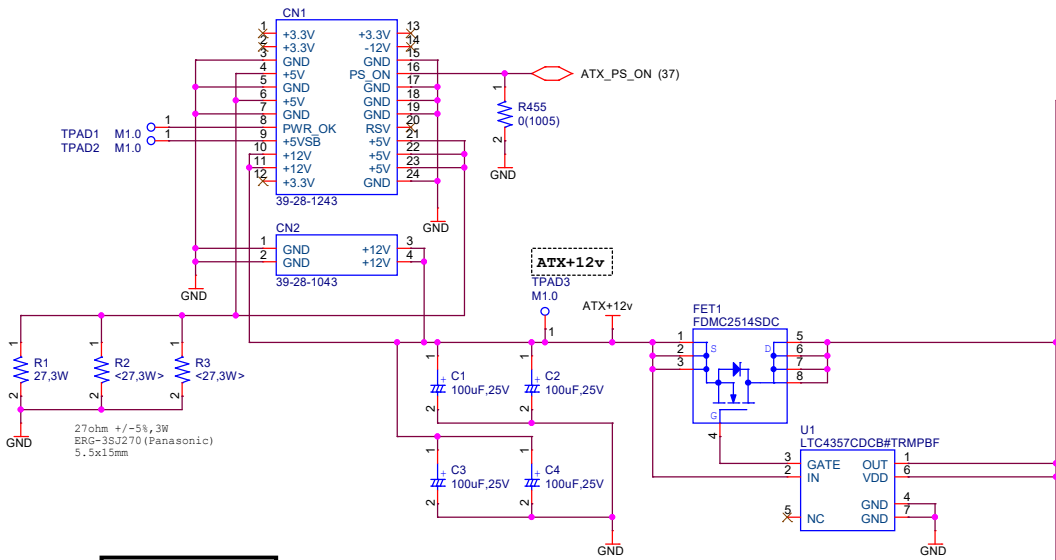


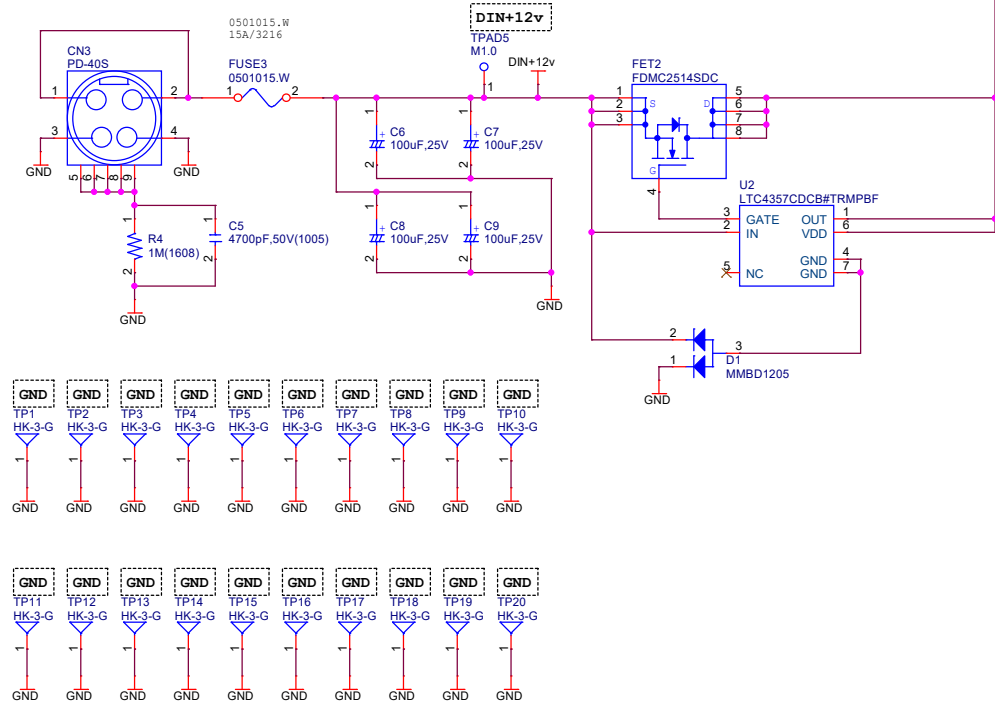
ATX POWER



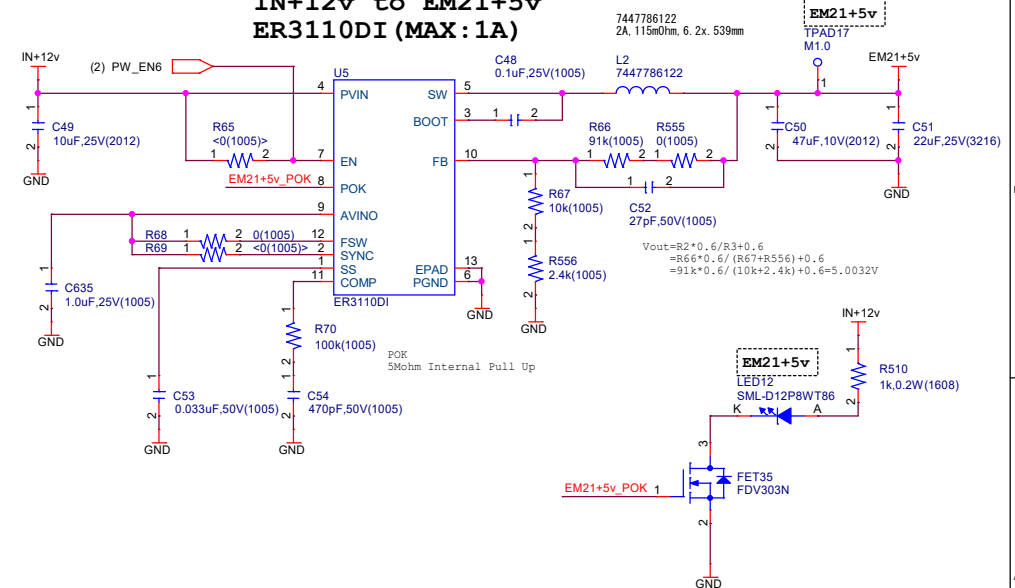
POWER SW ON-OFF

1-2: OFF
2-3: ON

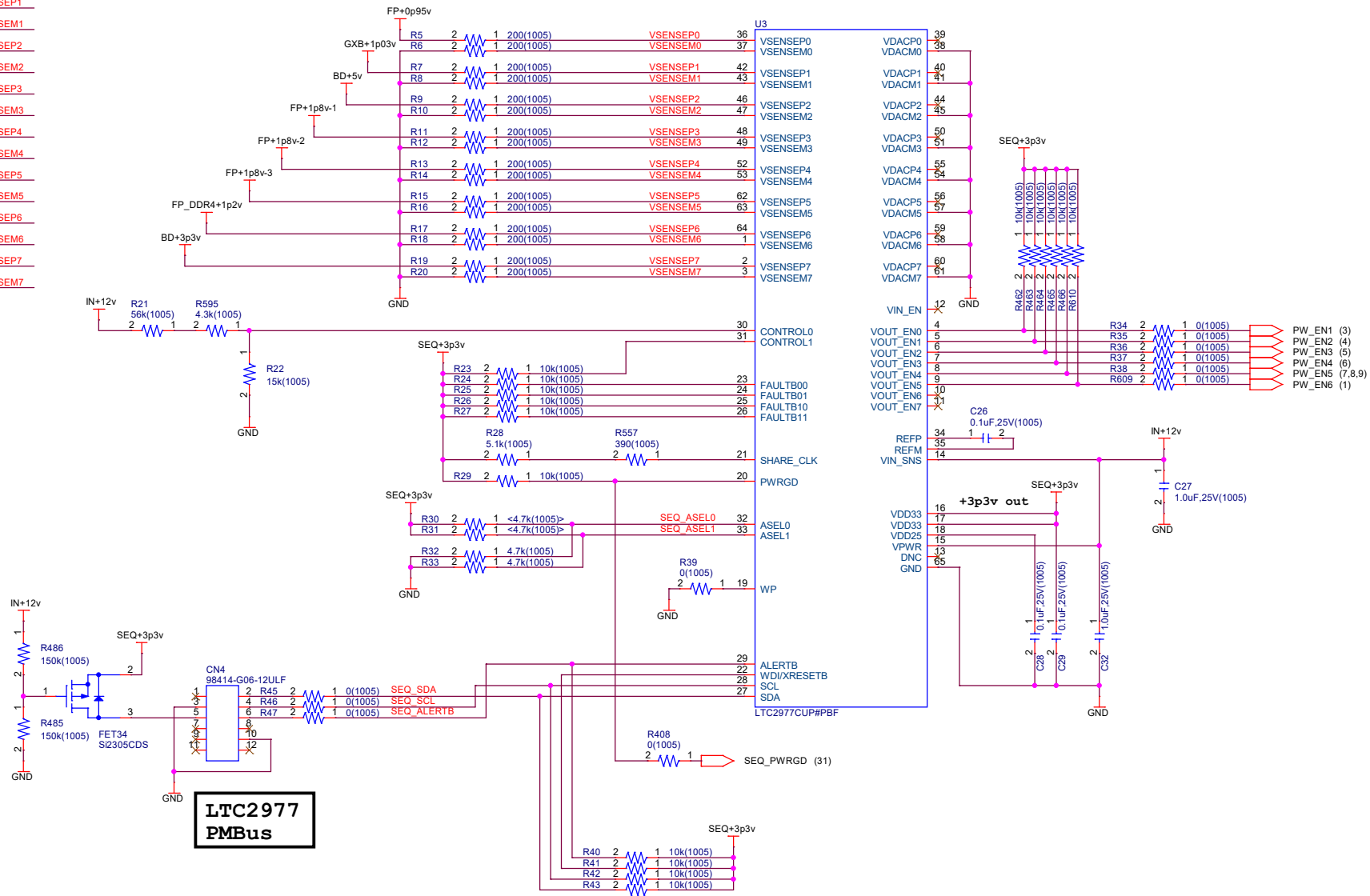
DIN POWER

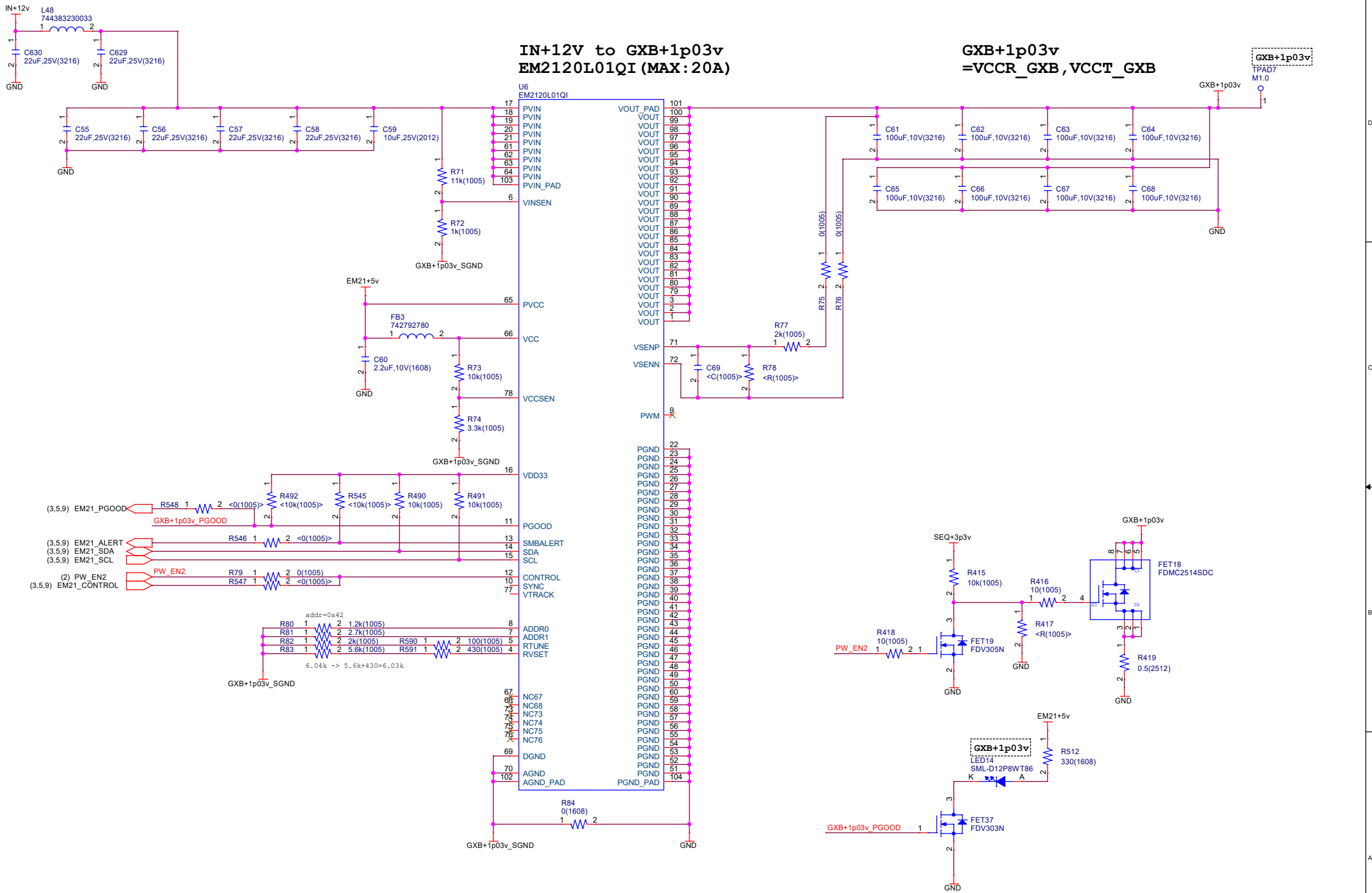


IN+12v to EM21+5v ER3110DI (MAX:1A)

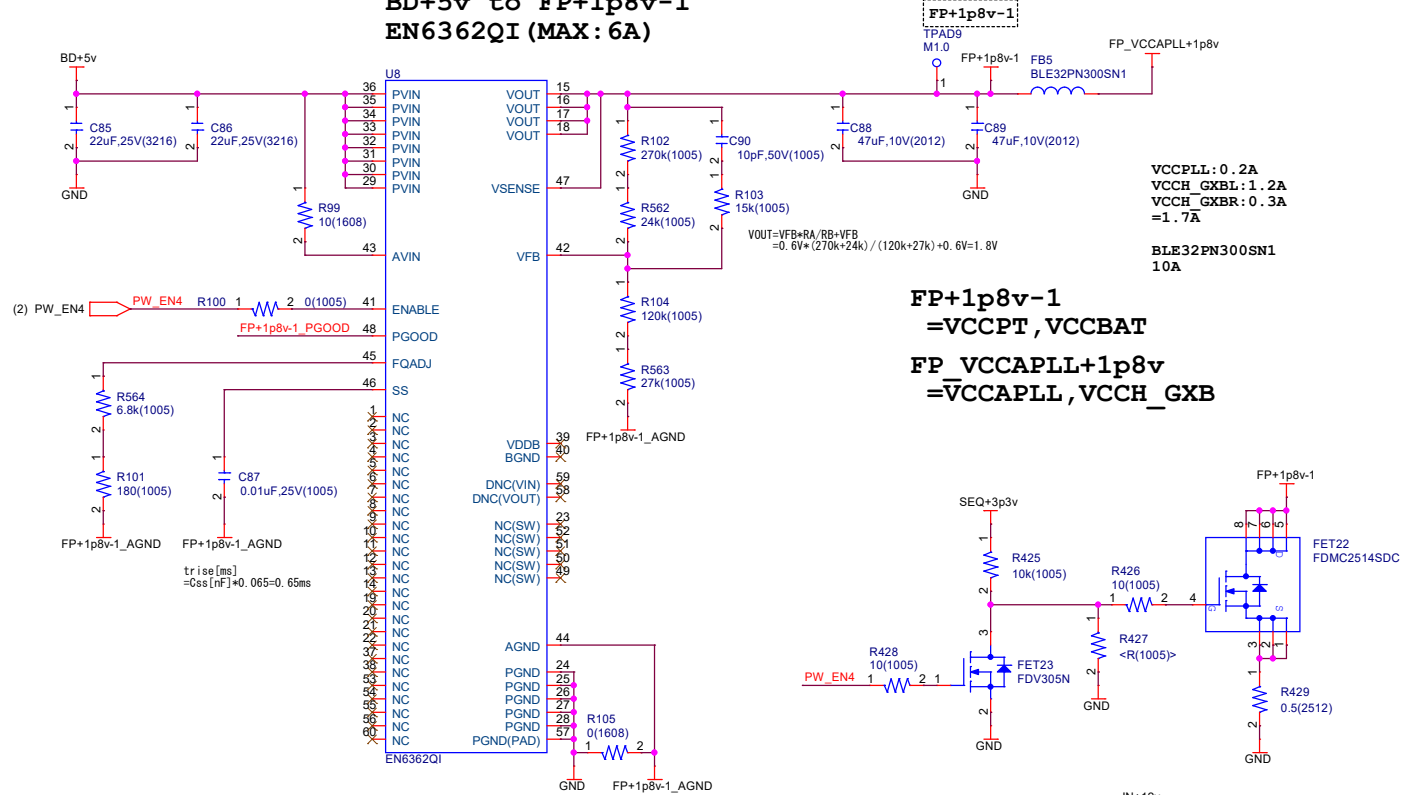


C10 0.1uF,25V(1005)
 2 1 VSENSEP0
 C11 0.1uF,25V(1005)
 2 1 VSENSEM0
 C12 0.1uF,25V(1005)
 2 1 VSENSEP1
 C13 0.1uF,25V(1005)
 2 1 VSENSEM1
 C14 0.1uF,25V(1005)
 2 1 VSENSEP2
 C15 0.1uF,25V(1005)
 2 1 VSENSEM2
 C16 0.1uF,25V(1005)
 2 1 VSENSEP3
 C17 0.1uF,25V(1005)
 2 1 VSENSEM3
 C18 0.1uF,25V(1005)
 2 1 VSENSEP4
 C19 0.1uF,25V(1005)
 2 1 VSENSEM4
 C20 0.1uF,25V(1005)
 2 1 VSENSEP5
 C21 0.1uF,25V(1005)
 2 1 VSENSEM5
 C22 0.1uF,25V(1005)
 2 1 VSENSEP6
 C23 0.1uF,25V(1005)
 2 1 VSENSEM6
 C24 0.1uF,25V(1005)
 2 1 VSENSEP7
 C25 0.1uF,25V(1005)
 2 1 VSENSEM7





BD+5v to FP+1p8v-1
EN6362QI (MAX: 6A)

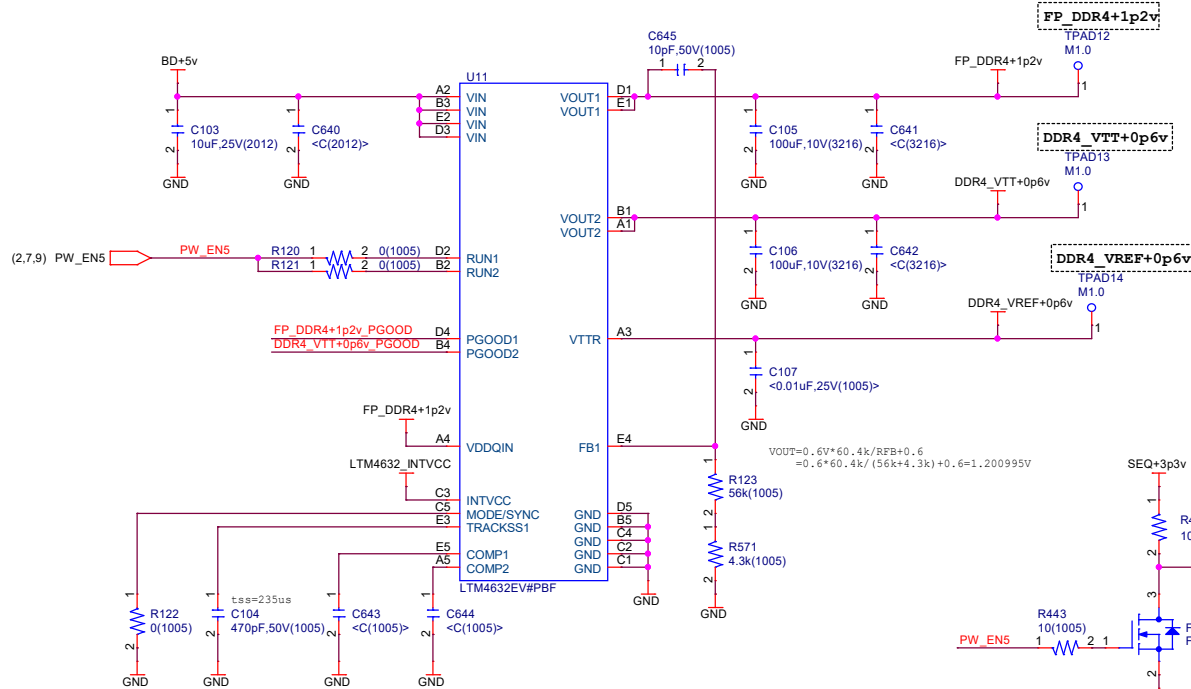


EN6362QI
PGOOD

This pin has an internal pull-up resistor to AVIN with a nominal value of 100k Ω .

Page		Power Supply FP+1.8V-1		
Title		Magnes		
Size	Document Number			Rev
A3	DATA_000381			B
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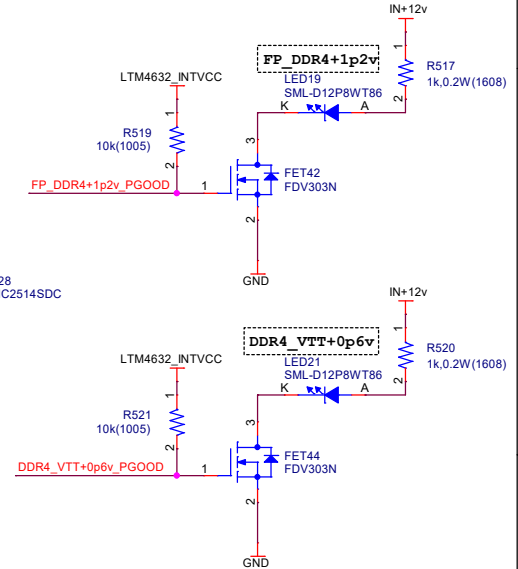
BD+5v to FP_DDR4+1p2v/DDR4_VTT+0p6v/DDR4_VREF+0p6v
LTM4632EV#PBF (MAX: 3Ax2, 10mA)



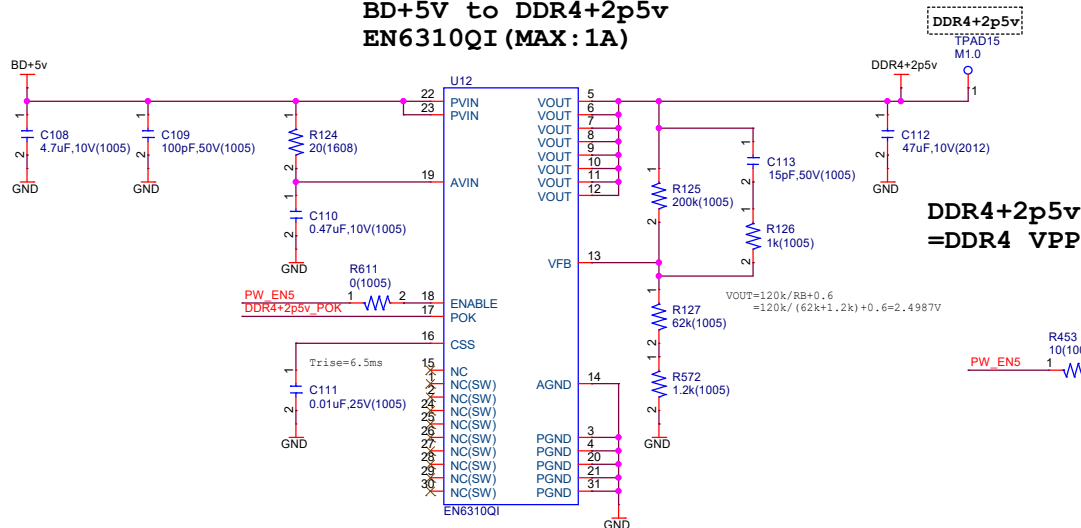
FP_DDR4+1p2v
=VCCIO (3C, 3D, 2L, 2K), DDR4x2x2

DDR4_VTT+0p6v
=DDR4_VTT

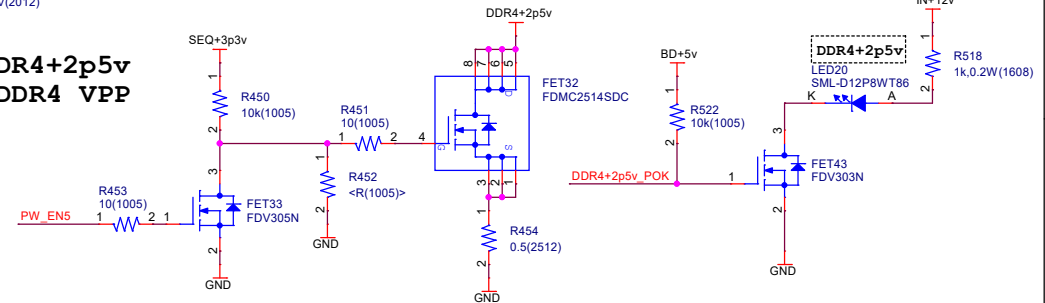
DDR4_VREF+0p6v
=DDR4_Vref

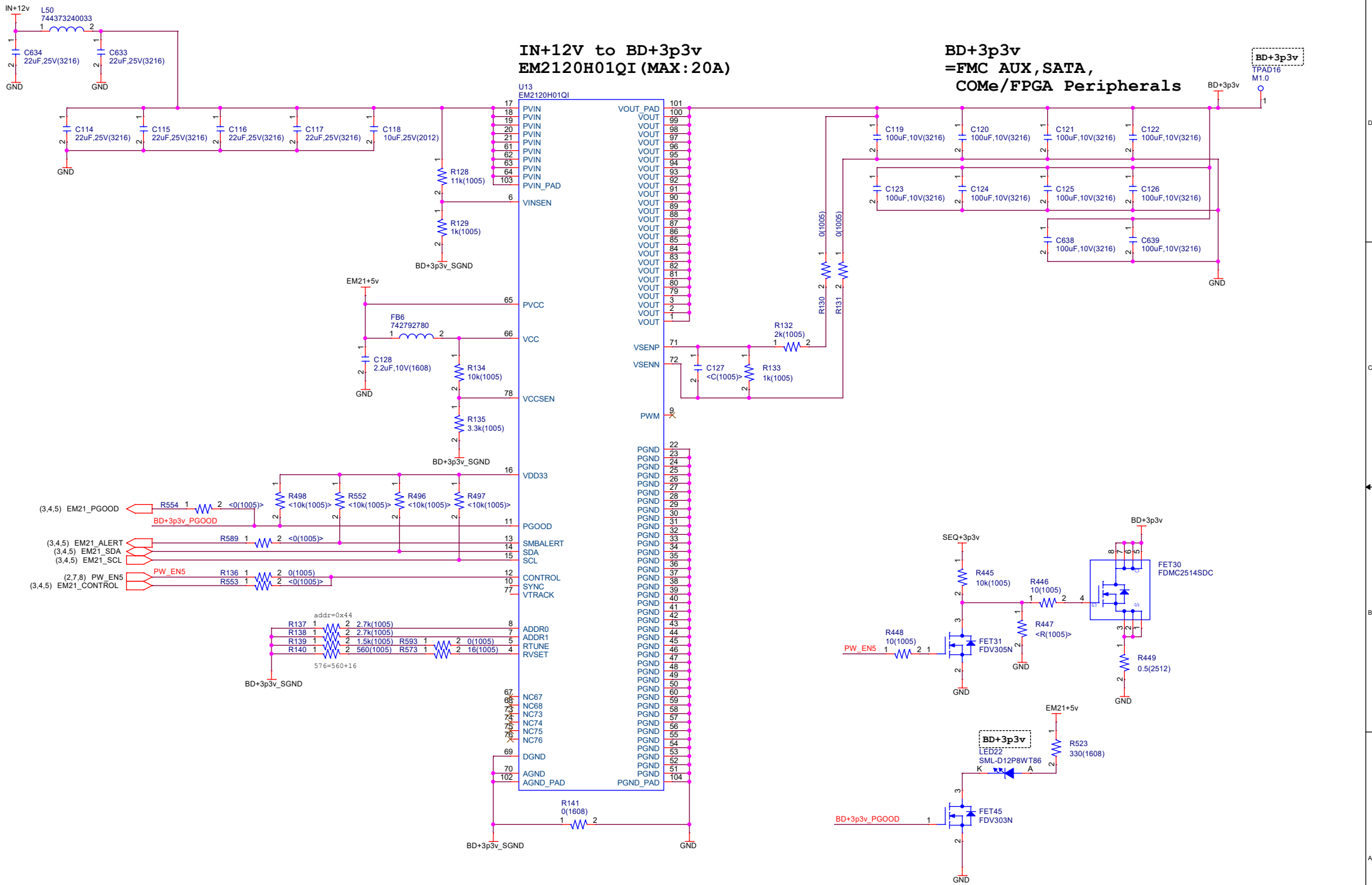


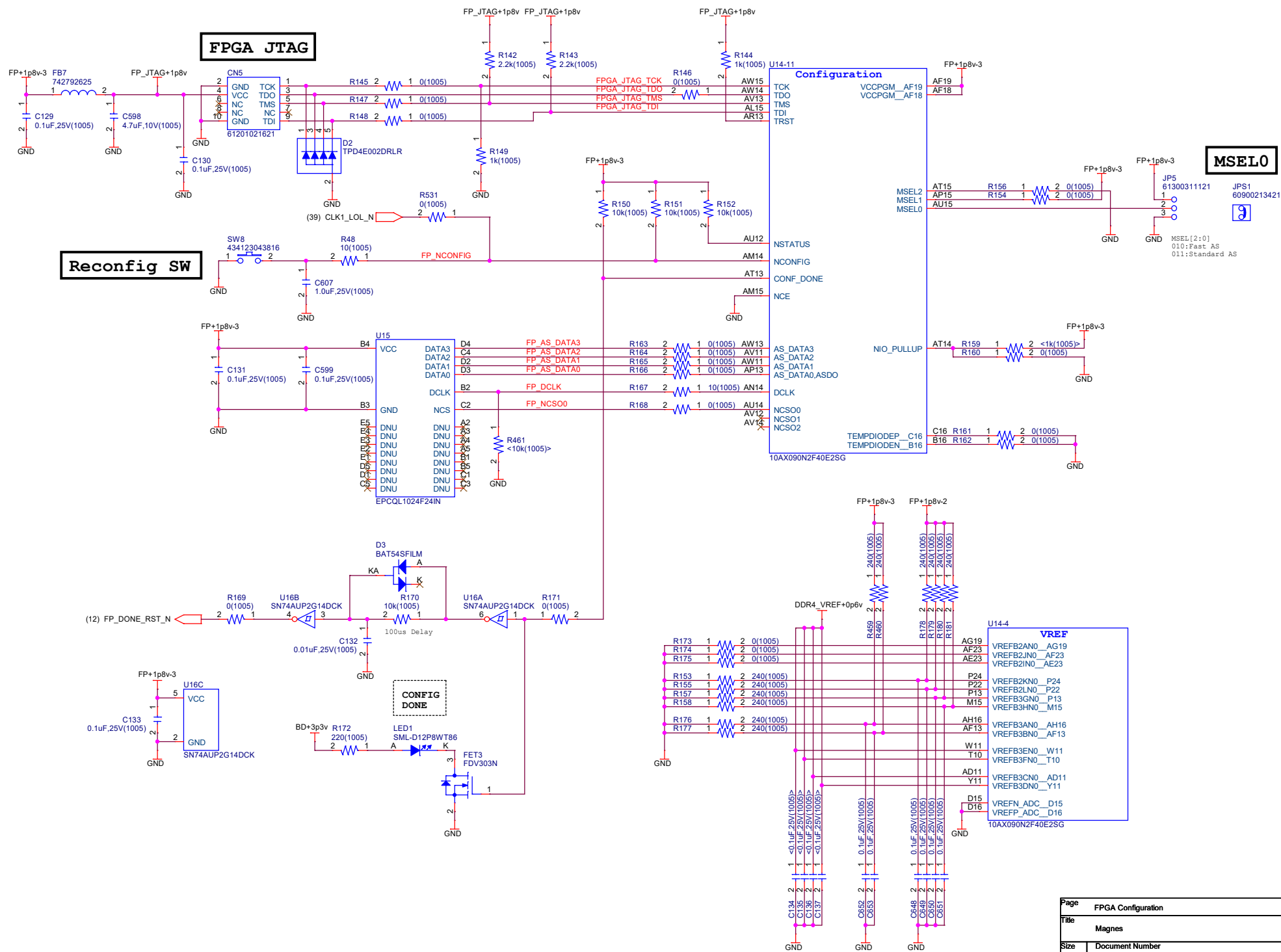
BD+5V to DDR4+2p5v
EN6310QI (MAX: 1A)

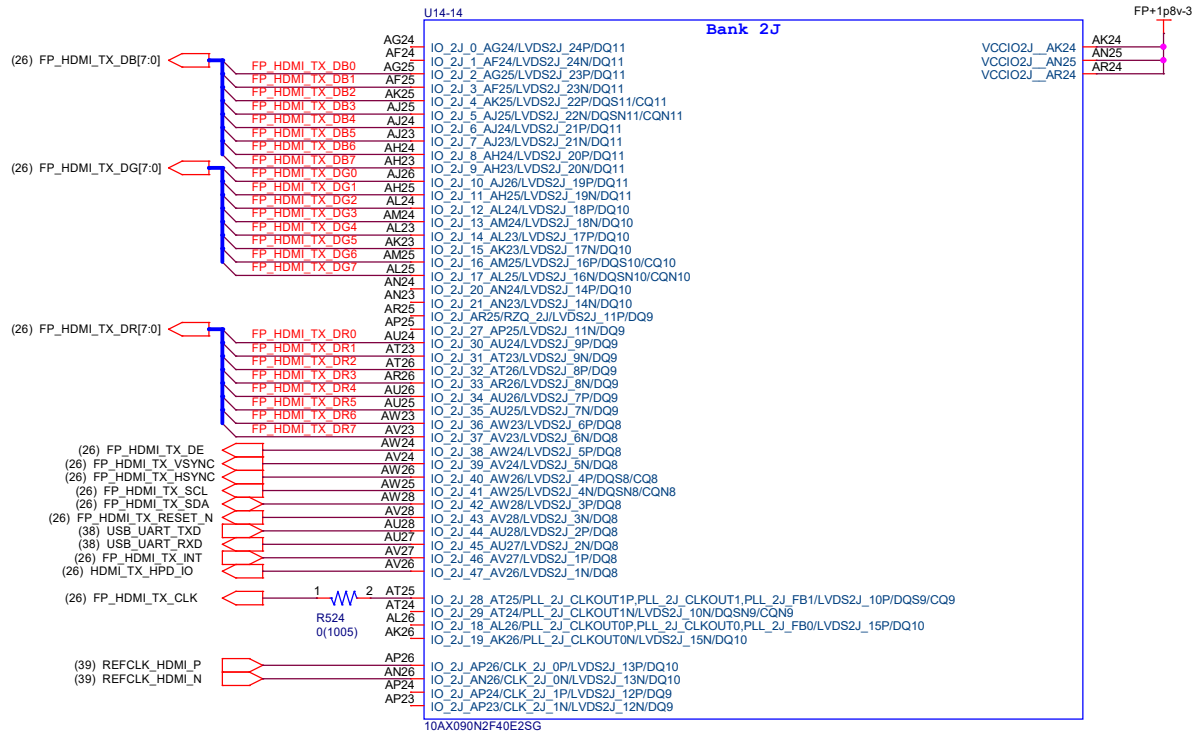


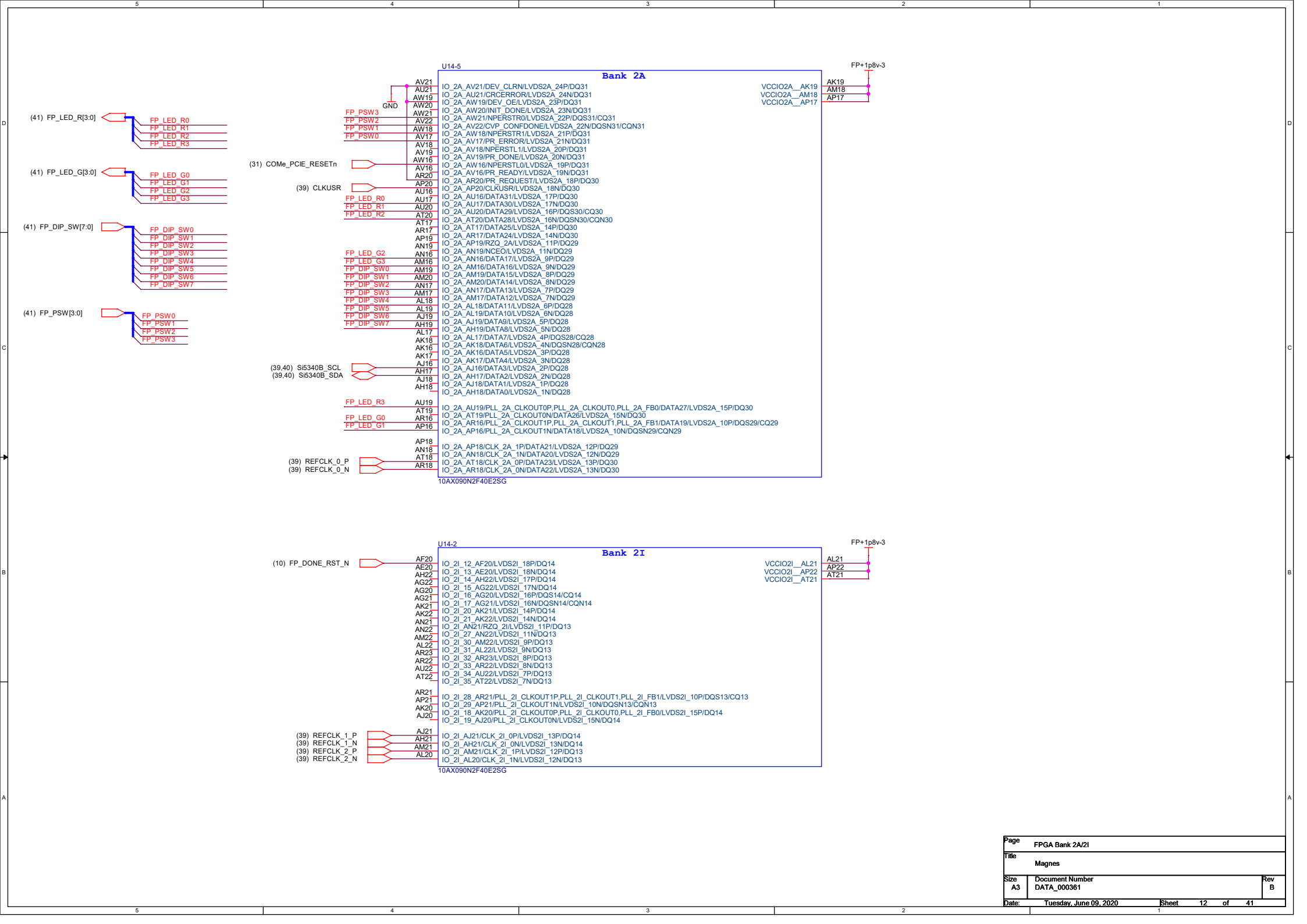
DDR4+2p5v
=DDR4_VPP

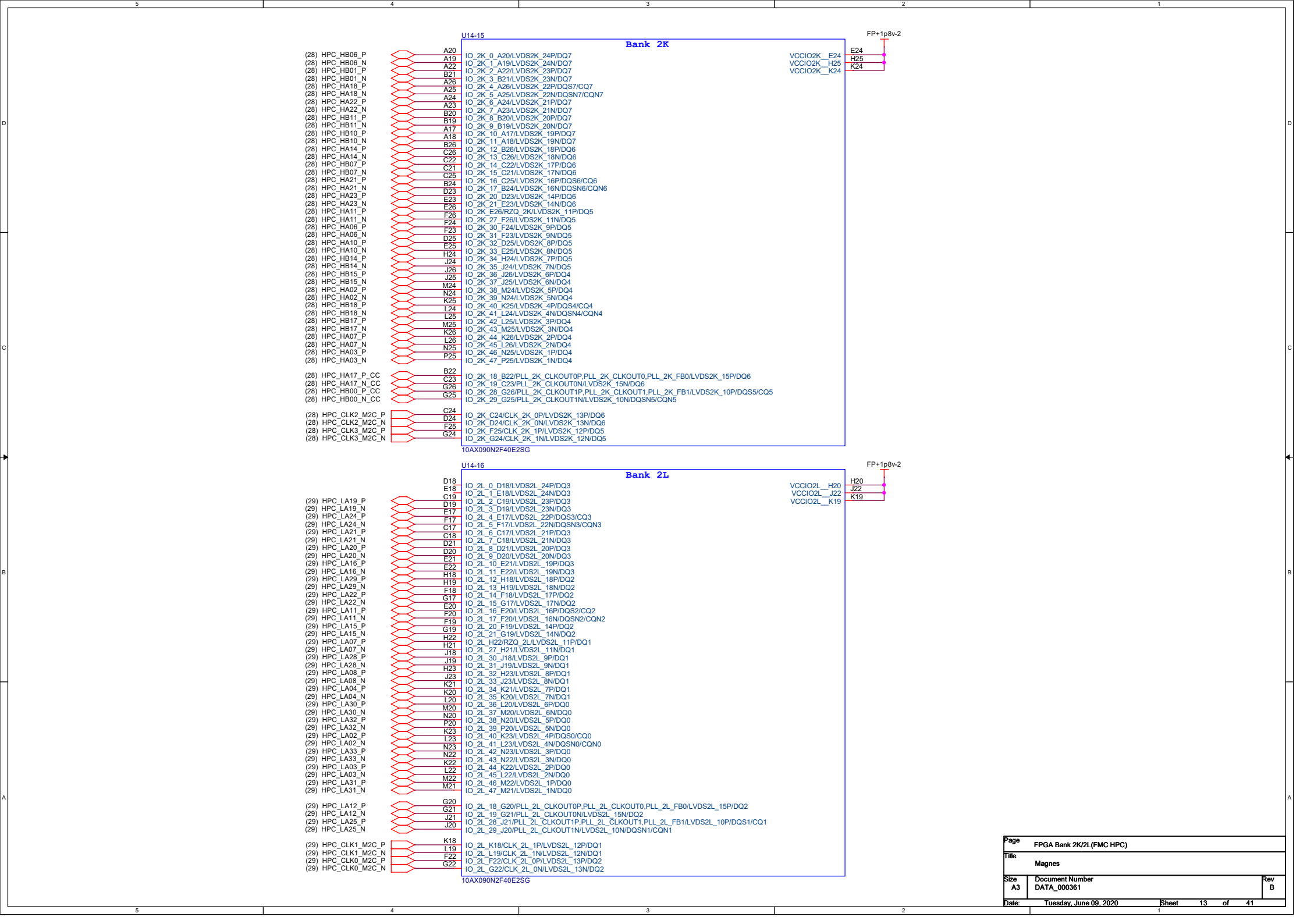


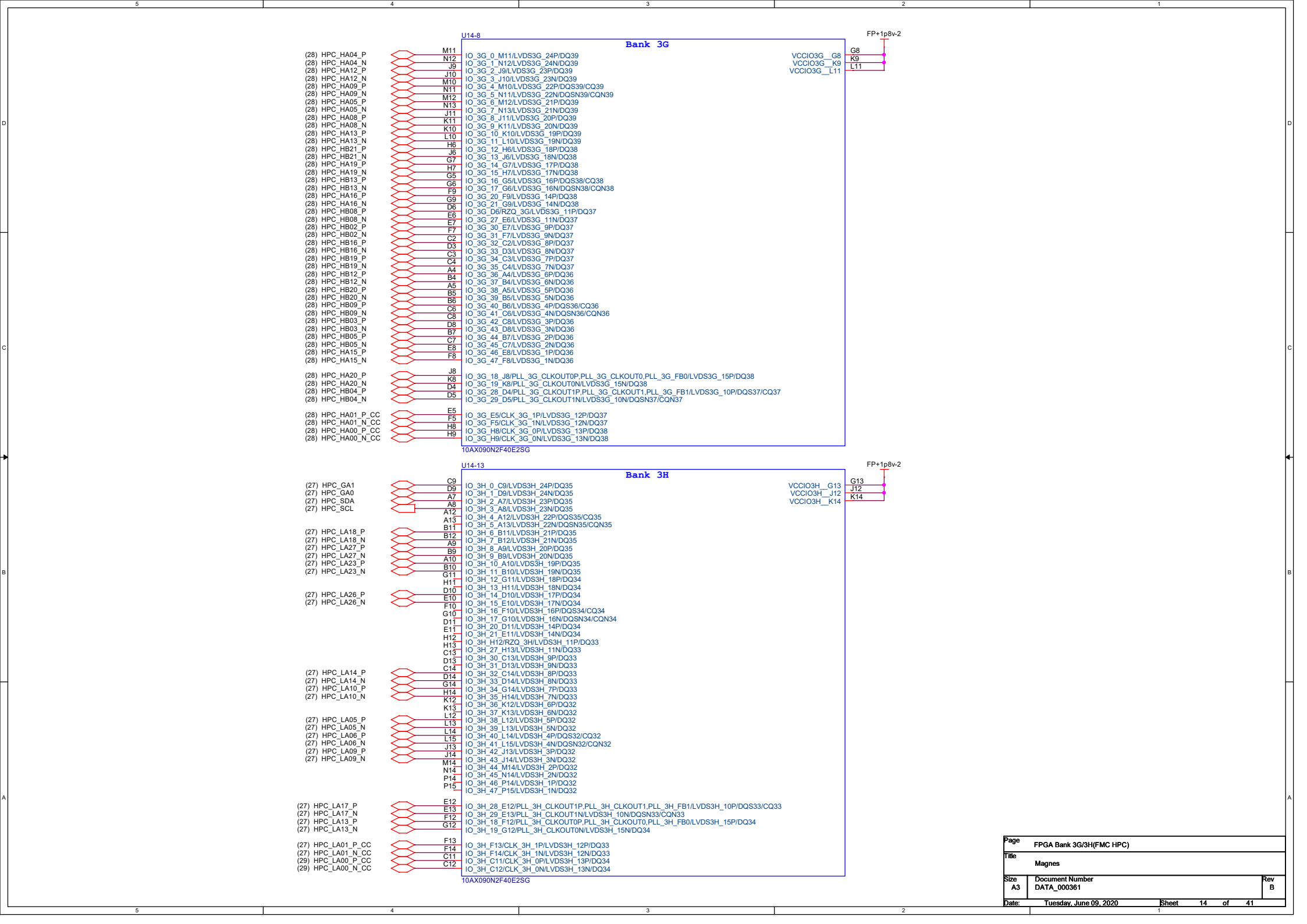




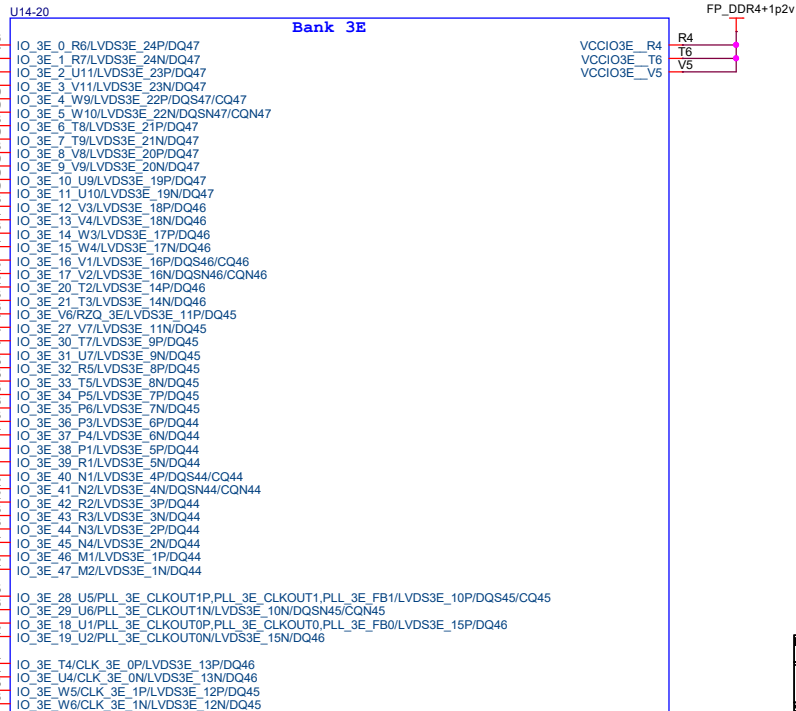
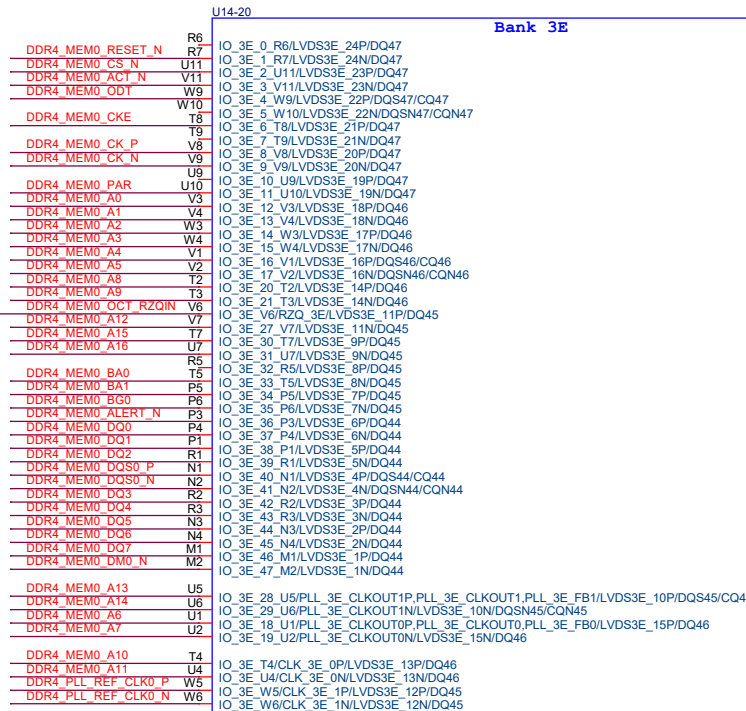
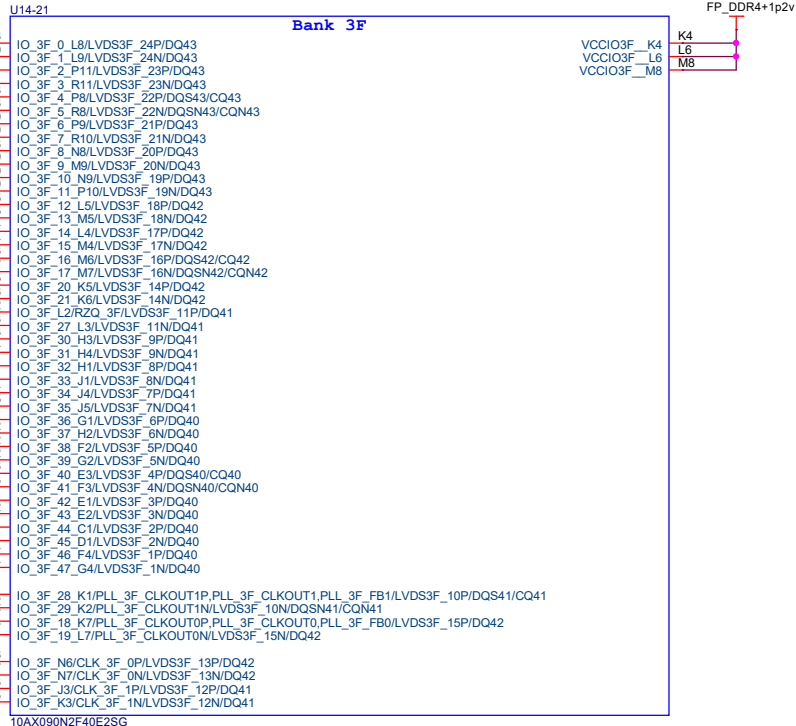
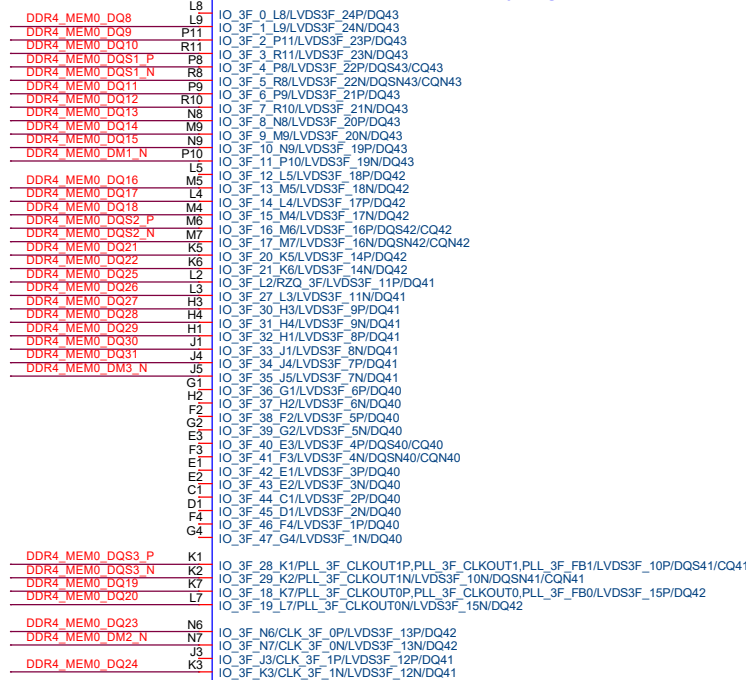
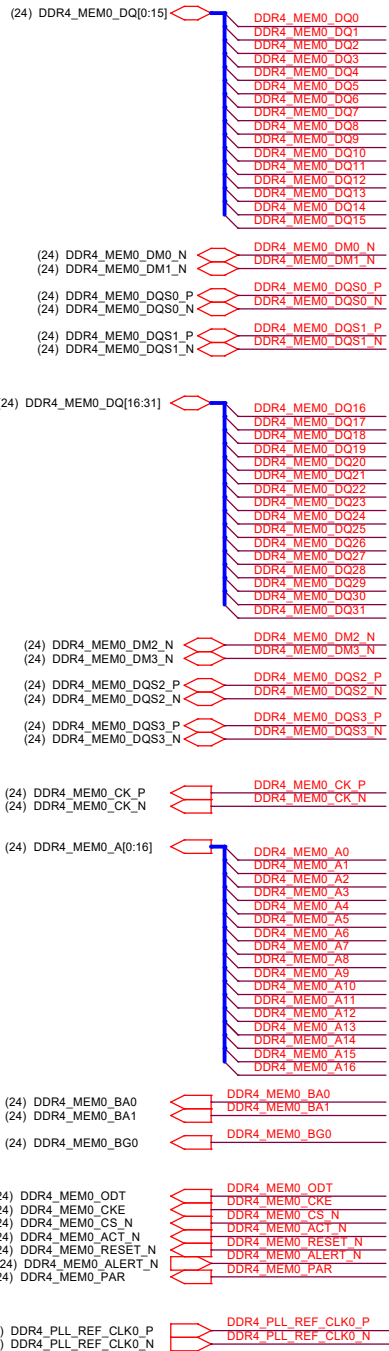


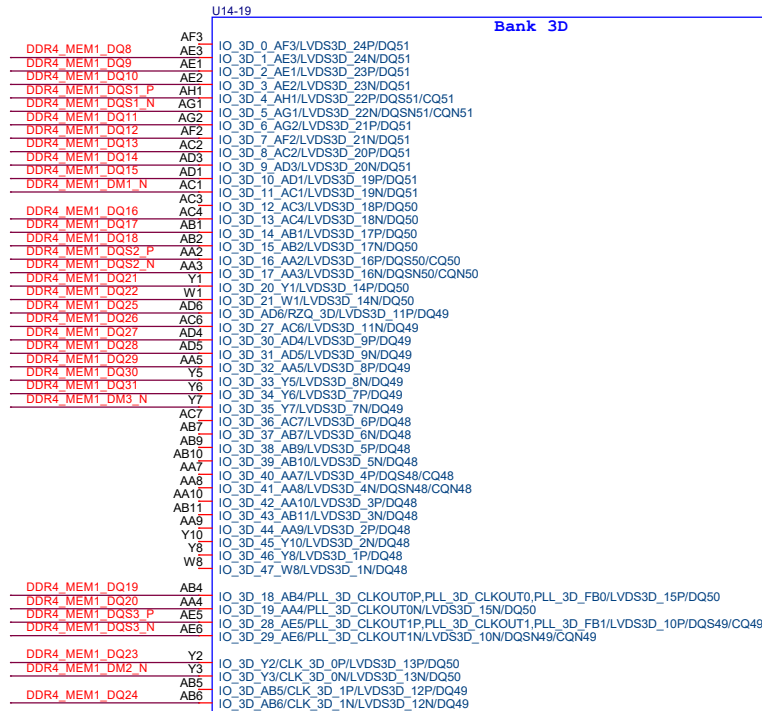
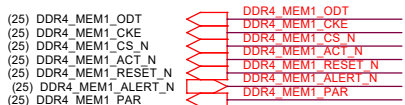
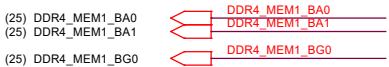
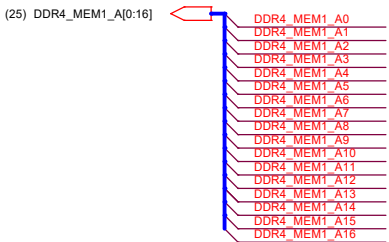
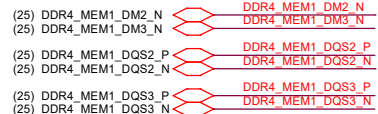
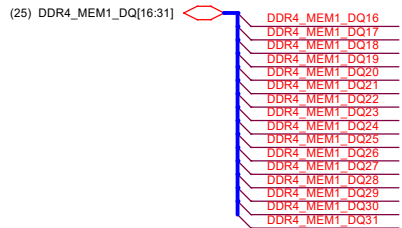
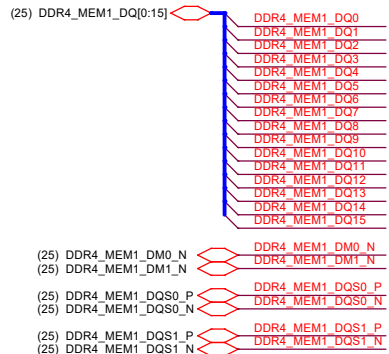








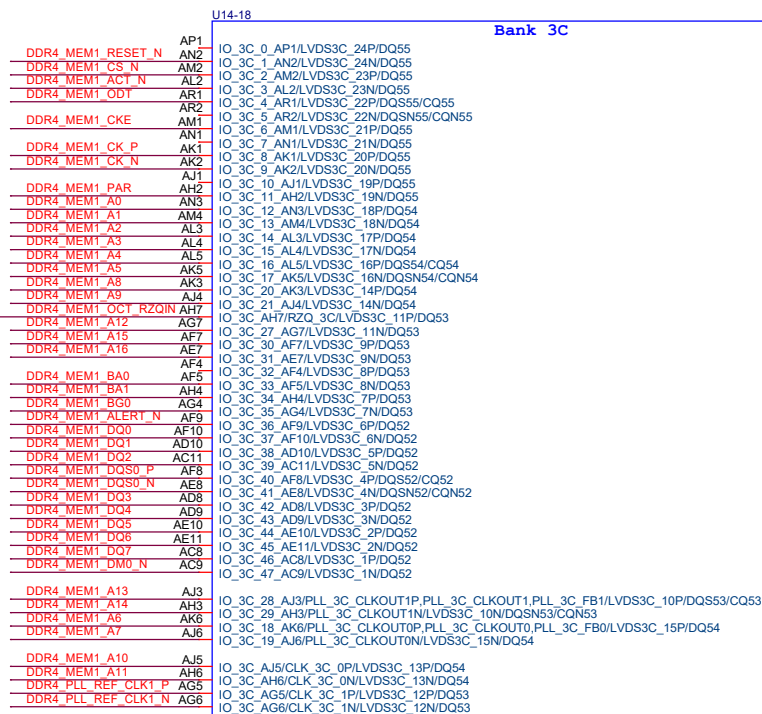




FP_DDR4+1p2v

VCCIO3D_AA6
VCCIO3D_AC5
VCCIO3D_Y4

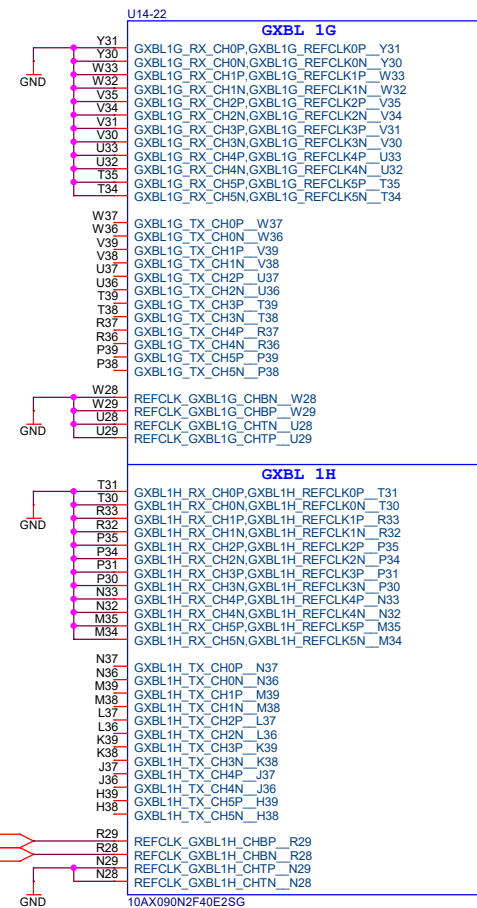
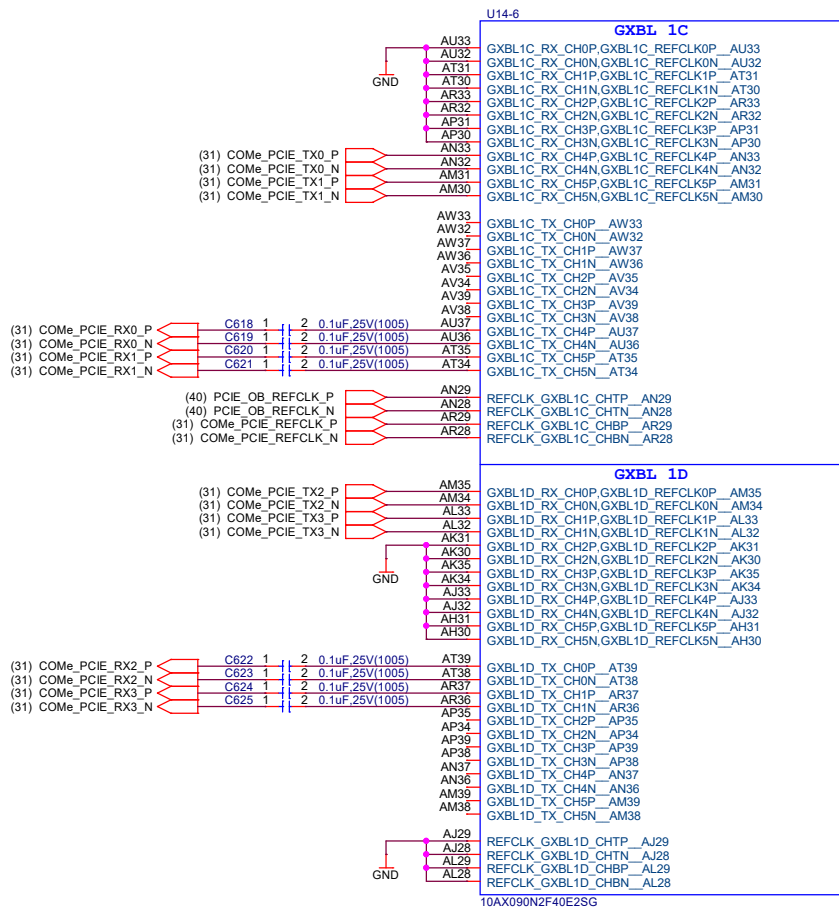
AA6
AC5
Y4



FP_DDR4+1p2v

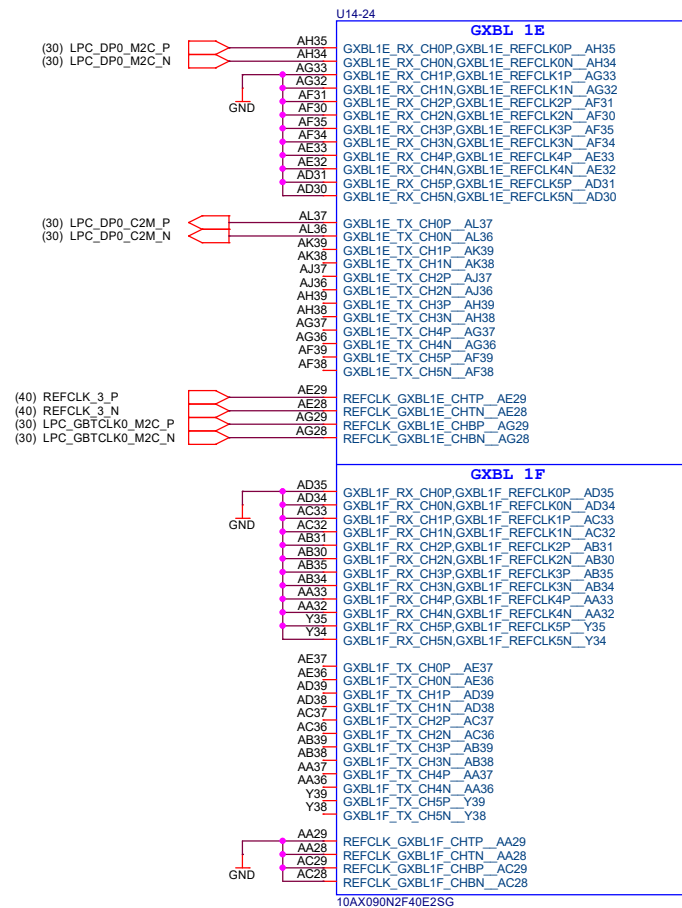
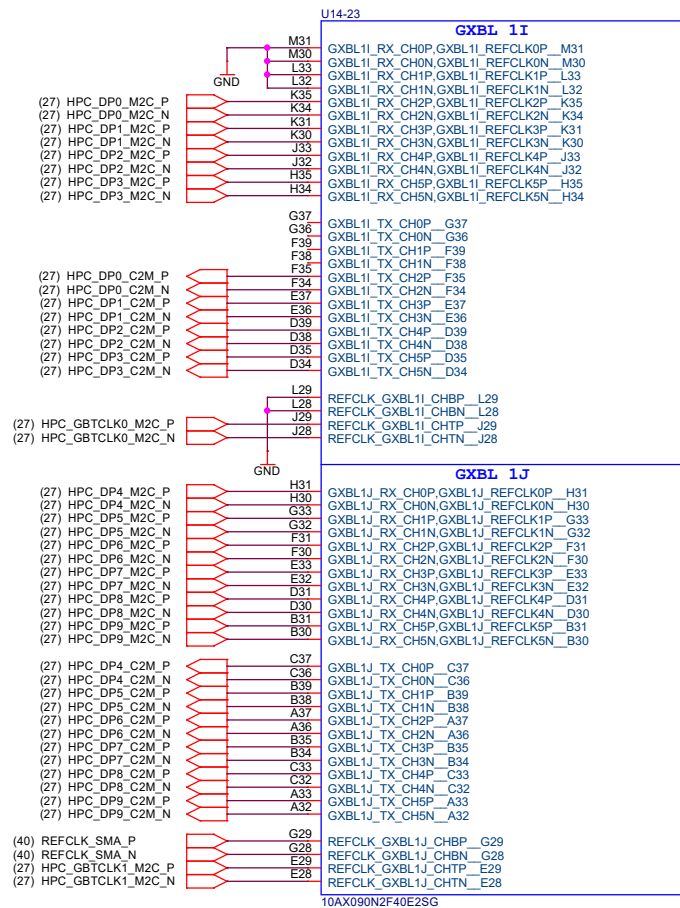
VCCIO3C_AD7
VCCIO3C_AG8
VCCIO3C_AH5

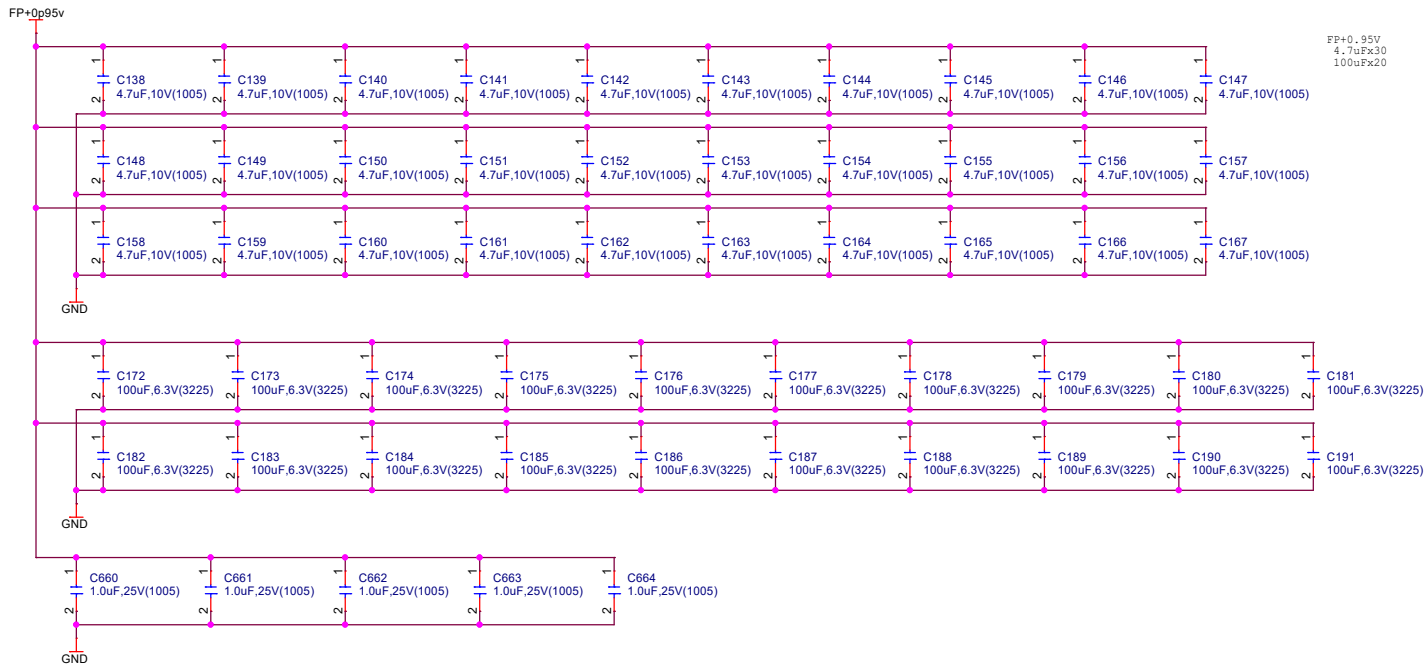
AD7
AG8
AH5



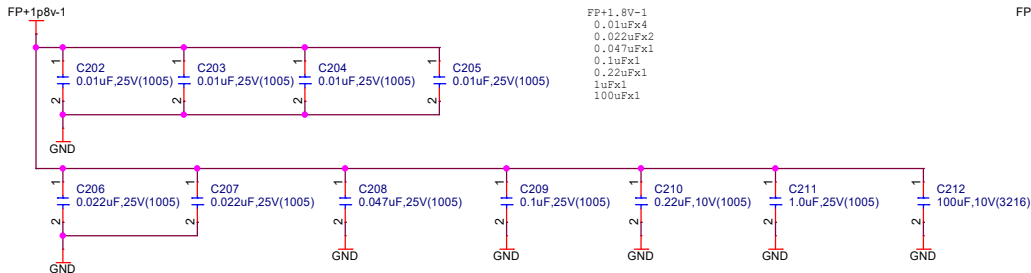
(40) ETH_GTX_REF_CLK_P
(40) ETH_GTX_REF_CLK_N



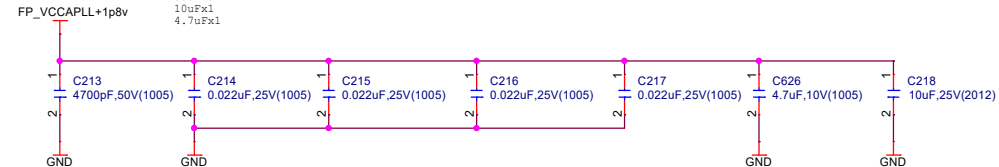




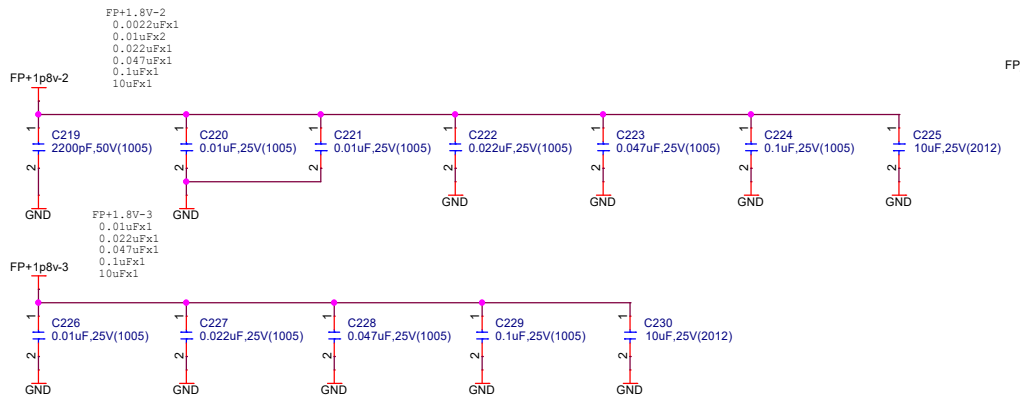
FP+0.95V
4.7uF x 30
100uF x 20



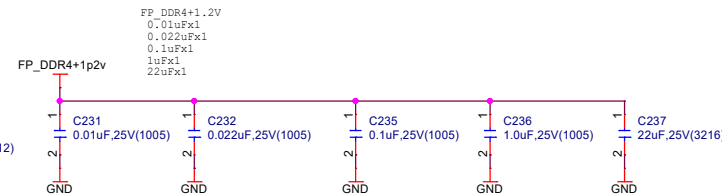
FP+1.8V-1
0.01uF x 4
0.022uF x 2
0.047uF x 1
0.1uF x 1
0.22uF x 1
1uF x 1
100uF x 1



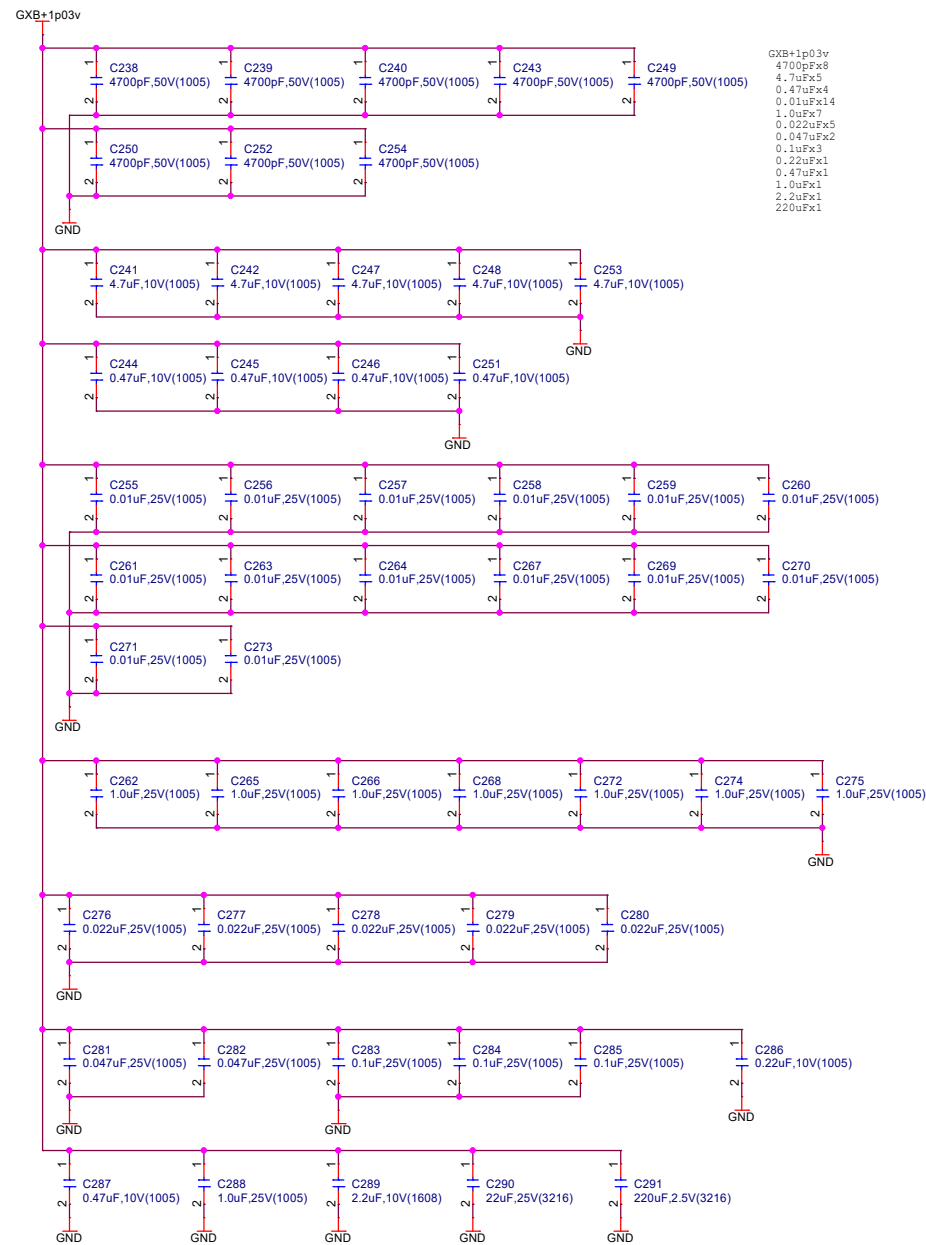
FP_VCCAPLL+1.8V
0.0047uF x 1
0.022uF x 4
10uF x 1
4.7uF x 1



FP+1.8V-2
0.0022uF x 1
0.01uF x 2
0.022uF x 1
0.047uF x 1
0.1uF x 1
10uF x 1



FP_DDR4+1.2V
0.01uF x 1
0.022uF x 1
0.1uF x 1
1uF x 1
22uF x 1



GXB+1p03v
4700pF,50V(1005)
4.7uF,10V(1005)
0.47uF,10V(1005)
0.01uF,25V(1005)
0.022uF,25V(1005)
0.047uF,10V(1005)
0.1uF,25V(1005)
0.22uF,10V(1005)
1.0uF,25V(1005)
2.2uF,10V(1005)
220uF,2.5V(3216)

U14-9		GND		Y9	
AW29	GND_AW29	GND_Y9	Y9		
AW31	GND_AW31	GND_Y37	Y37		
AW34	GND_AW34	GND_Y36	Y36		
AW35	GND_AW35	GND_Y33	Y33		
AW38	GND_AW38	GND_Y32	Y32		
AW7	GND_AW7	GND_Y26	Y26		
B13	GND_B13	GND_Y24	Y24		
B18	GND_B18	GND_Y19	Y19		
B2	GND_B2	GND_Y15	Y15		
B23	GND_B23	GND_W7	W7		
B25	GND_B25	GND_W39	W39		
B27	GND_B27	GND_W38	W38		
B28	GND_B28	GND_W35	W35		
B29	GND_B29	GND_W35	W34		
B3	GND_B3	GND_W34	W31		
B32	GND_B32	GND_W31	W30		
B33	GND_B33	GND_W30	W27		
B36	GND_B36	GND_W27	W26		
B37	GND_B37	GND_W26	W22		
B8	GND_B8	GND_W22	W2		
C10	GND_C10	GND_W2	W17		
C15	GND_C15	GND_W17	W12		
C20	GND_C20	GND_W12	W12		
C27	GND_C27	GND_V37	V37		
C28	GND_C28	GND_V36	V36		
C29	GND_C29	GND_V33	V33		
C30	GND_C30	GND_V32	V32		
C31	GND_C31	GND_V27	V27		
C34	GND_C34	GND_V26	V26		
C35	GND_C35	GND_V25	V25		
C38	GND_C38	GND_V20	V20		
C39	GND_C39	GND_V15	V15		
C5	GND_C5	GND_V10	V10		
D12	GND_D12	GND_U8	U8		
D17	GND_D17	GND_U39	U39		
D2	GND_D2	GND_U38	U38		
D22	GND_D22	GND_U35	U35		
D26	GND_D26	GND_U34	U34		
D32	GND_D32	GND_U31	U30		
D33	GND_D33	GND_U30	U3		
D36	GND_D36	GND_U3	U27		
D37	GND_D37	GND_U23	U23		
D7	GND_D7	GND_U18	U18		
E14	GND_E14	GND_U13	U13		
E19	GND_E19	GND_U13	T37		
E27	GND_E27	GND_T37	T36		
E30	GND_E30	GND_T36	T33		
E31	GND_E31	GND_T33	T32		
E34	GND_E34	GND_T32	T26		
E35	GND_E35	GND_T26	T21		
E38	GND_E38	GND_T21	T16		
E39	GND_E39	GND_T16	T11		
E4	GND_E4	GND_T11	T1		
E9	GND_E9	GND_T1	R9		
F1	GND_F1	GND_R9	R39		
F11	GND_F11	GND_R39	R38		
F16	GND_F16	GND_R38	R35		
F21	GND_F21	GND_R35	R34		
F27	GND_F27	GND_R34	R31		
F32	GND_F32	GND_R31	R30		
F33	GND_F33	GND_R30	R27		
F36	GND_F36	GND_R27	R26		
F37	GND_F37	GND_R26	R24		
F6	GND_F6	GND_R24	R19		
G18	GND_G18	GND_R19	R18		
G23	GND_G23	GND_R18	P7		
G27	GND_G27	GND_P7	P37		
G3	GND_G3	GND_P37	P36		
G30	GND_G30	GND_P36	P33		
G31	GND_G31	GND_P33	P32		
G34	GND_G34	GND_P32	P27		
G35	GND_G35	GND_P27	P26		
G38	GND_G38	GND_P26	P2		
G39	GND_G39	GND_P2	P18		
H10	GND_H10	GND_P18	P17		
H15	GND_H15	GND_P17	P16		
H26	GND_H26	GND_P16	P12		
H32	GND_H32	GND_P12	N5		
H33	GND_H33	GND_N5	N39		
H36	GND_H36	GND_N39	N38		
H37	GND_H37	GND_N38	N35		
H5	GND_H5	GND_N35	N34		
J17	GND_J17	GND_N34	N31		
J2	GND_J2	GND_N31	N30		
J27	GND_J27	GND_N30	N27		
J30	GND_J30	GND_N27	N26		
J31	GND_J31	GND_N26	N21		
J34	GND_J34	GND_N21	N18		
J35	GND_J35	GND_N18	N17		
J38	GND_J38	GND_N17	N16		
J39	GND_J39	GND_N16	N15		
J7	GND_J7	GND_N15	N10		
K27	GND_K27	GND_N10	M37		
K32	GND_K32	GND_M37	M36		
K33	GND_K33	GND_M36	M33		
K36	GND_K36	GND_M33	M32		
K37	GND_K37	GND_M32	M3		
L1	GND_L1	GND_M3	M26		
L16	GND_L16	GND_M26	M23		
L21	GND_L21	GND_M23	M18		
L27	GND_L27	GND_M18	M16		
L30	GND_L30	GND_M16	M13		
L31	GND_L31	GND_M13	L39		
L34	GND_L34	GND_L39	L38		
		GND_L38	L35		
		GND_L35			

GND

10AX090N2F40E2SG

GND

U14-7		GND		B17	
ADCGND_B17	ADCGND_B17				
A11	GND_A11				
A16	GND_A16				
A21	GND_A21				
A27	GND_A27				
A29	GND_A29				
A30	GND_A30				
A31	GND_A31				
A34	GND_A34				
A35	GND_A35				
A38	GND_A38				
A6	GND_A6				
AA1	GND_AA1				
AA11	GND_AA11				
AA17	GND_AA17				
AA21	GND_AA21				
AA26	GND_AA26				
AA27	GND_AA27				
AA30	GND_AA30				
AA31	GND_AA31				
AA34	GND_AA34				
AA35	GND_AA35				
AA38	GND_AA38				
AA39	GND_AA39				
AB13	GND_AB13				
AB18	GND_AB18				
AB23	GND_AB23				
AB26	GND_AB26				
AB27	GND_AB27				
AB3	GND_AB3				
AB32	GND_AB32				
AB33	GND_AB33				
AB36	GND_AB36				
AB37	GND_AB37				
AB8	GND_AB8				
AC10	GND_AC10				
AC15	GND_AC15				
AC20	GND_AC20				
AC22	GND_AC22				
AC25	GND_AC25				
AC27	GND_AC27				
AC30	GND_AC30				
AC31	GND_AC31				
AC34	GND_AC34				
AC35	GND_AC35				
AC38	GND_AC38				
AC39	GND_AC39				
AD12	GND_AD12				
AD2	GND_AD2				
AD26	GND_AD26				
AD32	GND_AD32				
AD33	GND_AD33				
AD36	GND_AD36				
AD37	GND_AD37				
AE19	GND_AE19				
AE24	GND_AE24				
AE26	GND_AE26				
AE27	GND_AE27				
AE30	GND_AE30				
AE31	GND_AE31				
AE34	GND_AE34				
AE35	GND_AE35				
AE38	GND_AE38				
AE39	GND_AE39				
AE4	GND_AE4				
AE9	GND_AE9				
AF1	GND_AF1				
AF11	GND_AF11				
AF16	GND_AF16				
AF26	GND_AF26				
AF27	GND_AF27				
AF32	GND_AF32				
AF33	GND_AF33				
AF36	GND_AF36				
AF37	GND_AF37				
AF6	GND_AF6				
AG13	GND_AG13				
AG18	GND_AG18				
AG23	GND_AG23				
AG26	GND_AG26				
AG27	GND_AG27				
AG3	GND_AG3				
AG30	GND_AG30				
AG31	GND_AG31				
AG34	GND_AG34				
AG35	GND_AG35				
AG38	GND_AG38				
AG39	GND_AG39				
AH10	GND_AH10				
AH15	GND_AH15				
AH20	GND_AH20				
AH26	GND_AH26				
AH32	GND_AH32				
AH33	GND_AH33				
AH36	GND_AH36				
AH37	GND_AH37				
AJ12	GND_AJ12				
AJ17	GND_AJ17				

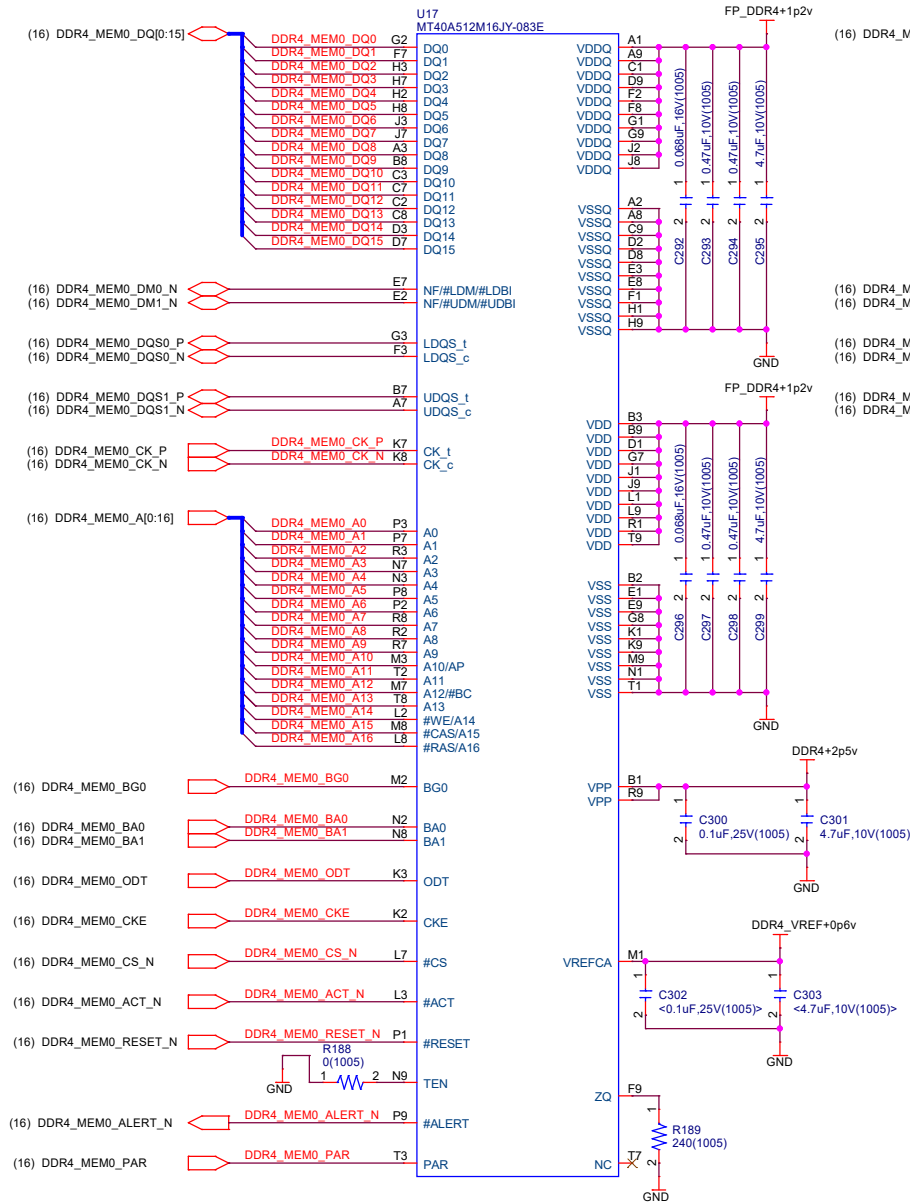
GND

10AX090N2F40E2SG

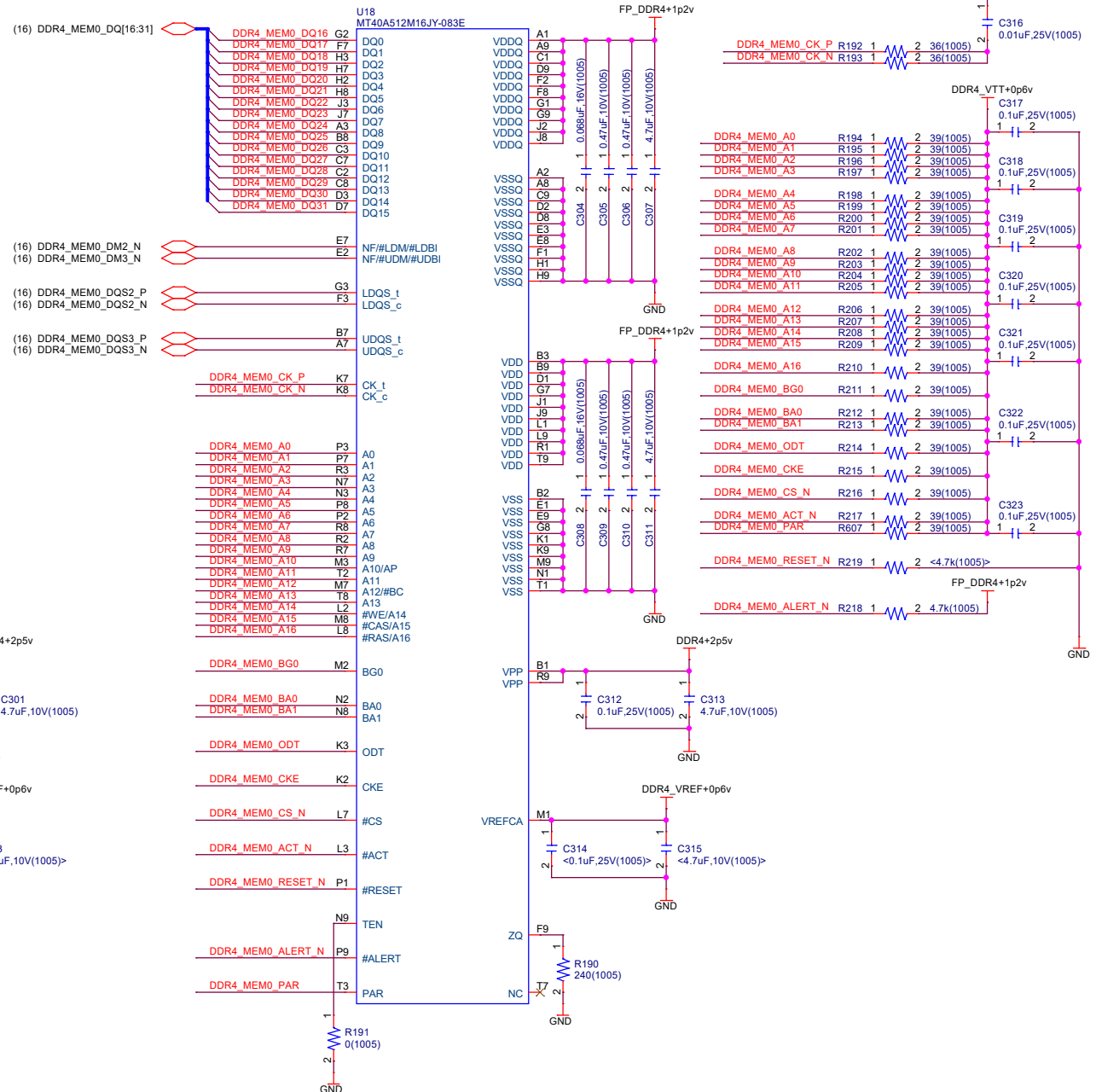
GND

GND_AW27	AW27
GND_AW22	AW22
GND_AW17	AW17
GND_AW12	AW12
GND_AV5	AV5
GND_AV37	AV37
GND_AV36	AV36
GND_AV33	AV33
GND_AV32	AV32
GND_AV31	AV31
GND_AV25	AV25
GND_AV20	AV20
GND_AV15	AV15
GND_AV10	AV10
GND_AU8	AU8
GND_AU39	AU39
GND_AU38	AU38
GND_AU35	AU35
GND_AU34	AU34
GND_AU31	AU31
GND_AU30	AU30
GND_AU3	AU3
GND_AU29	AU29
GND_AU23	AU23
GND_AU18	AU18
GND_AU15	AU13
GND_AU13	AT6
GND_AT6	AT37
GND_AT37	AT36
GND_AT36	AT33
GND_AT33	AT32
GND_AT32	AT29
GND_AT29	AT28
GND_AT28	AT27
GND_AT27	AT16
GND_AT16	AT11
GND_AT11	AT1
GND_AR9	AR9
GND_AR4	AR4
GND_AR39	AR39
GND_AR38	AR38
GND_AR35	AR35
GND_AR34	AR34
GND_AR31	AR31
GND_AR30	AR30
GND_AR27	AR27
GND_AR27	AR19
GND_AR19	AR15
GND_AR15	AR14
GND_AR14	AP7
GND_AP7	AP37
GND_AP37	AP36
GND_AP36	AP33
GND_AP33	AP32
GND_AP32	AP27
GND_AP27	AP2
GND_AP2	AP14
GND_AP14	AP12
GND_AP12	AN5
GND_AN5	AN39
GND_AN39	AN38
GND_AN38	AN35
GND_AN35	AN34
GND_AN34	AN31
GND_AN31	AN30
GND_AN30	AN27
GND_AN27	AN20
GND_AN20	AN15
GND_AN15	AN10
GND_AN10	AM37
GND_AM37	AM36
GND_AM36	AM33
GND_AM33	AM32
GND_AM32	AM3
GND_AM3	AM26
GND_AM26	AM23
GND_AM23	AL39
GND_AL39	AL38
GND_AL38	AL35
GND_AL35	AL34
GND_AL34	AL31
GND_AL31	AL30
GND_AL30	AL27
GND_AL27	AL16
GND_AL16	AL1
GND_AL1	AK4
GND_AK4	AK37
GND_AK37	AK36
GND_AK36	AK33
GND_AK33	AK32
GND_AK32	AK27
GND_AK27	AJ7
GND_AJ7	AJ39
GND_AJ39	AJ38
GND_AJ38	AJ35
GND_AJ35	AJ34
GND_AJ34	AJ31
GND_AJ31	AJ30
GND_AJ30	AJ27
GND_AJ27	AJ22
GND_AJ22	AJ2
GND_AJ2	

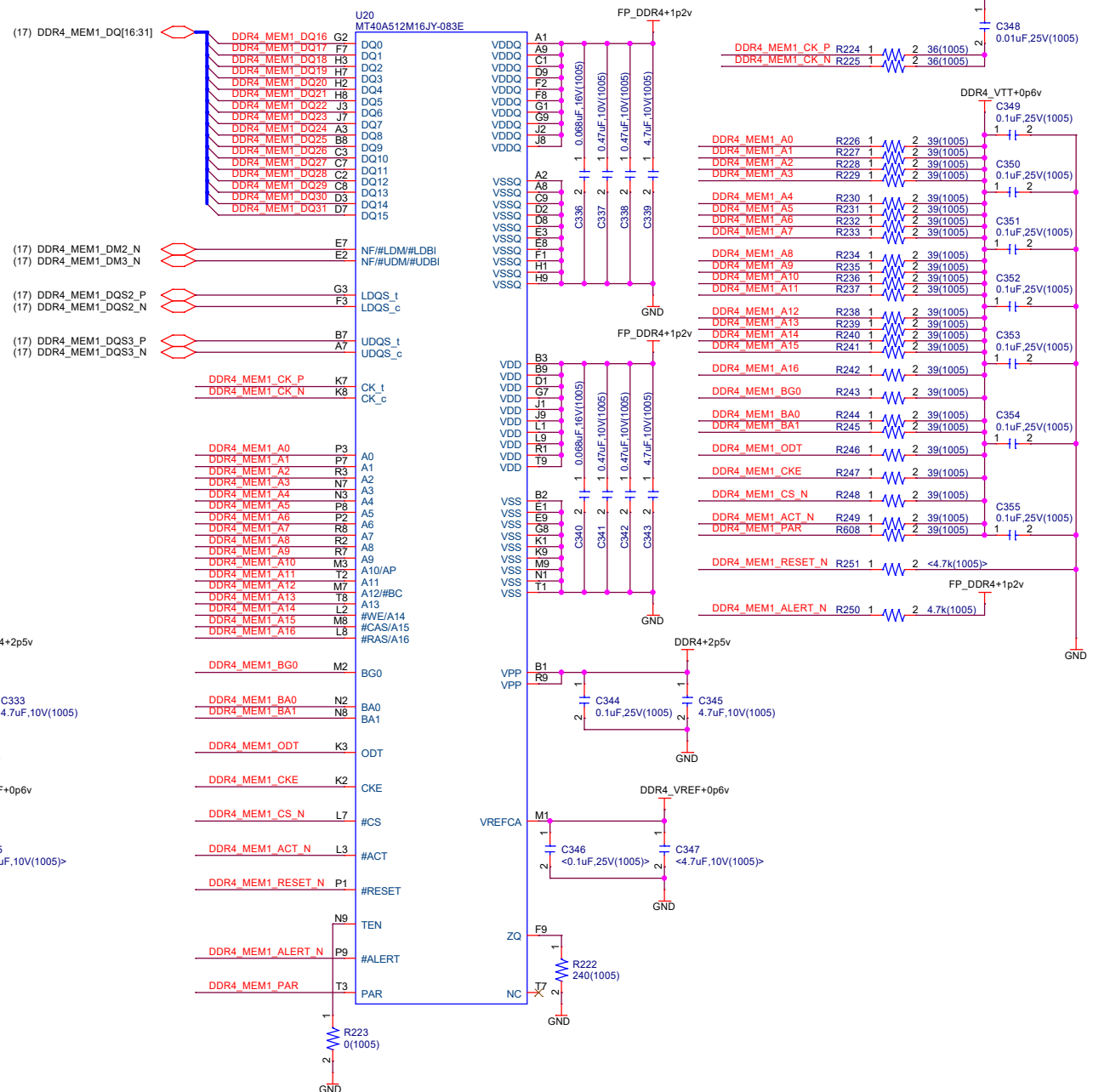
DDR4 SDRAM MEMO-1

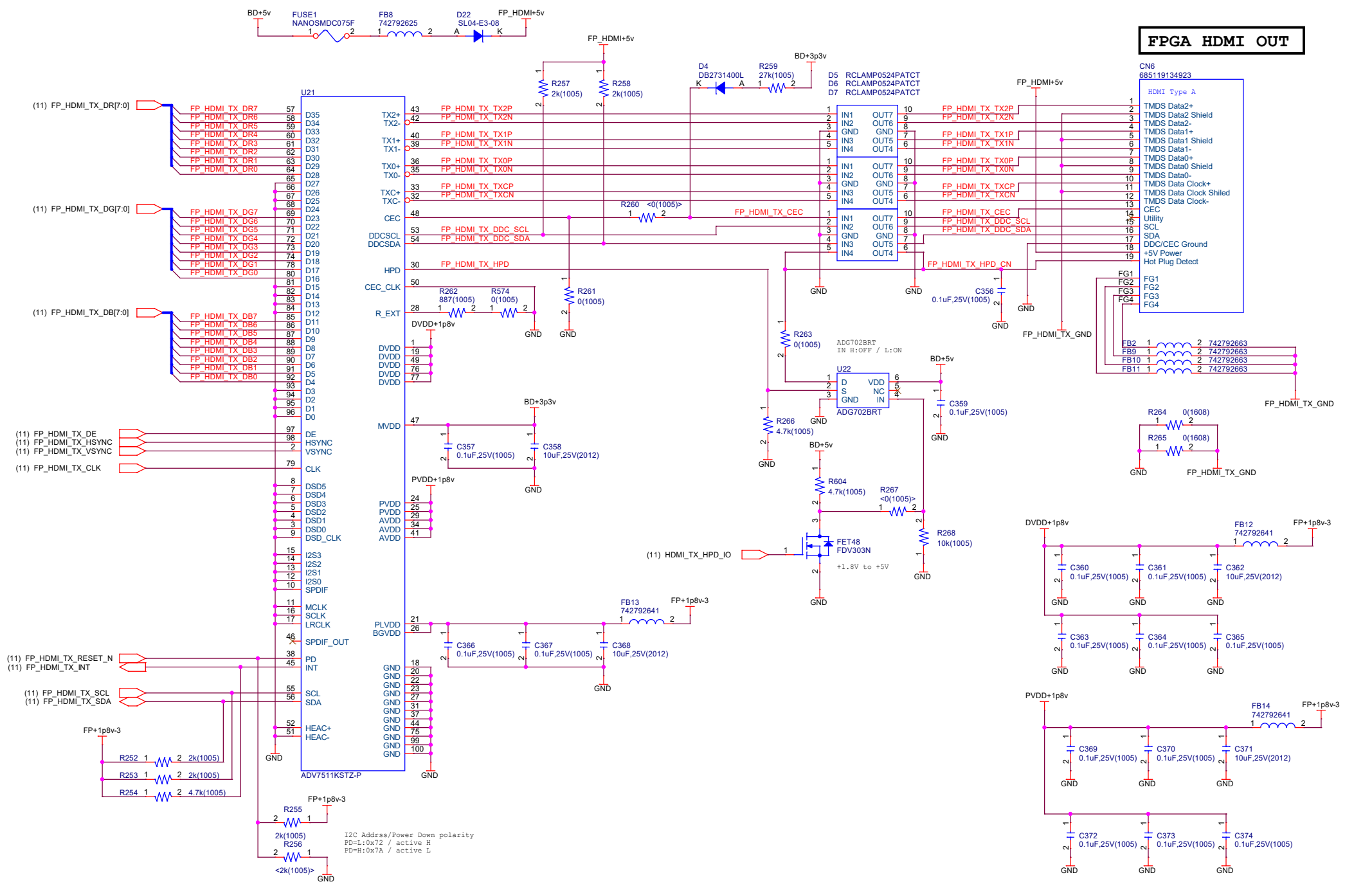


DDR4 SDRAM MEMO-2



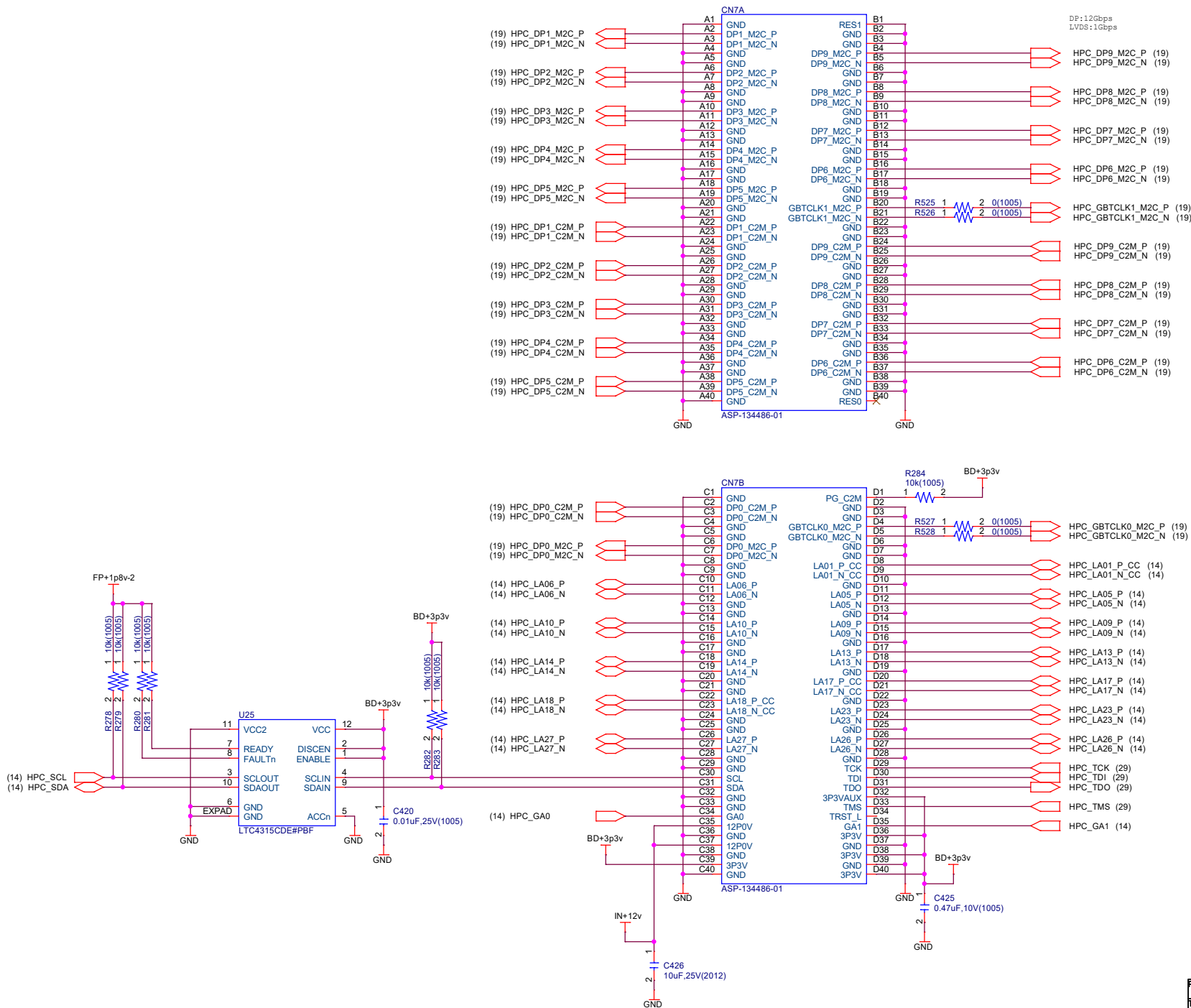
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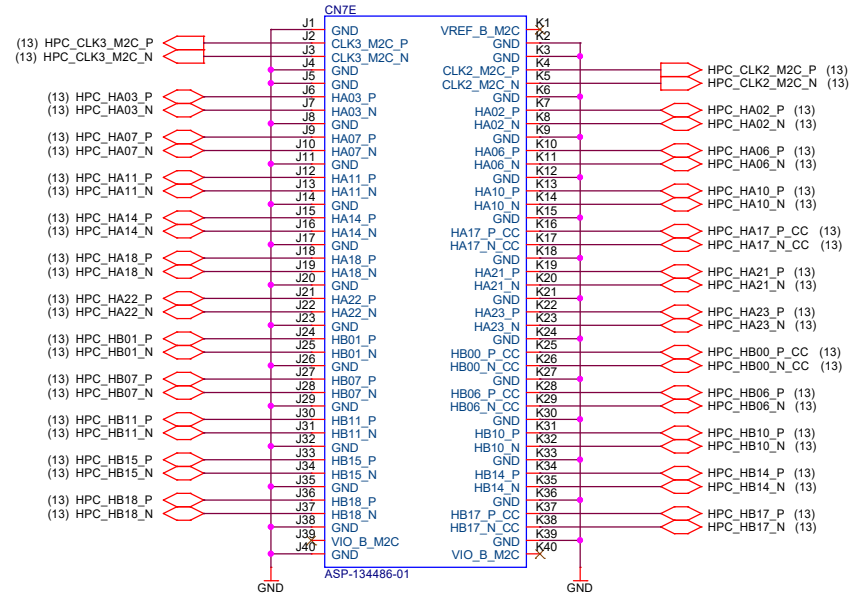
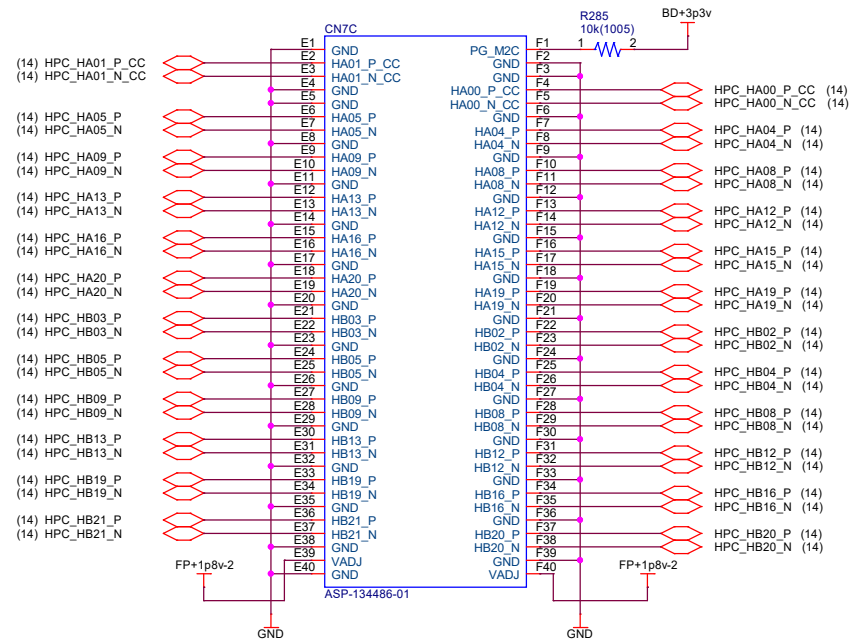


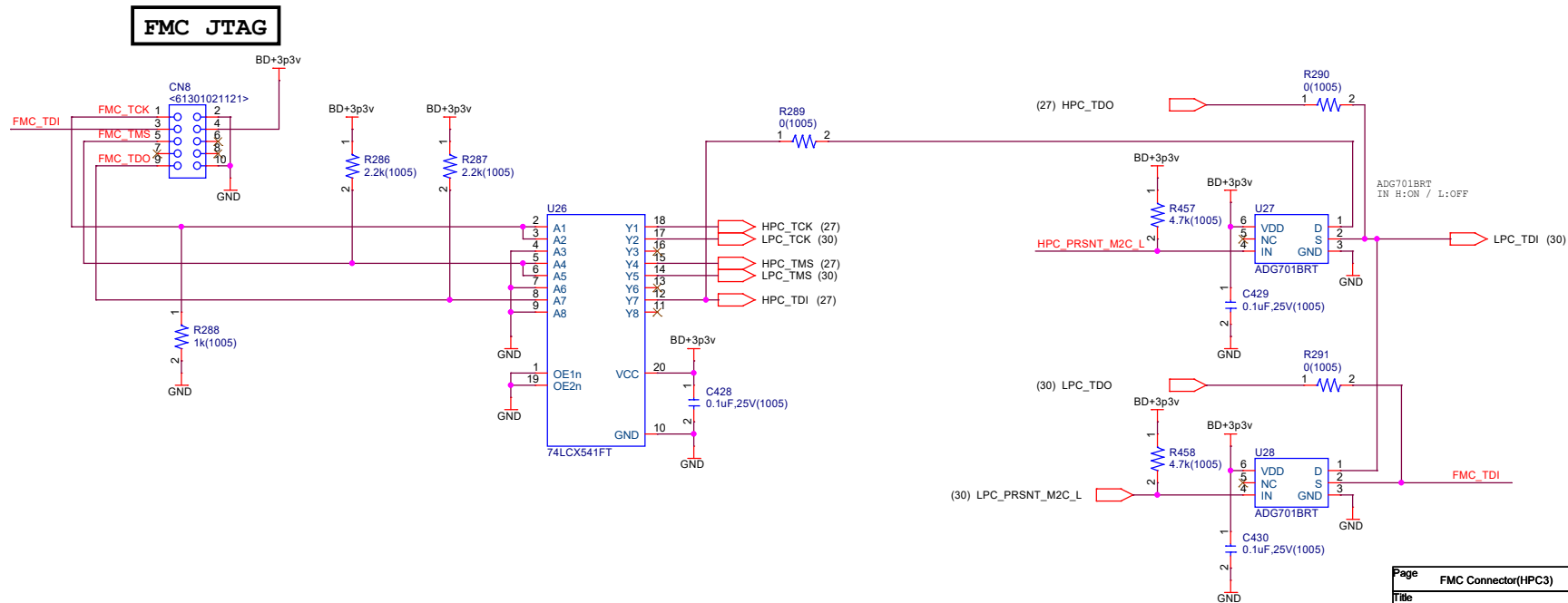
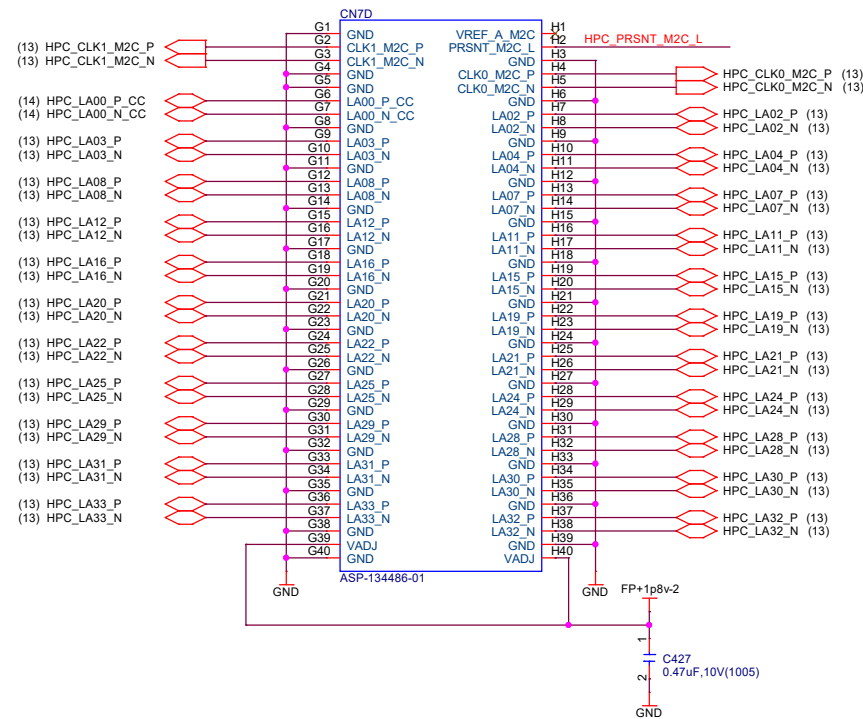


FPGA HDMI OUT

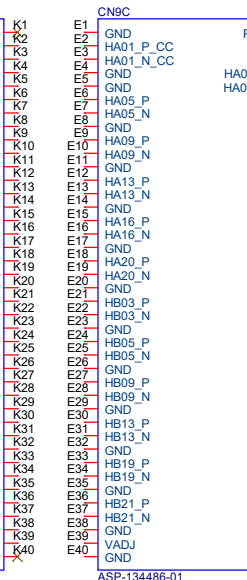
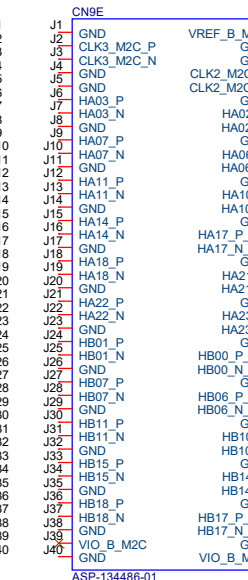
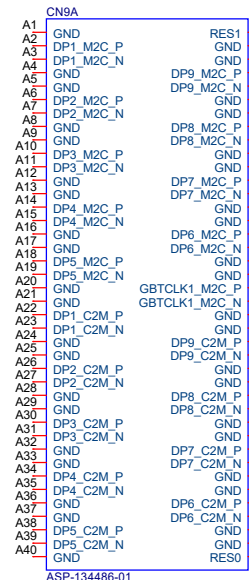
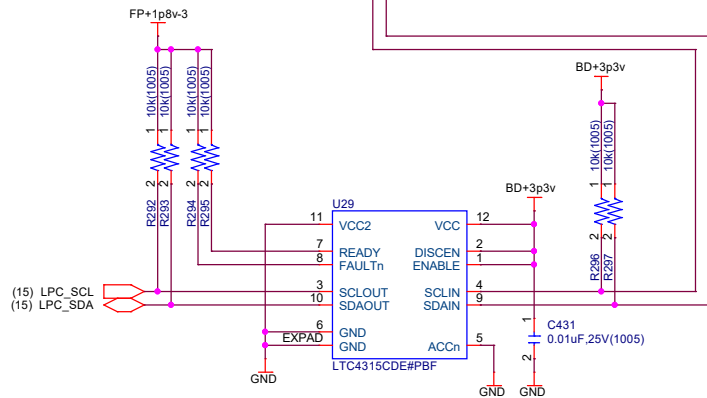
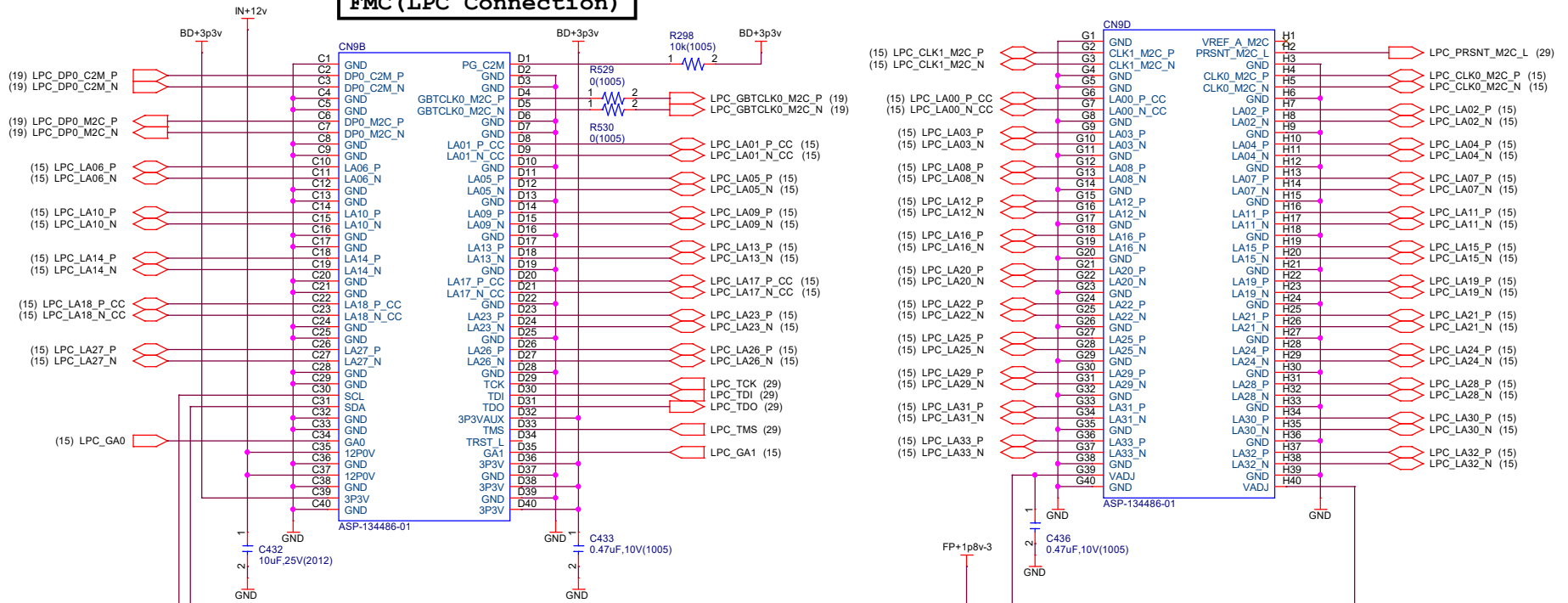
FMC (HPC Connection)



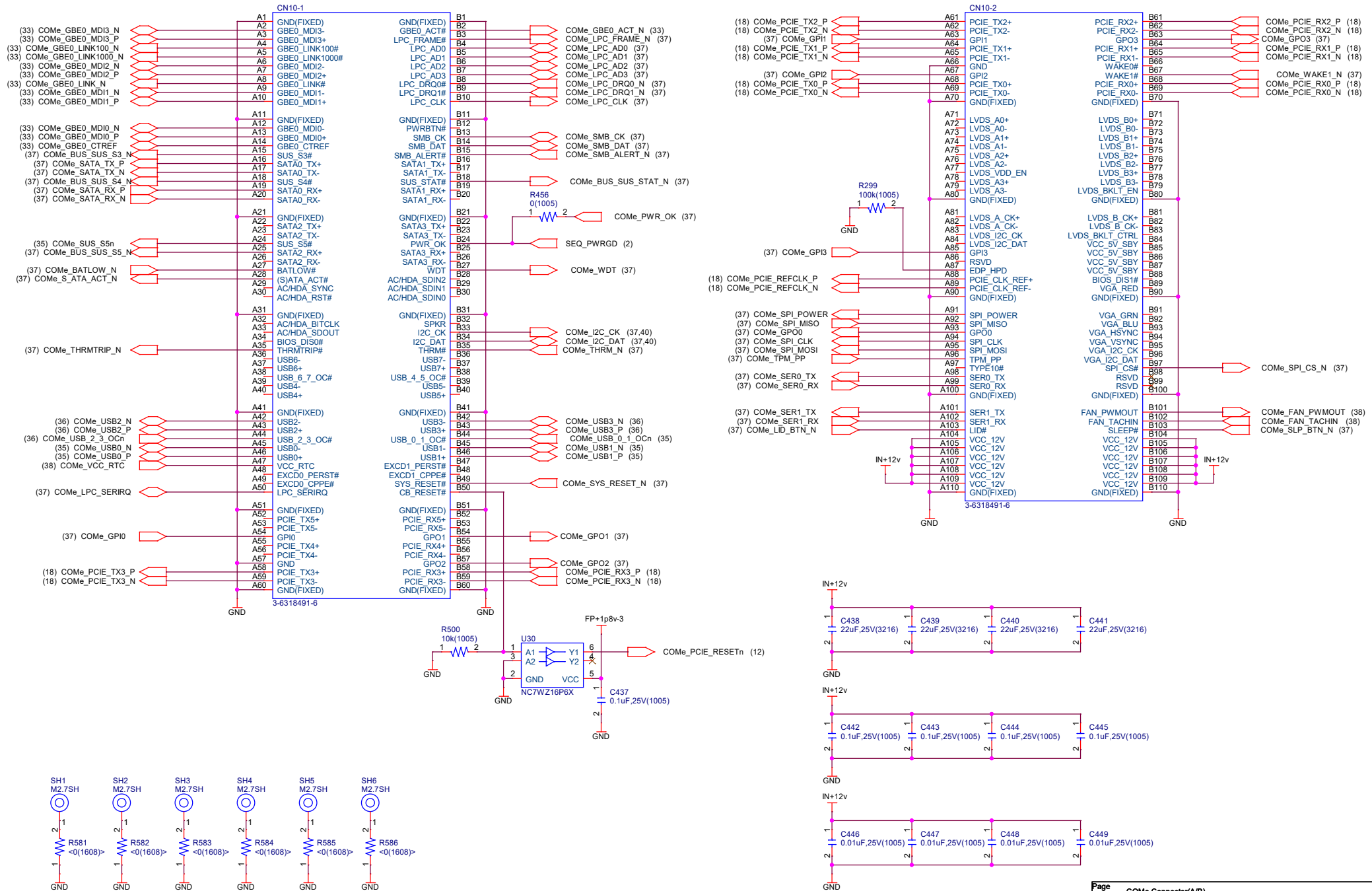




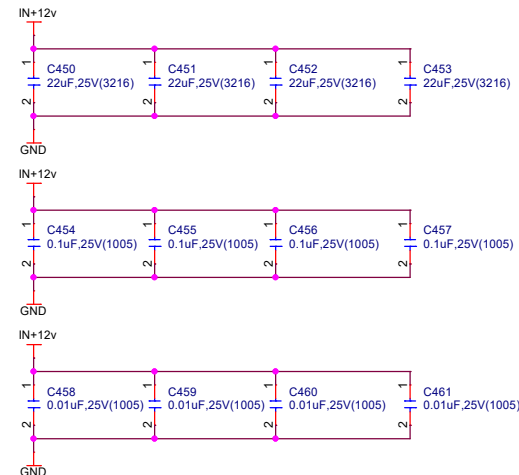
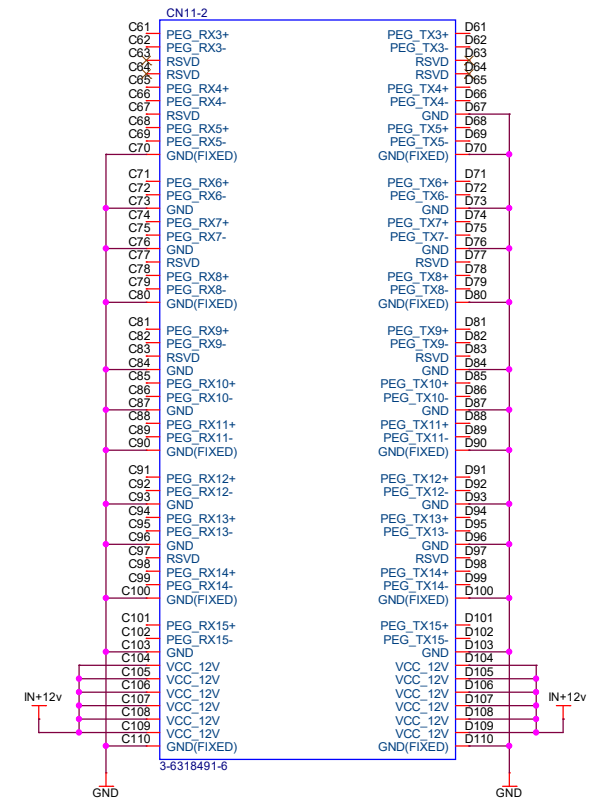
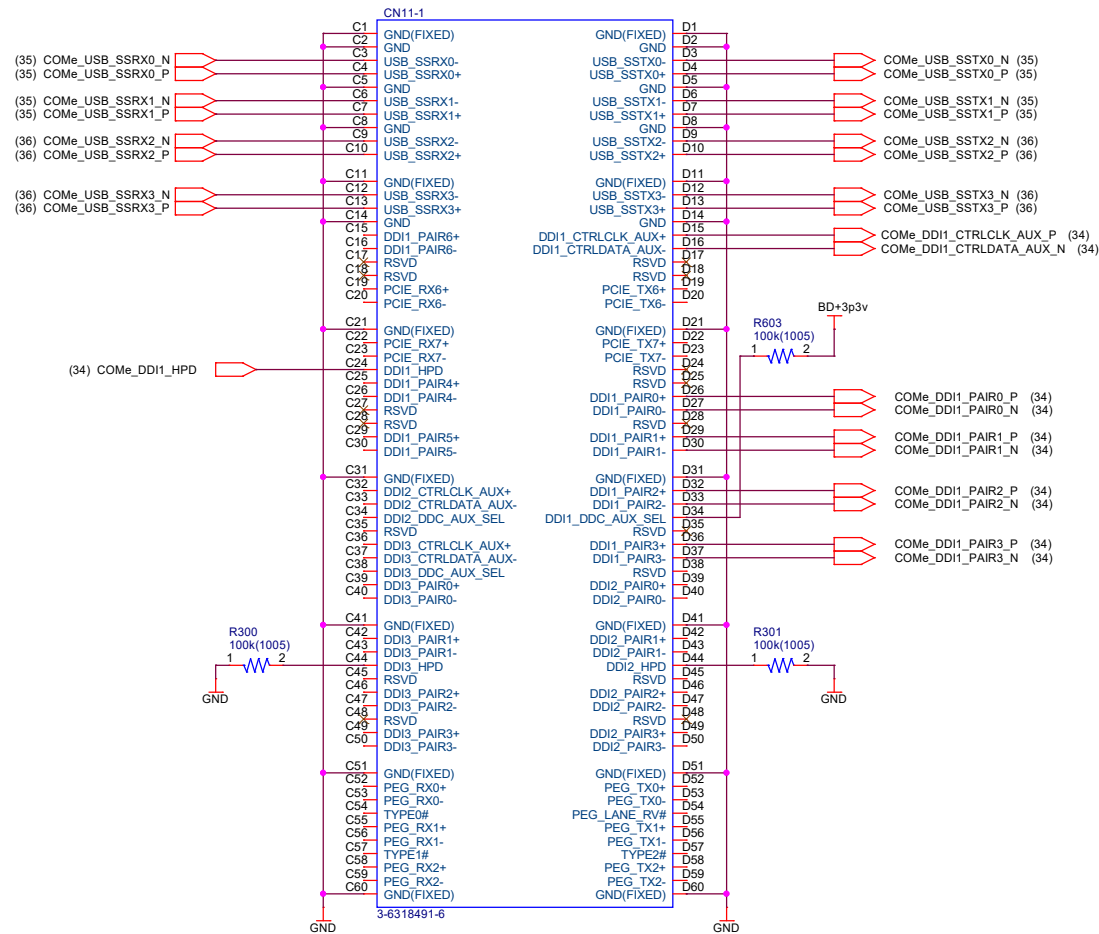
FMC (LPC Connection)

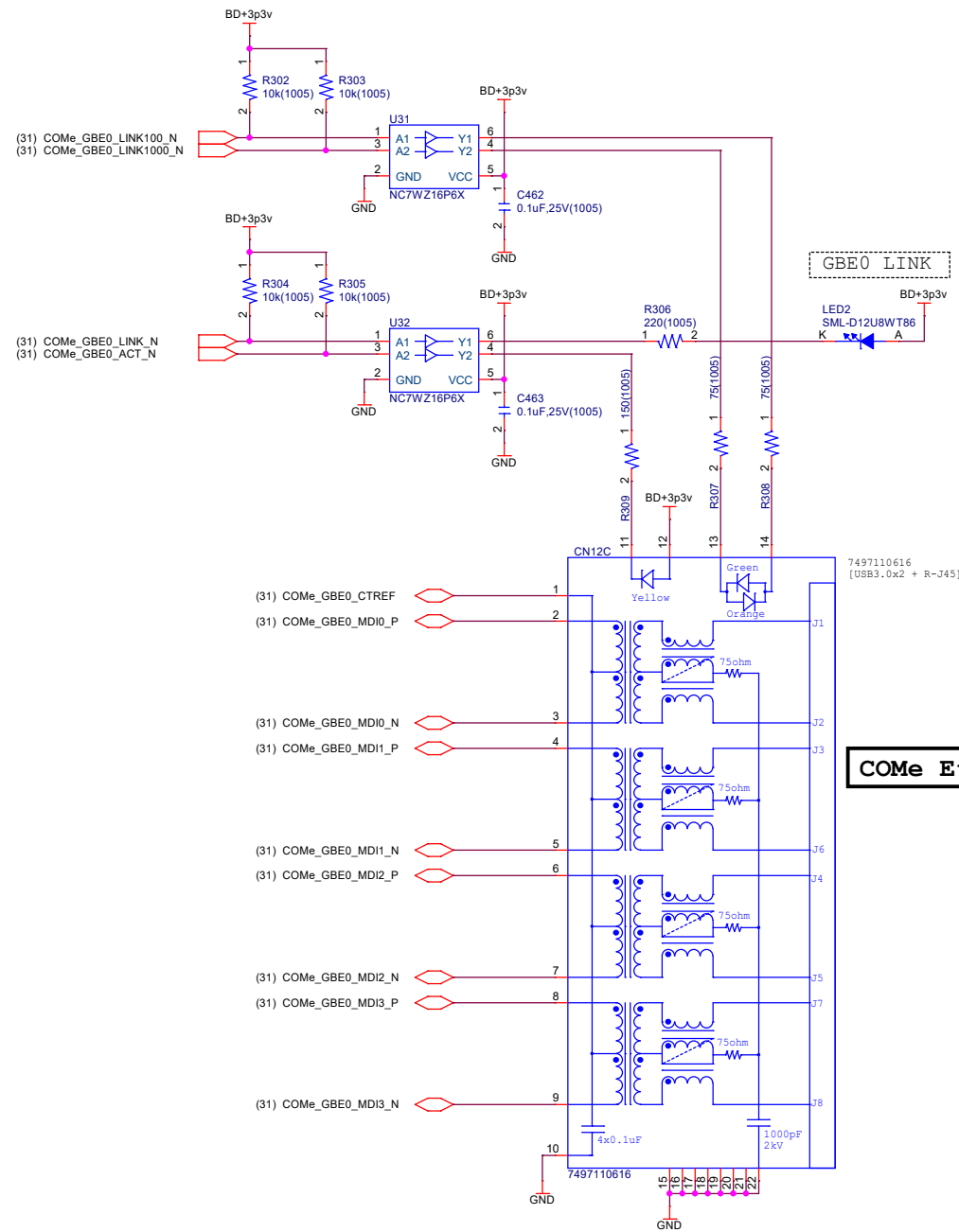


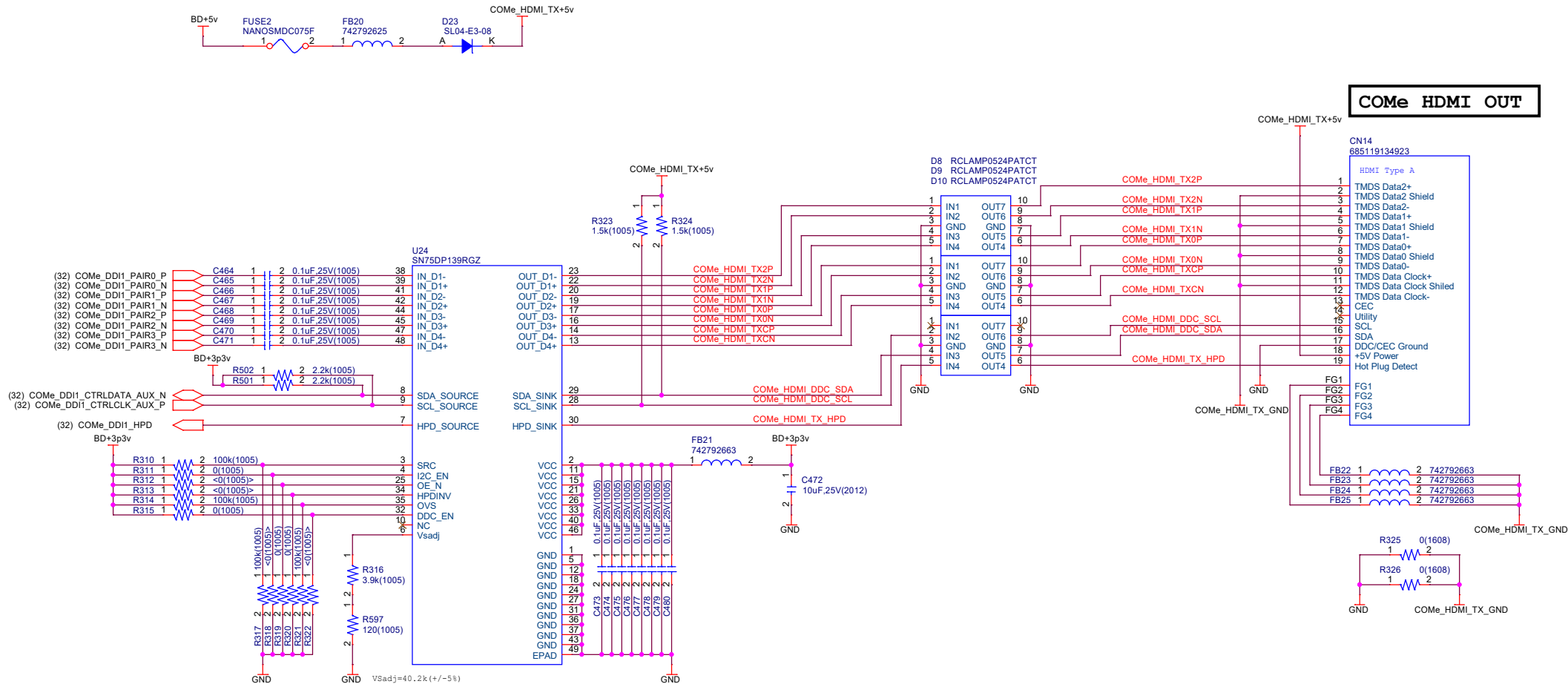
COMe Connector A/B



COMe Connector C/D

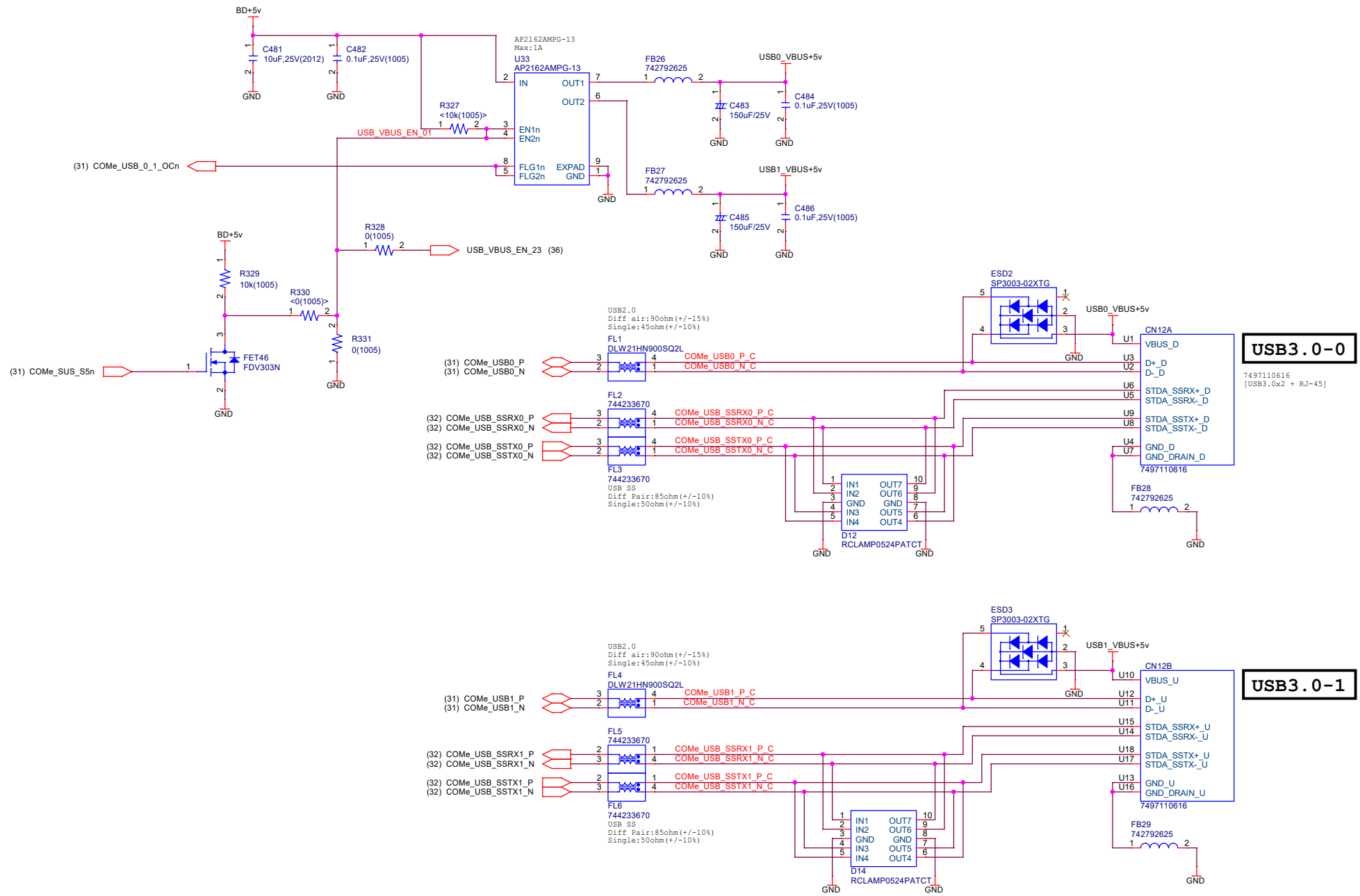


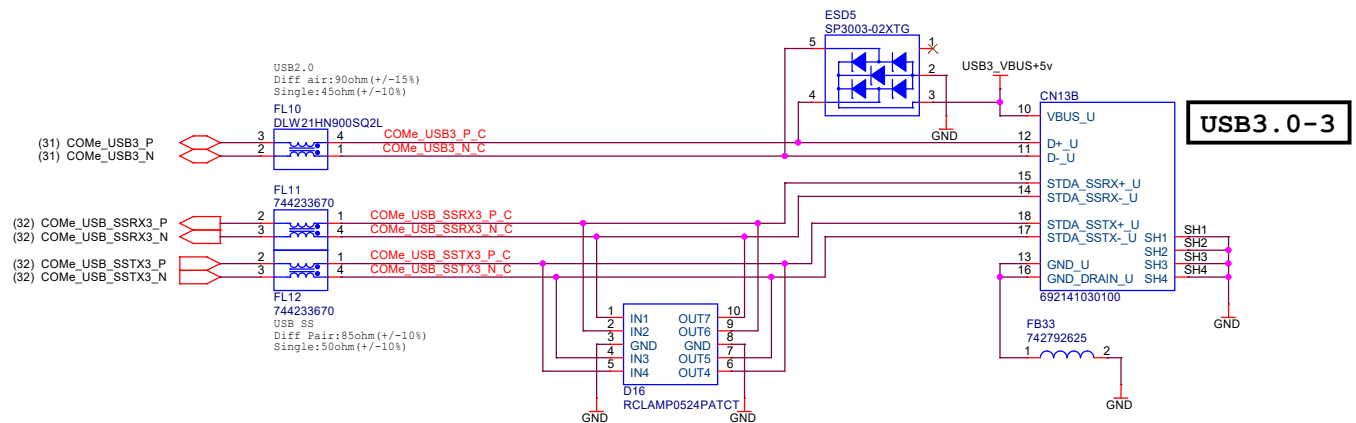
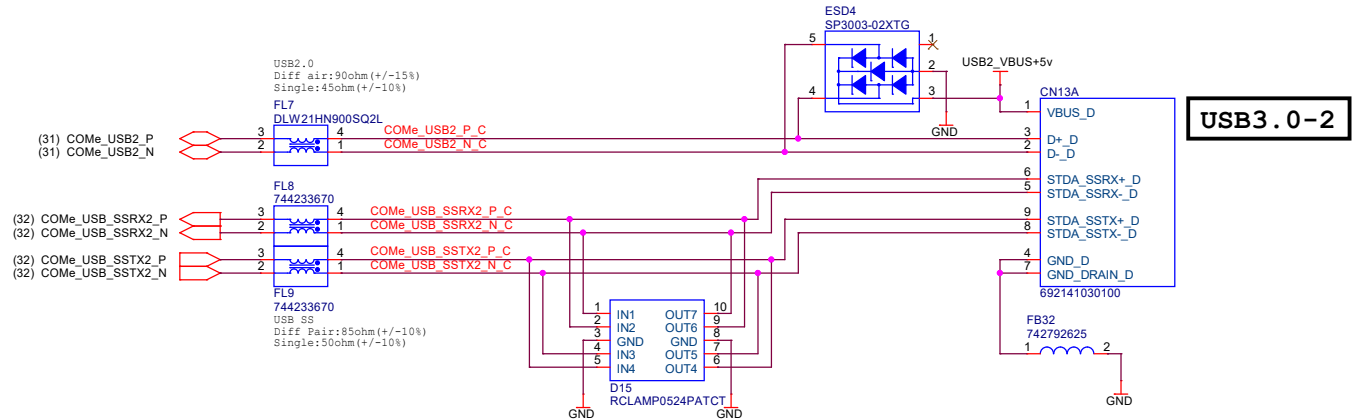
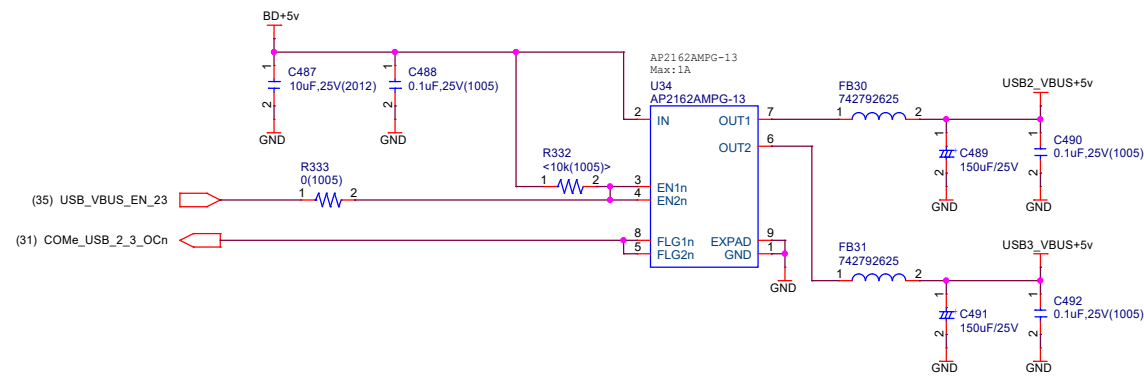


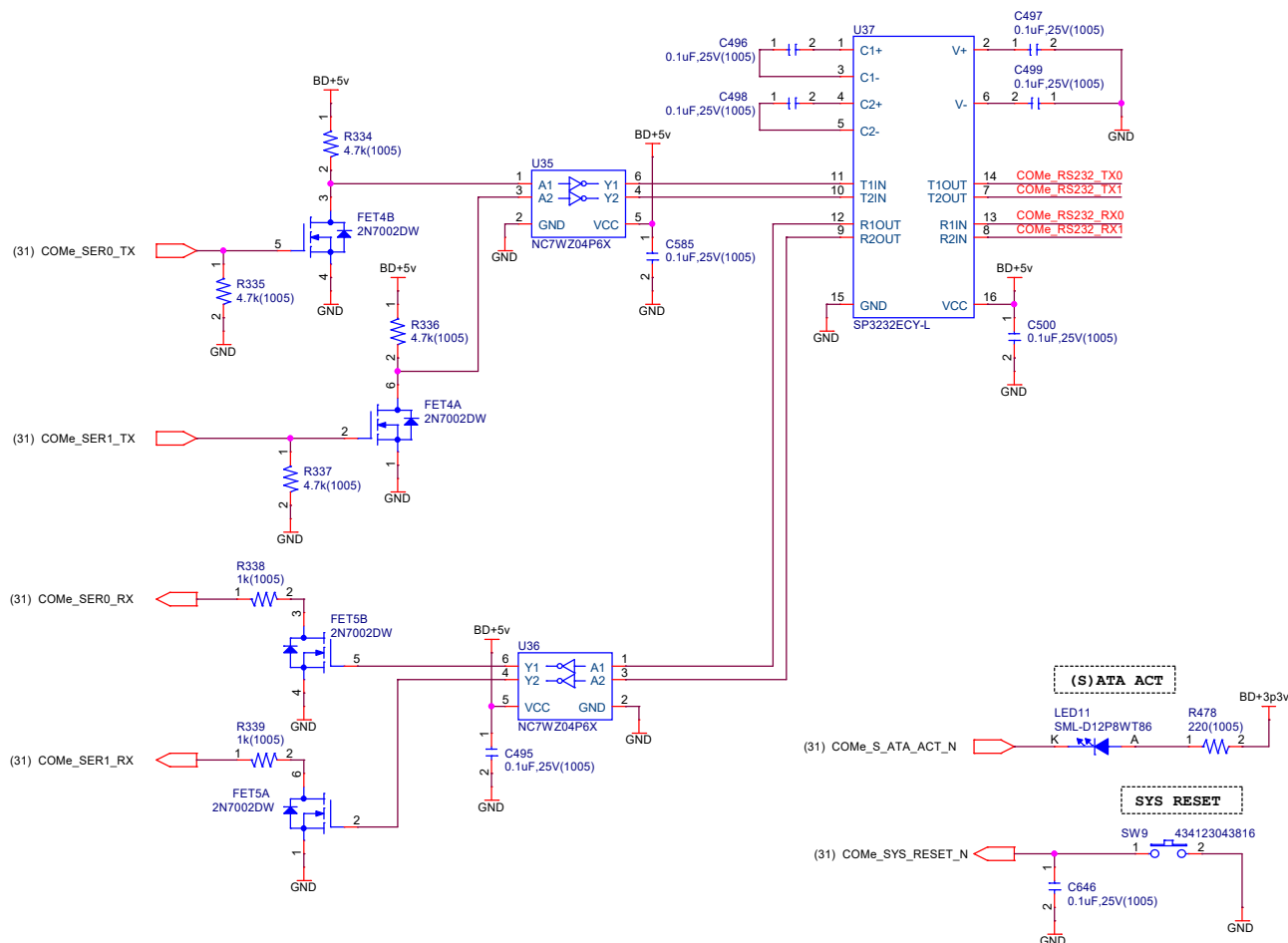
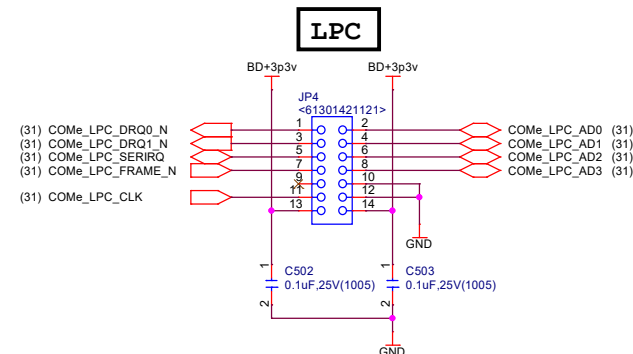
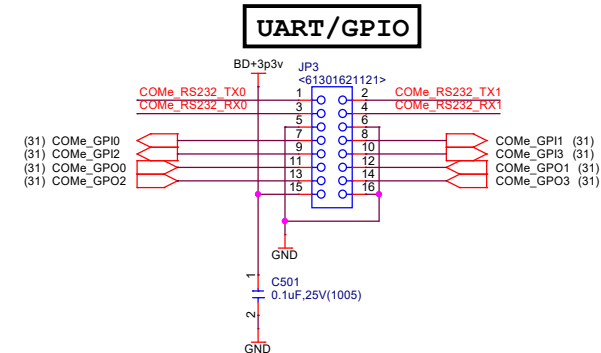
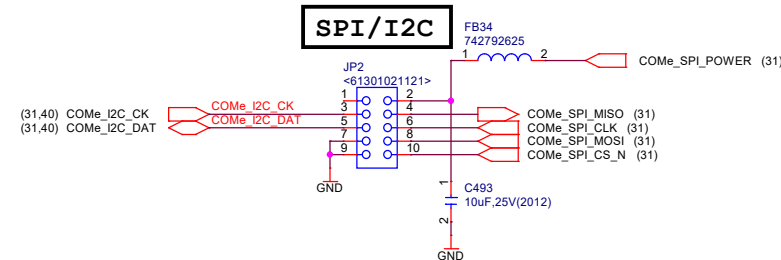
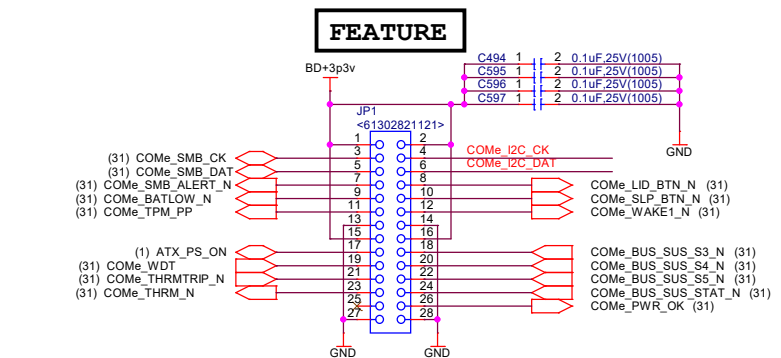
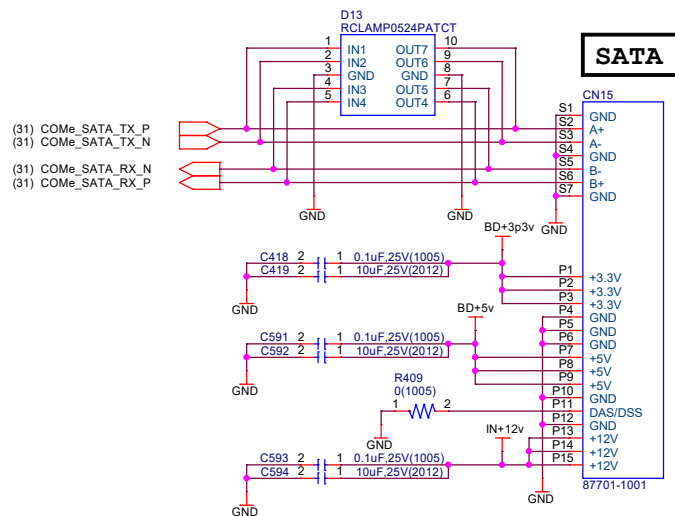


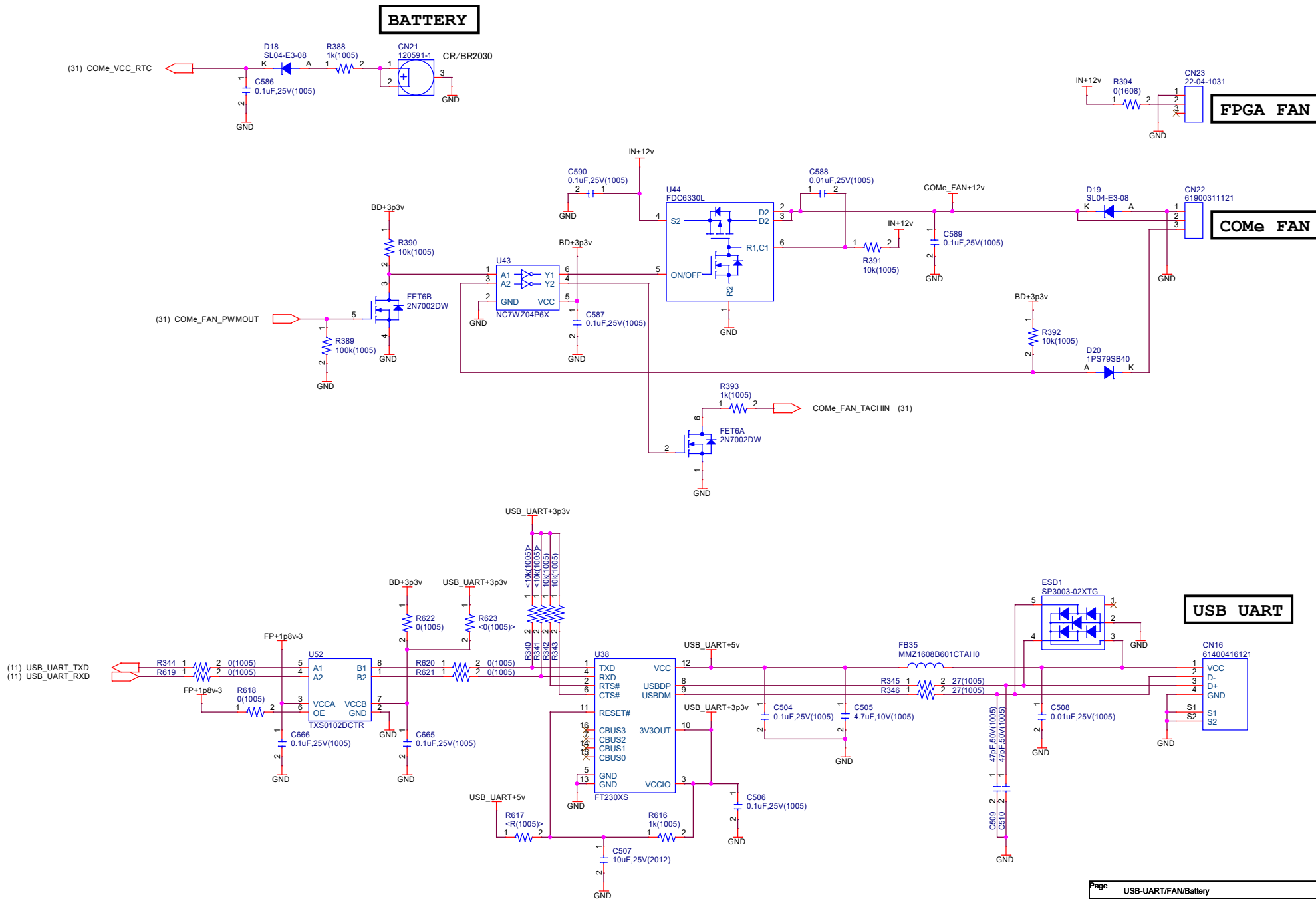
Display Port / HDMI / DVI Pin-out of Type 10 and Type 6

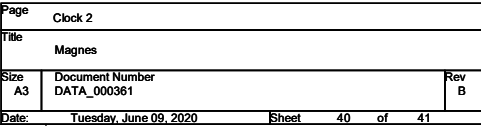
COM Express Pin Name	DDI0 Type 10	DDI1 Type 6	DDI2 Type 6	DDI3 Type 6	Function (DDIX) DisplayPort	Function (DDIX) HDMI / DVI
DDIX_PAIR0+	B71	D26	D39	C39	DPX_LANE0+	TMDSX_DATA2+
DDIX_PAIR0-	B72	D27	D40	C40	DPX_LANE0-	TMDSX_DATA2-
DDIX_PAIR1+	B73	D29	D42	C42	DPX_LANE1+	TMDSX_DATA1+
DDIX_PAIR1-	B74	D30	D43	C43	DPX_LANE1-	TMDSX_DATA1-
DDIX_PAIR2+	B75	D32	D46	C46	DPX_LANE2+	TMDSX_DATA0+
DDIX_PAIR2-	B76	D33	D47	C47	DPX_LANE2-	TMDSX_DATA0-
DDIX_PAIR3+	B81	D36	D49	C49	DPX_LANE3+	TMDSX_CLK+
DDIX_PAIR3-	B82	D37	D50	C50	DPX_LANE3-	TMDSX_CLK-
DDIX_HPD	B89	C24	D44	C44	DPX_HPD	HDMIIX_HPD
DDIX_CTRLCLK_AUX+	B98	D15	C32	C36	DPX_AUX+	HDMIIX_CTRLCLK
DDIX_CTRLCLK_AUX-	B99	D16	C33	C37	DPX_AUX-	HDMIIX_CTRLCLK
DDIX_DDC_AUX_SEL	B95	D34	C34	C38		











Debug LED

