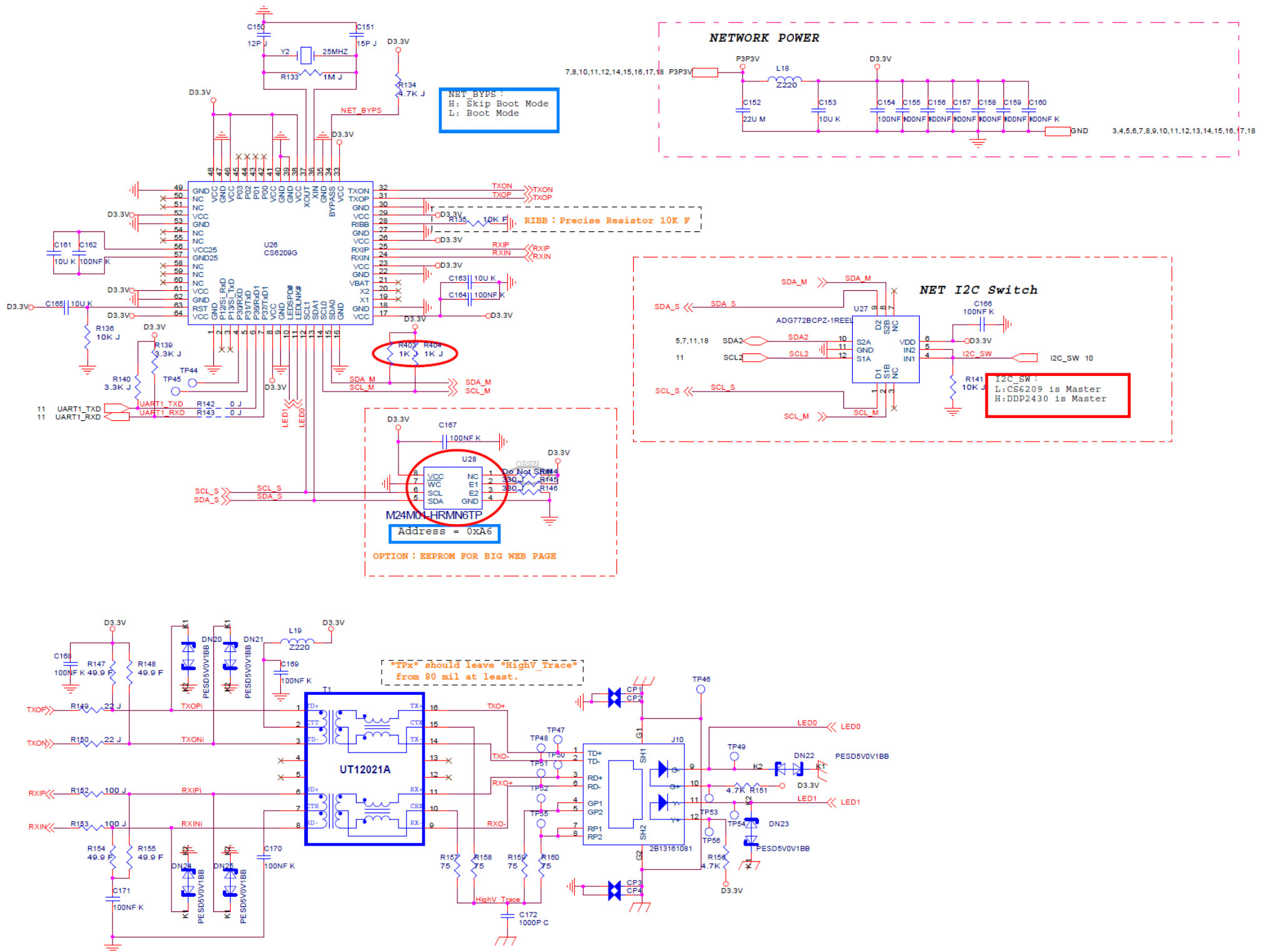




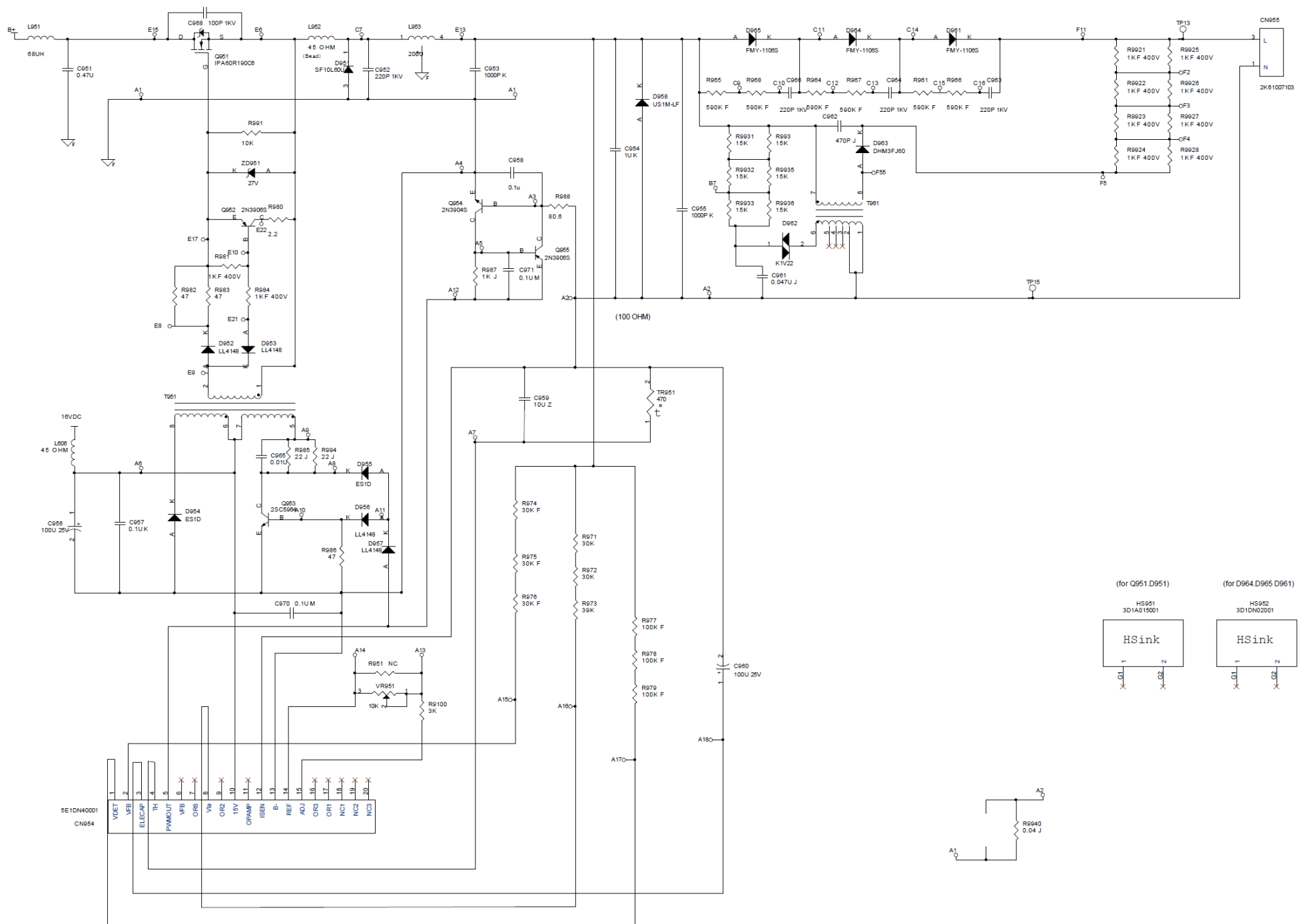


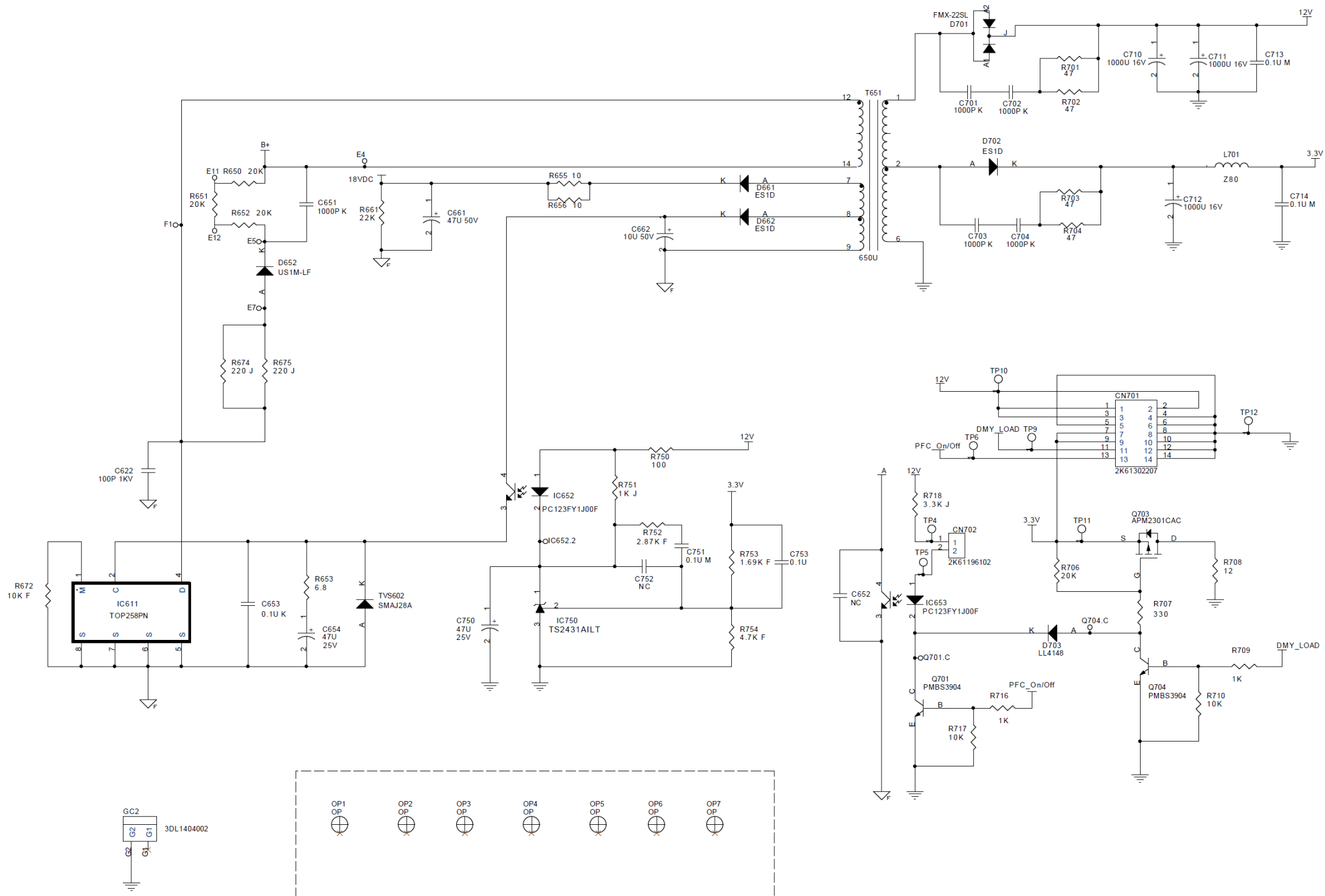


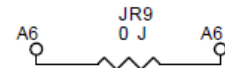
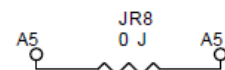
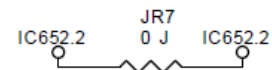
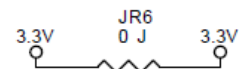
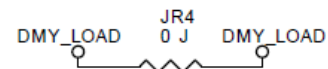
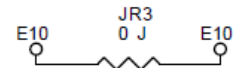
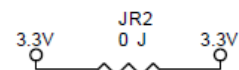
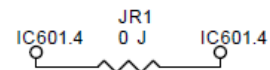
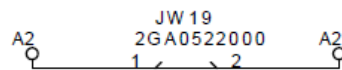
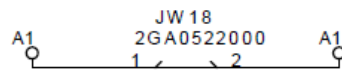
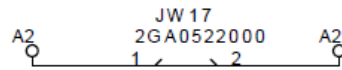
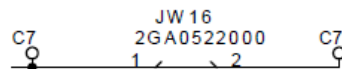
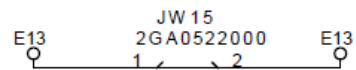
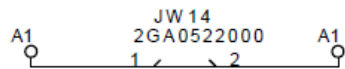
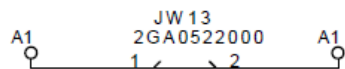
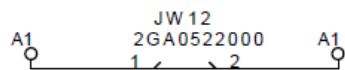
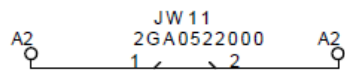
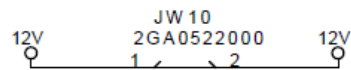
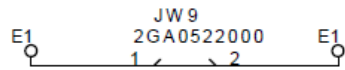
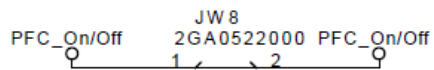
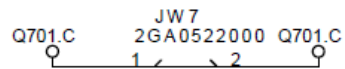
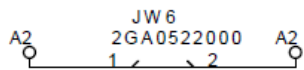
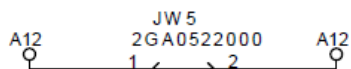
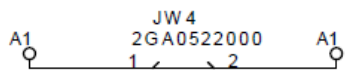
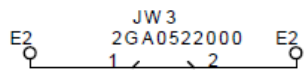
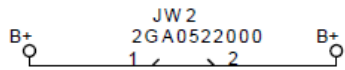
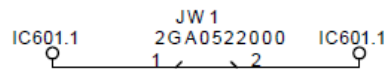


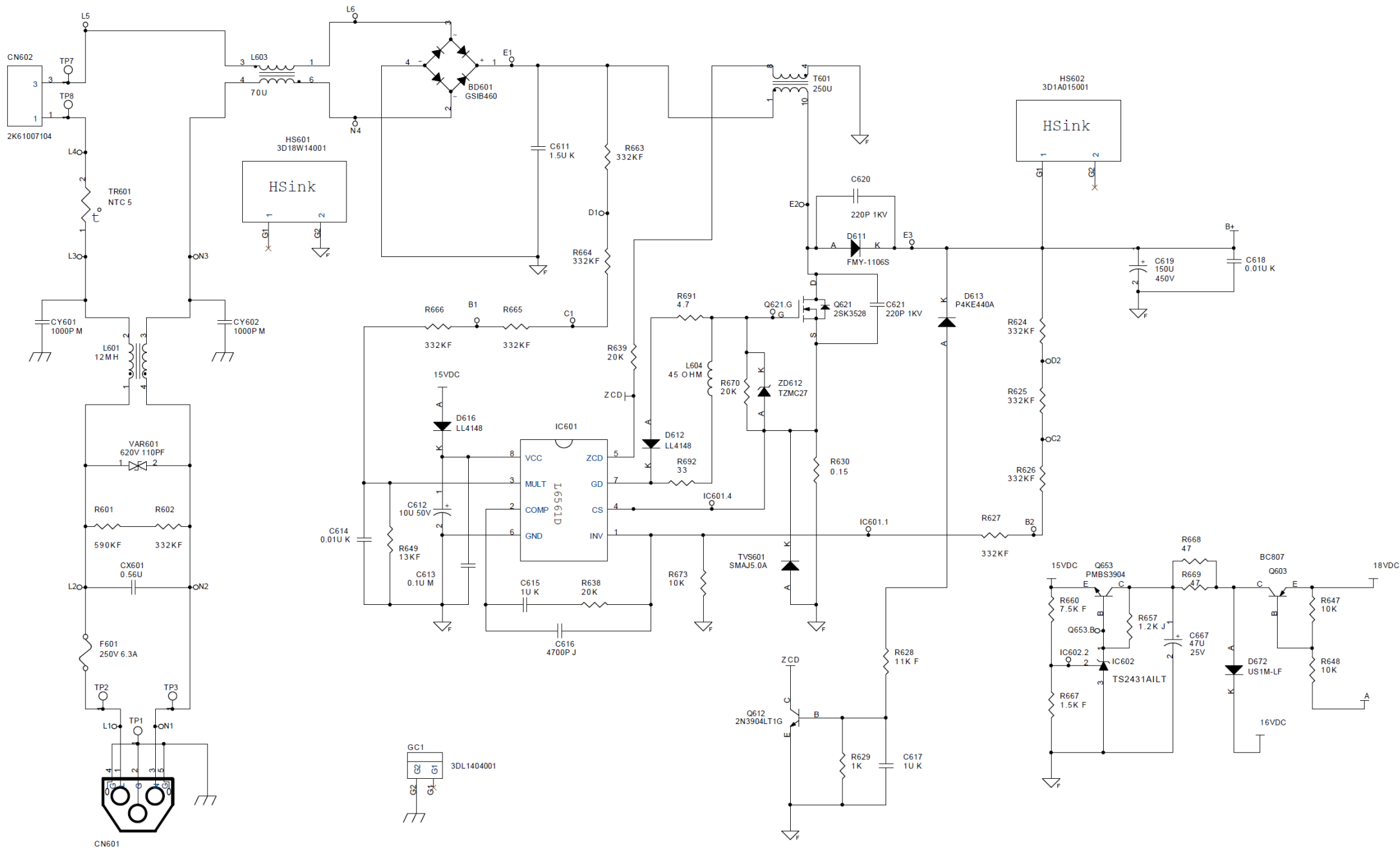


Power board:

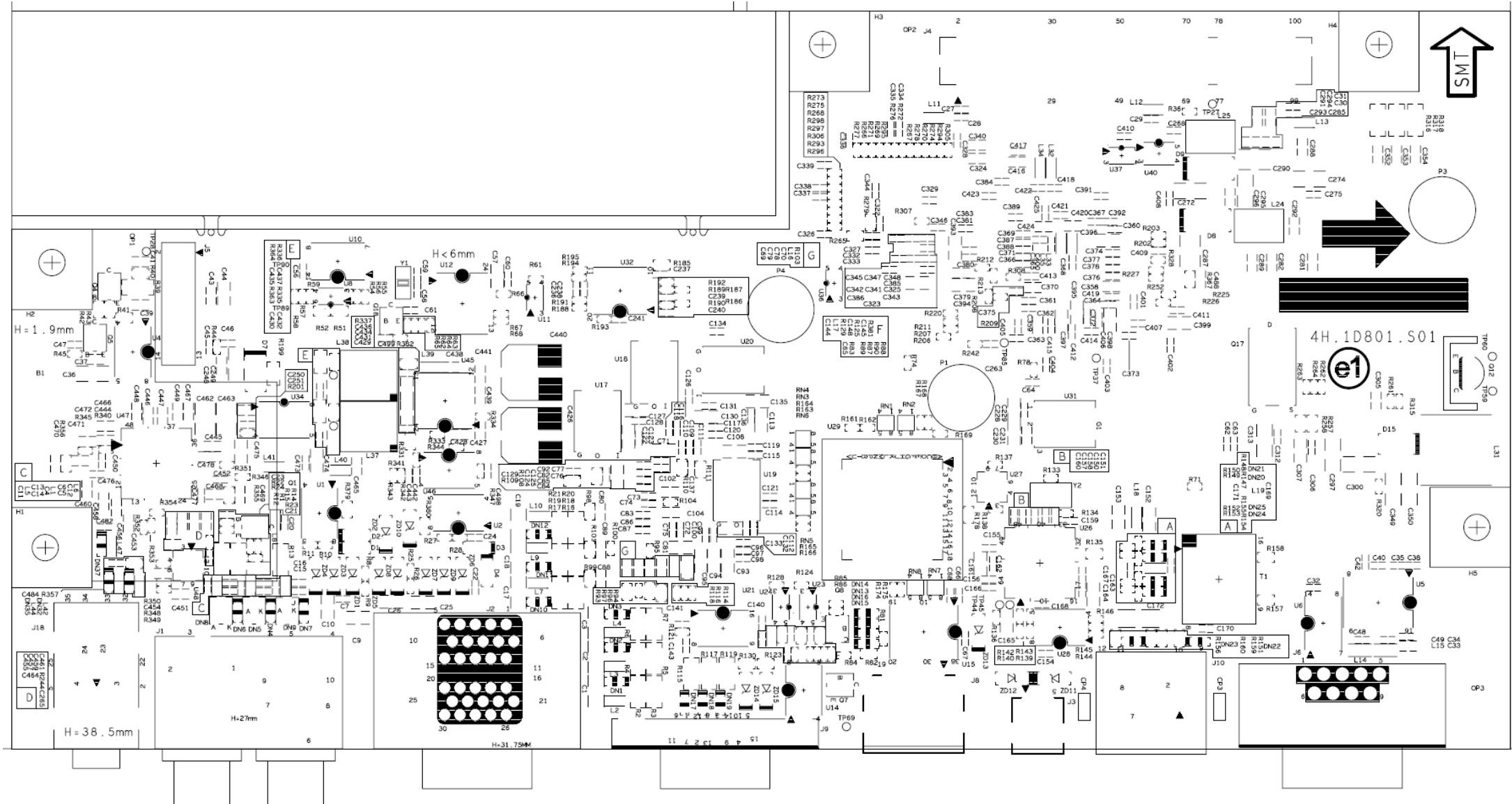


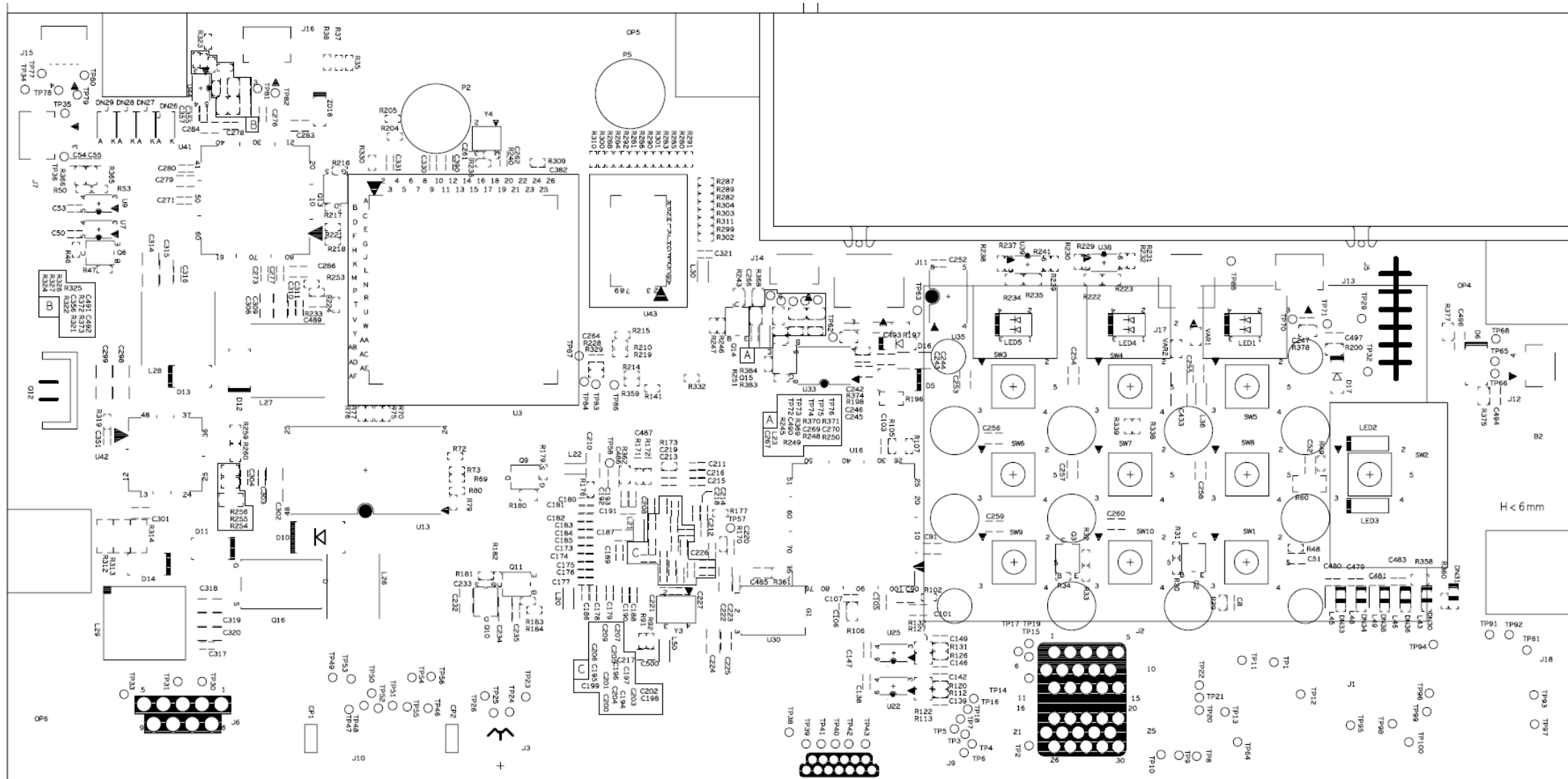






PCB Artwork: Main Board





Power Board

