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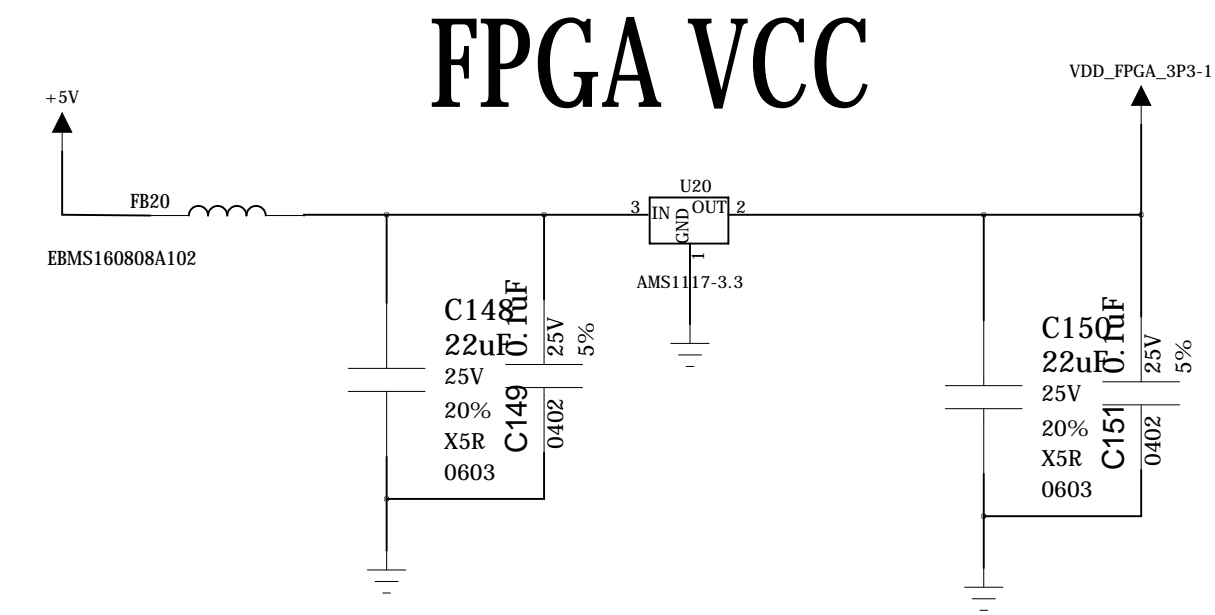
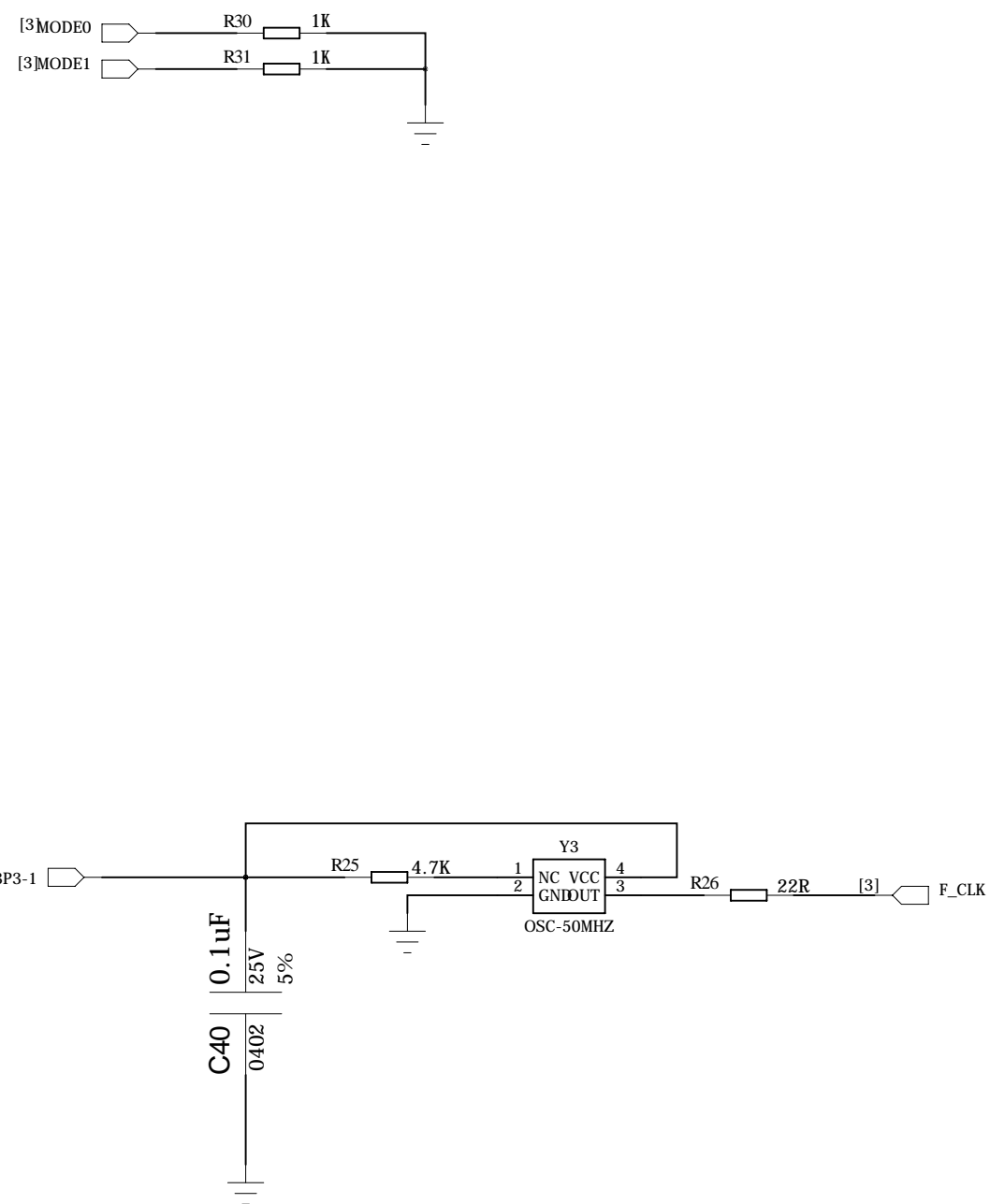
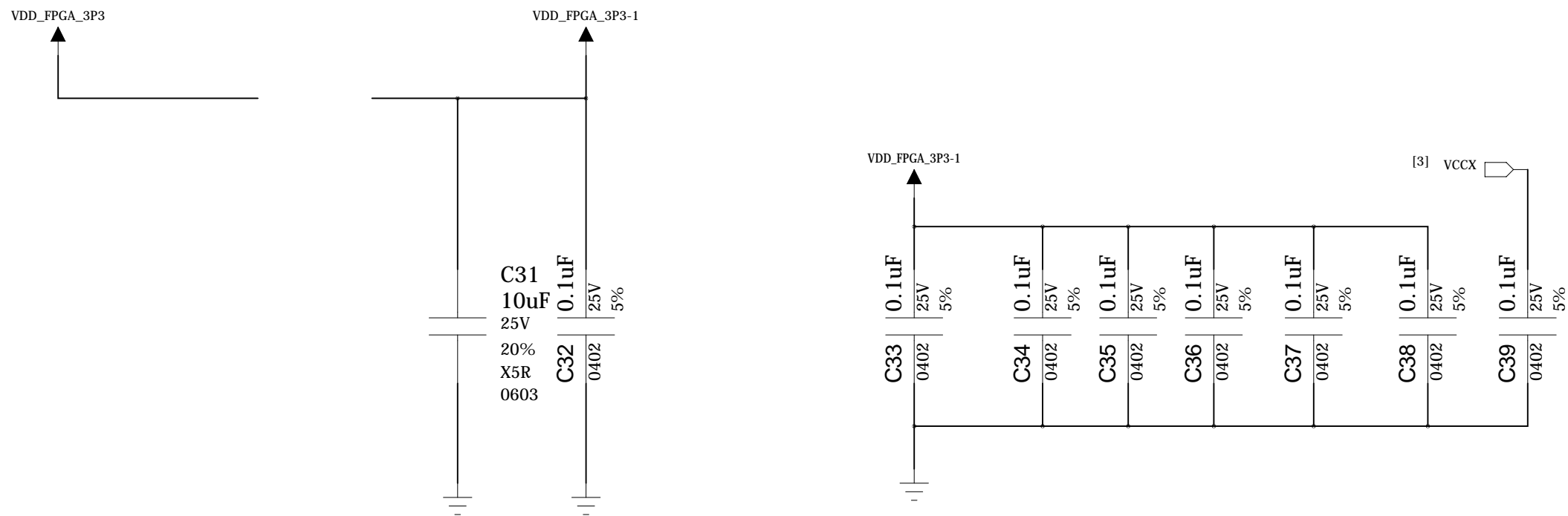
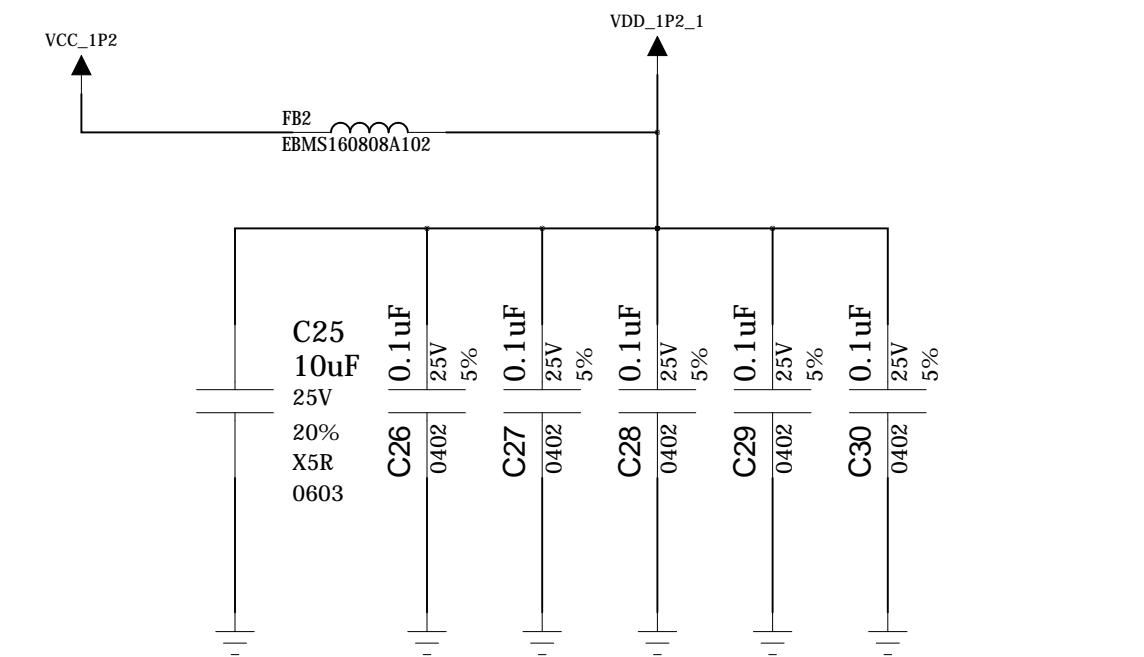
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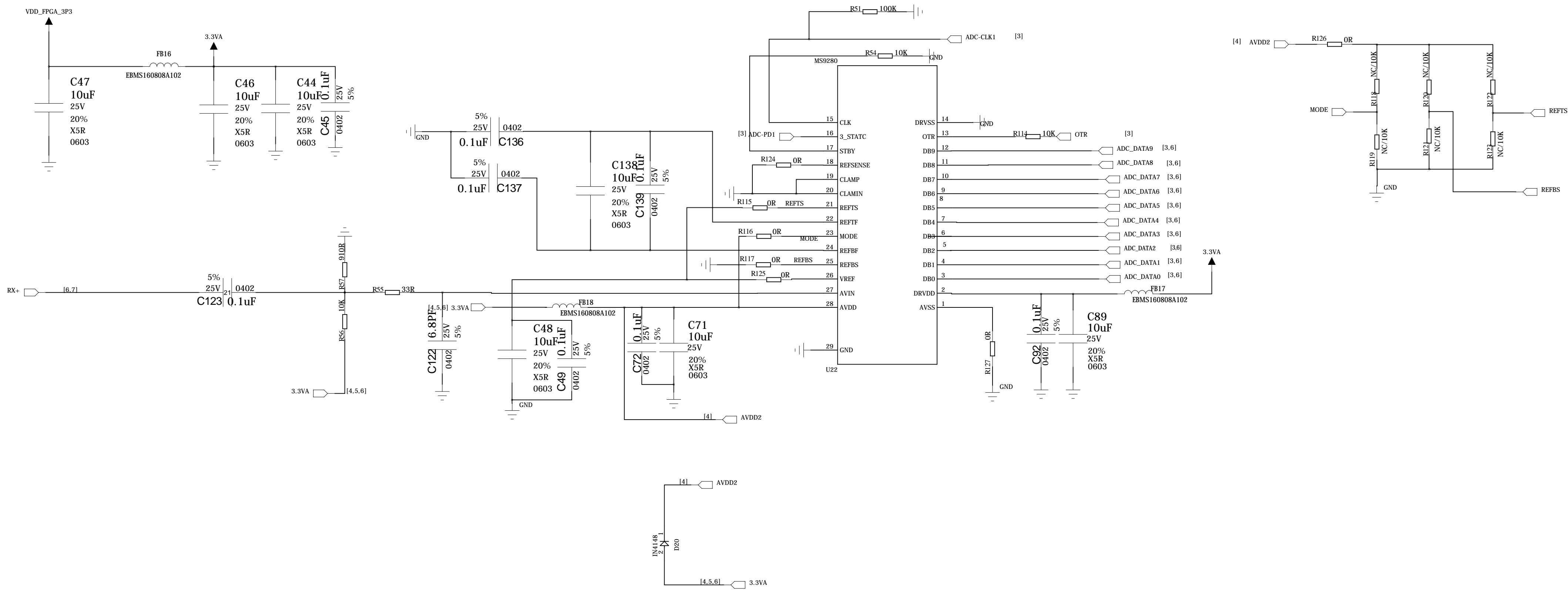
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	SODIMM Connector 1/3

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ADC PAGE

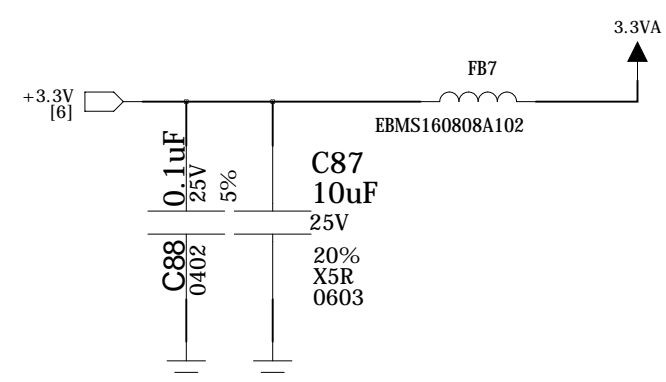
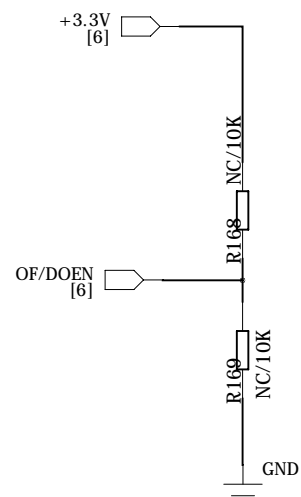
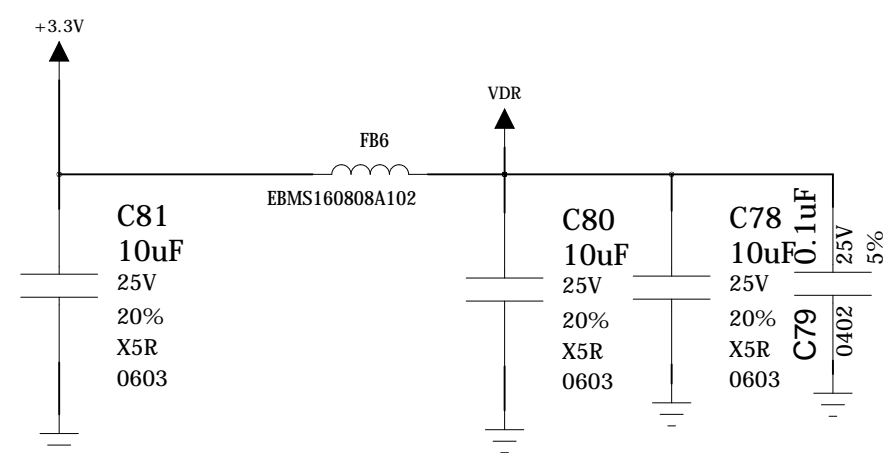
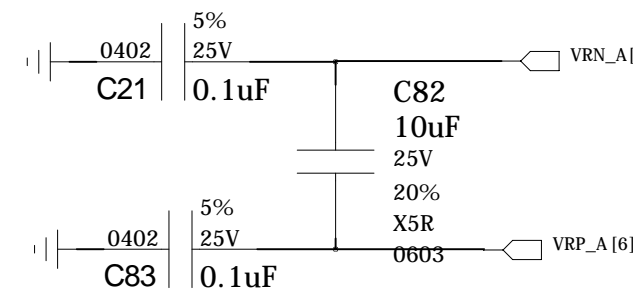
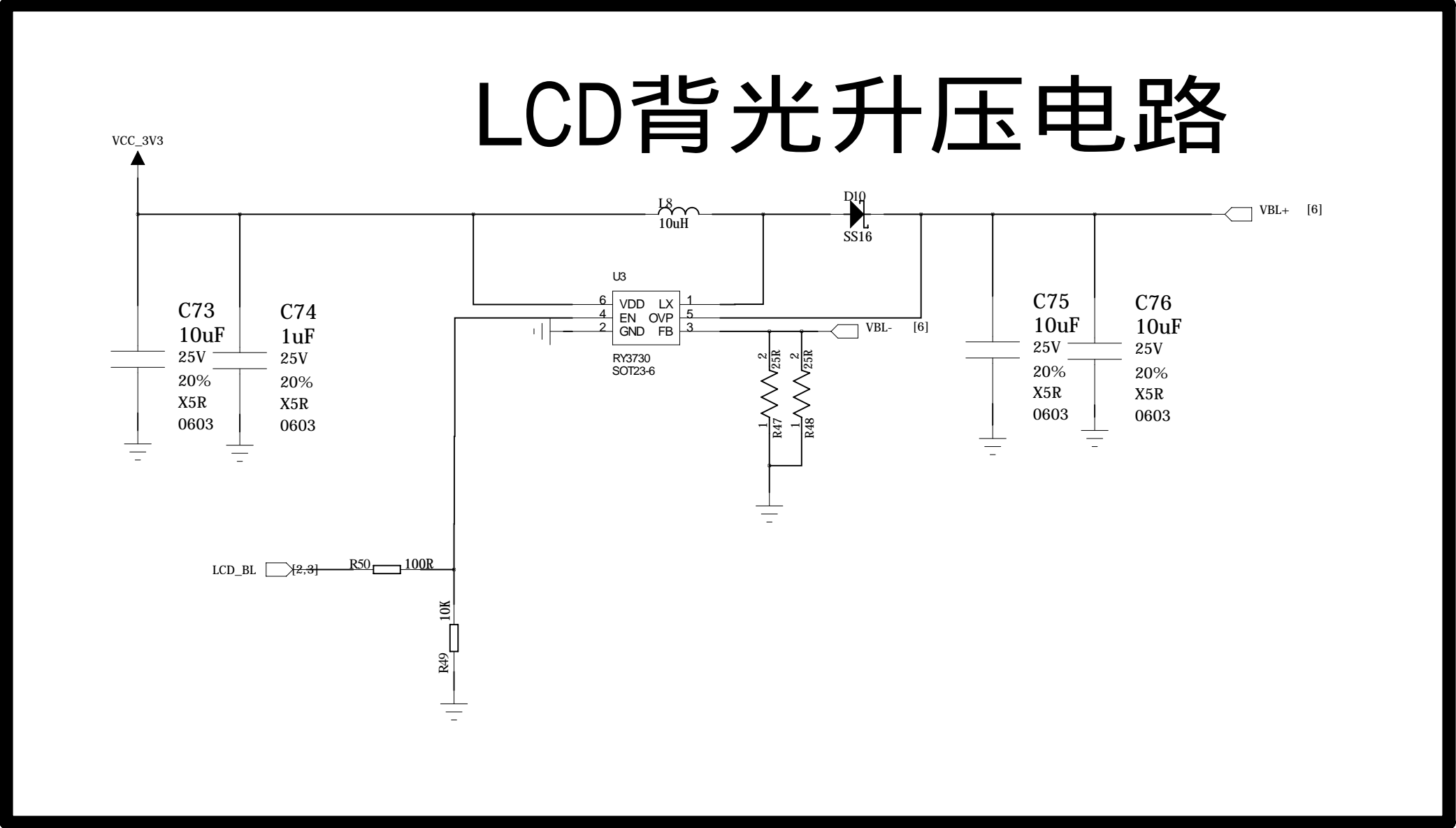




LCD 接口

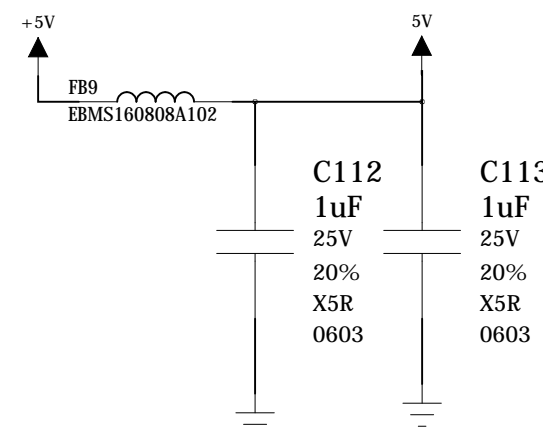
The diagram illustrates the LCD interface circuit, showing the connection between the LCD40P_05_A1 module and the SDM110P_050-A1 module. The LCD module pins are connected to the SDM module pins as follows:

- Power and Ground:**
 - GND (LCD) to GND (SDM)
 - VCC_3V3 (LCD) to VCC_3V3 (SDM)
- Control and Data Lines:**
 - INT (LCD) to INT (SDM)
 - RST (LCD) to RST (SDM)
 - TP_SDA2 (LCD) to TP_SDA2 (SDM)
 - TP_SCL2 (LCD) to TP_SCL2 (SDM)
 - TP_VDD (LCD) to TP_VDD (SDM)
- Resistors and Capacitors:**
 - Capacitor C1 (10uF) is connected between VCC_3V3 and GND.
 - Capacitor C2 (25V 20% X5R) is connected between VCC_3V3 and GND.
 - Resistor R402 (4.7k) is connected between VCC_3V3 and GND.



激光发射

升压电路



The schematic diagram illustrates the APD readout electronics, organized into several functional blocks:

- APD and Initial Amplification:** The APD (APD2) is biased by a 250V source (C107, 0.01uF, 250V) and a 100K resistor (R8). Its output is connected to the base of a BFR92P transistor (Q7). The base is also biased by a 3.3V source (C108, 0.1uF, 3.3V) through a 47K resistor (R82). The emitter of Q7 is connected to ground through a 10K resistor (R80).
- Signal Processing and Buffering:** The collector of Q7 is connected to the non-inverting input of an op-amp (U12, SGM8052). The op-amp is configured as a voltage follower with its output (OUTA) connected to the inverting input. The op-amp is powered by a 5V supply (C140, 220pF, 5V) and a 10K resistor (R102) to ground. The output of the op-amp (OUTA) is connected to the input of a second BFR92P transistor (Q8) through a 3.3K resistor (R82). The emitter of Q8 is connected to ground through a 100K resistor (R81).
- ADC and Digital Output:** The output of Q8 is connected to the input of an ADC (U13, MS8257N). The ADC is powered by a 3.3V supply (C130, 100nF, 3.3V) and a 20K resistor (R108) to ground. The ADC's output (OUT) is connected to the input of a digital output buffer (U14, 74VHC125) through a 100pF capacitor (C131). The output of the buffer (OUT) is connected to the input of a digital output buffer (U15, 74VHC125) through a 100pF capacitor (C132). The output of the final buffer (OUT) is connected to the input of a digital output buffer (U16, 74VHC125) through a 100pF capacitor (C133).
- Power and Grounding:** The circuit is powered by a 5V supply (C140, 220pF, 5V) and a 10K resistor (R102) to ground. The ground plane is labeled GND. Various components are labeled with their values and footprints, such as 0603 X5R for capacitors and 100K for resistors.

