

FMC HDMI CAM HKADS-15-02-HW-0100	
Avnet Design Services	
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FMC HDMI CAM

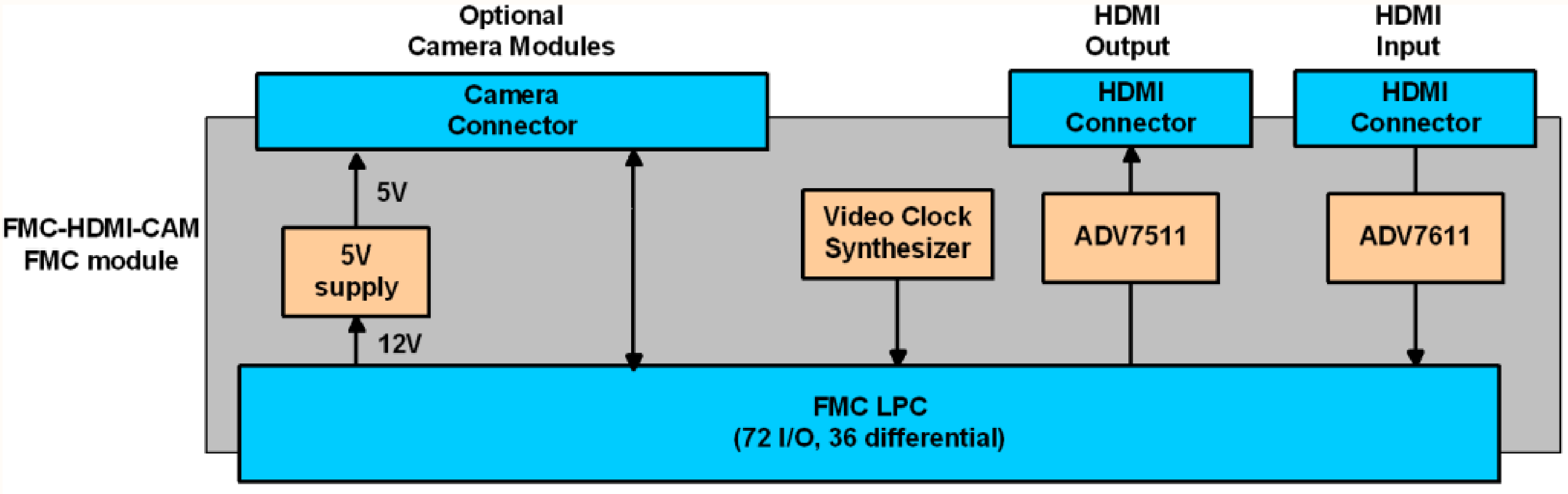
11 May 15

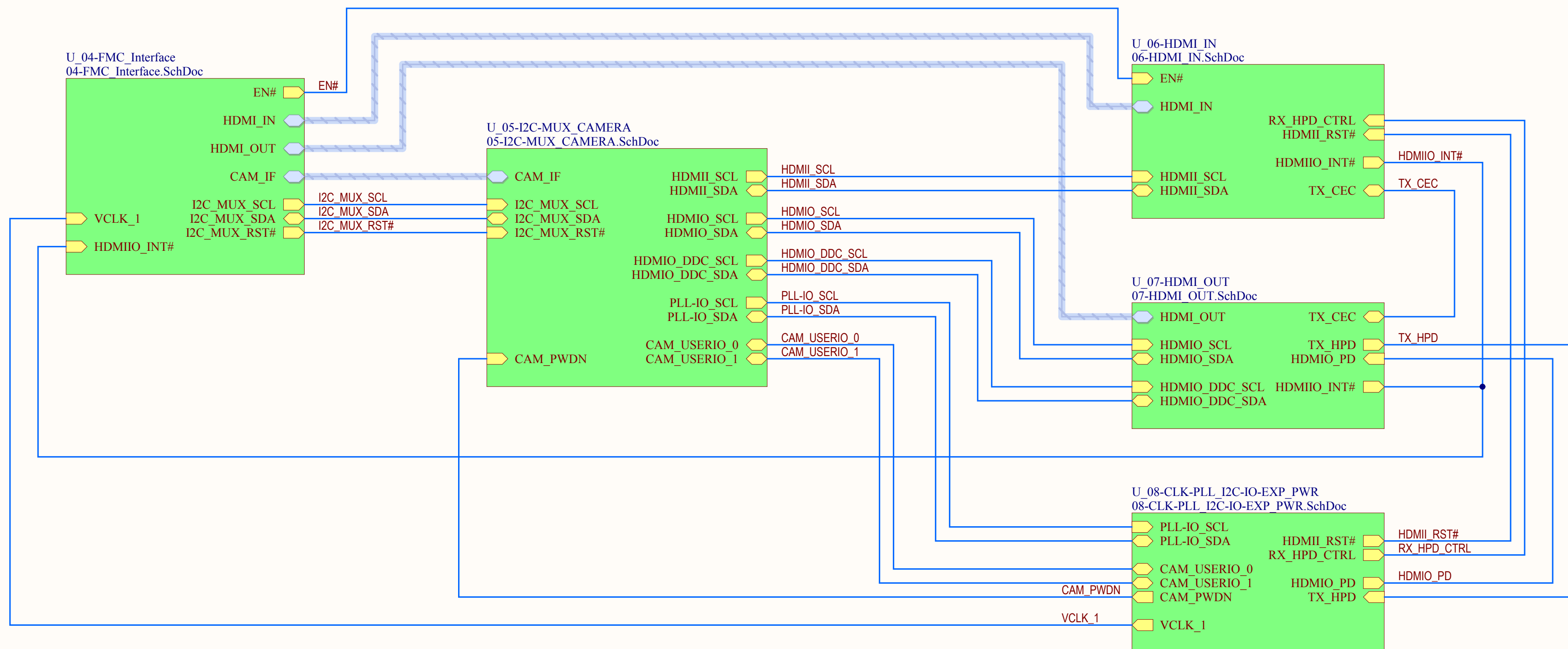
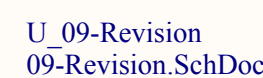
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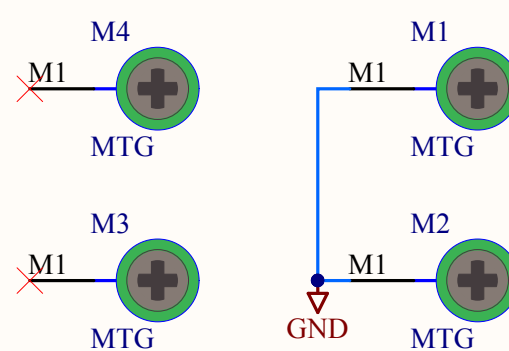
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Title: Sheet 01 - Lead Sheet		
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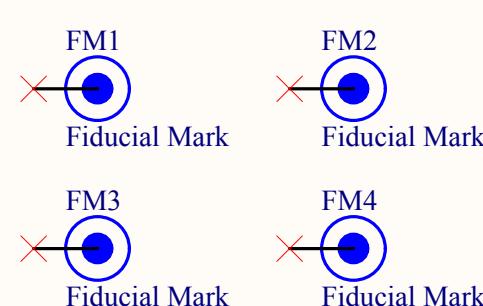




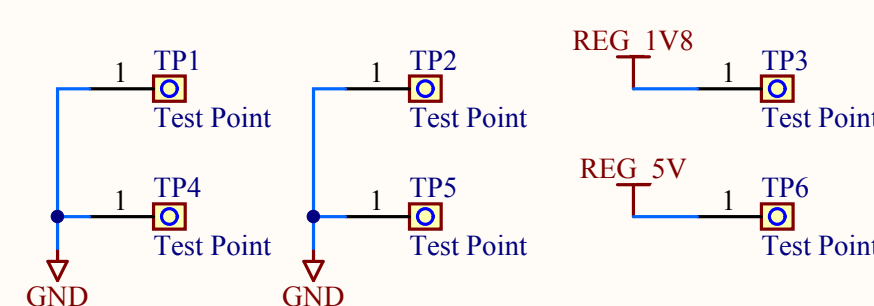
FMC Board Mounting Holes



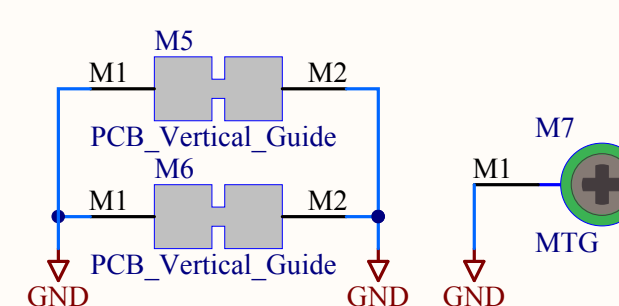
Fiducial Marks



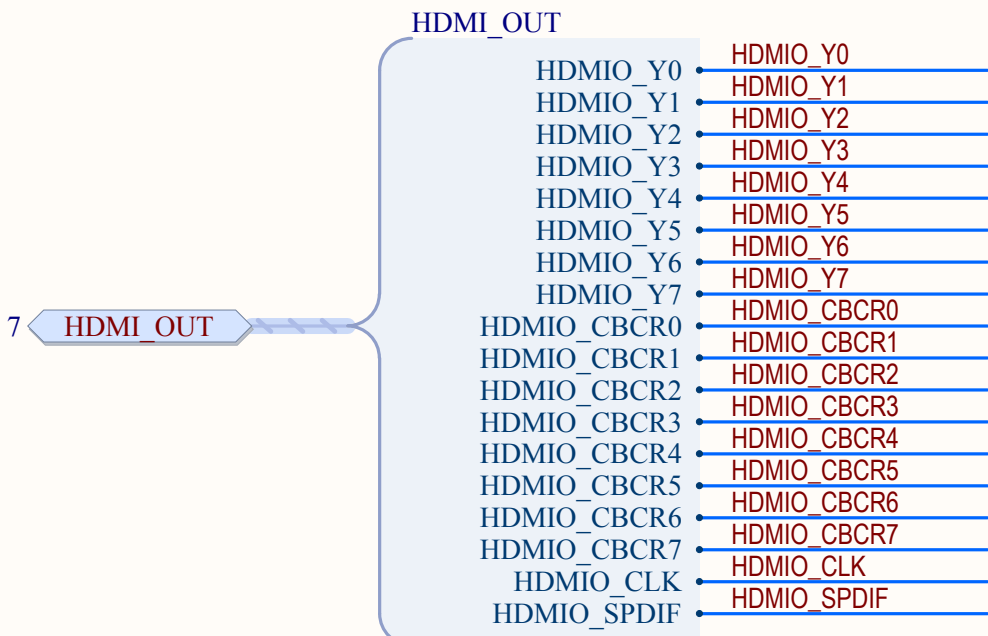
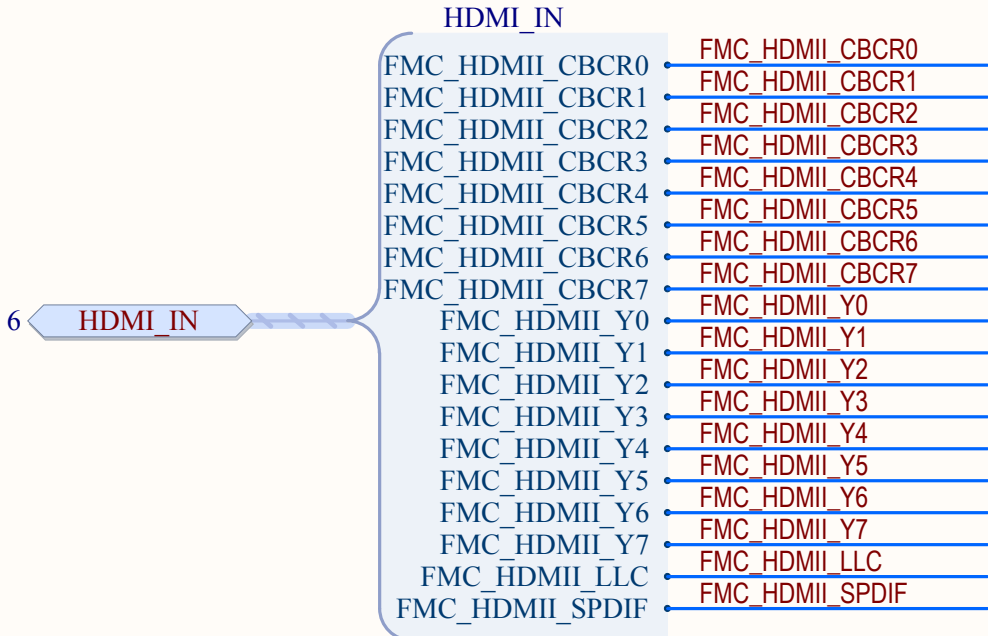
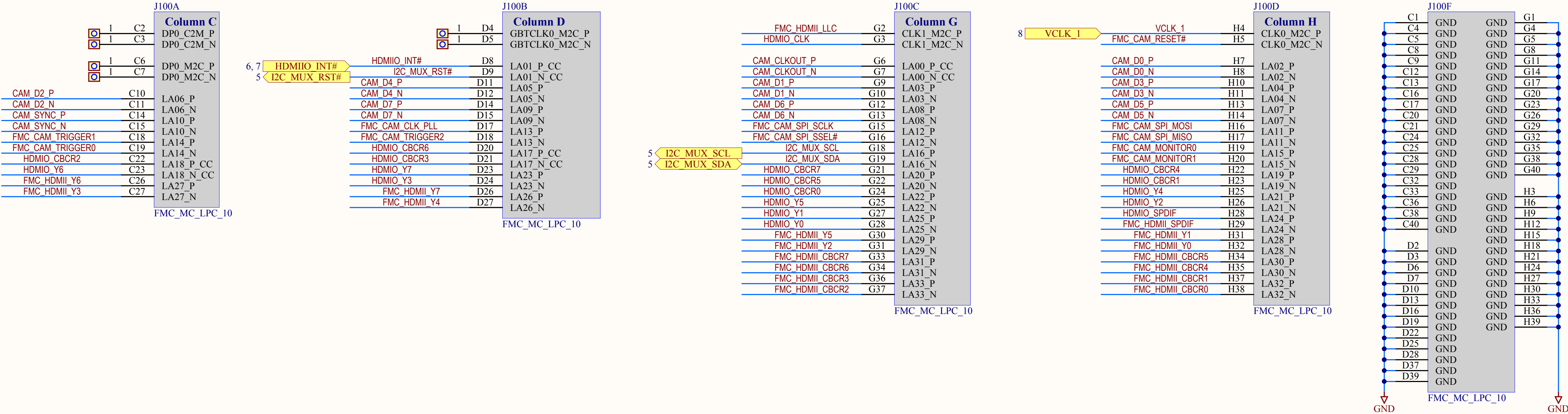
Test Points



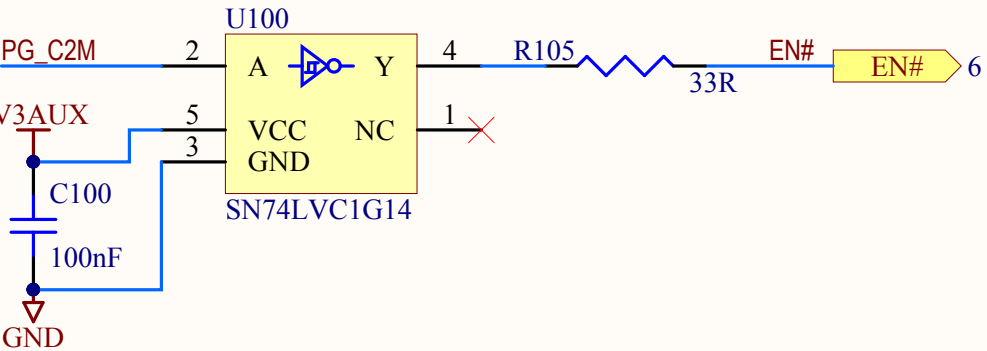
Camera Module PCB Guide



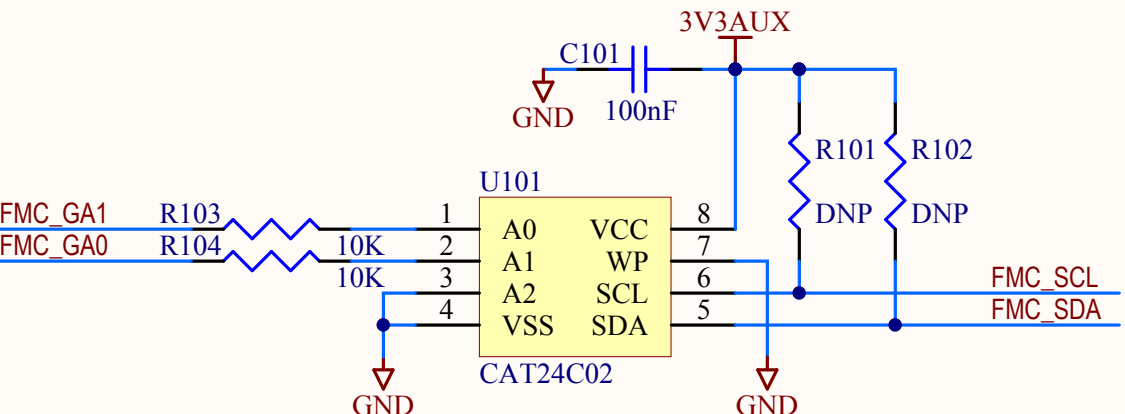
FMC LPC Interface



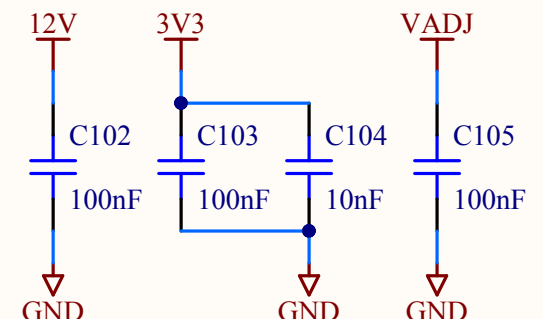
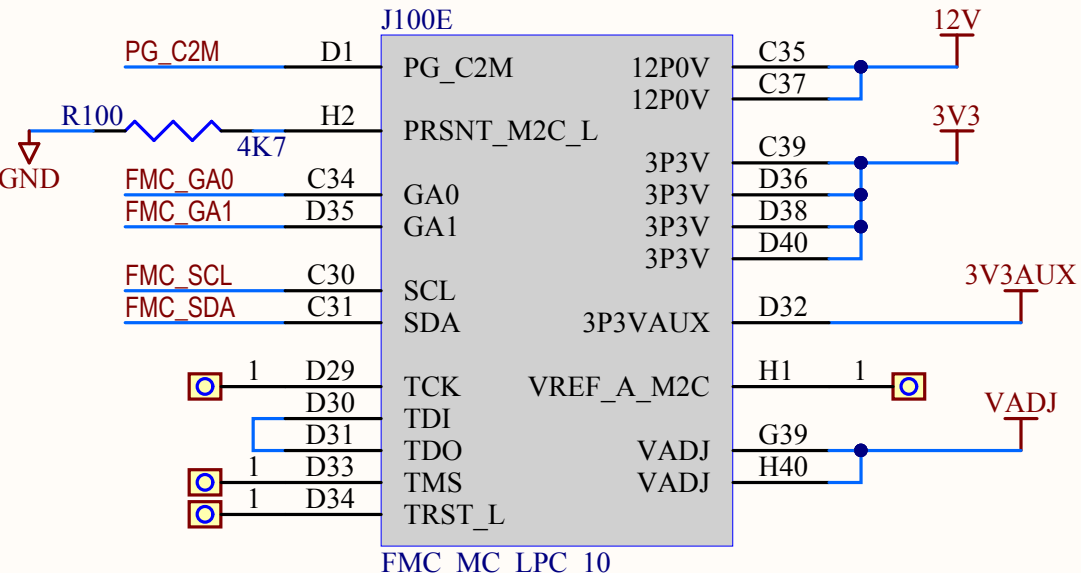
Voltage Translators Enable Control



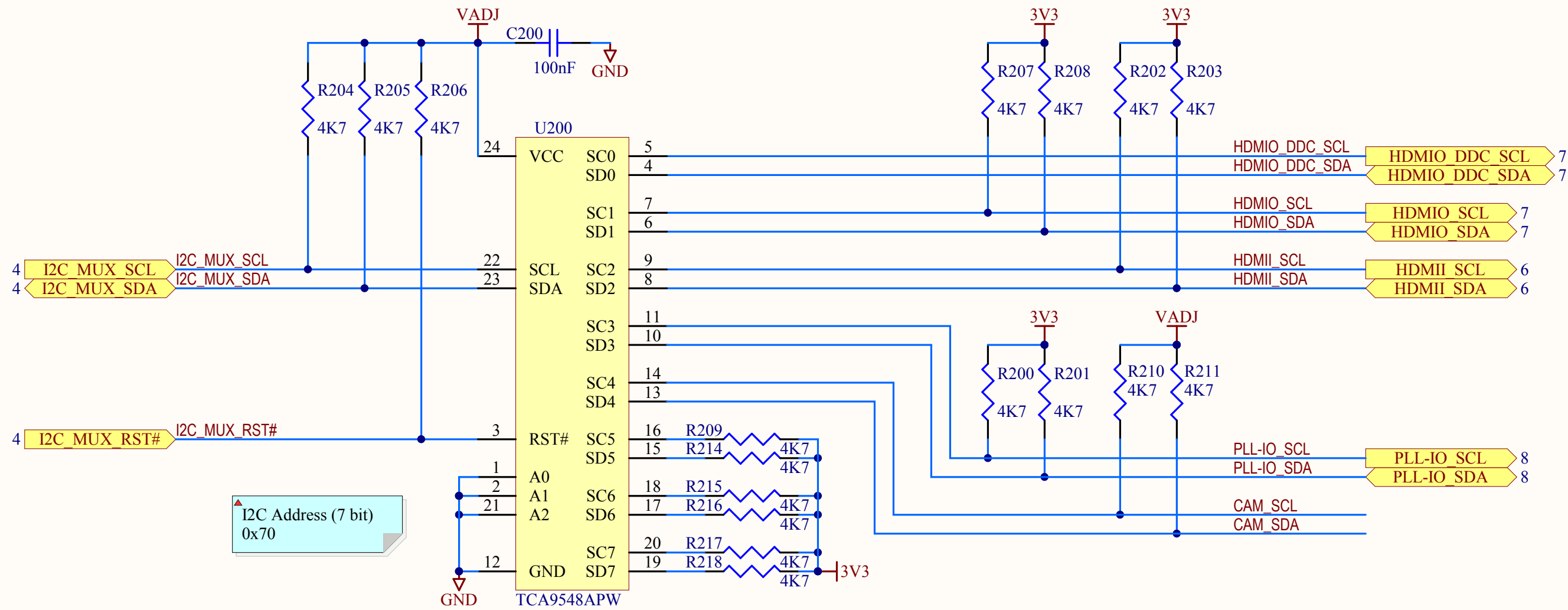
FMC IPMI EEPROM



GA[0:1]	FMC-HDMI-CAM I2C Address (7 bit)
00	0x50
01	0x51
10	0x52
11	0x53

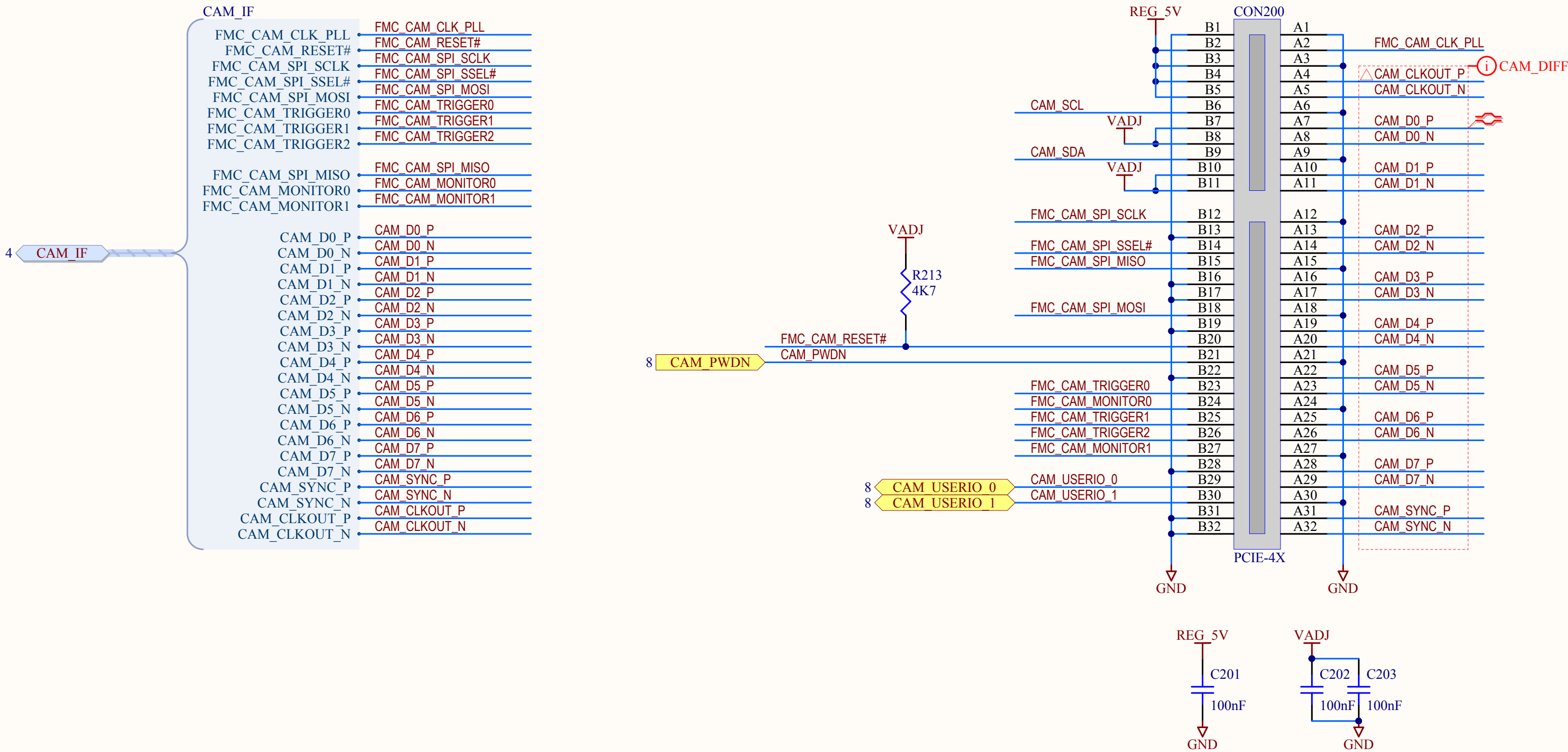


I2C Expansion

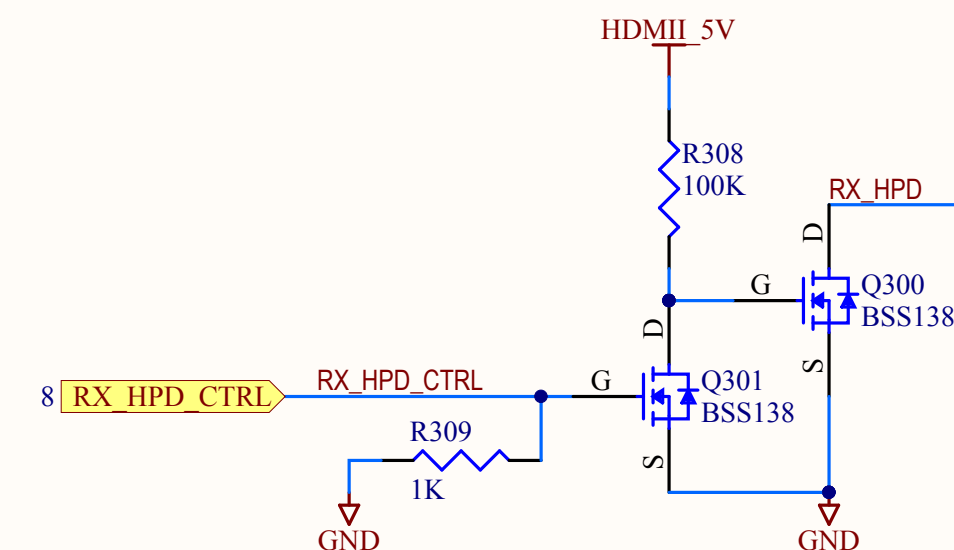
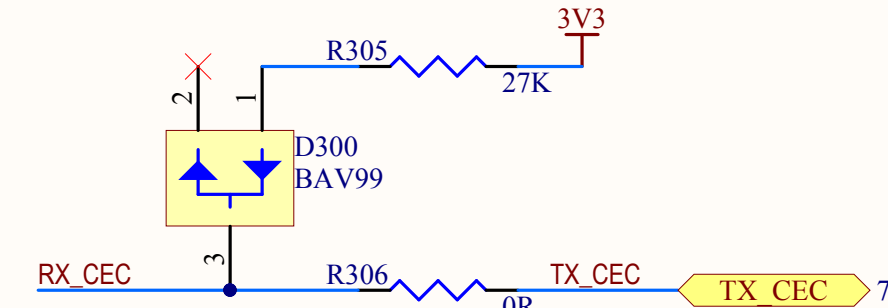
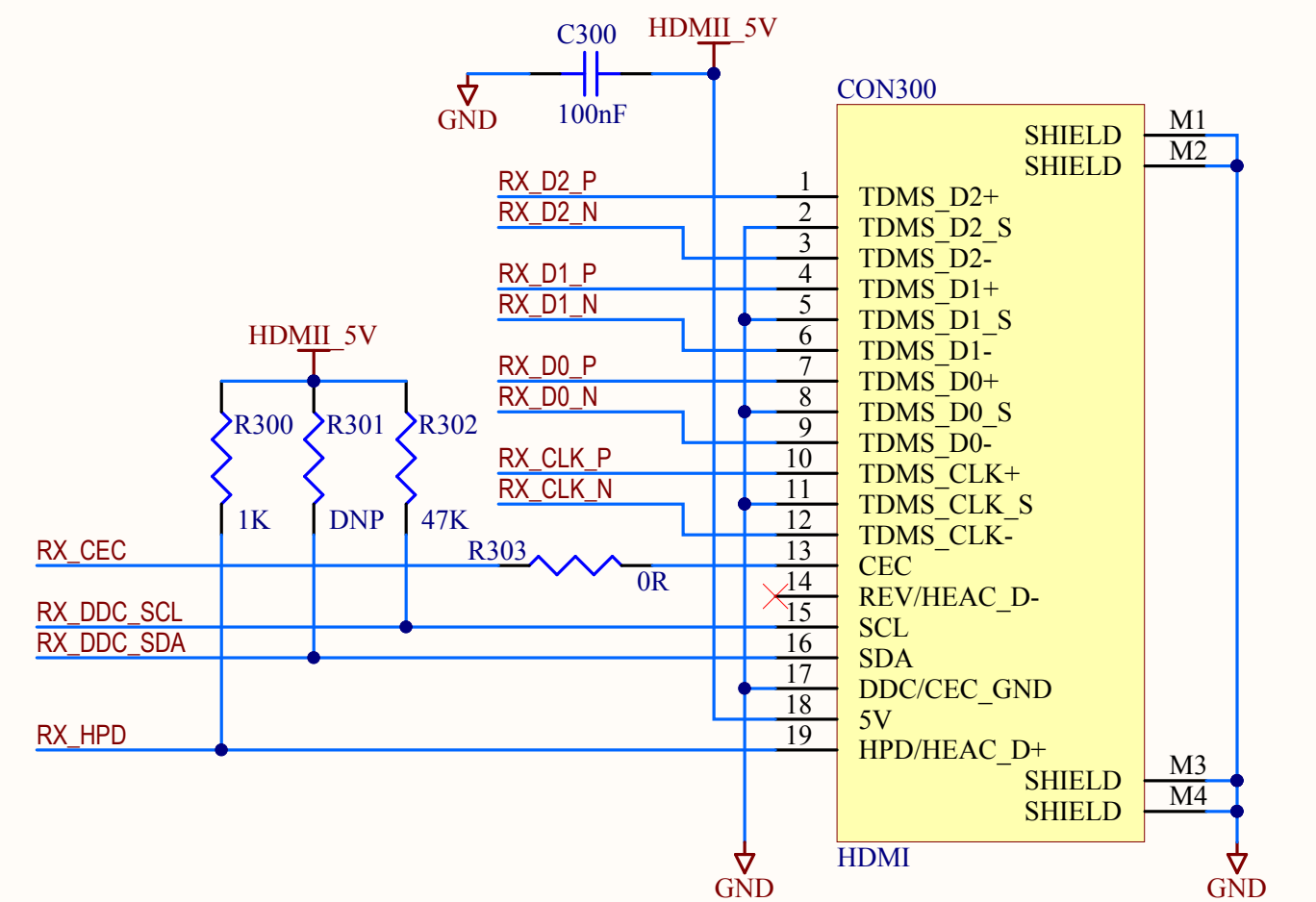
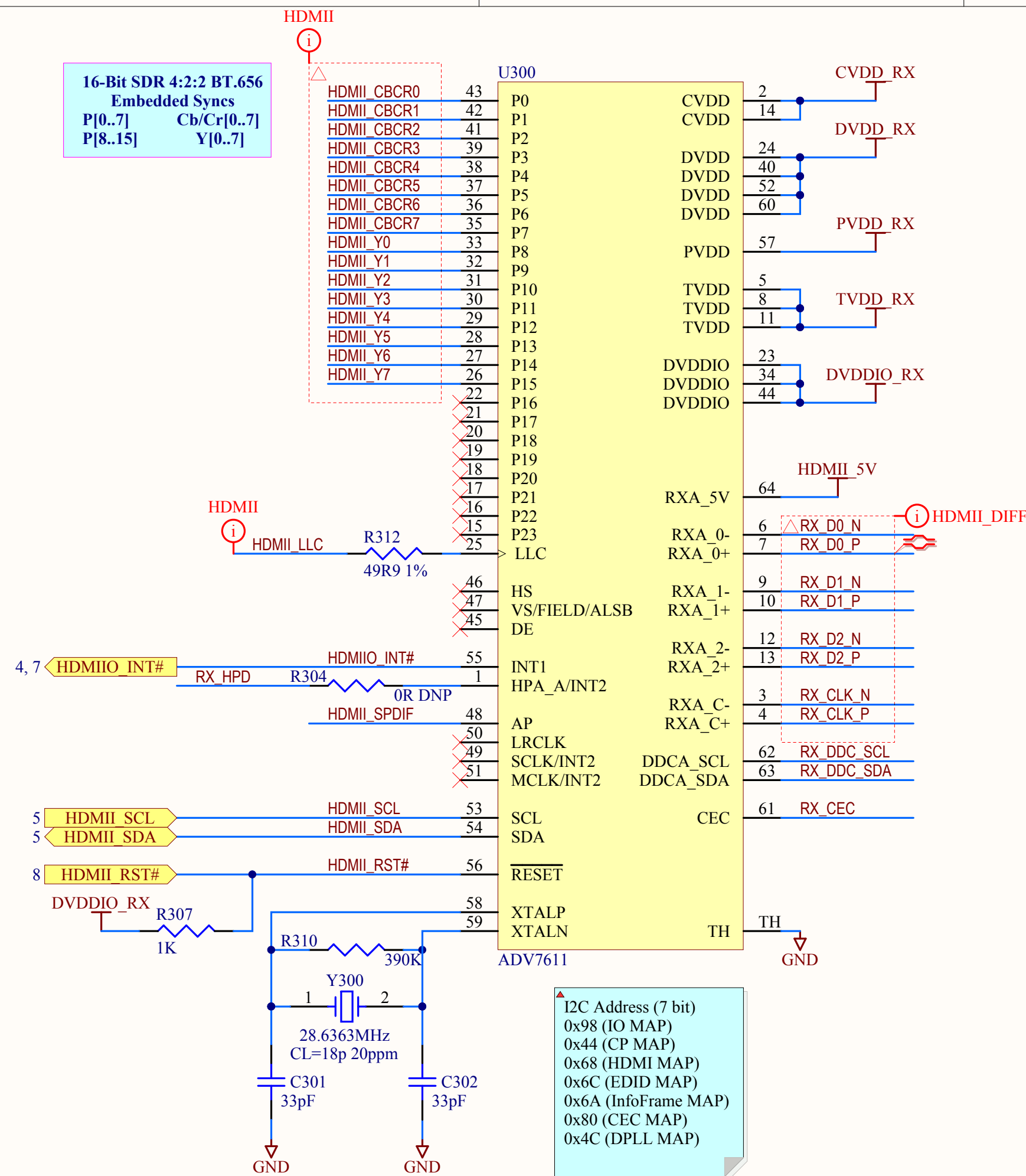
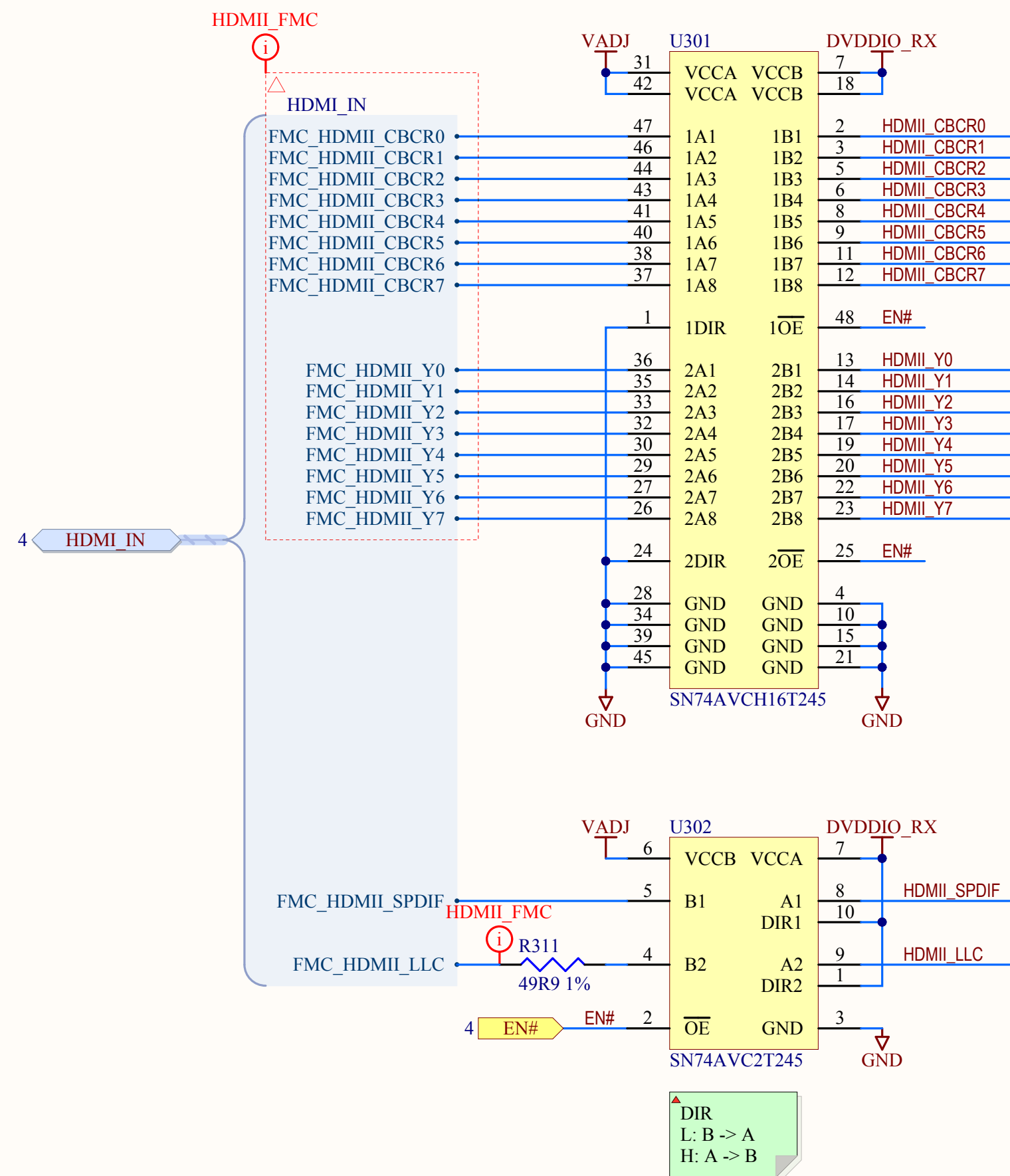


Channel	Device	I2C Address (7 Bit)
0	HDMI Output DDC	0x50
1	ADV7511: HDMI Output	0x72
2	ADV7611: HDMI Input	0x98
3	CDC9E13: Video Clock Synth PCA9555: I2C I/O Expander	0x65 0x20
4	Camera Module	
5~7	Not in use	

Camera Interface

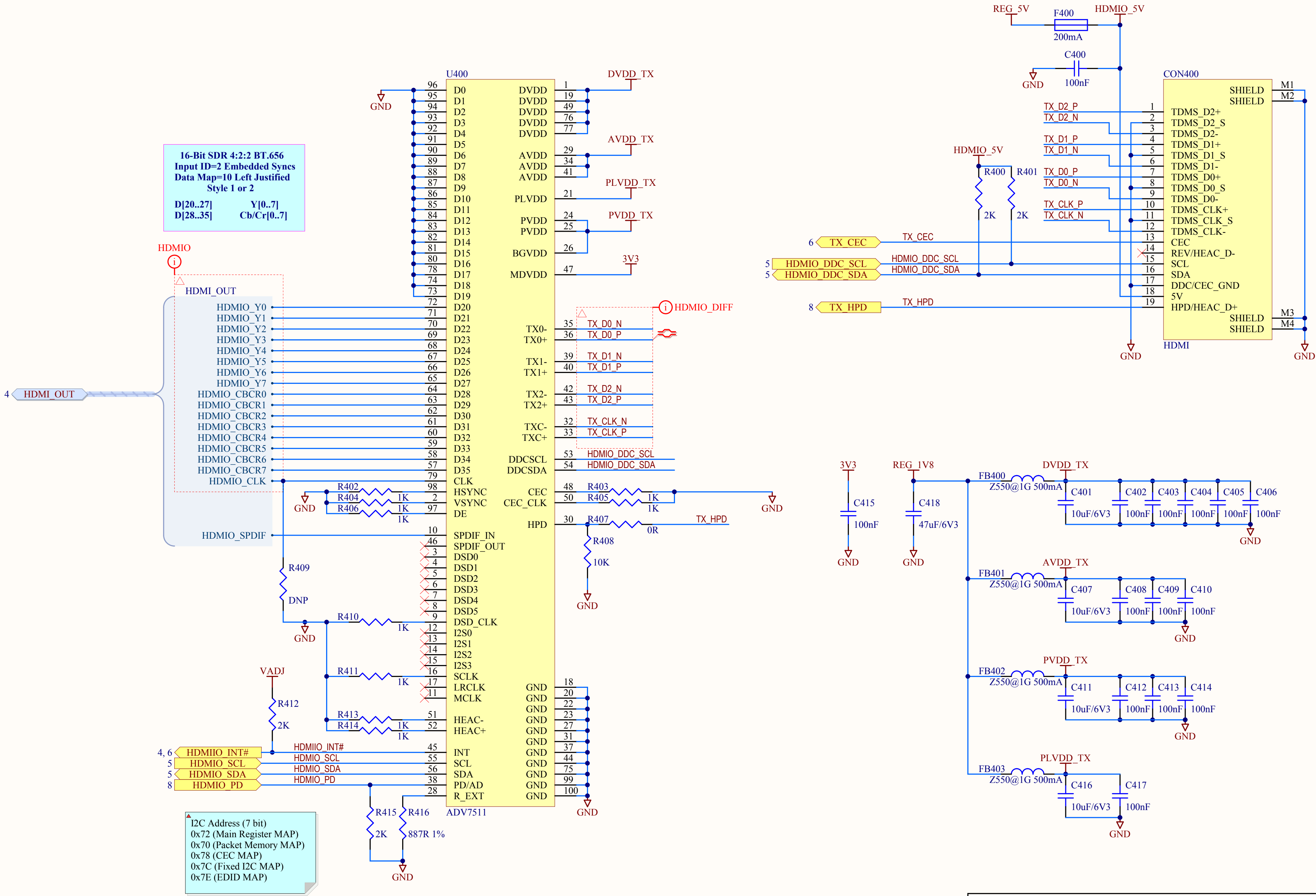


HDMI IN

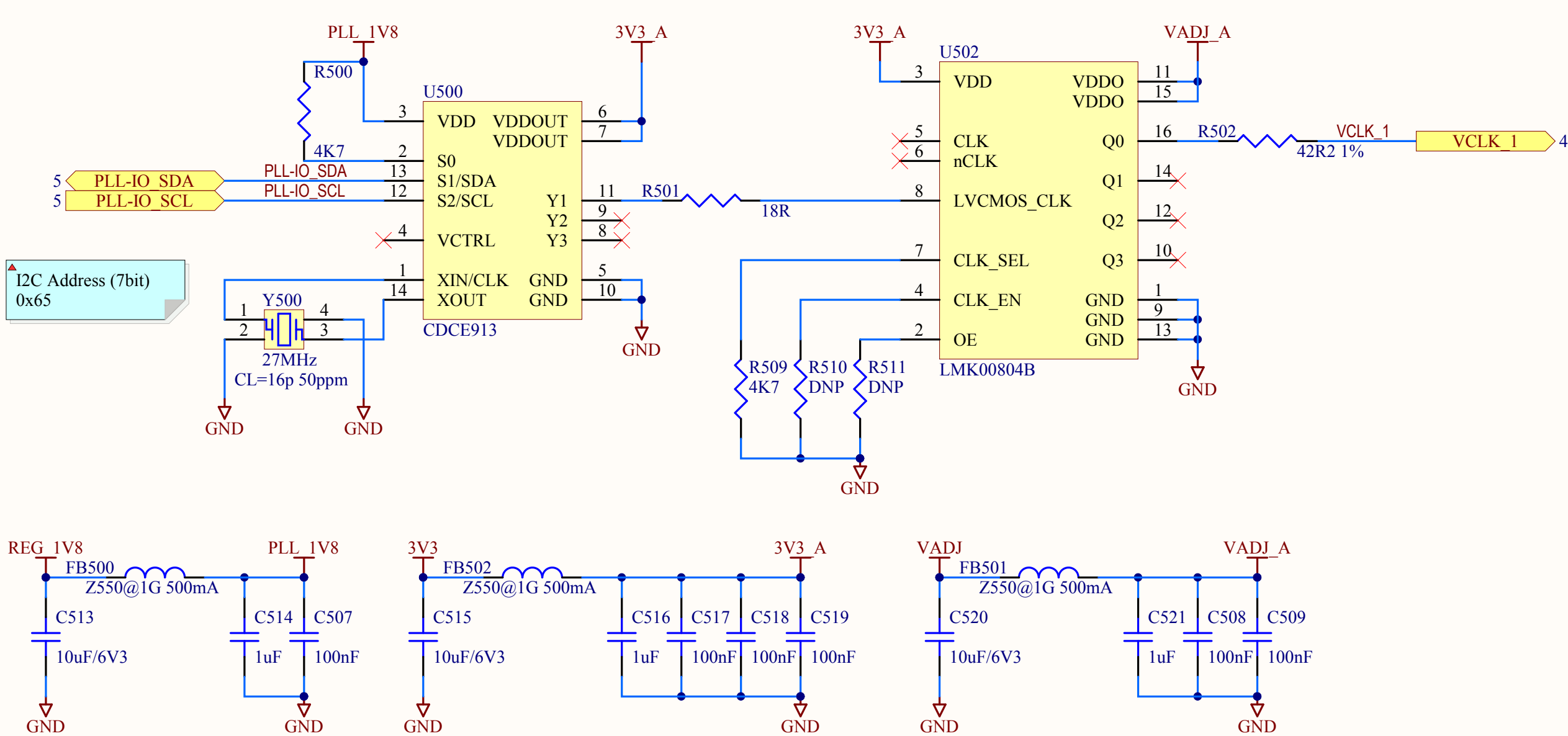


- Use ADV7611 internal EDID.
- Prevent EDID read when insert HDMI cable with this board in power off stage or not yet init ADV7611.
- FPGA fully control the Hot Plug assert

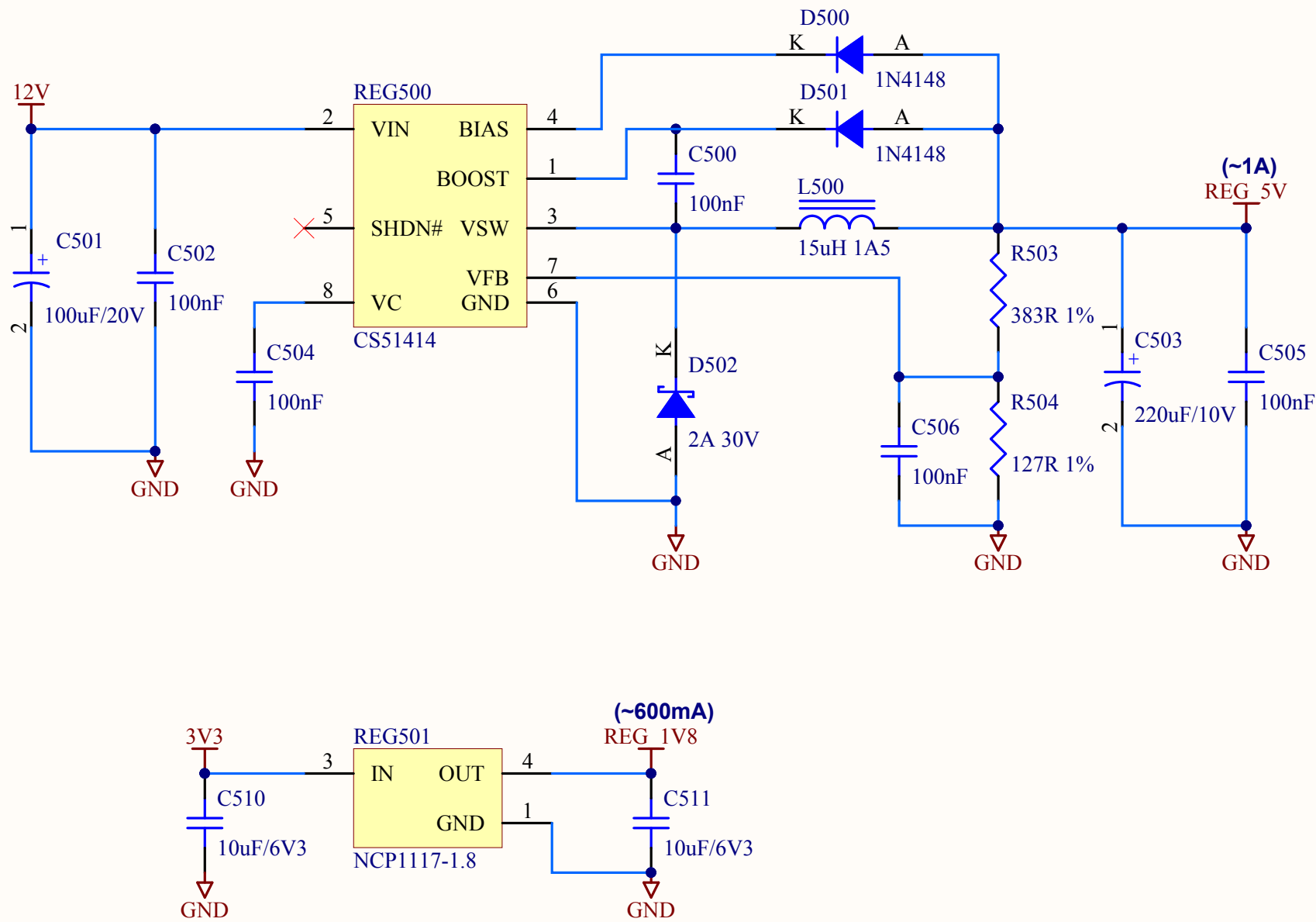
HDMI OUT



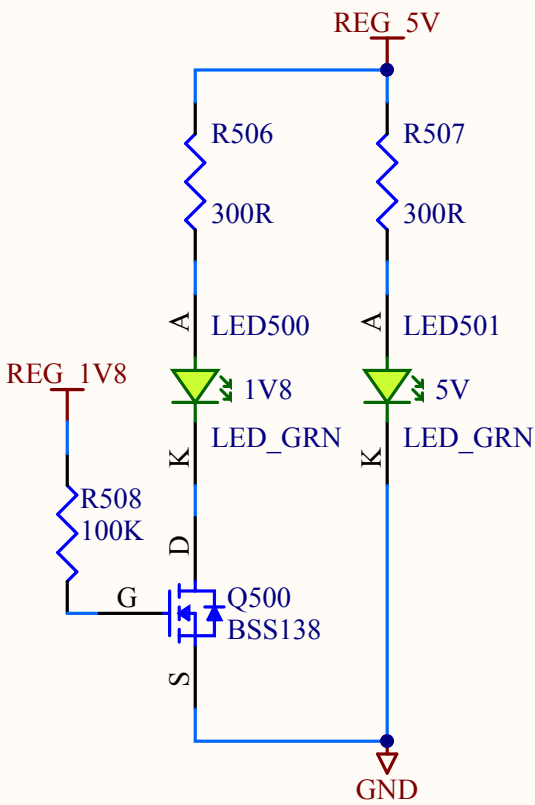
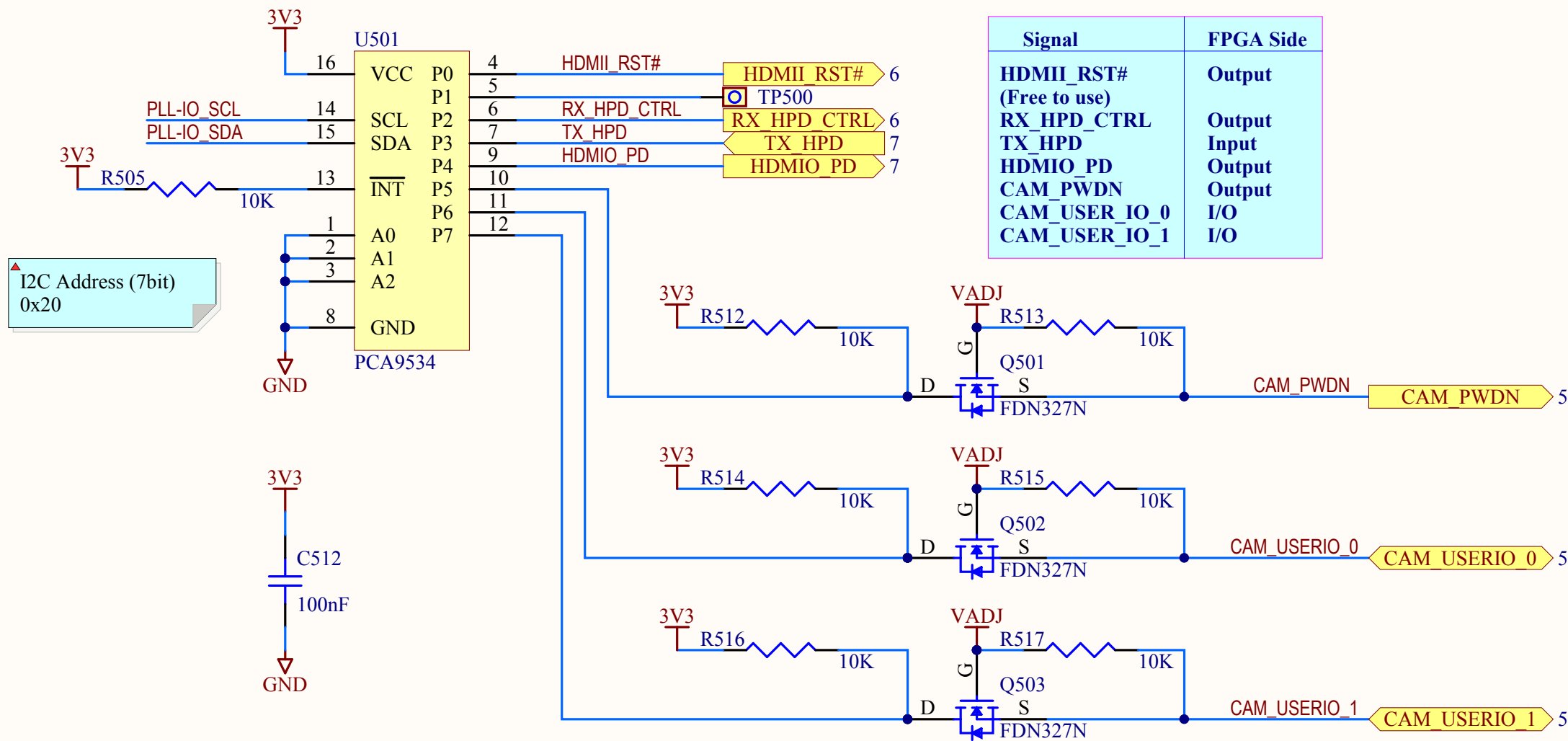
VIDEO CLOCK SYNTHESIZER



POWER



I2C I/O EXPANDER



	1	2	3	4	5	6
A	Revision / History V0: Draft version for internal review V0A: Remove duplicate pull up R212 Revise pin assignment on FMC for Camera I/F V0B: Add R311 series resistor for clock Revise I2C address mark V0C: Add R312 series resistor for clock V1: Mated with PCB V1					A
B						B
C						C
D						D
	1	2	3	4	5	6

 Avnet Engineering Services		
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