

# KC705 EVALUATION PLATFORM HW-K7-KC705

## (XC7K325T -2 FFG900)

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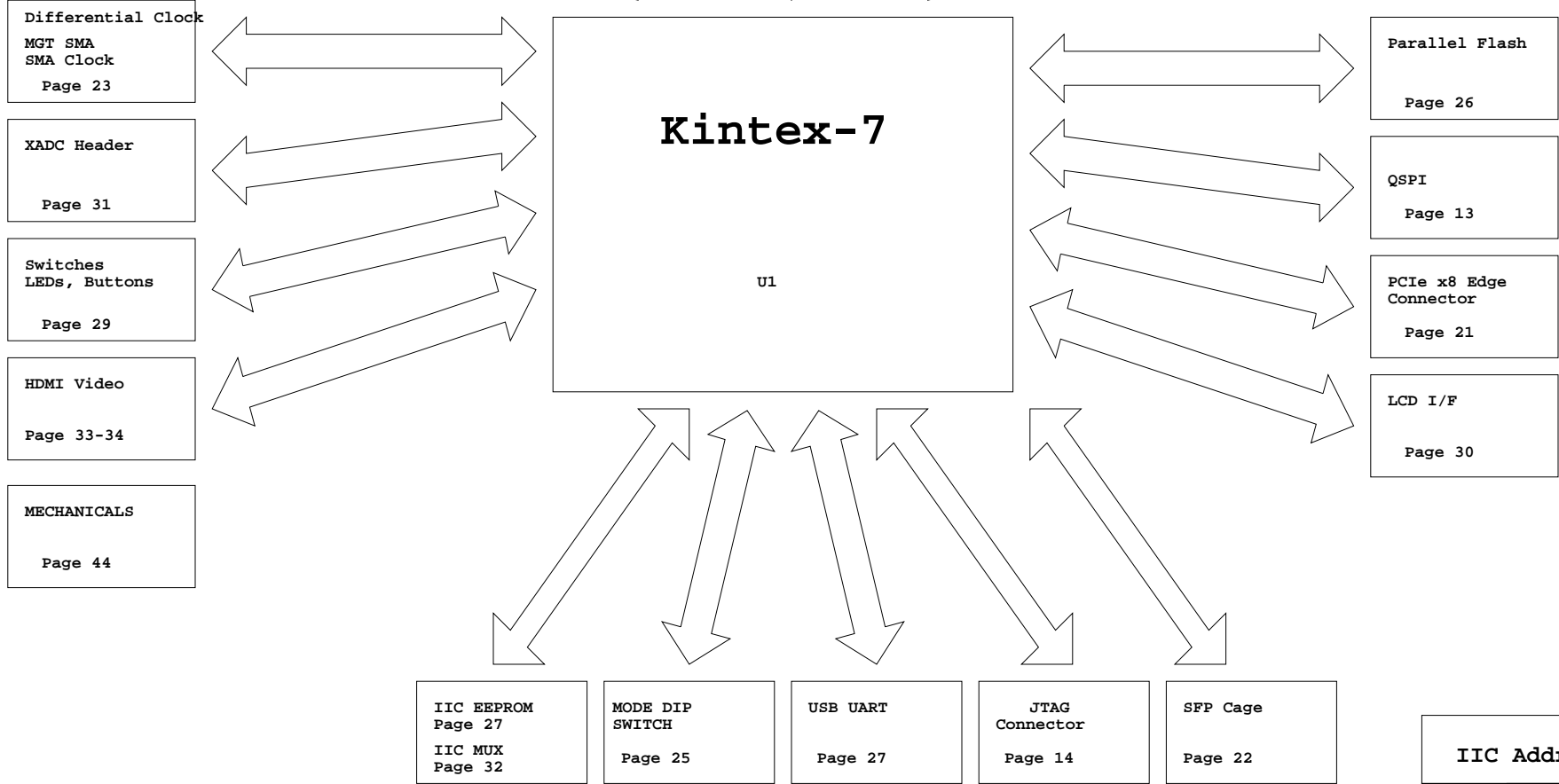
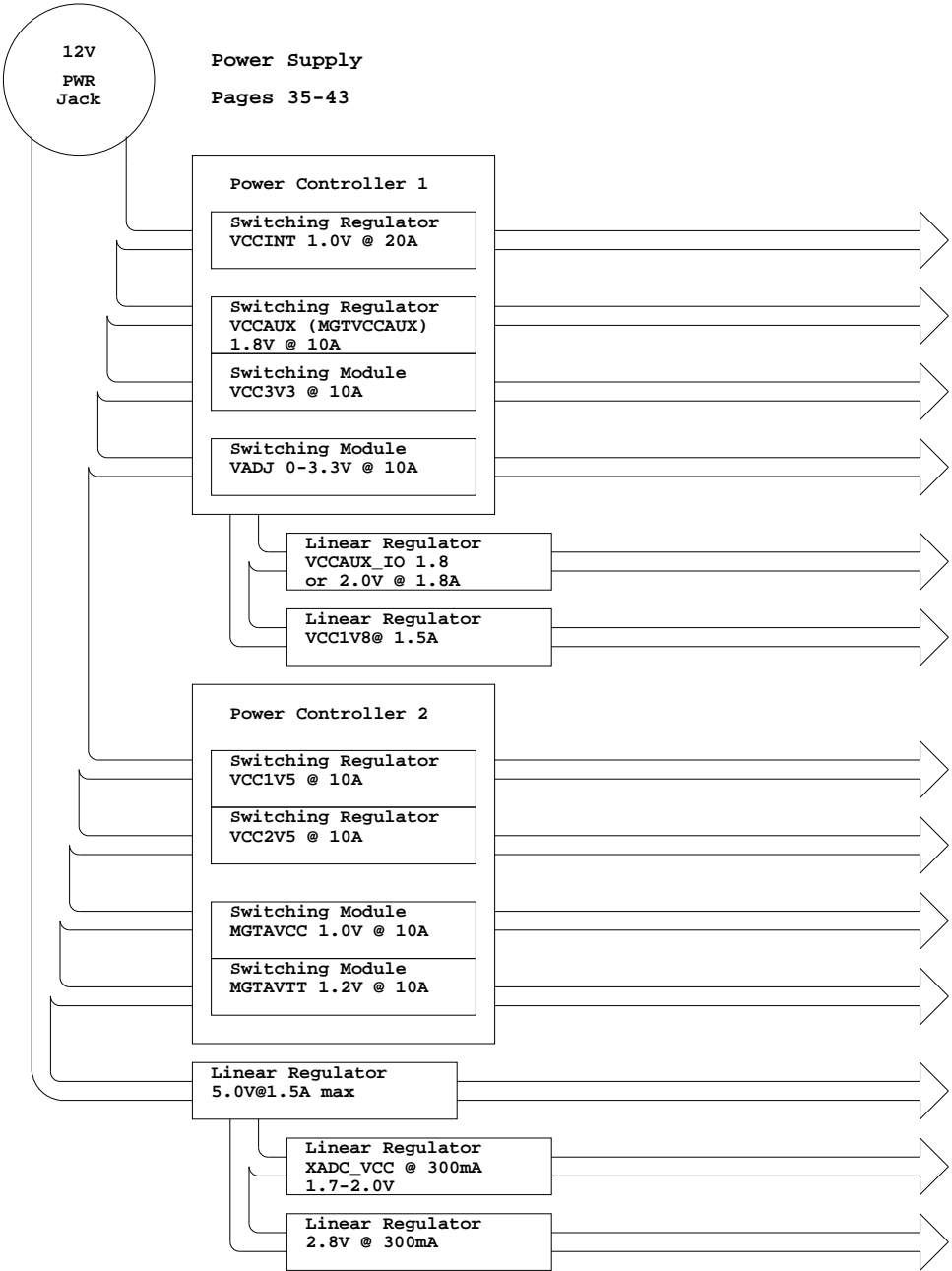
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Title:		ASSY P/N: 0431641	
		PCB P/N: 1280565	
		SCH P/N: 0381397	
Date:		4-2-2012_15:15	Ver: 1.1
Sheet Size: B		Rev: 01	
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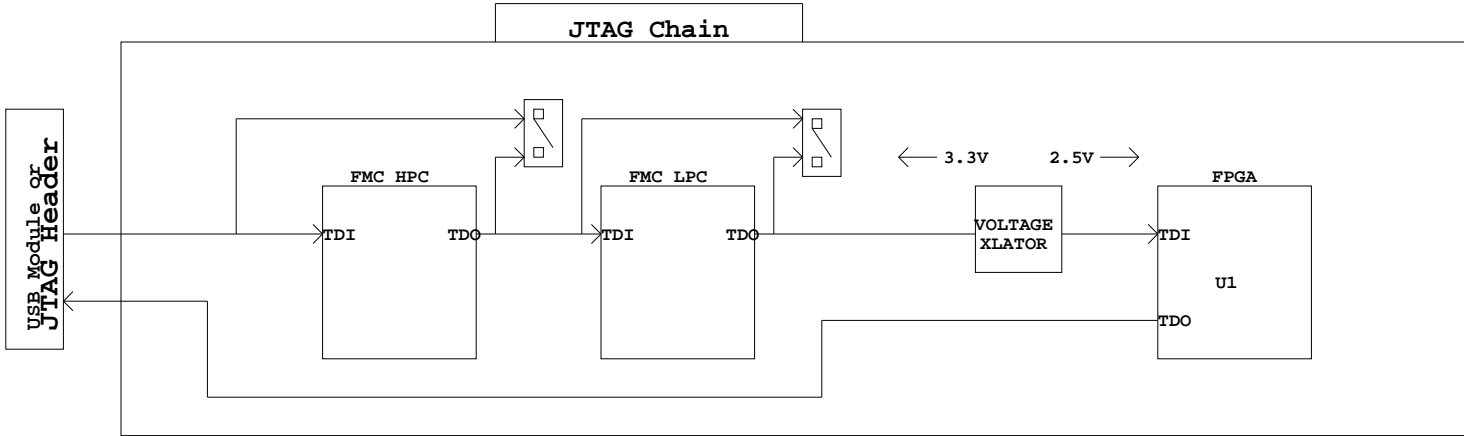
DDR3 SODIMM  
Page 15

FMC HPC/LPC  
Connectors  
Page 16-20

10/100/1000 Ethernet  
MII/GMII/RGMII/SGMII  
Page 25



board please refer to the Bill of Materials delivered for that board. Further device and board information can be found on Xilinx.com



IIC Addressing	
0b1110100	PCA9548
0b1010000 0b0011000	DDR3 SODIMM
0bxxxxxx00	FMC HPC
0bxxxxxx00	FMC LPC
0b1010000	SFP+
0b1011101	SI570
0b1010100	SI5324
0b1010100	IIC EEPROM
0b0111001	ADV7512

IRONWOOD FFG900 SOCKET  
SUPPORTS MULTIPLE DEVICES  
REFER TO BOARD BILL OF  
MATERIALS TO CONFIRM FPGA  
PROVIDED

Title: KC705 Block Diagram SCHEM, ROHS COMPLIANT KC705 EVALUATION PLATFORM		ASSY P/N: 0431641 PCB P/N: 1280565 SCH P/N: 0381397
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SOC\_K7\_325T\_FF900\_IRON

**BANK 0**  
**XC7K325TFFG900**

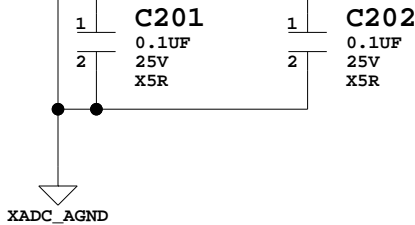
M1_0_AB2	AB2	FPGA M1	27
M0_0_AB5	AB5	FPGA M0	27
M2_0_AB1	AB1	FPGA M2	27
DONE_0_M10	M10	FPGA_DONE	29
CFGBVS_0_L10	L10		
PROGRAM_B_0_K10	K10	FPGA PROG B	26, 29
INIT_B_0_A10	A10	FPGA INIT_B	3, 26
TDI_0_H10	H10	FPGA TDI_BUF	14
TDO_0_G10	G10	JTAG TDO	14
TMS_0_F10	F10	FPGA TMS_BUF	14
TCK_0_E10	E10	FPGA TCK_BUF	14
CCLK_0_B10	B10	FPGA CCLK	
VCCBATT_0_C10	C10	FPGA VBATT	3
VN_0_T14	T14	XADC VN_R	31
VP_0_R15	R15	XADC VP_R	31
VREFP_0_T15	T15	XADC VREFP	31
VREFN_0_R14	R14		
DXP_0_U15	U15	XADC_DXP	31
GNDADC_0_P14	P14		
VCCADC_0_P15	P15	XADC_VCC	31
DXN_0_U14	U14	XADC_DXN	31

VCC2V5\_FPGA

T9  
AB6  
VCCO\_0\_T9  
VCCO\_0\_AB6

U1

SOC\_K7\_325T\_FF900\_IRON



R386

DNP  
DNP  
DNP

C546

DNP  
DNP  
XXX

GND

SOC\_K7\_325T\_FF900\_IRON

**BANK 12**  
**XC7K325TFFG900**

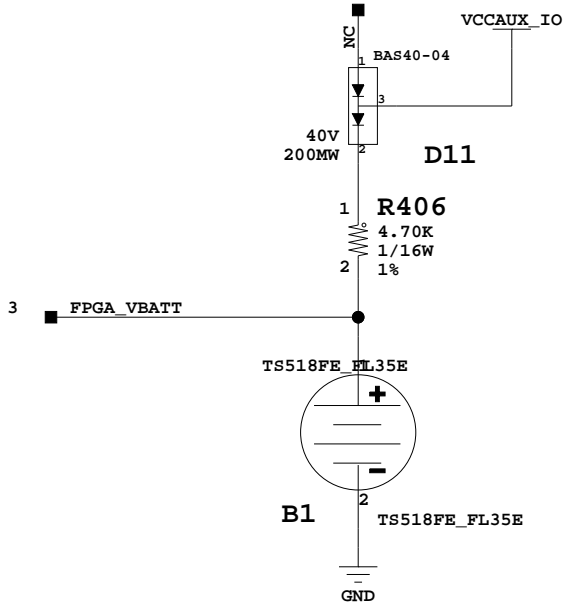
IO_25_12_AE20	AE20	SI5326_RST_LS	30
IO_L24N_T3_12_AK21	AK21	FMC LPC LA06_N	20
IO_L24P_T3_12_AK20	AK20	FMC LPC LA06_P	20
IO_L23N_T3_12_AJ21	AJ21	FMC LPC LA04_N	20
IO_L23P_T3_12_AJ21	AJ21	FMC LPC LA04_P	20
IO_L23P_T3_12_AH21	AH21	FMC LPC LA03_N	20
IO_L22N_T3_12_AH20	AH20	FMC LPC LA03_P	20
IO_L22P_T3_12_AG20	AG20	FMC LPC LA03_P	20
IO_L21N_T3_DQS_12_AJ23	AJ23	FMC LPC LA08_N	20
IO_L21P_T3_DQS_12_AJ22	AJ22	FMC LPC LA08_P	20
IO_L20N_T3_12_AH22	AH22	FMC LPC LA05_N	20
IO_L20P_T3_12_AG22	AG22	FMC LPC LA05_P	20
IO_L19N_T3_VREF_12_AF21	AF21	FMC LPC LA02_N	20
IO_L19P_T3_12_AF20	AF20	FMC LPC LA02_P	20
IO_L18N_T2_12_AH25	AH25	FMC LPC LA07_N	20
IO_L18P_T2_12_AG25	AG25	FMC LPC LA07_P	20
IO_L17N_T2_12_AK24	AK24	FMC LPC LA09_N	20
IO_L17P_T2_12_AK23	AK23	FMC LPC LA09_P	20
IO_L16N_T2_12_AF25	AF25	FMC LPC LA11_N	20
IO_L16P_T2_12_AE25	AE25	FMC LPC LA11_P	20
IO_L15N_T2_DQS_12_AK25	AK25	FMC LPC LA10_N	20
IO_L15P_T2_DQS_12_AJ24	AJ24	FMC LPC LA10_P	20
IO_L14P_T2_SRCC_12_AH24	AH24	HDMI_INT	33
IO_L14N_T2_SRCC_12_AH24	AG24	SI5326_INT_ALM_LS	30
IO_L14P_T2_SRCC_12_AG24	AG23	FMC LPC CLK0_M2C_N	20
IO_L13N_T2_MRCC_12_AG23	AF22	FMC LPC CLK0_M2C_P	20
IO_L13P_T2_MRCC_12_AF22	AE24	FMC LPC LA00_CC_N	20
IO_L12N_T1_MRCC_12_AE24	AD23	FMC LPC LA00_CC_P	20
IO_L12P_T1_MRCC_12_AD23	AF23	FMC LPC LA01_CC_N	20
IO_L11N_T1_SRCC_12_AF23	AE23	FMC LPC LA01_CC_P	20
IO_L11P_T1_SRCC_12_AE23	AE21	FMC LPC LA14_N	20
IO_L10N_T1_12_AE21	AD21	FMC LPC LA14_P	20
IO_L10P_T1_12_AD21	AD24	FMC LPC LA15_N	20
IO_L9N_T1_DQS_12_AD24	AC24	FMC LPC LA15_P	20
IO_L9P_T1_DQS_12_AC24	AD22	FMC LPC LA16_N	20
IO_L8N_T1_12_AD22	AC22	FMC LPC LA16_P	20
IO_L8P_T1_12_AC22	AC25	FMC LPC LA13_N	20
IO_L7N_T1_12_AC25	AB24	FMC LPC LA13_P	20
IO_L7P_T1_12_AB24	AB20	FMC LPC LA12_N	20
IO_L6N_T0_VREF_12_AB20	AA20	FMC LPC LA12_P	20
IO_L6P_T0_12_AA20	AC21	SDIO_CD_DAT3_LS	28
IO_L5N_T0_12_AC21	AC20	SDIO_DAT0_LS	28
IO_L5P_T0_12_AC20	AA23	SDIO_DAT1_LS	28
IO_L4N_T0_12_AA23	AA22	SDIO_DAT2_LS	28
IO_L4P_T0_12_AA22	AB23	SDIO_CLK_LS	28
IO_L3N_T0_DQS_12_AB23	AB22	SDIO_CMD_LS	28
IO_L3P_T0_DQS_12_AB22	AA21	SDIO_SDDET	28
IO_L2N_T0_12_AA21	Y21	SDIO_SDWP	28
IO_L2P_T0_12_Y21	Y24	USER SMA GPIO_N	23
IO_L1N_T0_12_Y24	Y23	USER SMA GPIO_P	23
IO_L1P_T0_12_Y23	Y20	SFP_TX_DISABLE	22
IO_0_12_Y20			

U1

SOC\_K7\_325T\_FF900\_IRON

VADJ\_FPGA

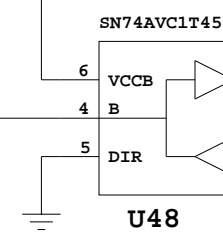
Y22	VCCO_12_Y22
AK22	VCCO_12_AK22
AG21	VCCO_12_AG21
AF24	VCCO_12_AF24
AD20	VCCO_12_AD20
AC23	VCCO_12_AC23



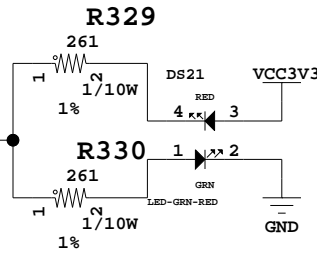
VCC2V5

R296  
4.7K  
1/10W  
5%

3, 26  
FPGA\_INIT\_B



VCC3V3



**FPGA Banks 0,12**



Title: FPGA Banks 0,12  
SCHEM, ROHS COMPLIANT  
KC705 EVALUATION PLATFORM

ASSY P/N: 0431641  
PCB P/N: 1280565  
SCH P/N: 0381397

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BANK 13  
XC7K325TFFG900

IO_25_13_AE26	AE26	GPIO_LED_4_LS	30
IO_L24N_T3_13_AK26	AK26	FMC_LPC_LA19_N	20
IO_L24P_T3_13_AJ26	AJ26	FMC_LPC_LA19_P	20
IO_L23N_T3_13_AF27	AF27	FMC_LPC_LA20_N	20
IO_L23P_T3_13_AF26	AF26	FMC_LPC_LA20_P	20
IO_L22N_T3_13_AH27	AH27	FMC_LPC_LA23_N	20
IO_L22P_T3_13_AH26	AH26	FMC_LPC_LA23_P	20
IO_L21N_T3_DQS_13_AG28	AG28	FMC_LPC_LA21_N	20
IO_L21P_T3_DQS_13_AG27	AG27	FMC_LPC_LA21_P	20
IO_L20N_T3_13_AK28	AK28	FMC_LPC_LA22_N	20
IO_L20P_T3_13_AJ27	AJ27	FMC_LPC_LA22_P	20
IO_L19N_T3_VREF_13_AD26	AD26	FMC_LPC_LA25_N	20
IO_L19P_T3_13_AC26	AC26	FMC_LPC_LA25_P	20
IO_L18N_T2_13_AH30	AH30	FMC_LPC_LA24_N	20
IO_L18P_T2_13_AG30	AG30	FMC_LPC_LA24_P	20
IO_L17N_T2_13_AJ29	AJ29	FMC_LPC_LA27_N	20
IO_L17P_T2_13_AJ28	AJ28	FMC_LPC_LA27_P	20
IO_L16N_T2_13_AF30	AF30	FMC_LPC_LA28_N	20
IO_L16P_T2_13_AE30	AE30	FMC_LPC_LA28_P	20
IO_L15N_T2_DQS_13_AK30	AK30	FMC_LPC_LA26_N	20
IO_L15P_T2_DQS_13_AK29	AK29	FMC_LPC_LA26_P	20
IO_L14N_T2_SRCC_13_AF28	AF28	FMC_LPC_LA29_N	20
IO_L14P_T2_SRCC_13_AE28	AE28	FMC_LPC_LA29_P	20
IO_L13N_T2_MRCC_13_AH29	AH29	FMC_LPC_CLK1_M2C_N	20
IO_L13P_T2_MRCC_13_AG29	AG29	FMC_LPC_CLK1_M2C_P	20
IO_L12N_T1_MRCC_13_AC27	AC27	FMC_LPC_LA17_CC_N	20
IO_L12P_T1_MRCC_13_AB27	AB27	FMC_LPC_LA17_CC_P	20
IO_L11N_T1_SRCC_13_AD28	AD28	FMC_LPC_LA18_CC_N	20
IO_L11P_T1_SRCC_13_AD27	AD27	FMC_LPC_LA18_CC_P	20
IO_L10N_T1_13_AB30	AB30	FMC_LPC_LA30_N	20
IO_L10P_T1_13_AB29	AB29	FMC_LPC_LA30_P	20
IO_L9N_T1_DQS_13_AE29	AE29	FMC_LPC_LA31_N	20
IO_L9P_T1_DQS_13_AD29	AD29	FMC_LPC_LA31_P	20
IO_L8N_T1_13_AA30	AA30	FMC_LPC_LA32_N	20
IO_L8P_T1_13_Y30	Y30	FMC_LPC_LA32_P	20
IO_L7N_T1_13_AC30	AC30	FMC_LPC_LA33_N	20
IO_L7P_T1_13_AC29	AC29	FMC_LPC_LA33_P	20
IO_L6N_T0_VREF_13_AB25	AB25	XADC_GPIO_0	31
IO_L6P_T0_13_AA25	AA25	XADC_GPIO_1	31
IO_L5N_T0_13_AB28	AB28	XADC_GPIO_2	31
IO_L5P_T0_13_AA27	AA27	XADC_GPIO_3	31
IO_L4N_T0_13_Y29	Y29	GPIO_DIP_SW0	29
IO_L4P_T0_13_W29	W29	GPIO_DIP_SW1	29
IO_L3N_T0_DQS_13_AA28	AA28	GPIO_DIP_SW2	29
IO_L3P_T0_DQS_13_Y28	Y28	GPIO_DIP_SW3	29
IO_L2N_T0_13_W28	W28	REC_CLOCK_C_N	24
IO_L2P_T0_13_W27	W27	REC_CLOCK_C_P	24
IO_L1N_T0_13_AA26	AA26	ROTARY_PUSH	29
IO_L1P_T0_13_Y26	Y26	ROTARY_INCA	29
IO_0_13_Y25	Y25	ROTARY_INCB	29

U1

SOC\_K7\_325T\_FF900\_IRON

SOC\_K7\_325T\_FF900\_IRON

BANK 14  
XC7K325TFFG900

IO_25_14_W19	W19	PHY_COL	25
IO_L24N_T3_A00_D16_14_W22	W22	FLASH_A0	26
IO_L24P_T3_A01_D17_14_W21	W21	FLASH_A1	26
IO_L23N_T3_A02_D18_14_W24	W24	FLASH_A2	26
IO_L23P_T3_A03_D19_14_U24	U24	FLASH_A3	26
IO_L22N_T3_A04_D20_14_V22	V22	FLASH_A4	26
IO_L22P_T3_A05_D21_14_V21	V21	FLASH_A5	26
IO_L21N_T3_DQS_A06_D22_14_U23	U23	FLASH_A6	26
IO_L21P_T3_DQS_14_U22	U22	SM_FAN_TACH	35
IO_L20N_T3_A07_D23_14_W24	W24	FLASH_A7	26
IO_L20P_T3_A08_D24_14_W23	W23	FLASH_A8	26
IO_L19N_T3_A09_D25_VREF_14_V20	V20	FLASH_A9	26
IO_L19P_T3_A10_D26_14_V19	V19	FLASH_A10	26
IO_L18N_T2_A11_D27_14_W26	W26	FLASH_A11	26
IO_L18P_T2_A12_D28_14_V25	V25	FLASH_A12	26
IO_L17N_T2_A13_D29_14_V30	V30	FLASH_A13	26
IO_L17P_T2_A14_D30_14_V29	V29	FLASH_A14	26
IO_L16N_T2_A15_D31_14_V27	V27	FLASH_A15	26
IO_L16P_T2_CSI_B_14_V26	V26	PHY_RXER	25
IO_L15N_T2_DQSDOUT_CS0B_14_U30	U30	PHY_RXD0	25
IO_L15P_T2_DQS_RDWR_B_14_U29	U29	FLASH_WAIT	26
IO_L14N_T2_SRCC_14_U25	U25	PHY_RXD1	25
IO_L14P_T2_SRCC_14_T25	T25	PHY_RXD2	25
IO_L13N_T2_MRCC_14_U28	U28	PHY_RXD3	25
IO_L13P_T2_MRCC_14_U27	U27	PHY_RXCLK	25
IO_L12N_T1_MRCC_14_T27	T27	PHY_RXD5	25
IO_L12P_T1_MRCC_14_T26	T26	PHY_RXD6	25
IO_L11N_T1_SRCC_14_T28	T28	PHY_RXD7	25
IO_L11P_T1_SRCC_14_R28	R28	PHY_RXCTL_RXDV	25
IO_L10N_T1_D15_14_R26	R26	FLASH_D15	26
IO_L10P_T1_D14_14_P26	P26	FLASH_D14	26
IO_L9N_T1_DQS_D13_14_T30	T30	FLASH_D13	26
IO_L9P_T1_DQS_14_R30	R30	PHY_CRS	25
IO_L8N_T1_D12_14_P28	P28	FLASH_D12	26
IO_L8P_T1_D11_14_P27	P27	FLASH_D11	26
IO_L7N_T1_D10_14_R29	R29	FLASH_D10	26
IO_L7P_T1_D09_14_P29	P29	FLASH_D9	26
IO_L6N_T0_D08_VREF_14_U20	U20	FLASH_D8	26
IO_L6P_T0_FCS_B_14_U19	U19	FPGA_FCS	27
IO_L5N_T0_D07_14_T23	T23	FLASH_D7	26
IO_L5P_T0_D06_14_T22	T22	FLASH_D6	26
IO_L4N_T0_D05_14_T21	T21	FLASH_D5	26
IO_L4P_T0_D04_14_T20	T20	FLASH_D4	26
IO_L3N_T0_DQS_EMCCLK_14_R24	R24	FPGA_EMCCLK	14
IO_L3P_T0_DQS_PUDC_B_14_R23	R23	PHY_MDC	25
IO_L2N_T0_D03_14_R21	R21	FLASH_D3	26
IO_L2P_T0_D02_14_R20	R20	FLASH_D2	26
IO_L1N_T0_D01_DIN_14_R25	R25	FLASH_D1	26
IO_L1P_T0_D00_MOSI_14_P24	P24	FLASH_D0	26
IO_0_14_R19	R19	PHY_RXD4	25

U1

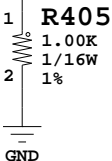
SOC\_K7\_325T\_FF900\_IRON

VADJ\_FPGA

AJ25	VCCO_13_AJ25
AH28	VCCO_13_AH28
AE27	VCCO_13_AE27
AD30	VCCO_13_AD30
AB26	VCCO_13_AB26
AA29	VCCO_13_AA29

VCC2V5\_FPGA

W25	VCCO_14_W25
V28	VCCO_14_V28
U21	VCCO_14_U21
T24	VCCO_14_T24
R27	VCCO_14_R27
P30	VCCO_14_P30



FPGA Banks 13, 14



Title: FPGA Banks 13, 14 SCHEM, ROHS COMPLIANT KC705 EVALUATION PLATFORM		ASSY P/N: 0431641 PCB P/N: 1280565 SCH P/N: 0381397
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SOC\_K7\_325T\_FF900\_IRON

BANK 15  
XC7K325TFFG900

IO_25_15_P19	P19	SFP LOS LS	30
IO_L24N_T3_RS0_15_M23	M23	FLASH A24	26,27
IO_L24P_T3_RS1_15_M22	M22	FLASH A25	26,27
IO_L23N_T3_FWE_B_15_M25	M25	FLASH FWE_B	26
IO_L23P_T3_FOE_B_15_M24	M24	FLASH OE_B	26
IO_L22N_T3_A16_15_P22	P22	FLASH A16	26
IO_L22P_T3_A17_15_P21	P21	FLASH A17	26
IO_L21N_T3_DQS_A18_15_N24	N24	FLASH A18	26
IO_L21P_T3_DQS_15_P23	P23	IIC MUX RESET_B	32
IO_L20N_T3_A19_15_N22	N22	FLASH A19	26
IO_L20P_T3_A20_15_N21	N21	FLASH A20	26
IO_L19N_T3_A21_VREF_15_N20	N20	FLASH A21	26
IO_L19P_T3_A22_15_N19	N19	FLASH A22	26
IO_L18N_T2_A23_15_N26	N26	FLASH A23	26
IO_L18P_T2_A24_15_N25	N25	PHY TXD1	25
IO_L17N_T2_A25_15_N30	N30	PHY_INT	25
IO_L17P_T2_A26_15_N29	N29	PHY TXER	25
IO_L16N_T2_A27_15_M27	M27	PHY TXCTL_TXEN	25
IO_L16P_T2_A28_15_N27	N27	PHY TXD0	25
IO_L15N_T2_DQS_ADV_B_15_M30	M30	FLASH_ADV_B	26
IO_L15P_T2_DQS_15_M29	M29	PHY TXD2	25
IO_L14N_T2_SRCC_15_L28	L28	PHY TXD3	25
IO_L14P_T2_SRCC_15_M28	M28	PHY TXCLK	25
IO_L13N_T2_MRCC_15_K29	K29	USER_CLOCK_N	23
IO_L13P_T2_MRCC_15_K28	K28	USER_CLOCK_P	23
IO_L12N_T1_MRCC_AD5N_15_K25	K25	USER_SMA_CLOCK_N	23
IO_L12P_T1_MRCC_AD5P_15_L25	L25	USER_SMA_CLOCK_P	23
IO_L11N_T1_SRCC_AD12N_15_L27	L27	USB_CTS	27
IO_L11P_T1_SRCC_AD12P_15_L26	L26	SM_FAN_PWM	35
IO_L10N_T1_AD4N_15_J26	J26	PHY TXD4	25
IO_L10P_T1_AD4P_15_K26	K26	PHY TXD5	25
IO_L9N_T1_DQS_AD11N_15_K30	K30	PHY TXC_GTXCLK	25
IO_L9P_T1_DQS_AD11P_15_L30	L30	PHY TXD6	25
IO_L8N_T1_AD3N_15_J28	J28	PHY TXD7	25
IO_L8P_T1_AD3P_15_J27	J27	FMC VADJ_ON_B_LS	30
IO_L7N_T1_AD10N_15_H29	H29	FMC C2M_PG_LS	30
IO_L7P_T1_AD10P_15_J29	J29	FMC HPC_PG_M2C_LS	30
IO_L6N_T0_VREF_15_L20	L20	PHY RESET	25
IO_L6P_T0_15_M20	M20	FMC HPC_PRSNT_M2C_B_LS	30
IO_L5N_T0_AD2N_15_J22	J22	FMC LPC_PRSNT_M2C_B_LS	30
IO_L5P_T0_AD2P_15_J21	J21	PHY MDIO	25
IO_L4N_T0_AD9N_15_K21	K21	IIC_SCL_MAIN	32
IO_L4P_T0_AD9P_15_L21	L21	IIC_SDA_MAIN	32
IO_L3N_T0_DQS_AD1N_15_K24	K24	USB_RX	27
IO_L3P_T0_DQS_AD1P_15_K23	K23	USB_RTS	27
IO_L2N_T0_AD8N_15_L23	L23	XADC_VAUX8N_R	31
IO_L2P_T0_AD8P_15_L22	L22	XADC_VAUX8P_R	31
IO_L1N_T0_AD0N_15_J24	J24	XADC_VAUX0N_R	31
IO_L1P_T0_AD0P_15_J23	J23	XADC_VAUX0P_R	31
IO_0_15_M19	M19	USB_TX	27

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BANK 16  
XC7K325TFFG900

IO_25_16_G25	G25	PCIE_PERST_LS	30
IO_L24N_T3_16_G30	G30	FMC_HPC_LA06_N	16
IO_L24P_T3_16_H30	H30	FMC_HPC_LA06_P	16
IO_L23N_T3_16_H27	H27	FMC_HPC_LA03_N	17
IO_L23P_T3_16_H26	H26	FMC_HPC_LA03_P	17
IO_L22N_T3_16_F30	F30	FMC_HPC_LA05_N	16
IO_L22P_T3_16_G29	G29	FMC_HPC_LA05_P	16
IO_L21N_T3_DQS_16_F27	F27	FMC_HPC_LA11_N	18
IO_L21P_T3_DQS_16_G27	G27	FMC_HPC_LA11_P	18
IO_L20N_T3_16_F28	F28	FMC_HPC_LA04_N	18
IO_L20P_T3_16_G28	G28	FMC_HPC_LA04_P	18
IO_L19N_T3_VREF_16_H25	H25	FMC_HPC_LA02_N	18
IO_L19P_T3_16_H24	H24	FMC_HPC_LA02_P	18
IO_L18N_T2_16_E30	E30	FMC_HPC_LA08_N	17
IO_L18P_T2_16_E29	E29	FMC_HPC_LA08_P	17
IO_L17N_T2_16_A30	A30	FMC_HPC_LA09_N	16
IO_L17P_T2_16_B30	B30	FMC_HPC_LA09_P	16
IO_L16N_T2_16_C30	C30	FMC_HPC_LA10_N	16
IO_L16P_T2_16_D29	D29	FMC_HPC_LA10_P	16
IO_L15N_T2_DQS_16_B29	B29	FMC_HPC_LA12_N	17
IO_L15P_T2_DQS_16_C29	C29	FMC_HPC_LA12_P	17
IO_L14N_T2_SRCC_16_D28	D28	FMC_HPC_LA07_N	18
IO_L14P_T2_SRCC_16_E28	E28	FMC_HPC_LA07_P	18
IO_L13N_T2_MRCC_16_C27	C27	FMC_HPC_CLK0_M2C_N	18
IO_L13P_T2_MRCC_16_D27	D27	FMC_HPC_CLK0_M2C_P	18
IO_L12N_T1_MRCC_16_B25	B25	FMC_HPC_LA00_CC_N	17
IO_L12P_T1_MRCC_16_C25	C25	FMC_HPC_LA00_CC_P	17
IO_L11N_T1_SRCC_16_C26	C26	FMC_HPC_LA01_CC_N	16
IO_L11P_T1_SRCC_16_D26	D26	FMC_HPC_LA01_CC_P	16
IO_L10N_T1_16_A26	A26	FMC_HPC_LA13_N	16
IO_L10P_T1_16_A25	A25	FMC_HPC_LA13_P	16
IO_L9N_T1_DQS_16_A28	A28	FMC_HPC_LA14_N	16
IO_L9P_T1_DQS_16_B28	B28	FMC_HPC_LA14_P	16
IO_L8N_T1_16_B24	B24	FMC_HPC_LA15_N	18
IO_L8P_T1_16_C24	C24	FMC_HPC_LA15_P	18
IO_L7N_T1_16_A27	A27	FMC_HPC_LA16_N	17
IO_L7P_T1_16_B27	B27	FMC_HPC_LA16_P	17
IO_L6N_T0_VREF_16_G24	G24	HDMI_R_D11	34
IO_L6P_T0_16_G23	G23	HDMI_R_D10	34
IO_L5N_T0_16_E26	E26	HDMI_R_D9	34
IO_L5P_T0_16_F26	F26	HDMI_R_D8	34
IO_L4N_T0_16_D24	D24	HDMI_R_D7	34
IO_L4P_T0_16_E24	E24	HDMI_R_D6	34
IO_L3N_T0_DQS_16_E25	E25	HDMI_R_D5	34
IO_L3P_T0_DQS_16_F25	F25	HDMI_R_D4	34
IO_L2N_T0_16_D23	D23	HDMI_R_D3	34
IO_L2P_T0_16_E23	E23	HDMI_R_D2	34
IO_L1N_T0_16_A23	A23	HDMI_R_D1	34
IO_L1P_T0_16_B23	B23	HDMI_R_D0	34
IO_0_16_F23	F23	PCIE_WAKE_B_LS	30

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FPGA Banks 15, 16



Title:	FPGA Banks 15, 16 SCHEM, ROHS COMPLIANT KC705 EVALUATION PLATFORM	ASSY P/N: 0431641 PCB P/N: 1280565 SCH P/N: 0381397
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Date:	4-2-2012_15:15	Ver:	1.1
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BANK 17  
XC7K325TFFG900

IO_25_17_E18	E18	GPIO LED 6 Ls	30
IO_L24N_T3_17_B19	B19	FMC HPC LA27 N	16
IO_L24P_T3_17_C19	C19	FMC HPC LA27 P	16
IO_L23N_T3_17_A22	A22	FMC HPC LA23 N	16
IO_L23P_T3_17_B22	B22	FMC HPC LA23 P	16
IO_L22N_T3_17_A18	A18	FMC HPC LA26 N	16
IO_L22P_T3_17_B18	B18	FMC HPC LA26 P	16
IO_L21N_T3_DQS_17_A21	A21	FMC HPC LA21 N	18
IO_L21P_T3_DQS_17_A20	A20	FMC HPC LA21 P	18
IO_L20N_T3_17_A17	A17	FMC HPC LA24 N	18
IO_L20P_T3_17_A16	A16	FMC HPC LA24 P	18
IO_L19N_T3_VREF_17_B20	B20	FMC HPC LA22 N	17
IO_L19P_T3_17_C20	C20	FMC HPC LA22 P	17
IO_L18N_T2_17_F17	F17	FMC HPC LA25 N	17
IO_L18P_T2_17_G17	G17	FMC HPC LA25 P	17
IO_L17N_T2_17_B17	B17	FMC HPC LA29 N	17
IO_L17P_T2_17_C17	C17	FMC HPC LA29 P	17
IO_L16N_T2_17_F18	F18	FMC HPC LA19 N	18
IO_L16P_T2_17_G18	G18	FMC HPC LA19 P	18
IO_L15N_T2_DQS_17_C16	C16	FMC HPC LA28 N	18
IO_L15P_T2_DQS_17_D16	D16	FMC HPC LA28 P	18
IO_L14N_T2_SRCC_17_D19	D19	FMC HPC LA20 N	17
IO_L14P_T2_SRCC_17_E19	E19	FMC HPC LA20 P	17
IO_L13N_T2_MRCC_17_D18	D18	FMC HPC CLK1 M2C N	17
IO_L13P_T2_MRCC_17_D17	D17	FMC HPC CLK1 M2C P	17
IO_L12N_T1_MRCC_17_E20	E20	FMC HPC LA17 CC N	16
IO_L12P_T1_MRCC_17_F20	F20	FMC HPC LA17 CC P	16
IO_L11N_T1_SRCC_17_E21	E21	FMC HPC LA18 CC N	16
IO_L11P_T1_SRCC_17_F21	F21	FMC HPC LA18 CC P	16
IO_L10N_T1_17_C22	C22	FMC HPC LA30 N	18
IO_L10P_T1_17_D22	D22	FMC HPC LA30 P	18
IO_L9N_T1_DQS_17_F22	F22	FMC HPC LA31 N	17
IO_L9P_T1_DQS_17_G22	G22	FMC HPC LA31 P	17
IO_L8N_T1_17_C21	C21	FMC HPC LA32 N	18
IO_L8P_T1_17_D21	D21	FMC HPC LA32 P	18
IO_L7N_T1_17_H22	H22	FMC HPC LA33 N	17
IO_L7P_T1_17_H21	H21	FMC HPC LA33 P	17
IO_L6N_T0_VREF_17_K20	K20	HDMI R D17	34
IO_L6P_T0_17_K19	K19	HDMI R D16	34
IO_L5N_T0_17_L18	L18	HDMI R D15	34
IO_L5P_T0_17_L17	L17	HDMI R D14	34
IO_L4N_T0_17_H19	H19	HDMI R D13	34
IO_L4P_T0_17_J19	J19	HDMI R D12	34
IO_L3N_T0_DQS_17_H17	H17	HDMI R DE	34
IO_L3P_T0_DQS_17_J17	J17	HDMI R SPDIF	34
IO_L2N_T0_17_G20	G20	HDMI SPDIF OUT Ls	30
IO_L2P_T0_17_H20	H20	HDMI R VSYNC	34
IO_L1N_T0_17_J18	J18	HDMI R HSYNC	34
IO_L1P_T0_17_K18	K18	HDMI R CLK	34
IO_0_17_G19	G19	GPIO LED 5 Ls	30

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BANK 18  
XC7K325TFFG900

IO_25_18_F16	F16	GPIO LED 7 Ls	30
IO_L24N_T3_18_A15	A15	FMC HPC HA07 N	18
IO_L24P_T3_18_B14	B14	FMC HPC HA07 P	18
IO_L23N_T3_18_B15	B15	FMC HPC HA12 N	17
IO_L23P_T3_18_C15	C15	FMC HPC HA12 P	17
IO_L22N_T3_18_A13	A13	FMC HPC HA11 N	18
IO_L22P_T3_18_B13	B13	FMC HPC HA11 P	18
IO_L21N_T3_DQS_18_C14	C14	FMC HPC HA06 N	18
IO_L21P_T3_DQS_18_D14	D14	FMC HPC HA06 P	18
IO_L20N_T3_18_E15	E15	FMC HPC HA08 N	17
IO_L20P_T3_18_E14	E14	FMC HPC HA08 P	17
IO_L19N_T3_VREF_18_E16	E16	FMC HPC HA05 N	17
IO_L19P_T3_18_F15	F15	FMC HPC HA05 P	17
IO_L18N_T2_18_C11	C11	FMC HPC HA02 N	18
IO_L18P_T2_18_D11	D11	FMC HPC HA02 P	18
IO_L17N_T2_18_A12	A12	FMC HPC HA10 N	18
IO_L17P_T2_18_A11	A11	FMC HPC HA10 P	18
IO_L16N_T2_18_E11	E11	FMC HPC HA04 N	17
IO_L16P_T2_18_F11	F11	FMC HPC HA04 P	17
IO_L15N_T2_DQS_18_B12	B12	FMC HPC HA03 N	18
IO_L15P_T2_DQS_18_C12	C12	FMC HPC HA03 P	18
IO_L14N_T2_SRCC_18_E13	E13	FMC HPC HA09 N	17
IO_L14P_T2_SRCC_18_F12	F12	FMC HPC HA09 P	17
IO_L13N_T2_MRCC_18_D13	D13	FMC HPC HA00 CC N	17
IO_L13P_T2_MRCC_18_D12	D12	FMC HPC HA00 CC P	17
IO_L12N_T1_MRCC_18_F13	F13	FMC HPC HA17 CC N	18
IO_L12P_T1_MRCC_18_G13	G13	FMC HPC HA17 CC P	18
IO_L11N_T1_SRCC_18_G14	G14	FMC HPC HA01 CC N	17
IO_L11P_T1_SRCC_18_H14	H14	FMC HPC HA01 CC P	17
IO_L10N_T1_18_H12	H12	FMC HPC HA19 N	17
IO_L10P_T1_18_H11	H11	FMC HPC HA19 P	17
IO_L9N_T1_DQS_18_H16	H16	FMC HPC HA14 N	18
IO_L9P_T1_DQS_18_J16	J16	FMC HPC HA14 P	18
IO_L8N_T1_18_J12	J12	FMC HPC HA21 N	18
IO_L8P_T1_18_J11	J11	FMC HPC HA21 P	18
IO_L7N_T1_18_G15	G15	FMC HPC HA15 N	17
IO_L7P_T1_18_H15	H15	FMC HPC HA15 P	17
IO_L6N_T0_VREF_18_K11	K11	FMC HPC HA22 N	18
IO_L6P_T0_18_L11	L11	FMC HPC HA22 P	18
IO_L5N_T0_18_J14	J14	FMC HPC HA18 N	18
IO_L5P_T0_18_K14	K14	FMC HPC HA18 P	18
IO_L4N_T0_18_J13	J13	FMC HPC HA20 N	17
IO_L4P_T0_18_K13	K13	FMC HPC HA20 P	17
IO_L3N_T0_DQS_18_L13	L13	FMC HPC HA23 N	18
IO_L3P_T0_DQS_18_L12	L12	FMC HPC HA23 P	18
IO_L2N_T0_18_K15	K15	FMC HPC HA16 N	17
IO_L2P_T0_18_L15	L15	FMC HPC HA16 P	17
IO_L1N_T0_18_K16	K16	FMC HPC HA13 N	17
IO_L1P_T0_18_L16	L16	FMC HPC HA13 P	17
IO_0_18_G12	G12	GPIO_SW_C	29

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FPGA Banks 17, 18



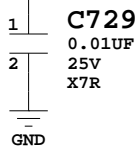
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Date: 4-2-2012_15:15	Ver: 1.1	
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BANK 32  
XC7K325TFFG900

IO\_25\_VRP\_32\_AB14  
IO\_L24N\_T3\_32\_Y15  
IO\_L24P\_T3\_32\_Y16  
IO\_L23N\_T3\_32\_AA16  
IO\_L23P\_T3\_32\_AA17  
IO\_L22N\_T3\_32\_AD14  
IO\_L22P\_T3\_32\_AC14  
IO\_L21N\_T3\_DQS\_32\_AC15  
IO\_L21P\_T3\_DQS\_32\_AC16  
IO\_L20N\_T3\_32\_AB15  
IO\_L20P\_T3\_32\_AA15  
IO\_L19N\_T3\_VREF\_32\_AE14  
IO\_L19P\_T3\_32\_AE15  
IO\_L18N\_T2\_32\_AC17  
IO\_L18P\_T2\_32\_AB17  
IO\_L17N\_T2\_32\_AC19  
IO\_L17P\_T2\_32\_AB19  
IO\_L16N\_T2\_32\_AB18  
IO\_L16P\_T2\_32\_AA18  
IO\_L15N\_T2\_DQS\_32\_Y18  
IO\_L15P\_T2\_DQS\_32\_Y19  
IO\_L14N\_T2\_SRCC\_32\_AD16  
IO\_L14P\_T2\_SRCC\_32\_AD17  
IO\_L13N\_T2\_MRCC\_32\_AE18  
IO\_L13P\_T2\_MRCC\_32\_AD18  
IO\_L12N\_T1\_MRCC\_32\_AG17  
IO\_L12P\_T1\_MRCC\_32\_AF17  
IO\_L11N\_T1\_SRCC\_32\_AG18  
IO\_L11P\_T1\_SRCC\_32\_AF18  
IO\_L10N\_T1\_32\_AE19  
IO\_L10P\_T1\_32\_AD19  
IO\_L9N\_T1\_DQS\_32\_AK18  
IO\_L9P\_T1\_DQS\_32\_AJ18  
IO\_L8N\_T1\_32\_AH19  
IO\_L8P\_T1\_32\_AG19  
IO\_L7N\_T1\_32\_AK19  
IO\_L7P\_T1\_32\_AJ19  
IO\_L6N\_T0\_VREF\_32\_AF16  
IO\_L6P\_T0\_32\_AE16  
IO\_L5N\_T0\_32\_AJ17  
IO\_L5P\_T0\_32\_AH17  
IO\_L4N\_T0\_32\_AG14  
IO\_L4P\_T0\_32\_AF15  
IO\_L3N\_T0\_DQS\_32\_AJ16  
IO\_L3P\_T0\_DQS\_32\_AH16  
IO\_L2N\_T0\_32\_AH15  
IO\_L2P\_T0\_32\_AG15  
IO\_L1N\_T0\_32\_AK15  
IO\_L1P\_T0\_32\_AK16  
IO\_0\_VRN\_32\_Y14

AB14 PMBUS\_ALERT\_LS  
Y15 DDR3\_D7  
Y16 DDR3\_DM0  
AA16 DDR3\_D1  
AA17 DDR3\_D4  
AD14 DDR3\_D3  
AC14 DDR3\_D2  
AC15 DDR3\_DQS0\_N  
AC16 DDR3\_DQS0\_P  
AB15 DDR3\_D5  
AA15 DDR3\_D0  
AE14  
AE15 DDR3\_D6  
AC17 NC  
AB17 DDR3\_DM1  
AC19 DDR3\_D10  
AB19 DDR3\_D8  
AB18 DDR3\_D13  
AA18 DDR3\_D12  
Y18 DDR3\_DQS1\_N  
Y19 DDR3\_DQS1\_P  
AD16 DDR3\_D9  
AD17 DDR3\_D11  
AE18 DDR3\_D14  
AD18 DDR3\_D15  
AG17 PMBUS\_CLK\_LS  
AF17 DDR3\_DM2  
AG18 DDR3\_D18  
AF18 DDR3\_D19  
AE19 DDR3\_D22  
AD19 DDR3\_D23  
AK18 DDR3\_DQS2\_N  
AJ18 DDR3\_DQS2\_P  
AH19 DDR3\_D20  
AG19 DDR3\_D16  
AK19 DDR3\_D17  
AJ19 DDR3\_D21  
AF16  
AE16 DDR3\_DM3  
AJ17 DDR3\_D25  
AH17 DDR3\_D28  
AG14 DDR3\_D29  
AF15 DDR3\_D27  
AJ16 DDR3\_DQS3\_N  
AH16 DDR3\_DQS3\_P  
AH15 DDR3\_D30  
AG15 DDR3\_D26  
AK15 DDR3\_D31  
AK16 DDR3\_D24  
Y14 PMBUS\_DATA\_LS

VTIVREF



VCC1V5\_FPGA

AJ15 VCCO\_32\_AJ15  
AH18 VCCO\_32\_AH18  
AF14 VCCO\_32\_AF14  
AE17 VCCO\_32\_AE17  
AB16 VCCO\_32\_AB16  
AA19 VCCO\_32\_AA19

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BANK 33  
XC7K325TFFG900

IO\_25\_VRP\_33\_AD13  
IO\_L24N\_T3\_33\_AH12  
IO\_L24P\_T3\_33\_AG13  
IO\_L23N\_T3\_33\_AG12  
IO\_L23P\_T3\_33\_AF12  
IO\_L22N\_T3\_33\_AJ12  
IO\_L22P\_T3\_33\_AJ13  
IO\_L21N\_T3\_DQS\_33\_AJ14  
IO\_L21P\_T3\_DQS\_33\_AH14  
IO\_L20N\_T3\_33\_AK13  
IO\_L20P\_T3\_33\_AK14  
IO\_L19N\_T3\_VREF\_33\_AF13  
IO\_L19P\_T3\_33\_AE13  
IO\_L18N\_T2\_33\_AJ11  
IO\_L18P\_T2\_33\_AH11  
IO\_L17N\_T2\_33\_AK10  
IO\_L17P\_T2\_33\_AK11  
IO\_L16N\_T2\_33\_AH9  
IO\_L16P\_T2\_33\_AG9  
IO\_L15N\_T2\_DQS\_33\_AK9  
IO\_L15P\_T2\_DQS\_33\_AJ9  
IO\_L14N\_T2\_SRCC\_33\_AF10  
IO\_L14P\_T2\_SRCC\_33\_AE10  
IO\_L13N\_T2\_MRCC\_33\_AH10  
IO\_L13P\_T2\_MRCC\_33\_AG10  
IO\_L12N\_T1\_MRCC\_33\_AD11  
IO\_L12P\_T1\_MRCC\_33\_AD12  
IO\_L11N\_T1\_SRCC\_33\_AF11  
IO\_L11P\_T1\_SRCC\_33\_AE11  
IO\_L10N\_T1\_33\_AE9  
IO\_L10P\_T1\_33\_AD9  
IO\_L9N\_T1\_DQS\_33\_AC11  
IO\_L9P\_T1\_DQS\_33\_AC12  
IO\_L8N\_T1\_33\_AE8  
IO\_L8P\_T1\_33\_AD8  
IO\_L7N\_T1\_33\_AC10  
IO\_L7P\_T1\_33\_AB10  
IO\_L6N\_T0\_VREF\_33\_AB13  
IO\_L6P\_T0\_33\_AA13  
IO\_L5N\_T0\_33\_AA10  
IO\_L5P\_T0\_33\_AA11  
IO\_L4N\_T0\_33\_Y10  
IO\_L4P\_T0\_33\_Y11  
IO\_L3N\_T0\_DQS\_33\_AC9  
IO\_L3P\_T0\_DQS\_33\_AB9  
IO\_L2N\_T0\_33\_AB8  
IO\_L2P\_T0\_33\_AA8  
IO\_L1N\_T0\_33\_AB12  
IO\_L1P\_T0\_33\_AA12  
IO\_0\_VRN\_33\_Y13

AD13 VRP\_33  
AH12 DDR3\_A0  
AG13 DDR3\_A1  
AG12 DDR3\_A2  
AF12 DDR3\_A3  
AJ12 DDR3\_A4  
AJ13 DDR3\_A5  
AJ14 DDR3\_A6  
AH14 DDR3\_A7  
AK13 DDR3\_A8  
AK14 DDR3\_A9  
AF13 DDR3\_A10  
AE13 DDR3\_A11  
AJ11 DDR3\_A12  
AH11 DDR3\_A13  
AK10 DDR3\_A14  
AK11 DDR3\_A15  
AH9 DDR3\_BA0  
AG9 DDR3\_BA1  
AK9 DDR3\_BA2  
AJ9 DDR3\_TEMP\_EVENT  
AF10 DDR3\_CKE0  
AE10 DDR3\_CKE1  
AH10 DDR3\_CLK0\_N  
AG10 DDR3\_CLK0\_P  
AD11 SYSCLK\_N  
AD12 SYSCLK\_P  
AF11 DDR3\_CLK1\_N  
AE11 DDR3\_CLK1\_P  
AE9 DDR3\_WE\_B  
AD9 DDR3\_RAS\_B  
AC11 DDR3\_CAS\_B  
AC12 DDR3\_S0\_B  
AE8 DDR3\_S1\_B  
AD8 DDR3\_ODT0  
AC10 DDR3\_ODT1  
AB10 LCD\_E\_LS  
AB13 LCD\_RW\_LS  
AA13 LCD\_DB4\_LS  
AA10 LCD\_DB5\_LS  
AA11 LCD\_DB6\_LS  
Y10 LCD\_DB7\_LS  
Y11 LCD\_RS\_LS  
AC9 GPIO\_LED\_2\_LS  
AB9 GPIO\_LED\_3\_LS  
AB8 GPIO\_LED\_0\_LS  
AA8 GPIO\_LED\_1\_LS  
AB12 GPIO\_SW\_S  
AA12 GPIO\_SW\_N  
Y13 VRN\_33

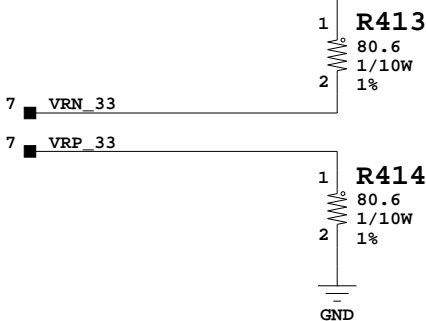
VCC1V5\_FPGA

Y12 VCCO\_33\_Y12  
AK12 VCCO\_33\_AK12  
AG11 VCCO\_33\_AG11  
AD10 VCCO\_33\_AD10  
AC13 VCCO\_33\_AC13  
AA9 VCCO\_33\_AA9

U1

SOC\_K7\_325T\_FF900\_IRON

VCC1V5\_FPGA



FPGA Banks 32, 33



Title: FPGA Banks 32, 33 SCHEM, ROHS COMPLIANT KC705 EVALUATION PLATFORM		ASSY P/N: 0431641 PCB P/N: 1280565 SCH P/N: 0381397
Date: 4-2-2012_15:15	Ver: 1.1	
Sheet Size: B	Rev: 01	
Sheet 7 of 47	Drawn By BF	

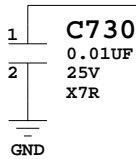
SOC\_K7\_325T\_FF900\_IRON

BANK 34  
XC7K325TFFG900

IO\_25\_VRP\_34\_AB7  
IO\_L24N\_T3\_34\_AK4  
IO\_L24P\_T3\_34\_AK5  
IO\_L23N\_T3\_34\_AK8  
IO\_L23P\_T3\_34\_AJ8  
IO\_L22N\_T3\_34\_AK6  
IO\_L22P\_T3\_34\_AJ6  
IO\_L21N\_T3\_DQS\_34\_AJ7  
IO\_L21P\_T3\_DQS\_34\_AH7  
IO\_L20N\_T3\_34\_AG7  
IO\_L20P\_T3\_34\_AF7  
IO\_L19N\_T3\_VREF\_34\_AG8  
IO\_L19P\_T3\_34\_AF8  
IO\_L18N\_T2\_34\_AK3  
IO\_L18P\_T2\_34\_AJ3  
IO\_L17N\_T2\_34\_AK1  
IO\_L17P\_T2\_34\_AJ1  
IO\_L16N\_T2\_34\_AJ2  
IO\_L16P\_T2\_34\_AH2  
IO\_L15N\_T2\_DQS\_34\_AH1  
IO\_L15P\_T2\_DQS\_34\_AG2  
IO\_L14N\_T2\_SRCC\_34\_AH5  
IO\_L14P\_T2\_SRCC\_34\_AH6  
IO\_L13N\_T2\_MRCC\_34\_AJ4  
IO\_L13P\_T2\_MRCC\_34\_AH4  
IO\_L12N\_T1\_MRCC\_34\_AG5  
IO\_L12P\_T1\_MRCC\_34\_AF6  
IO\_L11N\_T1\_SRCC\_34\_AF5  
IO\_L11P\_T1\_SRCC\_34\_AE5  
IO\_L10N\_T1\_34\_AE3  
IO\_L10P\_T1\_34\_AE4  
IO\_L9N\_T1\_DQS\_34\_AG3  
IO\_L9P\_T1\_DQS\_34\_AG4  
IO\_L8N\_T1\_34\_AF1  
IO\_L8P\_T1\_34\_AE1  
IO\_L7N\_T1\_34\_AF2  
IO\_L7P\_T1\_34\_AF3  
IO\_L6N\_T0\_VREF\_34\_AD7  
IO\_L6P\_T0\_34\_AC7  
IO\_L5N\_T0\_34\_AE6  
IO\_L5P\_T0\_34\_AD6  
IO\_L4N\_T0\_34\_AC4  
IO\_L4P\_T0\_34\_AC5  
IO\_L3N\_T0\_DQS\_34\_AD1  
IO\_L3P\_T0\_DQS\_34\_AD2  
IO\_L2N\_T0\_34\_AC1  
IO\_L2P\_T0\_34\_AC2  
IO\_L1N\_T0\_34\_AD3  
IO\_L1P\_T0\_34\_AD4  
IO\_0\_VRN\_34\_AC6

AB7 CPU\_RESET 29  
AK4 DDR3\_D37 15  
AK5 DDR3\_DM4 15  
AK8 DDR3\_D32 15  
AJ8 DDR3\_D38 15  
AK6 DDR3\_D33 15  
AJ6 DDR3\_D39 15  
AJ7 DDR3\_DQS4\_N 15  
AH7 DDR3\_DQS4\_P 15  
AG7 DDR3\_D34 15  
AF7 DDR3\_D35 15  
AG8  
AF8 DDR3\_D36 15  
AK3 DDR3\_RESET\_B 15  
AJ3 DDR3\_DM5 15  
AK1 DDR3\_D46 15  
AJ1 DDR3\_D47 15  
AJ2 DDR3\_D42 15  
AH2 DDR3\_D43 15  
AH1 DDR3\_DQS5\_N 15  
AG2 DDR3\_DQS5\_P 15  
AH5 DDR3\_D40 15  
AH6 DDR3\_D41 15  
AJ4 DDR3\_D45 15  
AH4 DDR3\_D44 15  
AG5 GPIO\_SW\_E 29  
AF6 DDR3\_DM6 15  
AF5 DDR3\_D53 15  
AE5 DDR3\_D55 15  
AE3 DDR3\_D51 15  
AE4 DDR3\_D50 15  
AG3 DDR3\_DQS6\_N 15  
AG4 DDR3\_DQS6\_P 15  
AF1 DDR3\_D48 15  
AE1 DDR3\_D54 15  
AF2 DDR3\_D49 15  
AF3 DDR3\_D52 15  
AD7  
AC7 DDR3\_DM7 15  
AE6 DDR3\_D60 15  
AD6 DDR3\_D61 15  
AC4 DDR3\_D58 15  
AC5 DDR3\_D59 15  
AD1 DDR3\_DQS7\_N 15  
AD2 DDR3\_DQS7\_P 15  
AC1 DDR3\_D56 15  
AC2 DDR3\_D62 15  
AD3 DDR3\_D57 15  
AD4 DDR3\_D63 15  
AC6 GPIO\_SW\_W 29

VTTVREF




VCC1V5\_FPGA

AK2 VCCO\_34\_AK2  
AJ5 VCCO\_34\_AJ5  
AH8 VCCO\_34\_AH8  
AG1 VCCO\_34\_AG1  
AF4 VCCO\_34\_AF4  
AE7 VCCO\_34\_AE7  
AC3 VCCO\_34\_AC3

U1

SOC\_K7\_325T\_FF900\_IRON

FPGA Bank 34

			
Title:		FPGA Bank 34 SCHEM, ROHS COMPLIANT KC705 EVALUATION PLATFORM	ASSY P/N: 0431641 PCB P/N: 1280565 SCH P/N: 0381397
Date:		4-2-2012_15:15	Ver: 1.1
Sheet Size: B		Rev: 01	
Sheet		8 of 47	Drawn By BF

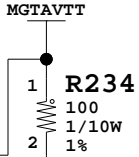


SOC\_K7\_325T\_FF900\_IRON

BANK 115  
XC7K325TFFG900

MGTXTXP0\_115\_Y2  
MGTXTXN0\_115\_Y1  
MGTXRXP0\_115\_AA4  
MGTXRXN0\_115\_AA3  
MGTXTXP1\_115\_V2  
MGTXTXN1\_115\_V1  
MGTXRXP1\_115\_Y6  
MGTXRXN1\_115\_Y5  
MGTXTXP2\_115\_U4  
MGTXTXN2\_115\_U3  
MGTXRXP2\_115\_W4  
MGTXRXN2\_115\_W3  
MGTXTXP3\_115\_T2  
MGTXTXN3\_115\_T1  
MGTXRXP3\_115\_V6  
MGTXRXN3\_115\_V5  
MGTREFCLK0P\_115\_R8  
MGTREFCLK0N\_115\_R7  
MGTREFCLK1P\_115\_U8  
MGTREFCLK1N\_115\_U7  
MGTAVTTRCAL\_115\_W7  
MGTRREF\_115\_W8

Y2 PCIE TX7 P 21  
Y1 PCIE TX7 N 21  
AA4 PCIE RX7 P 21  
AA3 PCIE RX7 N 21  
V2 PCIE TX6 P 21  
V1 PCIE TX6 N 21  
Y6 PCIE RX6 P 21  
Y5 PCIE RX6 N 21  
U4 PCIE TX5 P 21  
U3 PCIE TX5 N 21  
W4 PCIE RX5 P 21  
W3 PCIE RX5 N 21  
T2 PCIE TX4 P 21  
T1 PCIE TX4 N 21  
V6 PCIE RX4 P 21  
V5 PCIE RX4 N 21  
R8 NC 21  
R7 NC 21  
U8 PCIE CLK\_QO\_P 21  
U7 PCIE CLK\_QO\_N 21  
W7 21  
W8



U1

SOC\_K7\_325T\_FF900\_IRON

SOC\_K7\_325T\_FF900\_IRON

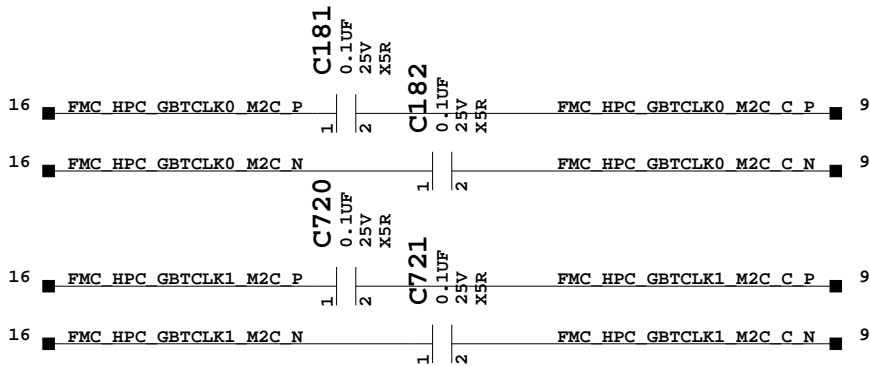
BANK 117  
XC7K325TFFG900

MGTXTXP0\_117\_K2  
MGTXTXN0\_117\_K1  
MGTXRXP0\_117\_K6  
MGTXRXN0\_117\_K5  
MGTXTXP1\_117\_J4  
MGTXTXN1\_117\_J3  
MGTXRXP1\_117\_H6  
MGTXRXN1\_117\_H5  
MGTXTXP2\_117\_H2  
MGTXTXN2\_117\_H1  
MGTXRXP2\_117\_G4  
MGTXRXN2\_117\_G3  
MGTXTXP3\_117\_F2  
MGTXTXN3\_117\_F1  
MGTXRXP3\_117\_F6  
MGTXRXN3\_117\_F5  
MGTREFCLK0P\_117\_G8  
MGTREFCLK0N\_117\_G7  
MGTREFCLK1P\_117\_J8  
MGTREFCLK1N\_117\_J7

K2 SMA MGT\_TX\_P 23  
K1 SMA MGT\_TX\_N 23  
K6 SMA MGT\_RX\_P 23  
K5 SMA MGT\_RX\_N 23  
J4 SGMII\_TX\_P 25  
J3 SGMII\_TX\_N 25  
H6 SGMII\_RX\_P 25  
H5 SGMII\_RX\_N 25  
H2 SFP\_TX\_P 22  
H1 SFP\_TX\_N 22  
G4 SFP\_RX\_P 22  
G3 SFP\_RX\_N 22  
F2 FMC LPC DP0 C2M\_P 20  
F1 FMC LPC DP0 C2M\_N 20  
F6 FMC LPC DP0 M2C\_P 20  
F5 FMC LPC DP0 M2C\_N 20  
G8 SGMIIICLK\_Q0\_P 23  
G7 SGMIIICLK\_Q0\_N 23  
J8 SMA MGT\_REFCLK\_P 23  
J7 SMA MGT\_REFCLK\_N 23

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SOC\_K7\_325T\_FF900\_IRON



SOC\_K7\_325T\_FF900\_IRON

BANK 116  
XC7K325TFFG900

MGTXTXP0\_116\_P2  
MGTXTXN0\_116\_P1  
MGTXRXP0\_116\_T6  
MGTXRXN0\_116\_T5  
MGTXTXP1\_116\_N4  
MGTXTXN1\_116\_N3  
MGTXRXP1\_116\_R4  
MGTXRXN1\_116\_R3  
MGTXTXP2\_116\_M2  
MGTXTXN2\_116\_M1  
MGTXRXP2\_116\_P6  
MGTXRXN2\_116\_P5  
MGTXTXP3\_116\_L4  
MGTXTXN3\_116\_L3  
MGTXRXP3\_116\_M6  
MGTXRXN3\_116\_M5  
MGTREFCLK0P\_116\_L8  
MGTREFCLK0N\_116\_L7  
MGTREFCLK1P\_116\_N8  
MGTREFCLK1N\_116\_N7

P2 PCIE TX3\_P 21  
P1 PCIE TX3\_N 21  
T6 PCIE RX3\_P 21  
T5 PCIE RX3\_N 21  
N4 PCIE TX2\_P 21  
N3 PCIE TX2\_N 21  
R4 PCIE RX2\_P 21  
R3 PCIE RX2\_N 21  
M2 PCIE TX1\_P 21  
M1 PCIE TX1\_N 21  
P6 PCIE RX1\_P 21  
P5 PCIE RX1\_N 21  
L4 PCIE TX0\_P 21  
L3 PCIE TX0\_N 21  
M6 PCIE RX0\_P 21  
M5 PCIE RX0\_N 21  
L8 SI5326\_OUT\_C\_P 24  
L7 SI5326\_OUT\_C\_N 24  
N8 FMC LPC GBTCLK0 M2C\_C\_P 9  
N7 FMC LPC GBTCLK0 M2C\_C\_N 9

U1

SOC\_K7\_325T\_FF900\_IRON

SOC\_K7\_325T\_FF900\_IRON

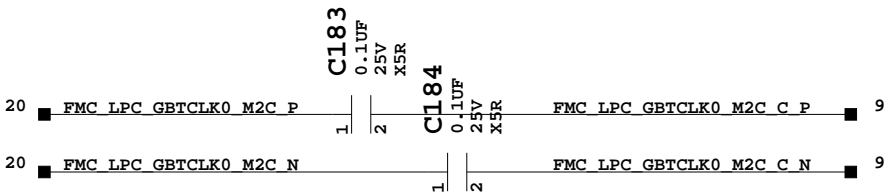
BANK 118  
XC7K325TFFG900

MGTXTXP0\_118\_D2  
MGTXTXN0\_118\_D1  
MGTXRXP0\_118\_E4  
MGTXRXN0\_118\_E3  
MGTXTXP1\_118\_C4  
MGTXTXN1\_118\_C3  
MGTXRXP1\_118\_D6  
MGTXRXN1\_118\_D5  
MGTXTXP2\_118\_B2  
MGTXTXN2\_118\_B1  
MGTXRXP2\_118\_B6  
MGTXRXN2\_118\_B5  
MGTXTXP3\_118\_A4  
MGTXTXN3\_118\_A3  
MGTXRXP3\_118\_A8  
MGTXRXN3\_118\_A7  
MGTREFCLK0P\_118\_C8  
MGTREFCLK0N\_118\_C7  
MGTREFCLK1P\_118\_E8  
MGTREFCLK1N\_118\_E7

D2 FMC HPC DP0 C2M\_P 16  
D1 FMC HPC DP0 C2M\_N 16  
E4 FMC HPC DP0 M2C\_P 16  
E3 FMC HPC DP0 M2C\_N 16  
C4 FMC HPC DP1 C2M\_P 16  
C3 FMC HPC DP1 C2M\_N 16  
D6 FMC HPC DP1 M2C\_P 16  
D5 FMC HPC DP1 M2C\_N 16  
B2 FMC HPC DP2 C2M\_P 16  
B1 FMC HPC DP2 C2M\_N 16  
B6 FMC HPC DP2 M2C\_P 16  
B5 FMC HPC DP2 M2C\_N 16  
A4 FMC HPC DP3 C2M\_P 16  
A3 FMC HPC DP3 C2M\_N 16  
A8 FMC HPC DP3 M2C\_P 16  
A7 FMC HPC DP3 M2C\_N 16  
C8 FMC HPC GBTCLK0 M2C\_C\_P 9  
C7 FMC HPC GBTCLK0 M2C\_C\_N 9  
E8 FMC HPC GBTCLK1 M2C\_C\_P 9  
E7 FMC HPC GBTCLK1 M2C\_C\_N 9

U1

SOC\_K7\_325T\_FF900\_IRON

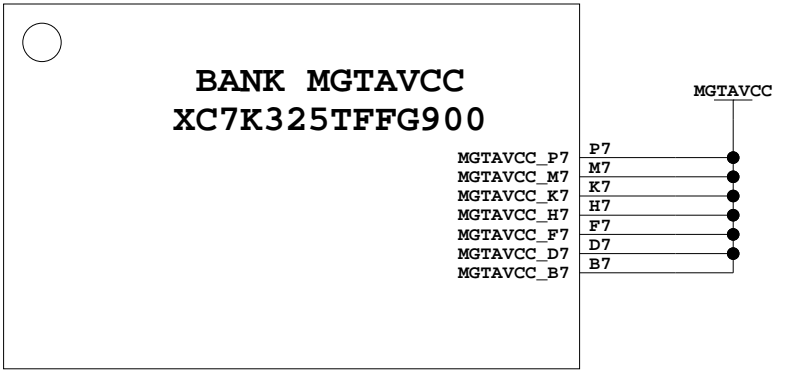


FPGA GT Banks



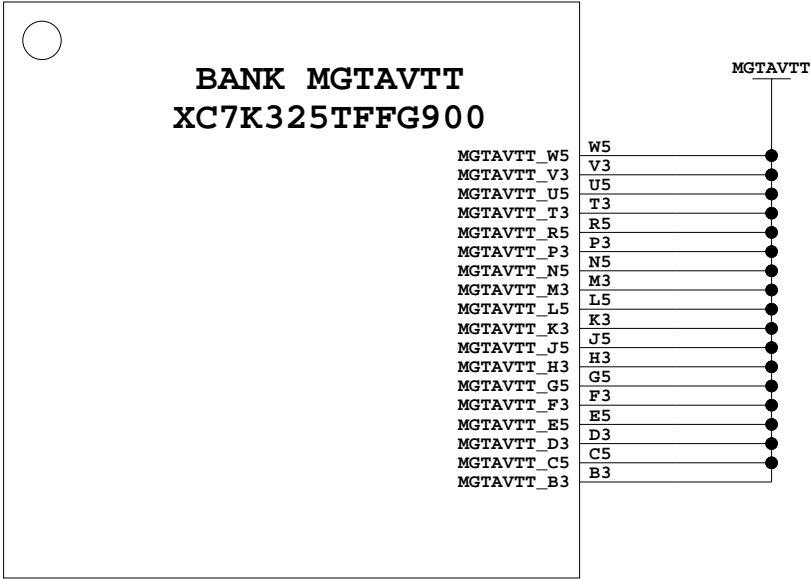
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Date: 4-2-2012_15:15	Ver: 1.1	
Sheet Size: B	Rev: 01	
Sheet 9 of 47	Drawn By BF	

SOC\_K7\_325T\_FF900\_IRON

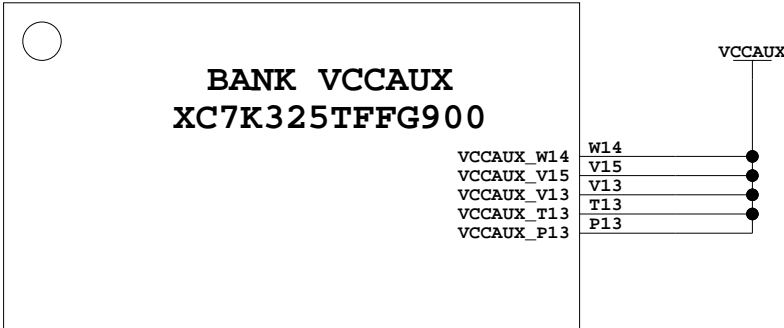


U1 SOC\_K7\_325T\_FF900\_IRON

SOC\_K7\_325T\_FF900\_IRON

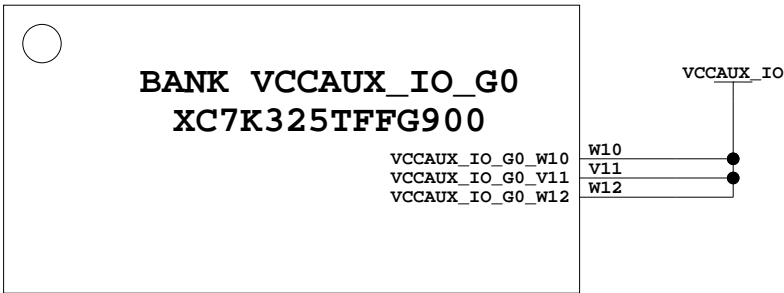


U1 SOC\_K7\_325T\_FF900\_IRON



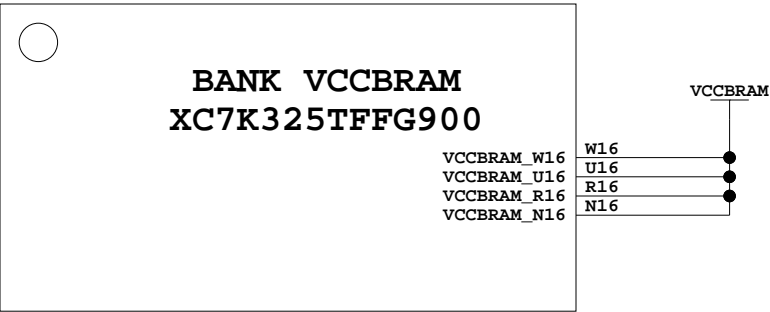
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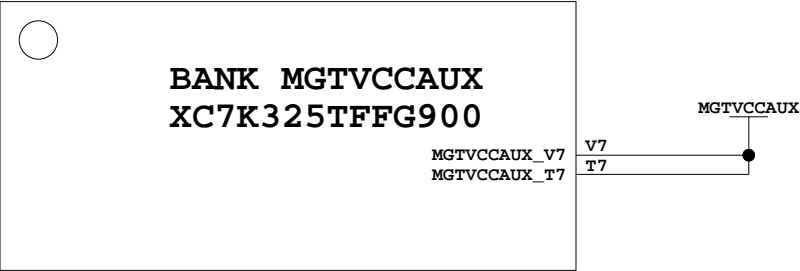
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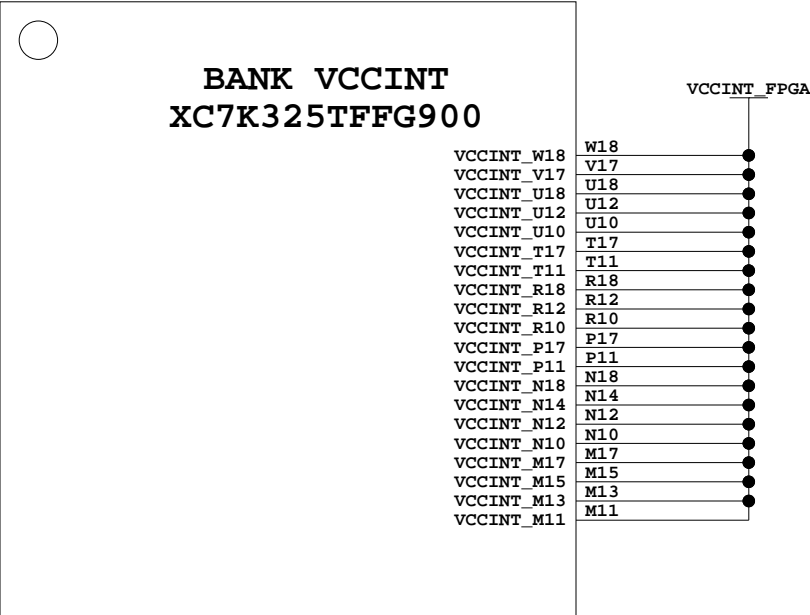
U1 SOC\_K7\_325T\_FF900\_IRON

SOC\_K7\_325T\_FF900\_IRON



U1 SOC\_K7\_325T\_FF900\_IRON

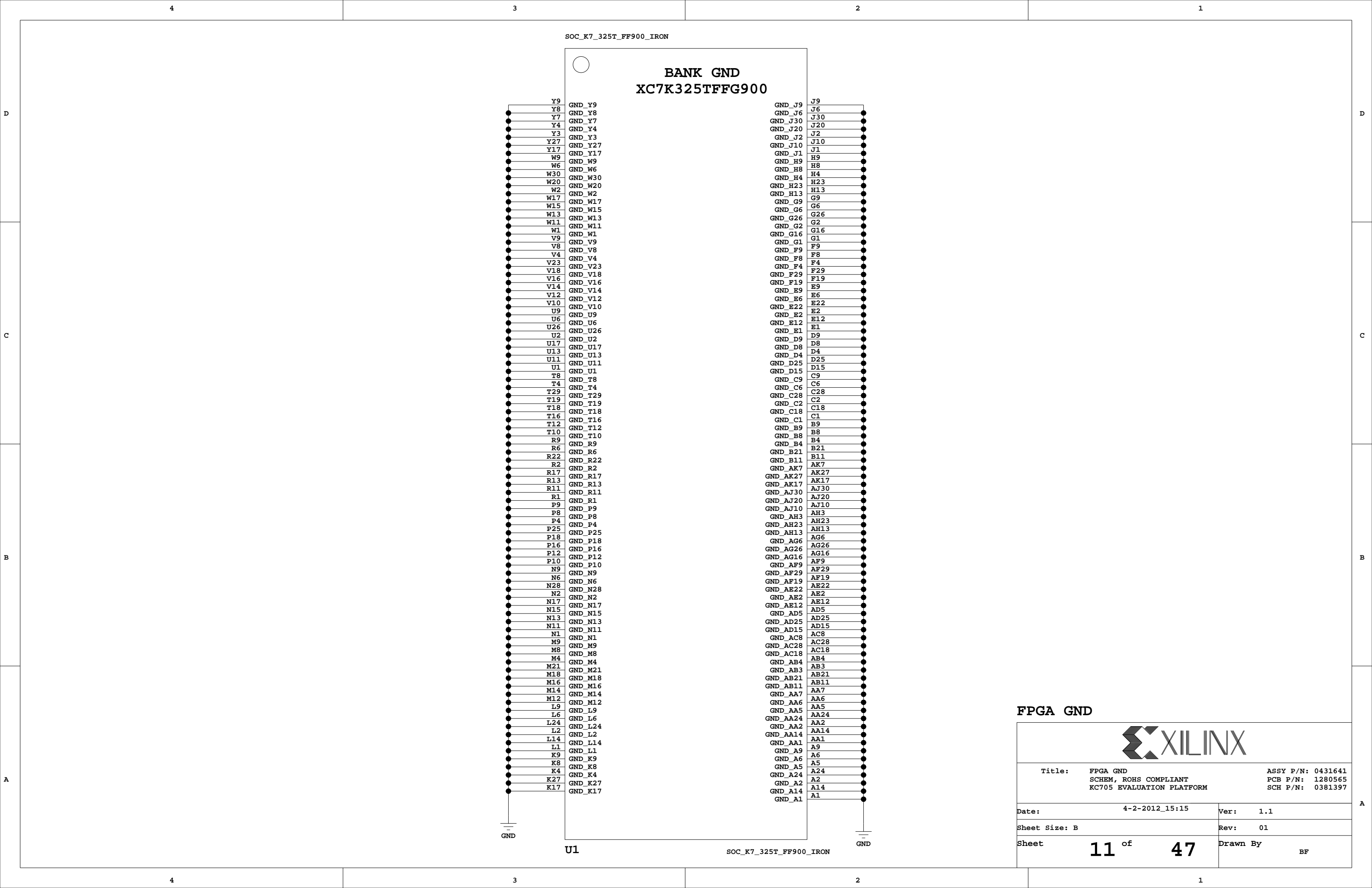
SOC\_K7\_325T\_FF900\_IRON



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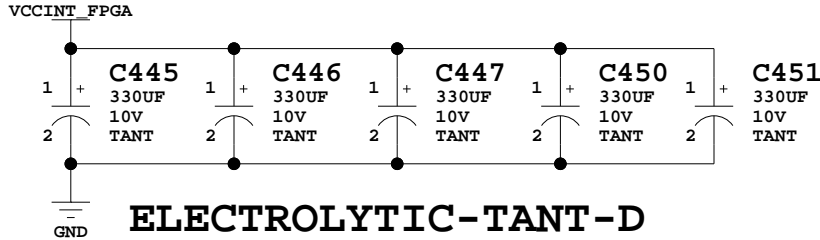
### FPGA Power Pins

Title:		ASSY P/N: 0431641	
		PCB P/N: 1280565	
		SCH P/N: 0381397	
Date:	4-2-2012_15:15	Ver:	1.1
Sheet Size: B		Rev:	01
Sheet		Drawn By	
10 of 47		BF	

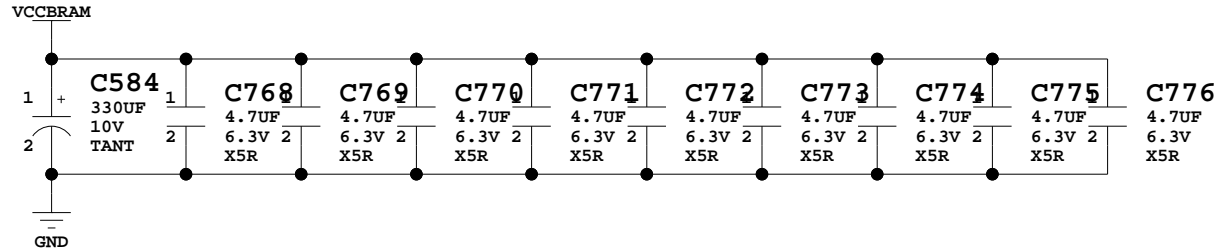


BYPASS CAPACITORS

VCCINT 330uF (5)

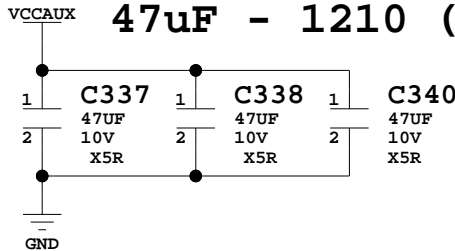


VCCBRAM 330uF (1) ELEC-TANT-D, 4.7uF (9) 0402



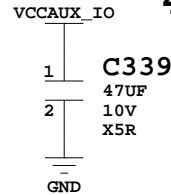
VCCAUX

47uF - 1210 (3)

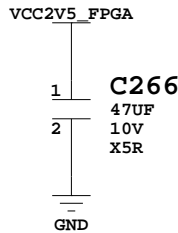


VCCAUX\_IO

47uF - 1210 (1)

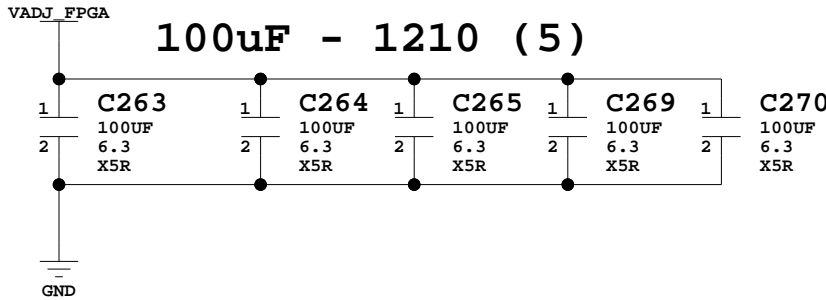


Bank 0 2.5V VCCO  
100uF - 1210 (1)



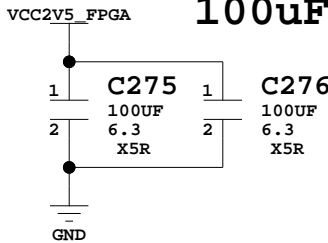
Banks 12, 13, 16, 17,  
and 18 VADJ VCCO

100uF - 1210 (5)



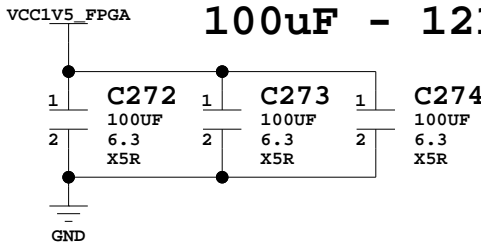
Banks 14, 15 2.5V VCCO

100uF - 1210 (2)



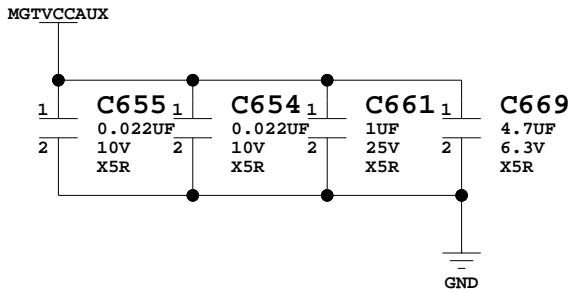
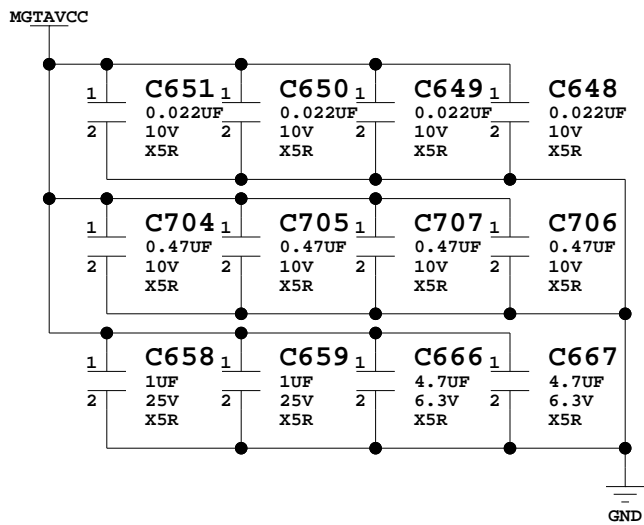
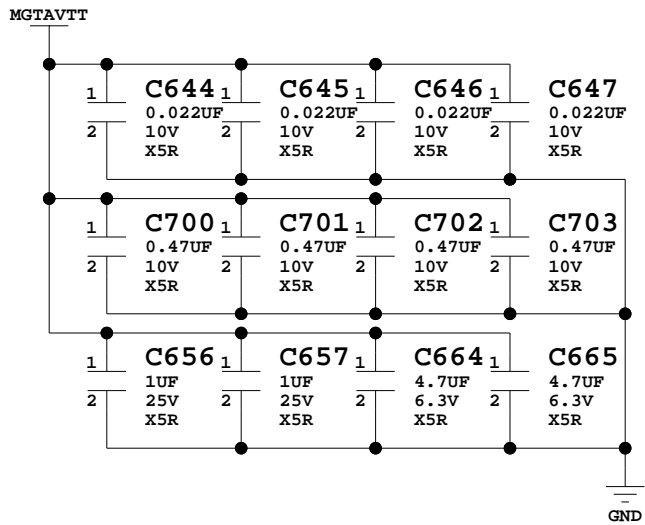
Banks 32, 33, 34 1.5V VCCO

100uF - 1210 (3)



FPGA Bypass Capacitors

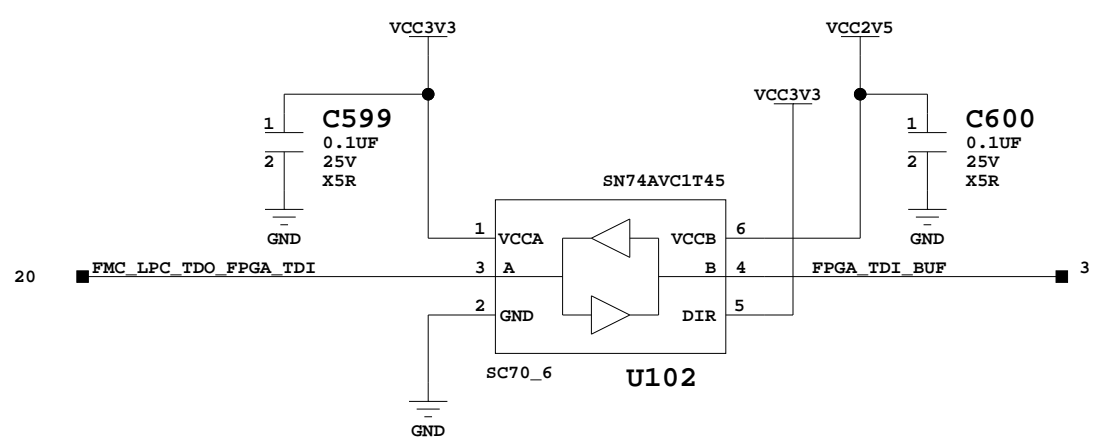
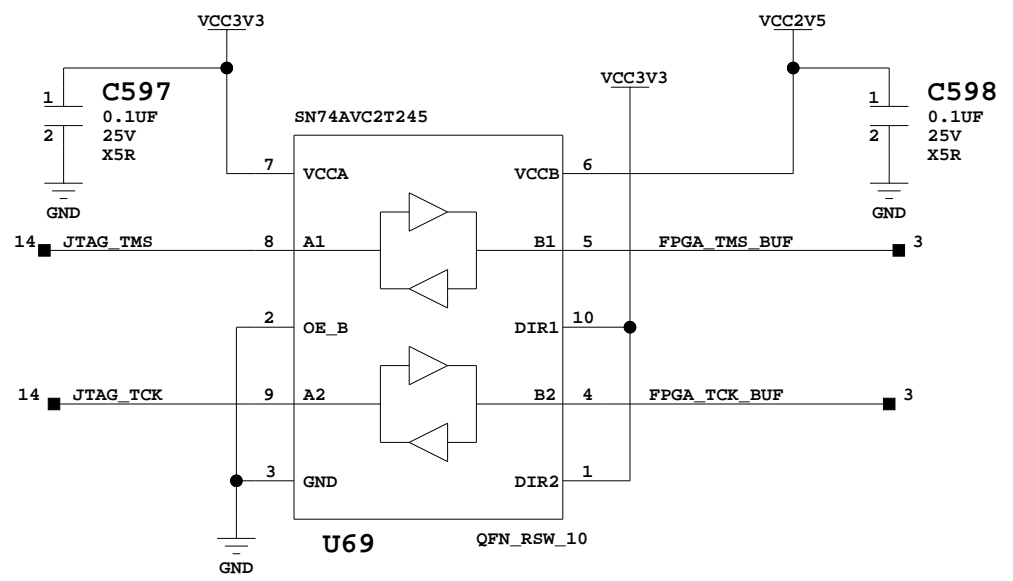
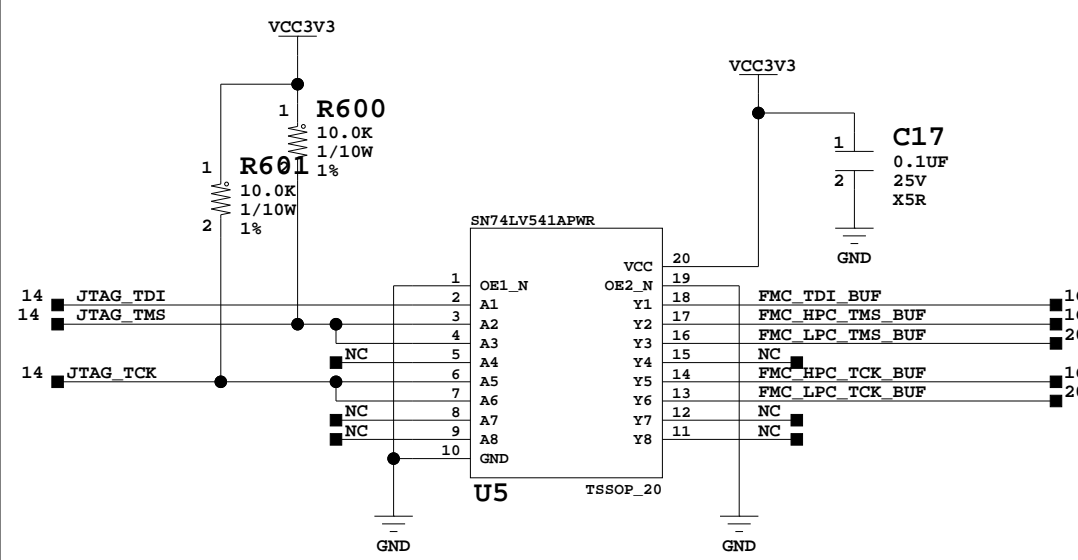
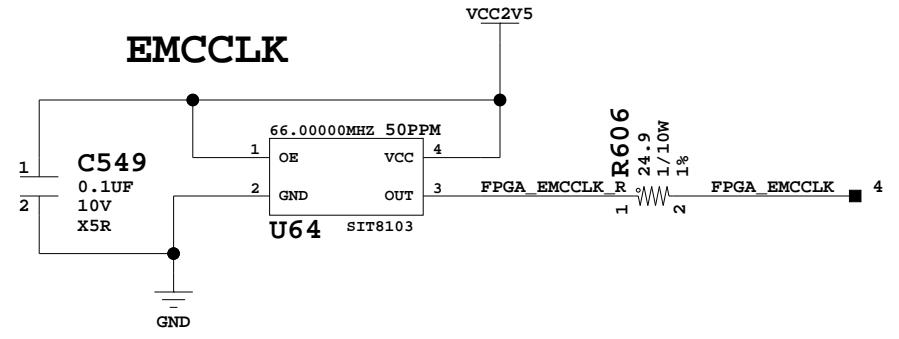
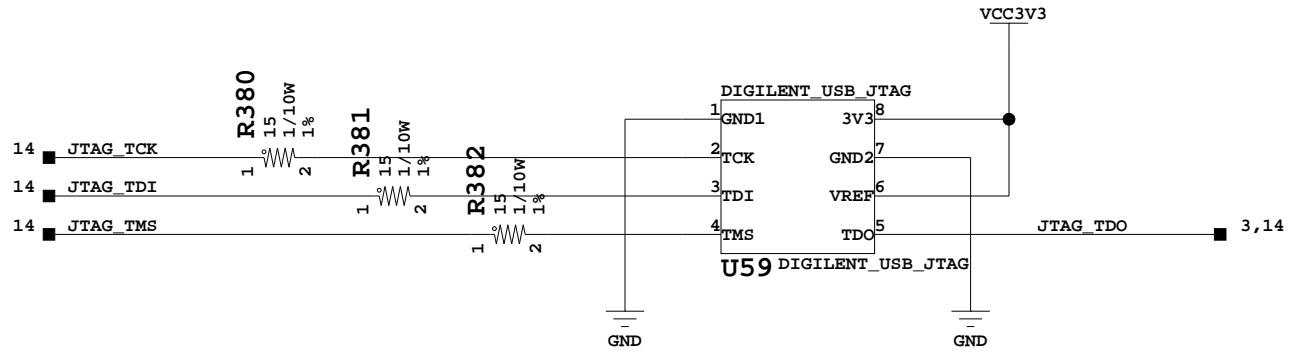
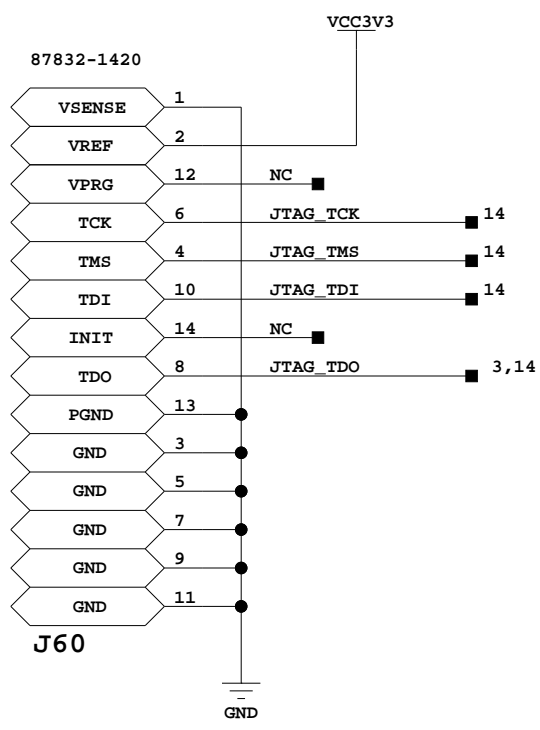
Title: FPGA Bypass Capacitors SCHEM, ROHS COMPLIANT KC705 EVALUATION PLATFORM		ASSY P/N: 0431641 PCB P/N: 1280565 SCH P/N: 0381397
Date:	4-2-2012_15:15	Ver: 1.1
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FPGA MGT Bypass Capacitors



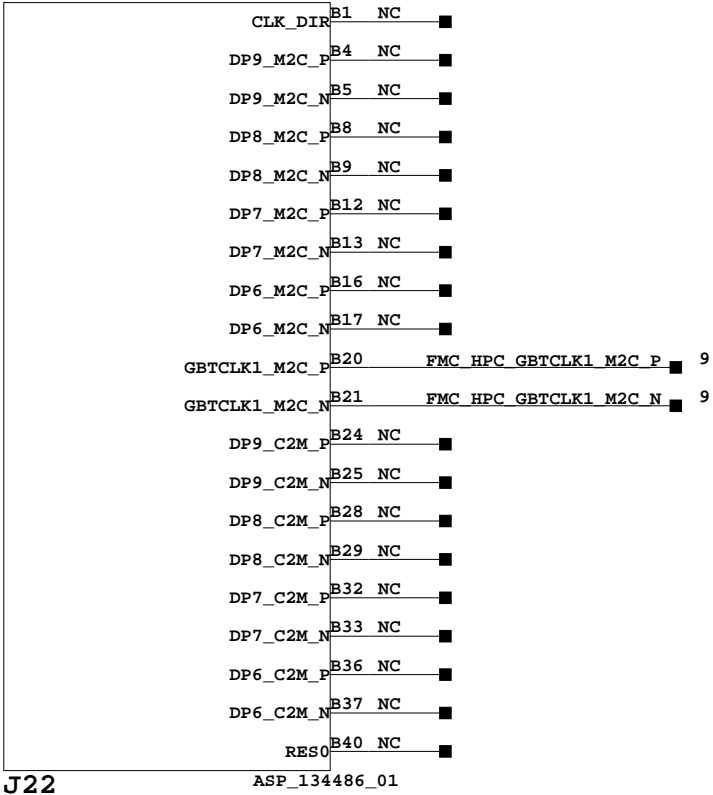
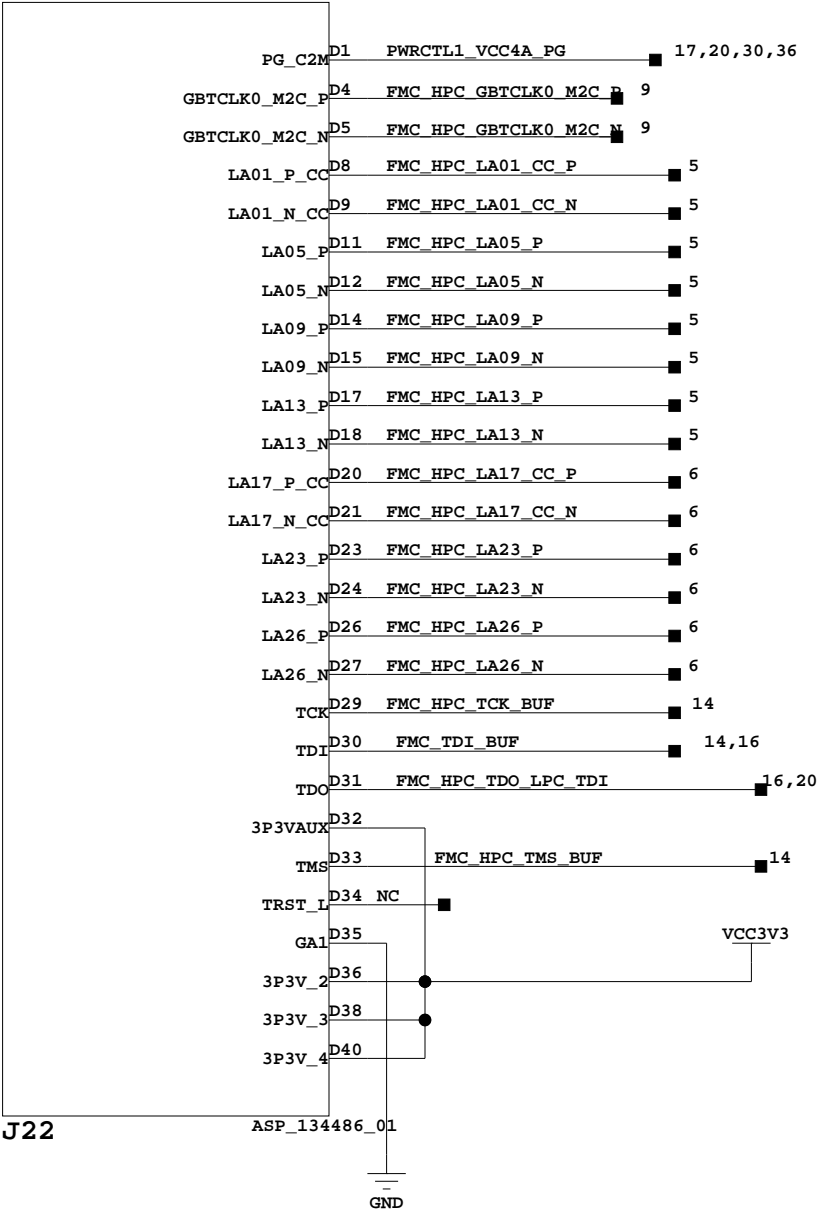
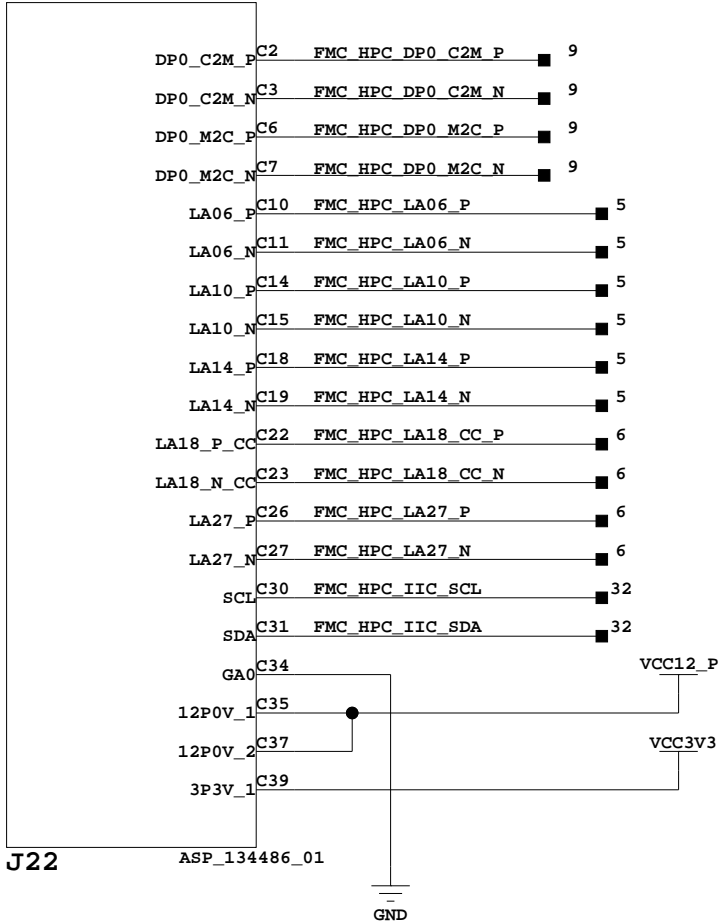
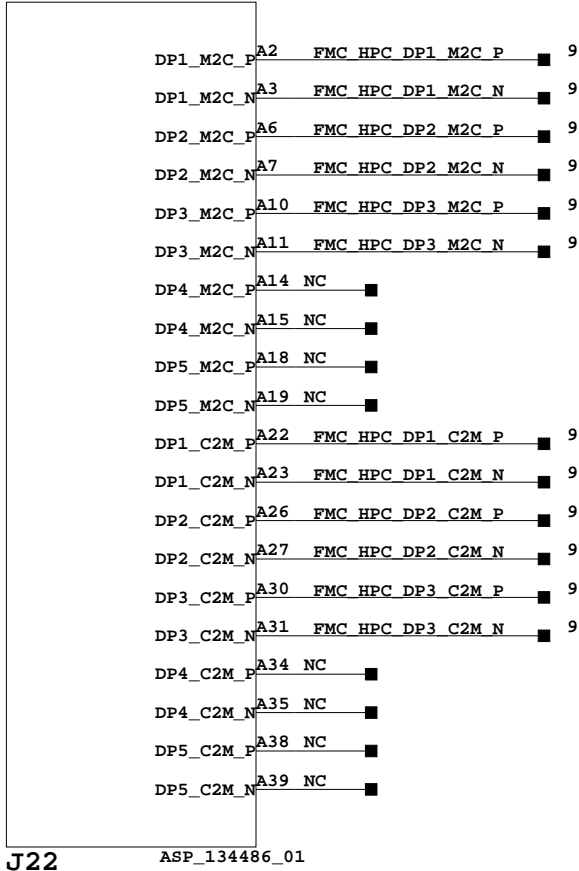
Title: HDMI SERIES RESISTORS AT FPGA SCHEM, ROHS COMPLIANT KC705 EVALUATION PLATFORM		ASSY P/N: 0431641 PCB P/N: 1280565 SCH P/N: 0381397
Date: 4-2-2012_15:15	Ver: 1.1	
Sheet Size: B	Rev: 01	
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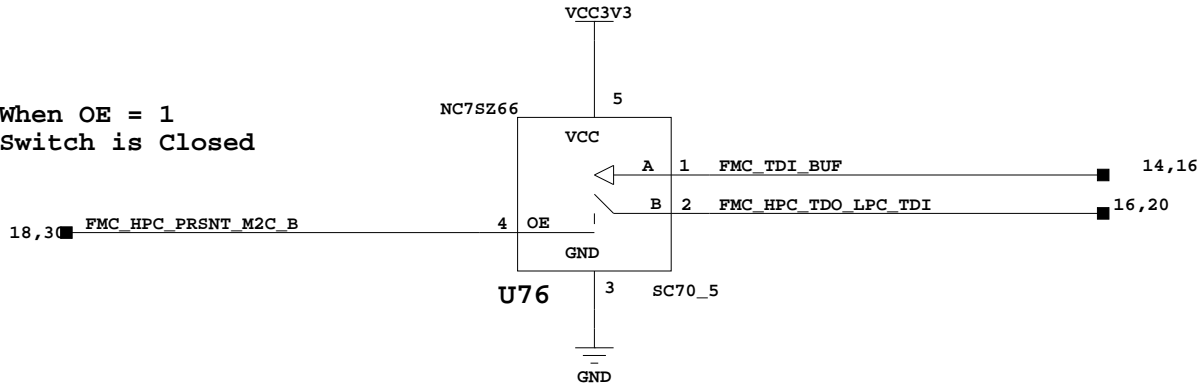
JTAG Buffer, USB JTAG Module, JTAG Header

Title: JTAG Buffer, USB JTAG Module, JTAG Header	
SCHEM, ROHS COMPLIANT	
KC705 EVALUATION PLATFORM	
Rev: 1.1	
Date: 4-2-2012_15:15	
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Rev: 01	
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Drawn By BF	





When OE = 1  
Switch is Closed

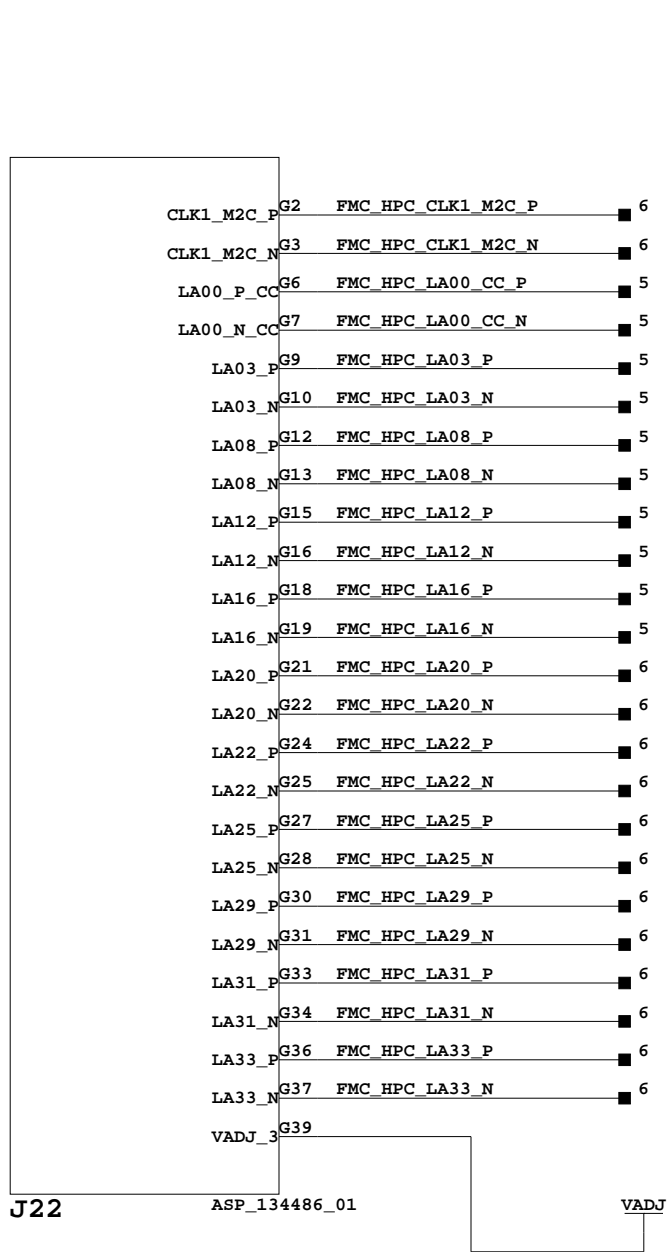
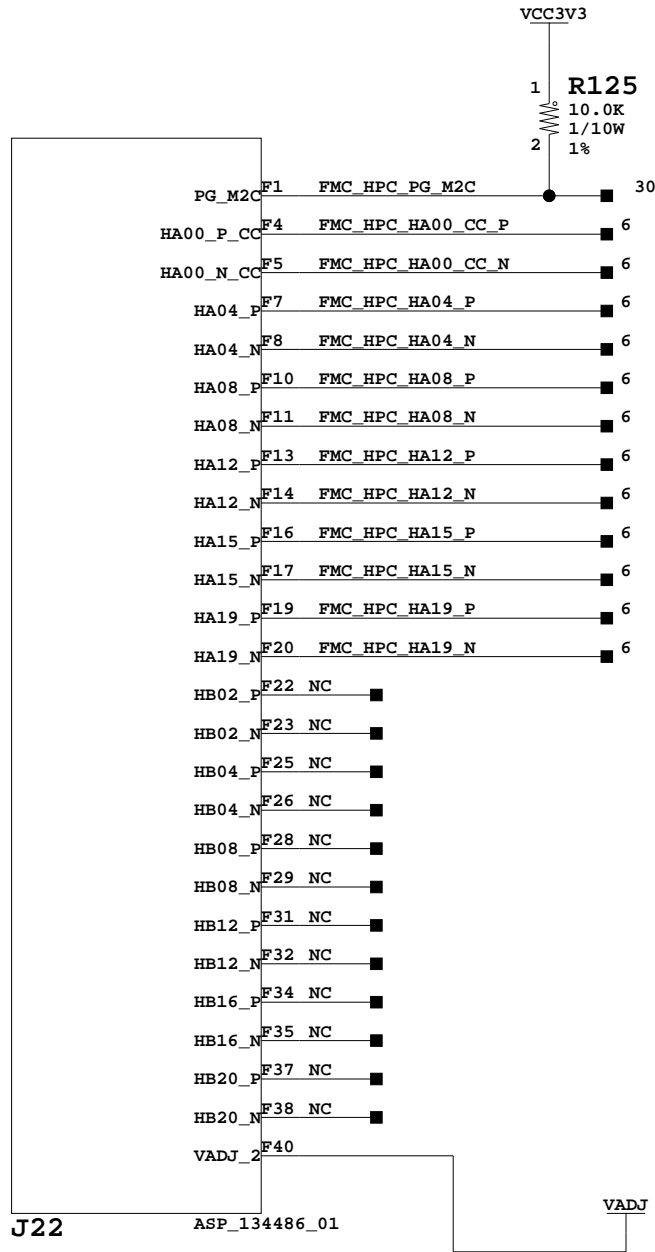
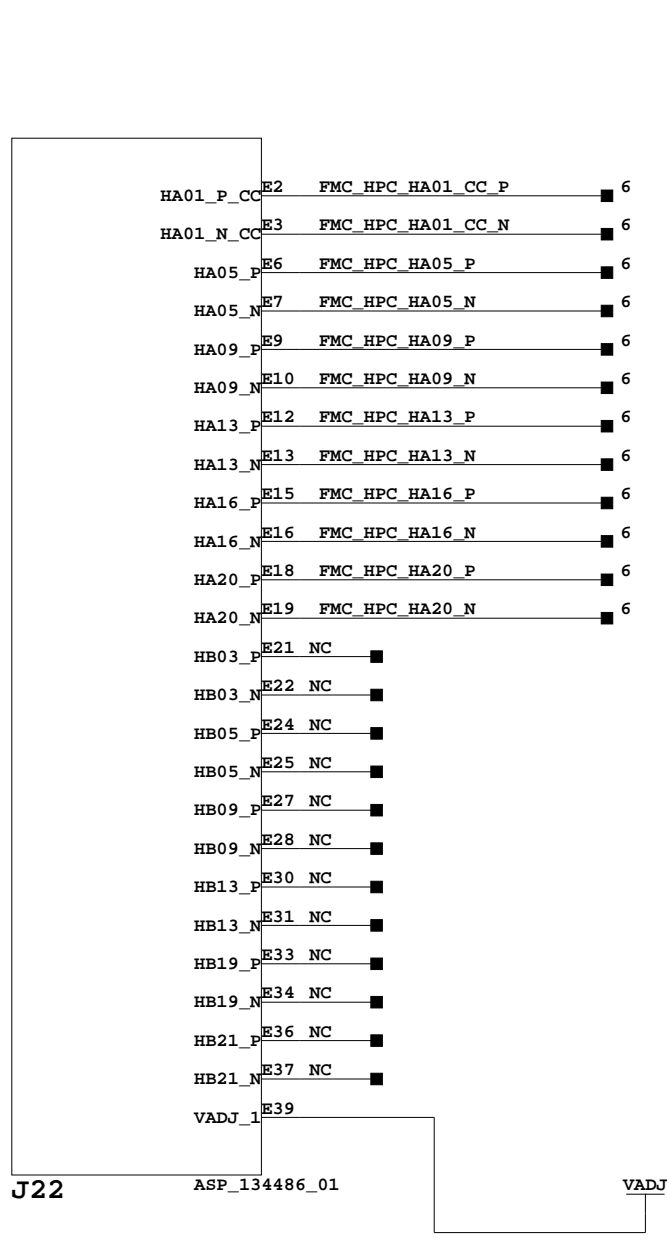


## ANSI/VITA 57.1 - Revised 2010 FMC HPC Header, Rows A, B, C, D

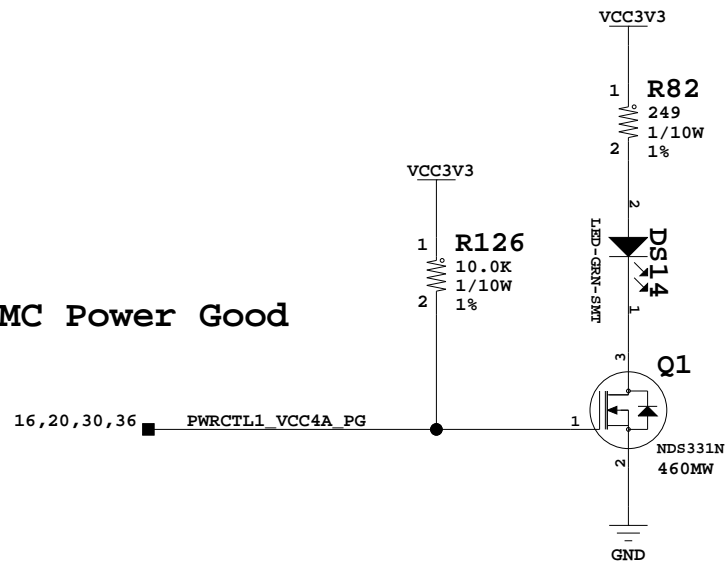


Title: FMC HPC Header, Rows A, B, C, D SCHEM, ROHS COMPLIANT KC705 EVALUATION PLATFORM		ASSY P/N: 0431641 PCB P/N: 1280565 SCH P/N: 0381397
Date: 4-2-2012_15:15	Ver: 1.1	
Sheet Size: B	Rev: 01	
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FMC Power Good



ANSI/VITA 57.1 - Revised 2010  
FMC HPC Header, Rows E, F, G



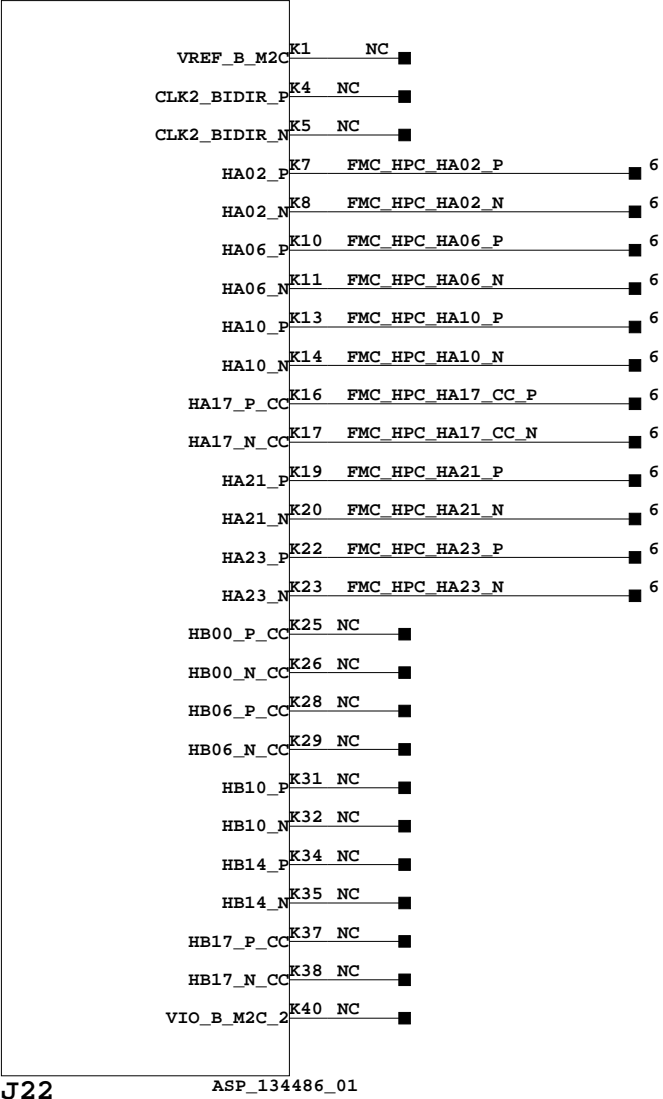
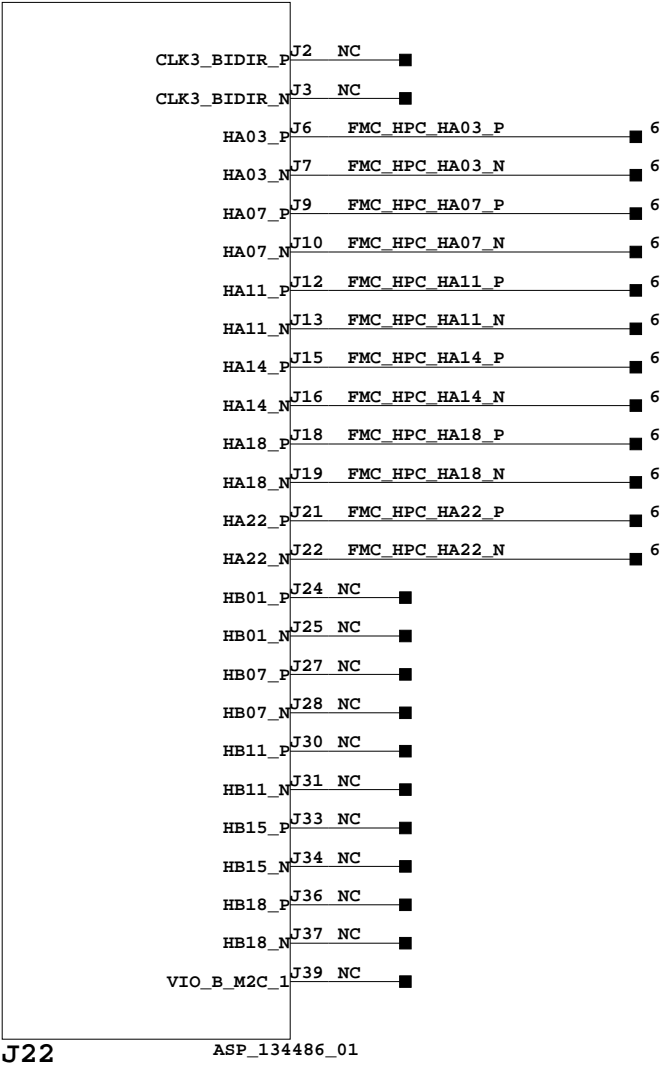
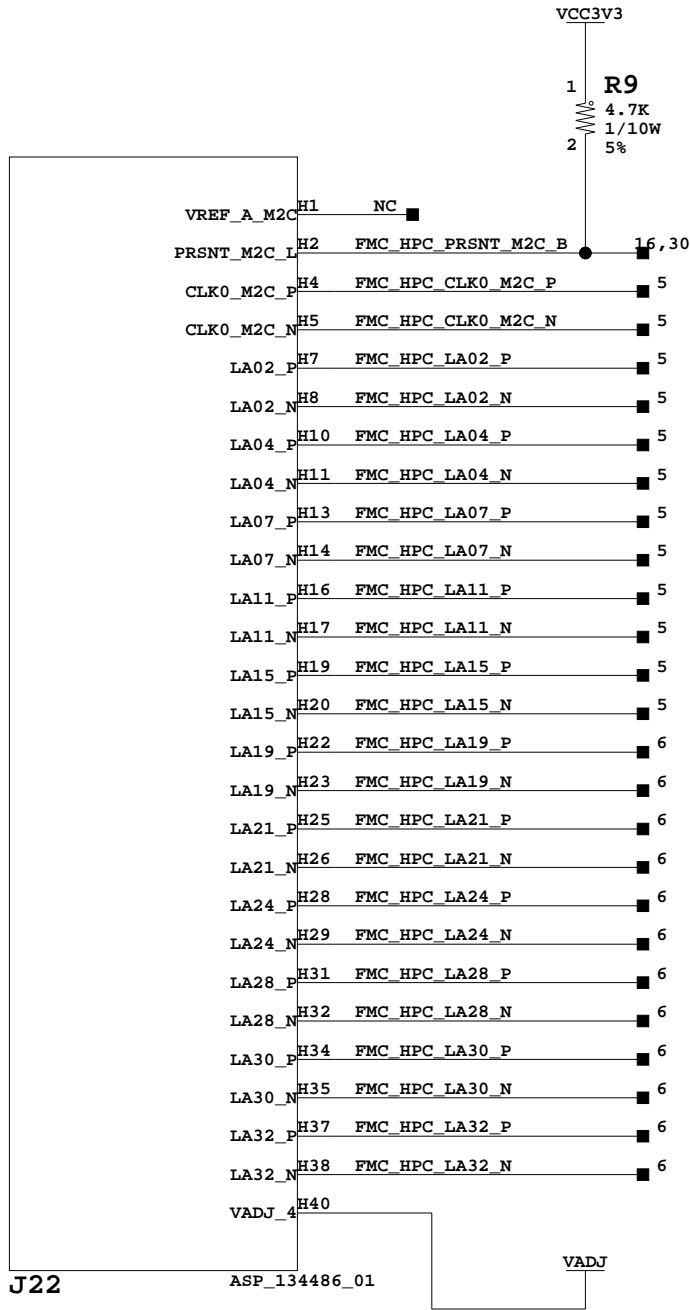
Title: FMC HPC Header, Rows E, F, G  
SCHEM, ROHS COMPLIANT  
KC705 EVALUATION PLATFORM

ASSY P/N: 0431641  
PCB P/N: 1280565  
SCH P/N: 0381397

Date: 4-2-2012\_15:15 Ver: 1.1


Sheet Size: B Rev: 01

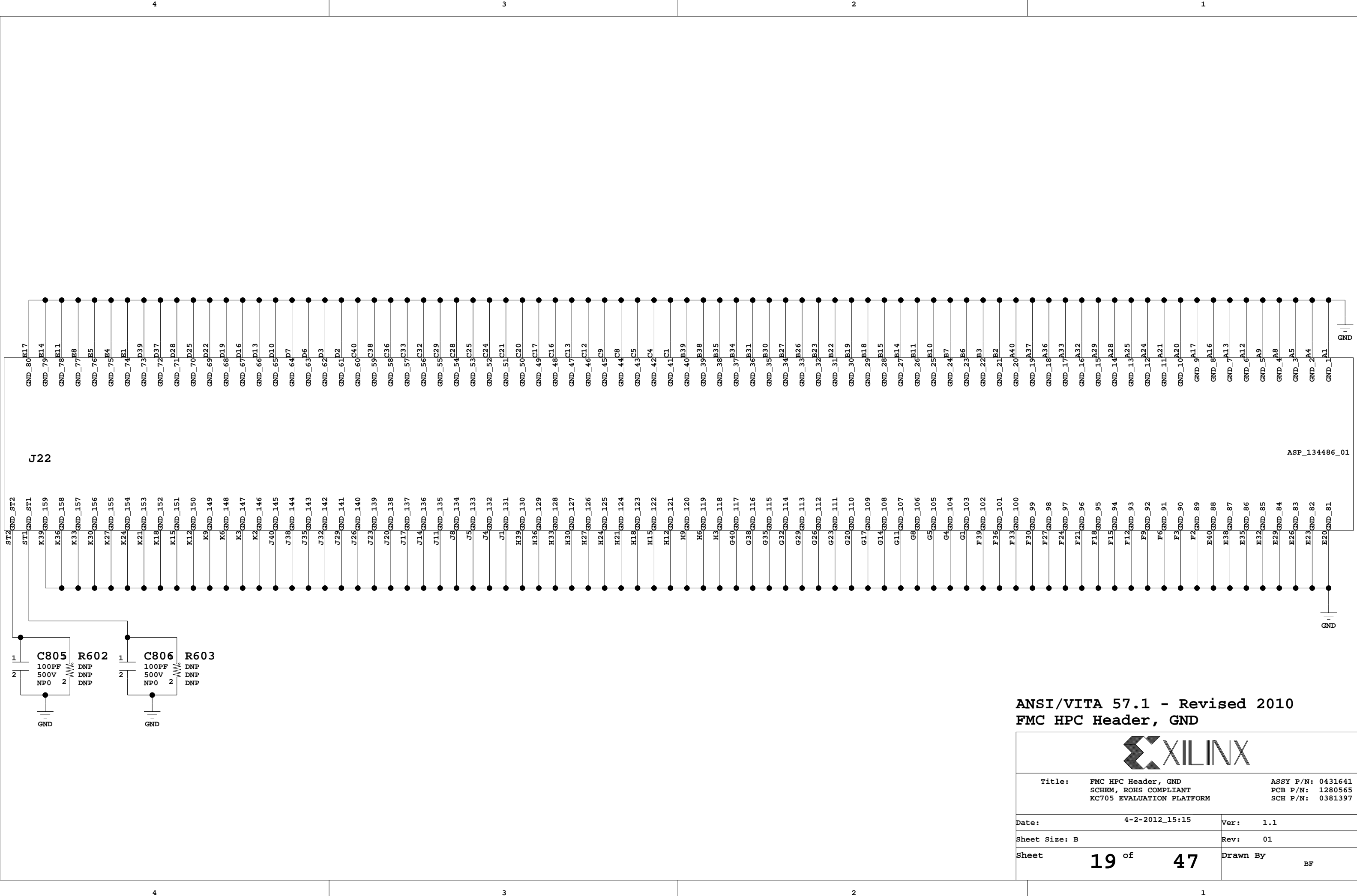
Sheet 17 of 47 Drawn By BF



1

ANSI/VITA 57.1 - Revised 2010  
FMC HPC Header, Rows H, J, K

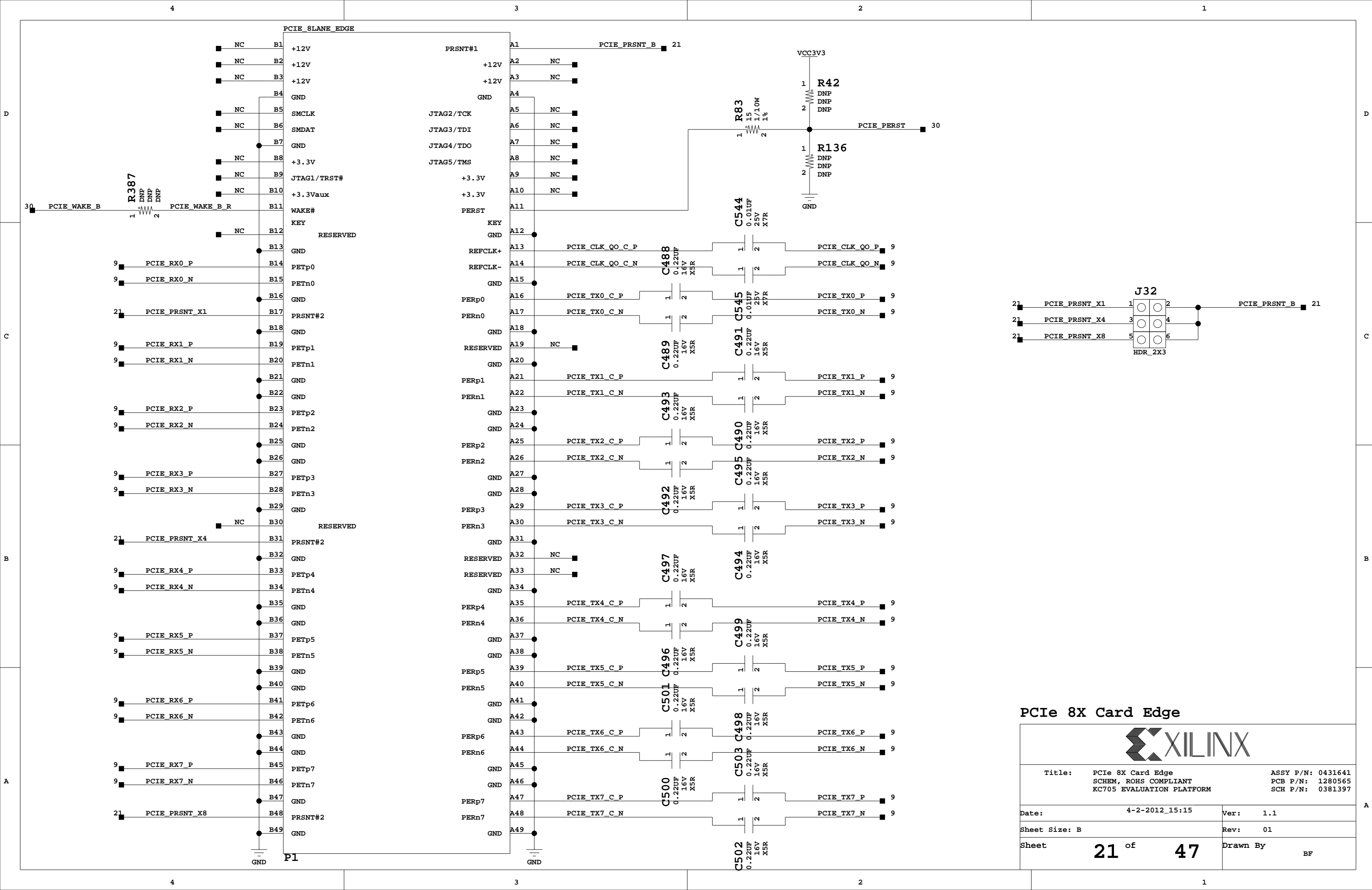
		
Title: FMC HPC Header, Rows H, J, K SCHEM, ROHS COMPLIANT KC705 EVALUATION PLATFORM		ASSY P/N: 0431641 PCB P/N: 1280565 SCH P/N: 0381397
Date: 4-2-2012_15:15	Ver: 1.1	
Sheet Size: B		Rev: 01
Sheet 18 of 47	Drawn By BF	

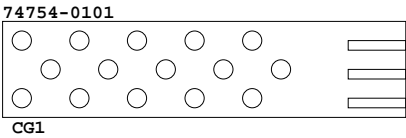
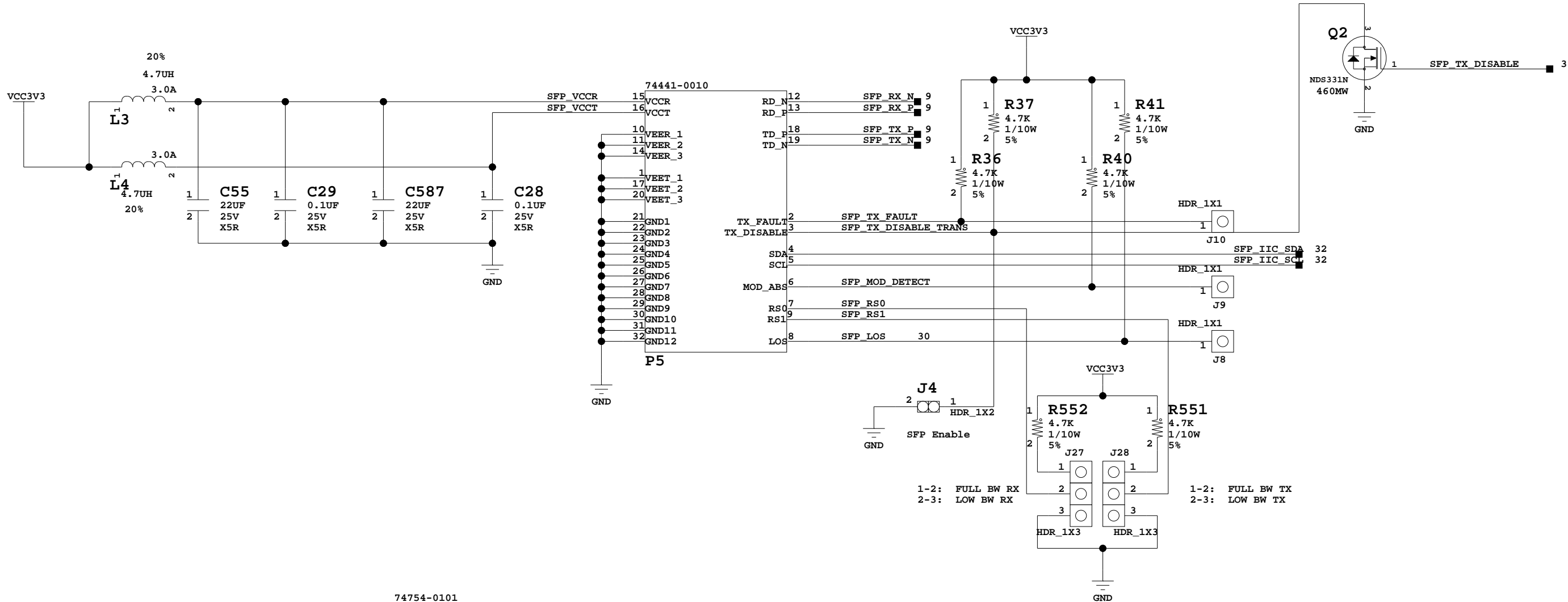


ANSI/VITA 57.1 - Revised 2010  
FMC HPC Header, GND

Title:		FMC HPC Header, GND SCHEM, ROHS COMPLIANT KC705 EVALUATION PLATFORM	
		ASSY P/N: 0431641 PCB P/N: 1280565 SCH P/N: 0381397	
Date:	4-2-2012_15:15	Ver:	1.1
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Sheet	19 of 47	Drawn By	BF

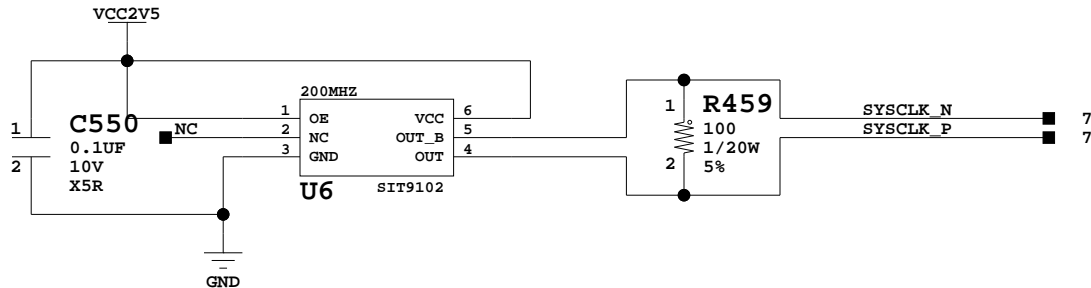
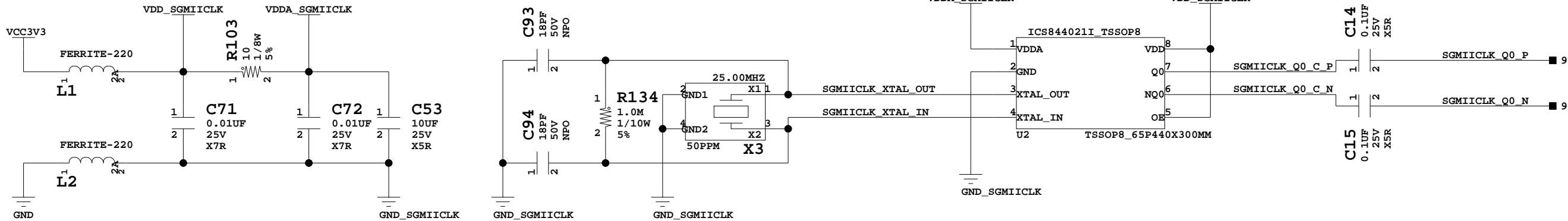




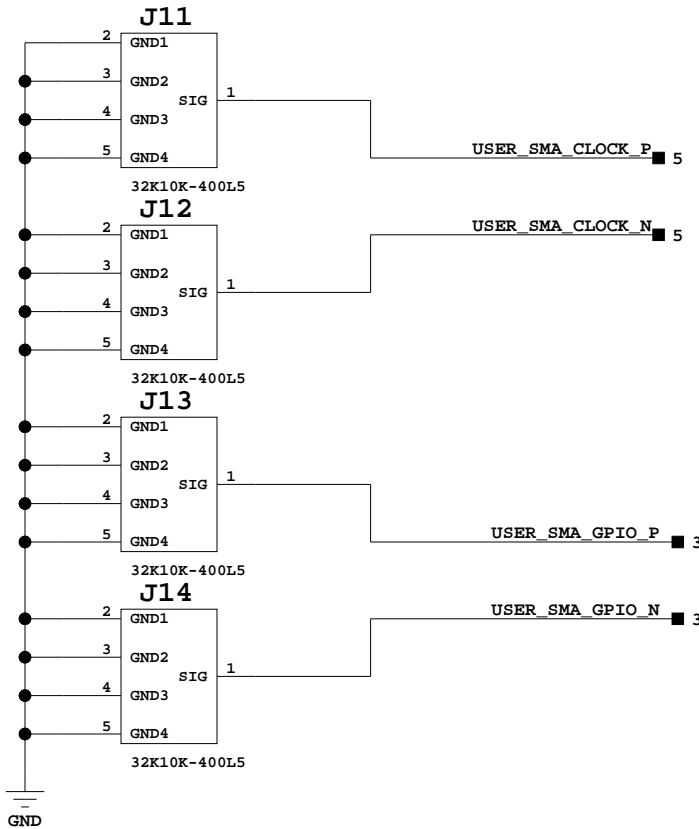
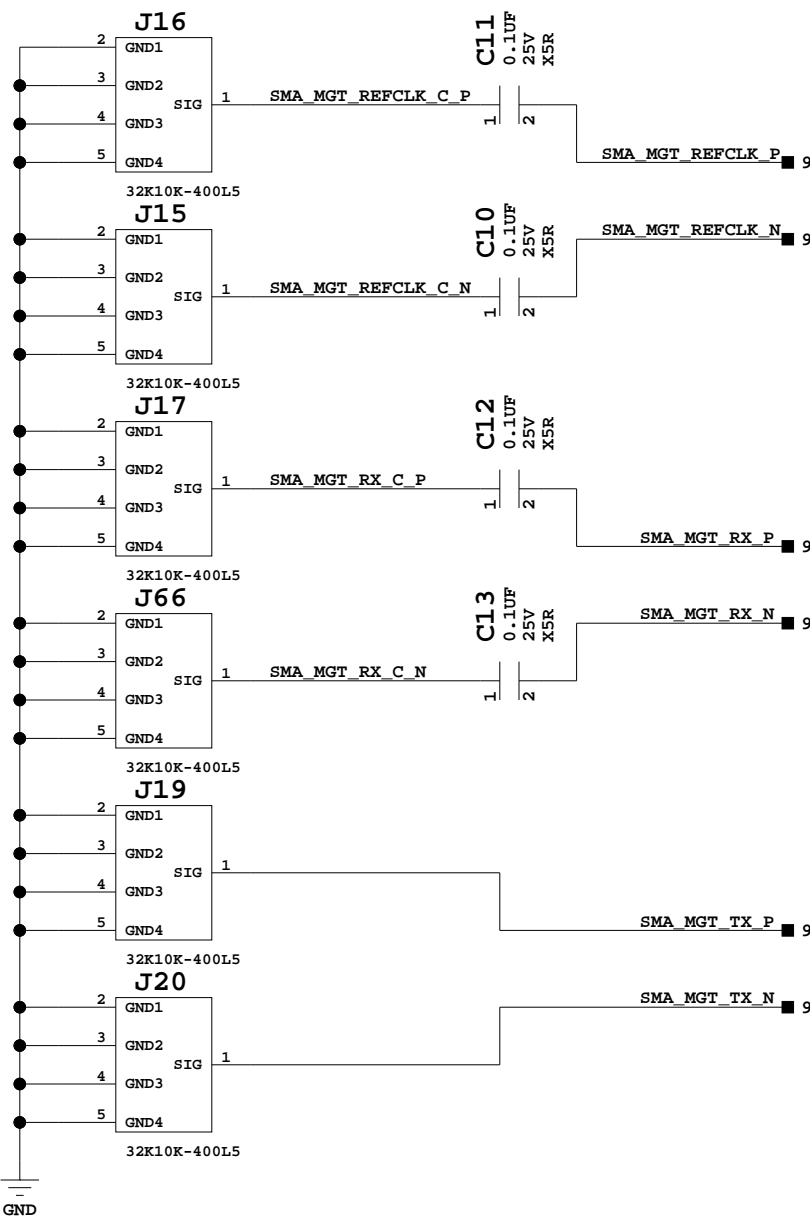
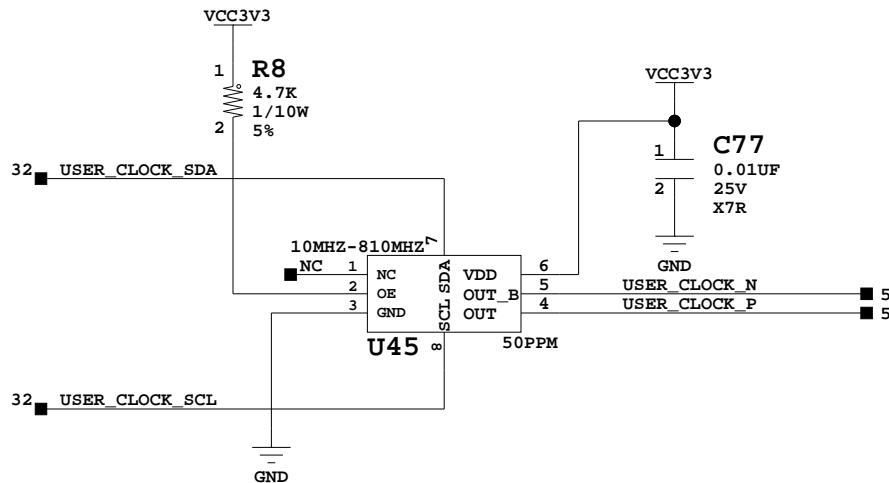


SFP+ Connector and Cage

Title: SFP+ Connector and Cage SCHEM, ROHS COMPLIANT KC705 EVALUATION PLATFORM		ASSY P/N: 0431641 PCB P/N: 1280565 SCH P/N: 0381397	
Date: 4-2-2012_15:15	Ver: 1.1		
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SIT9102AI-243N25E200.0000



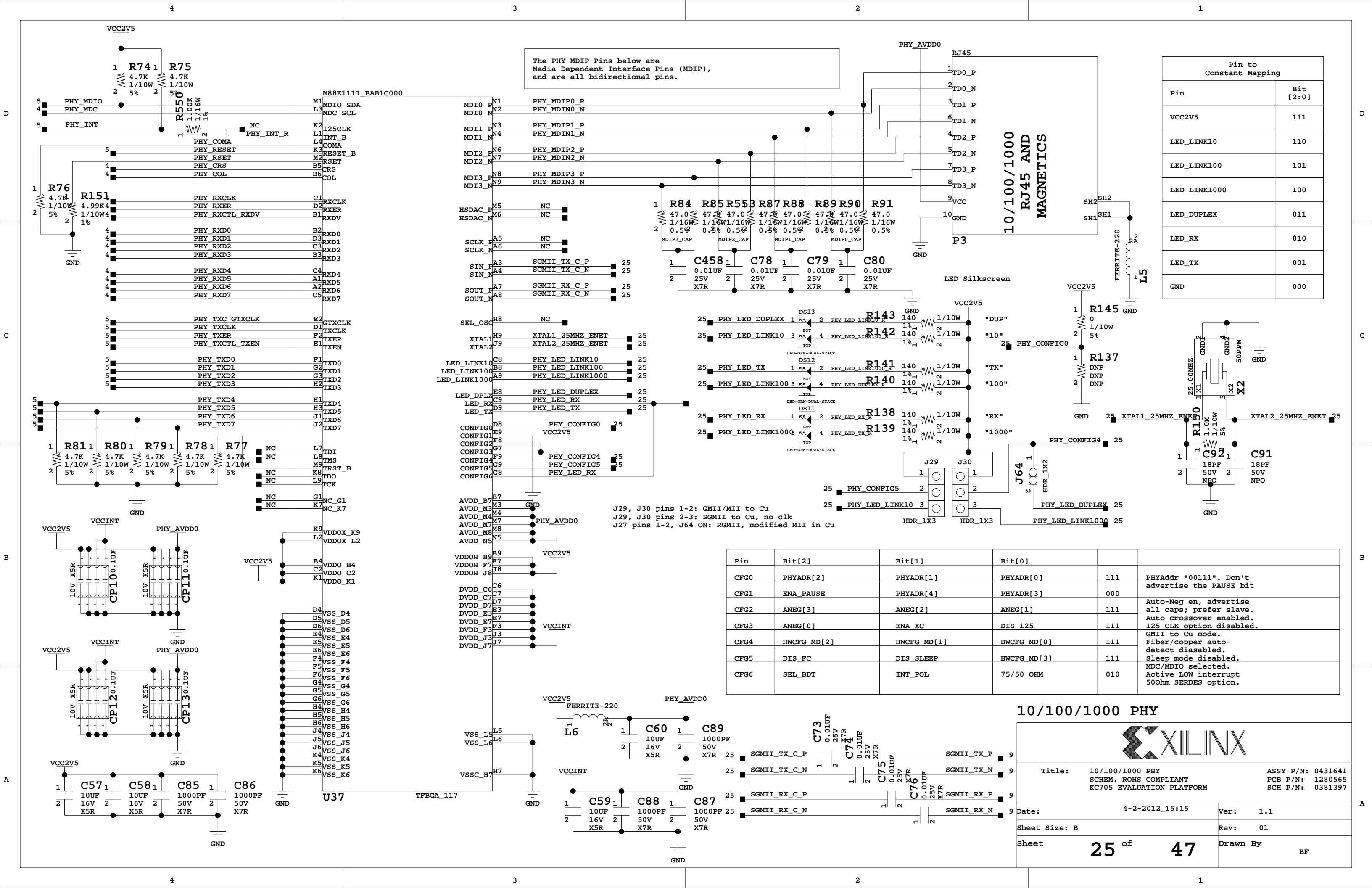
### Clocks and SMA Connectors



Title: Clocks and SMA Connectors SCHEM, ROHS COMPLIANT KC705 EVALUATION PLATFORM		ASSY P/N: 0431641 PCB P/N: 1280565 SCH P/N: 0381397
Date: 4-2-2012_15:15	Ver: 1.1	
Sheet Size: B	Rev: 01	
Sheet 23 of 47	Drawn By BF	

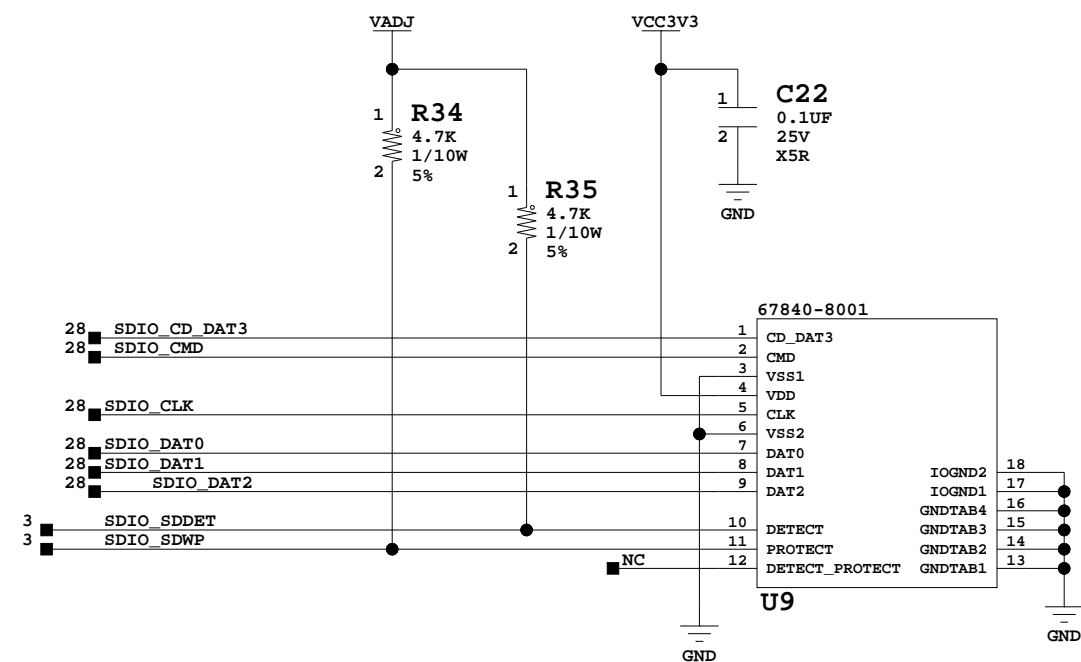
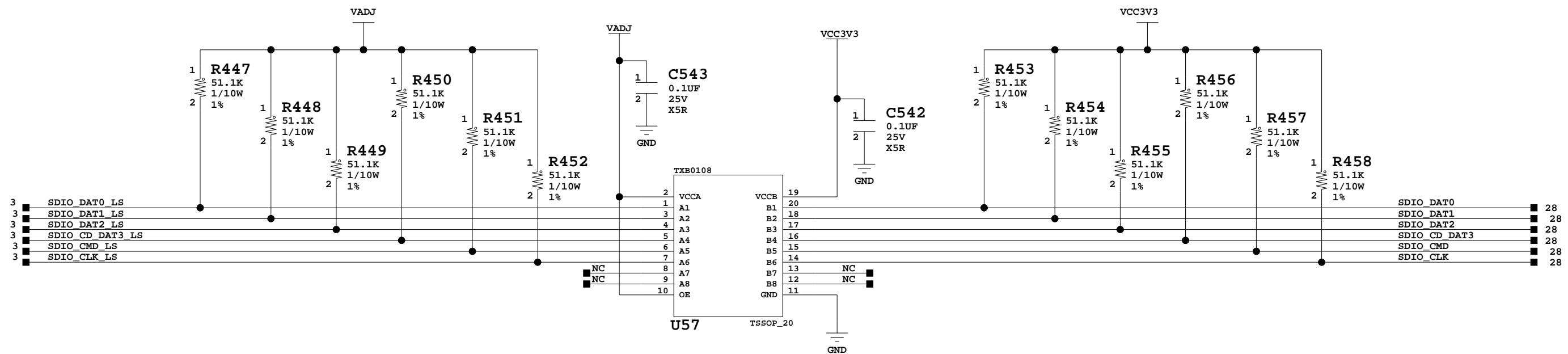












## SD Card Connector

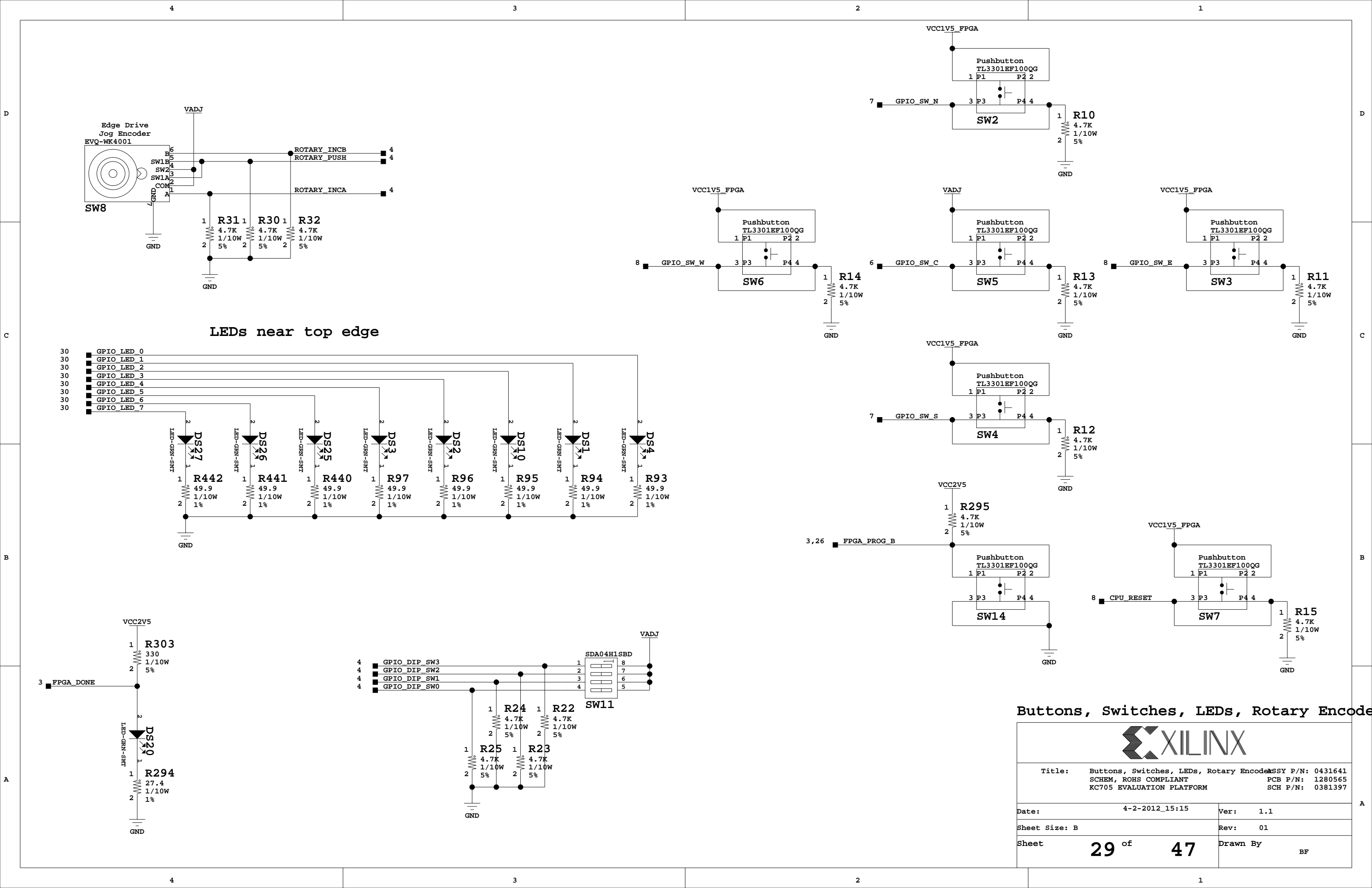


Title:	SD Card Connector	ASSY P/N: 0431641
	SCHEM, ROHS COMPLIANT	PCB P/N: 1280565
	KC705 EVALUATION PLATFORM	SCH P/N: 0381397

Date:	4-2-2012_15:15	Ver:	1.1
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XADC\_VCC5V0

C215  
10UF  
16V  
X5R

ADP123  
VIN VOUT  
GND  
EN  
ADJ  
TSOT\_5

XADC\_AGND

VCCAUX

FERRITE-600

L19

C216  
10UF  
16V  
X5R

XADC\_AGND

R608  
2.7K  
1/10W  
1%

R290  
1.00K  
1/16W  
1%

XADC\_AGND

J48  
1  
2  
3  
HDR\_1X3

VADJ

XADC\_VCC5V0

31

XADC\_VN

31

XADC\_VAUX0P

31

XADC\_VAUX8N

3

XADC\_DXP

31

XADC\_VREF

J46

TST-110-01-G-D

XADC\_AGND

XADC\_AGND

2

XADC\_VP

4

XADC\_VAUX0N

6

XADC\_VAUX8P

8

XADC\_VAUX8P

10

XADC\_DXP

12

XADC\_VCC\_HEADER

14

XADC\_VCC\_HEADER

16

XADC\_GPIO\_0

18

XADC\_GPIO\_2

20

XADC\_GPIO\_2

GND

3

XADC\_VP\_R

1

C220  
1000PF  
50V  
X7R

2

3

XADC\_VN\_R

R280  
100  
1/10W  
1%

R279  
100  
1/10W  
1%

31

XADC\_VP

31

XADC\_VN

5

XADC\_VAUX8P\_R

1

C218  
1000PF  
50V  
X7R

2

5

XADC\_VAUX8N\_R

R275  
100  
1/10W  
1%

R276  
100  
1/10W  
1%

31

XADC\_VAUX8P

31

XADC\_VAUX8N

5

XADC\_VAUX0P\_R

1

C219  
1000PF  
50V  
X7R

2

5

XADC\_VAUX0N\_R

R278  
100  
1/10W  
1%

R277  
100  
1/10W  
1%

31

XADC\_VAUX0P

31

XADC\_VAUX0N

VCC5V0

FERRITE-600

L18

J68

HDR\_1X2

3,31

XADC\_VCC

XADC\_VCC5V0

J69

HDR\_1X3

IC VOLT REF, 1.25V

SOT23\_3  
REF3012  
IN OUT  
GND

U42

C217  
10UF  
10V  
X5R

XADC\_VREF

31

XADC\_VREFP

J47

HDR\_1X3

XADC\_AGND

## XADC Header and Reference



Title: XADC Header and Reference  
SCHEM, ROHS COMPLIANT  
KC705 EVALUATION PLATFORM

ASSY P/N: 0431641  
PCB P/N: 1280565  
SCH P/N: 0381397

Date: 4-2-2012\_15:15

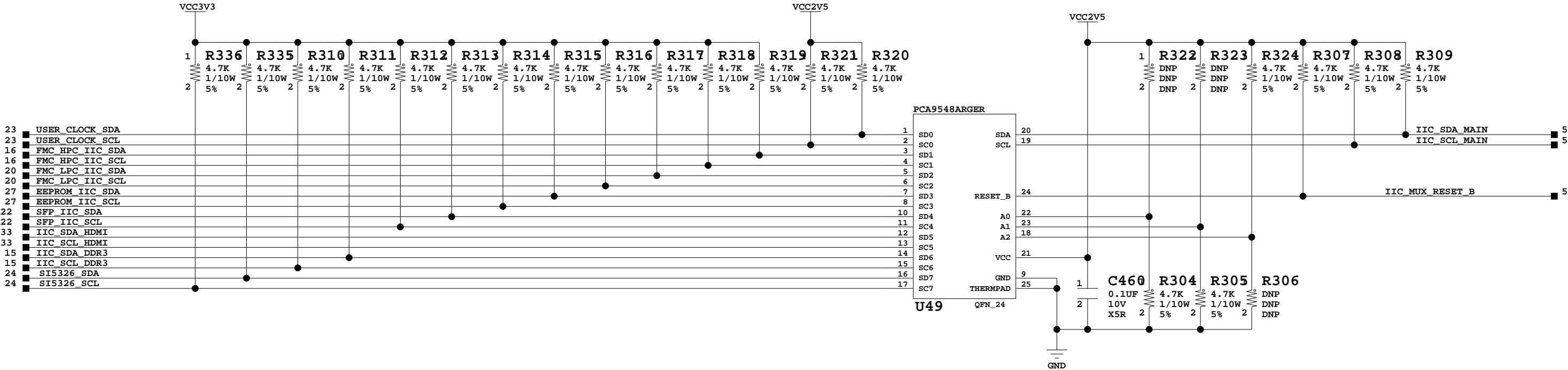
Ver: 1.1

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IIC MUX

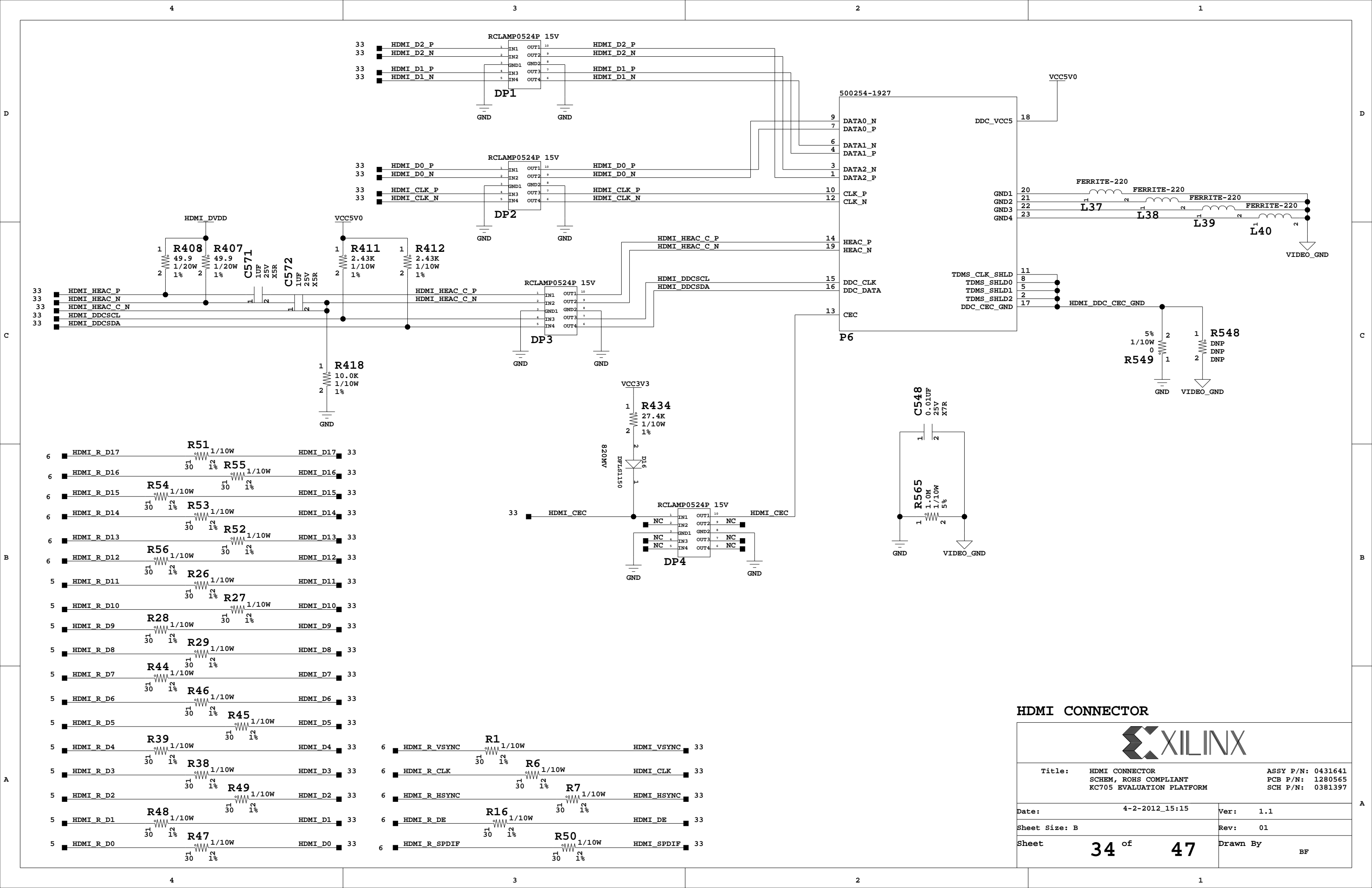
Title: IIC MUX SCHEM, ROHS COMPLIANT KC705 EVALUATION PLATFORM

ASSY P/N: 0431641 PCB P/N: 1280565 SCH P/N: 0381397

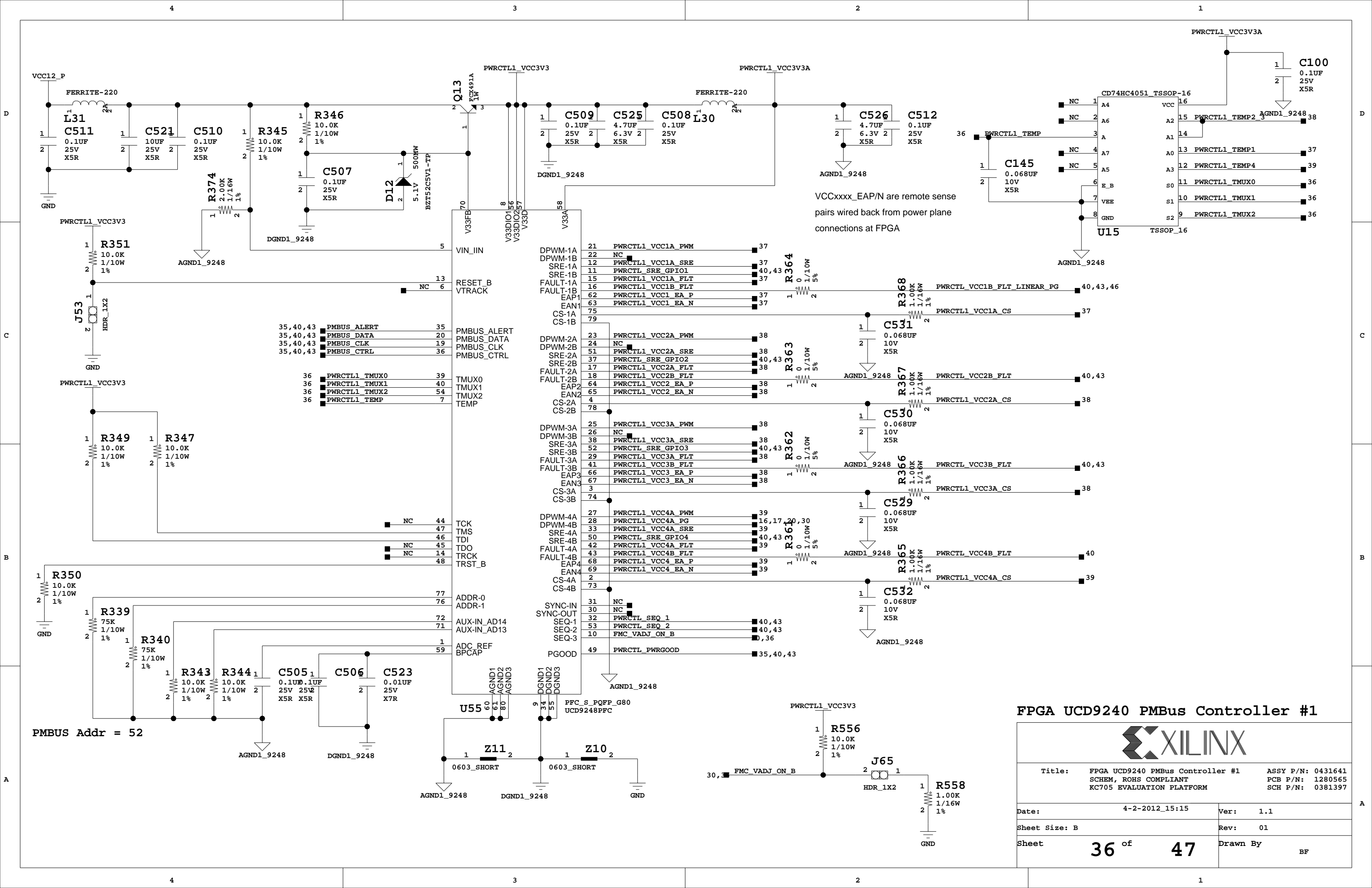
Date: 4-2-2012_15:15	Ver: 1.1
Sheet Size: B	Rev: 01
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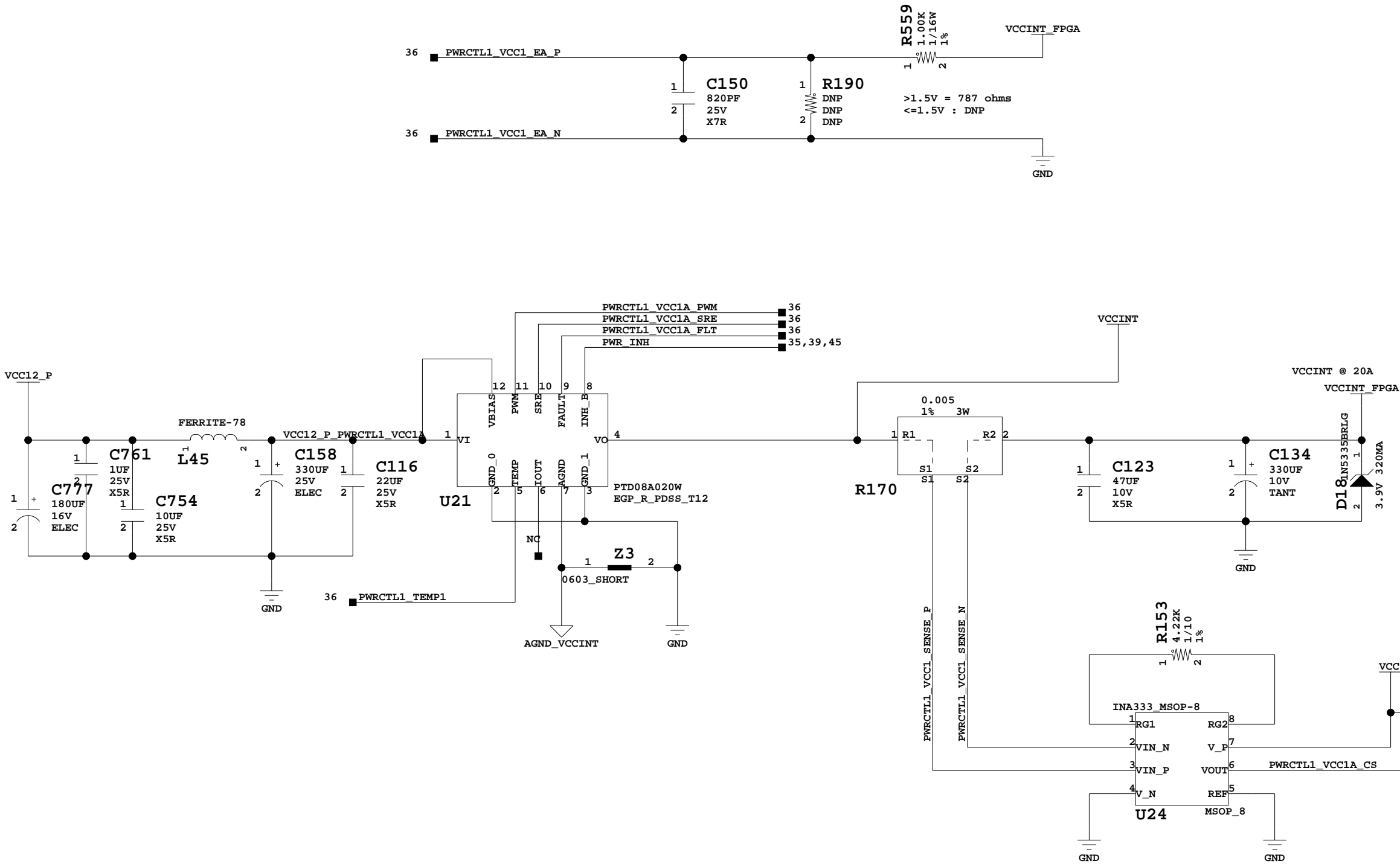










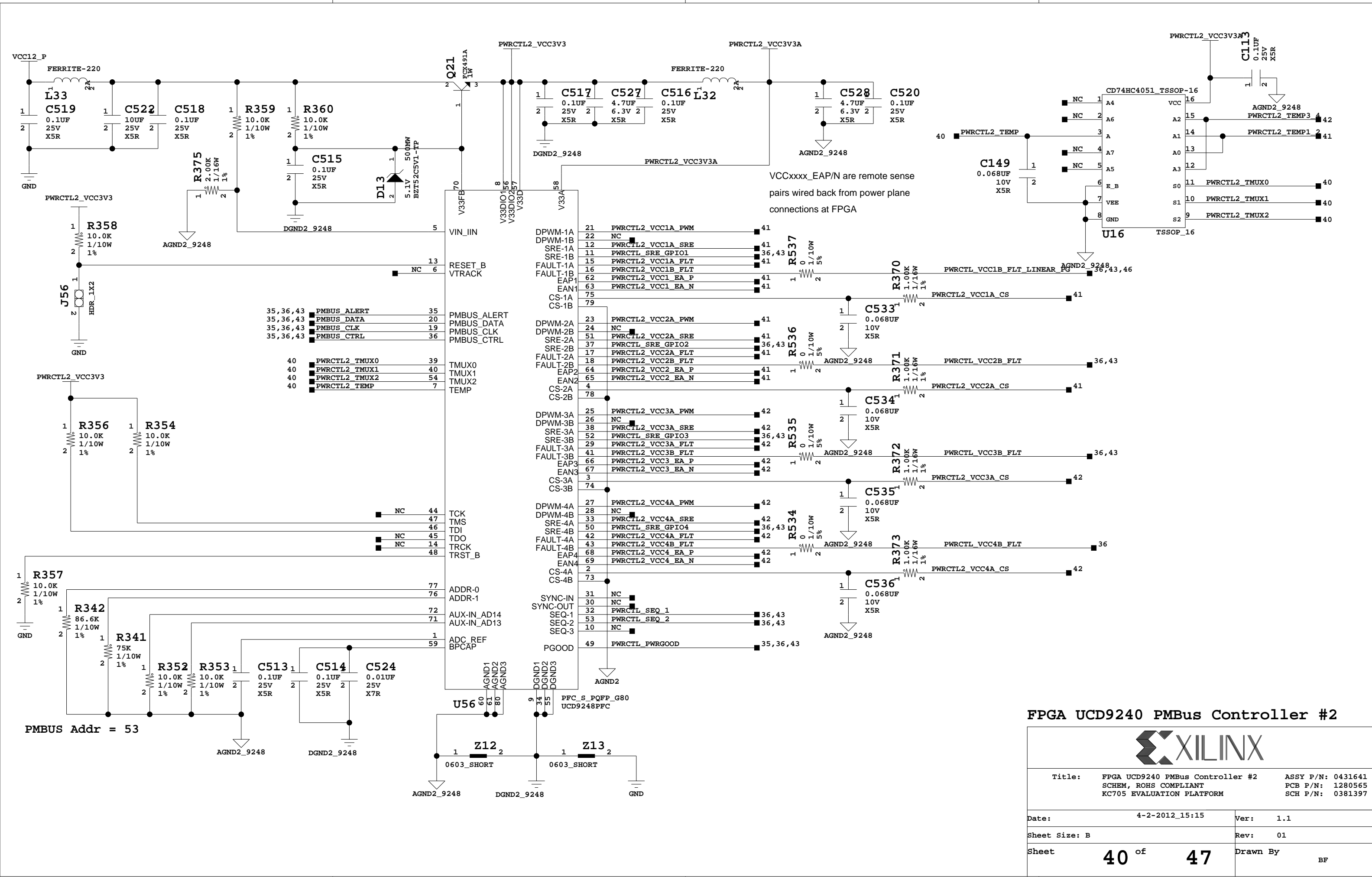


PTD08A020W 20A Max. Power Channel

Title: PTD08A010W 20A Max. Power Channel SCHEM, ROHS COMPLIANT KC705 EVALUATION PLATFORM		
Date: 4-2-2012_15:15		Ver: 1.1
Sheet Size: B		Rev: 01
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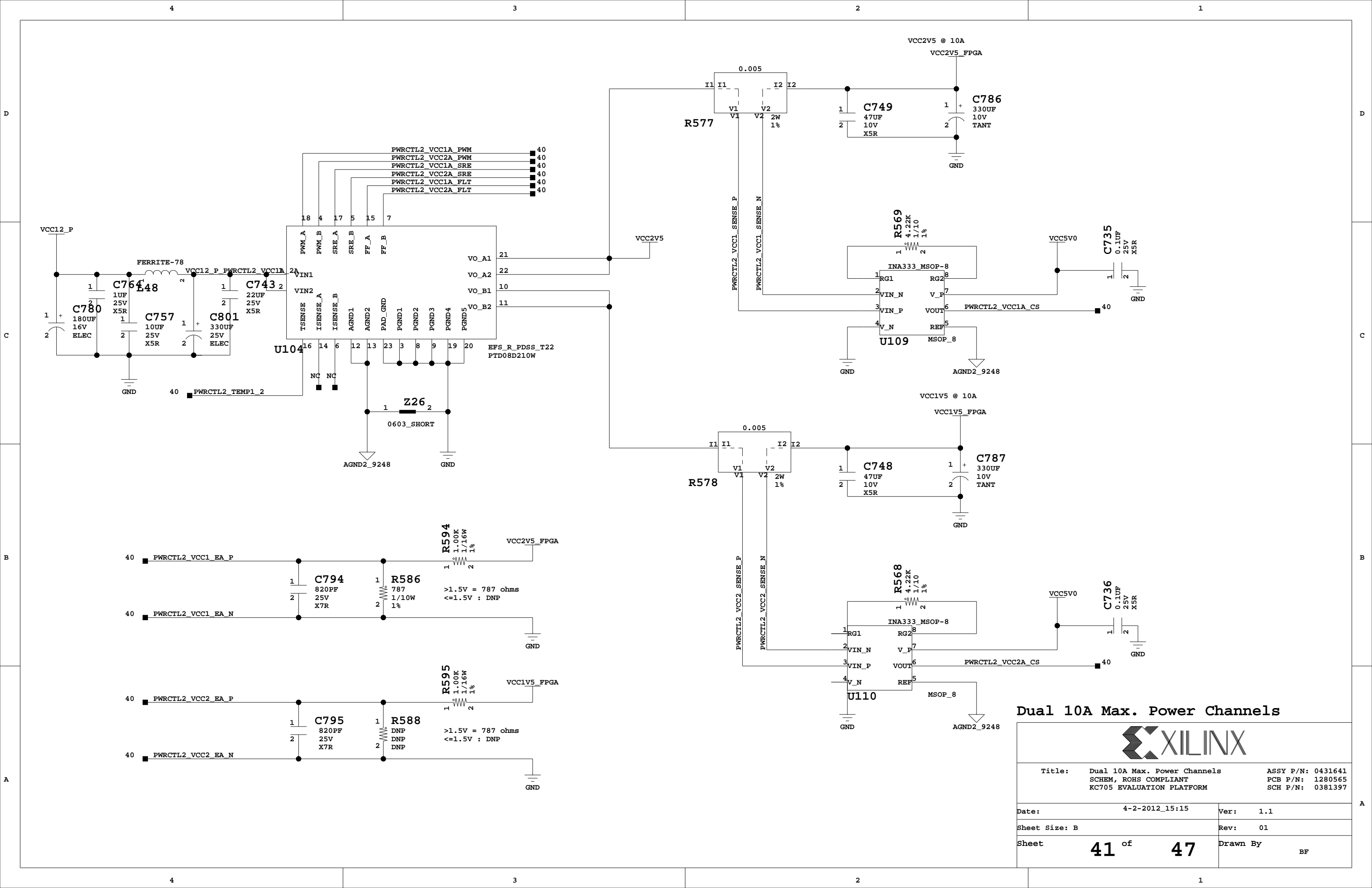


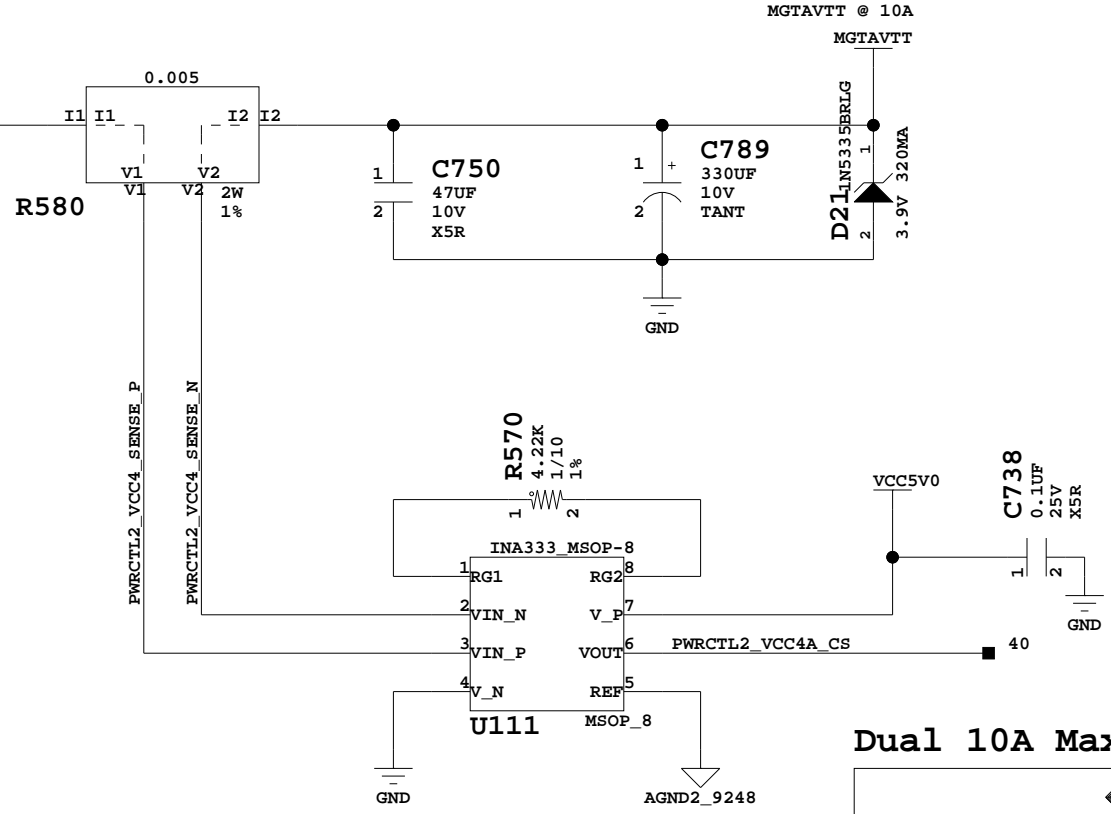
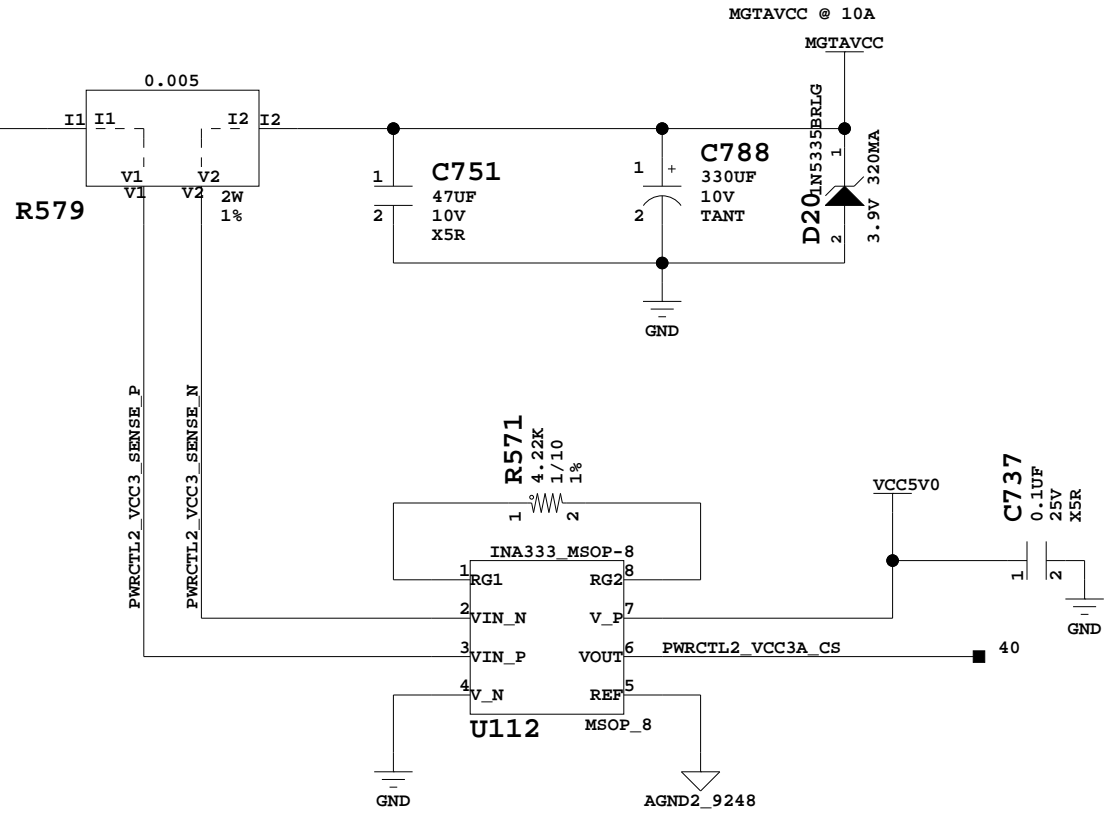
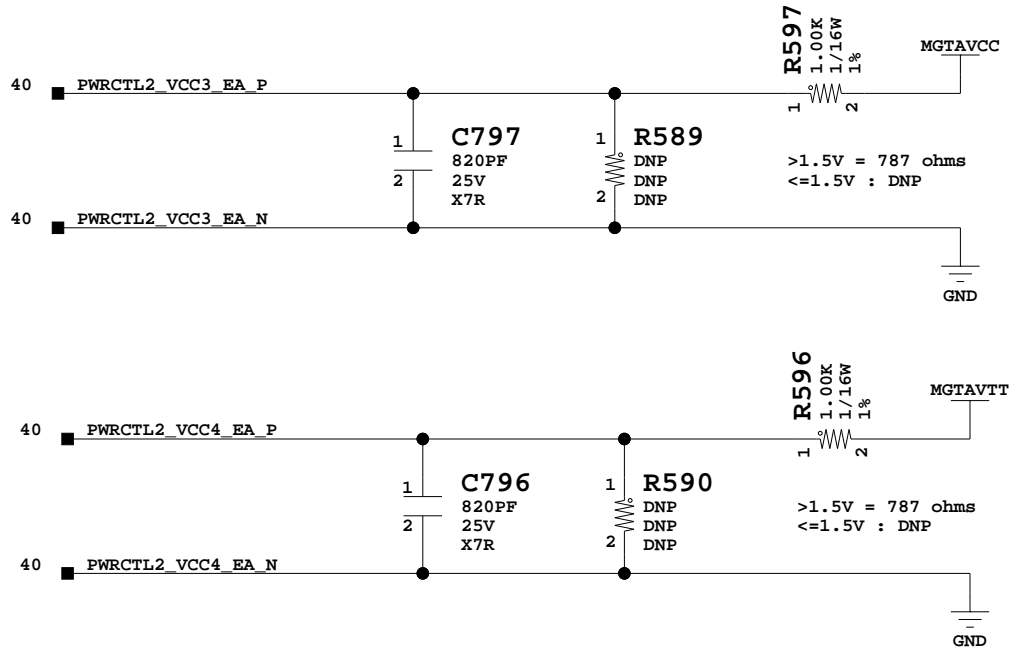
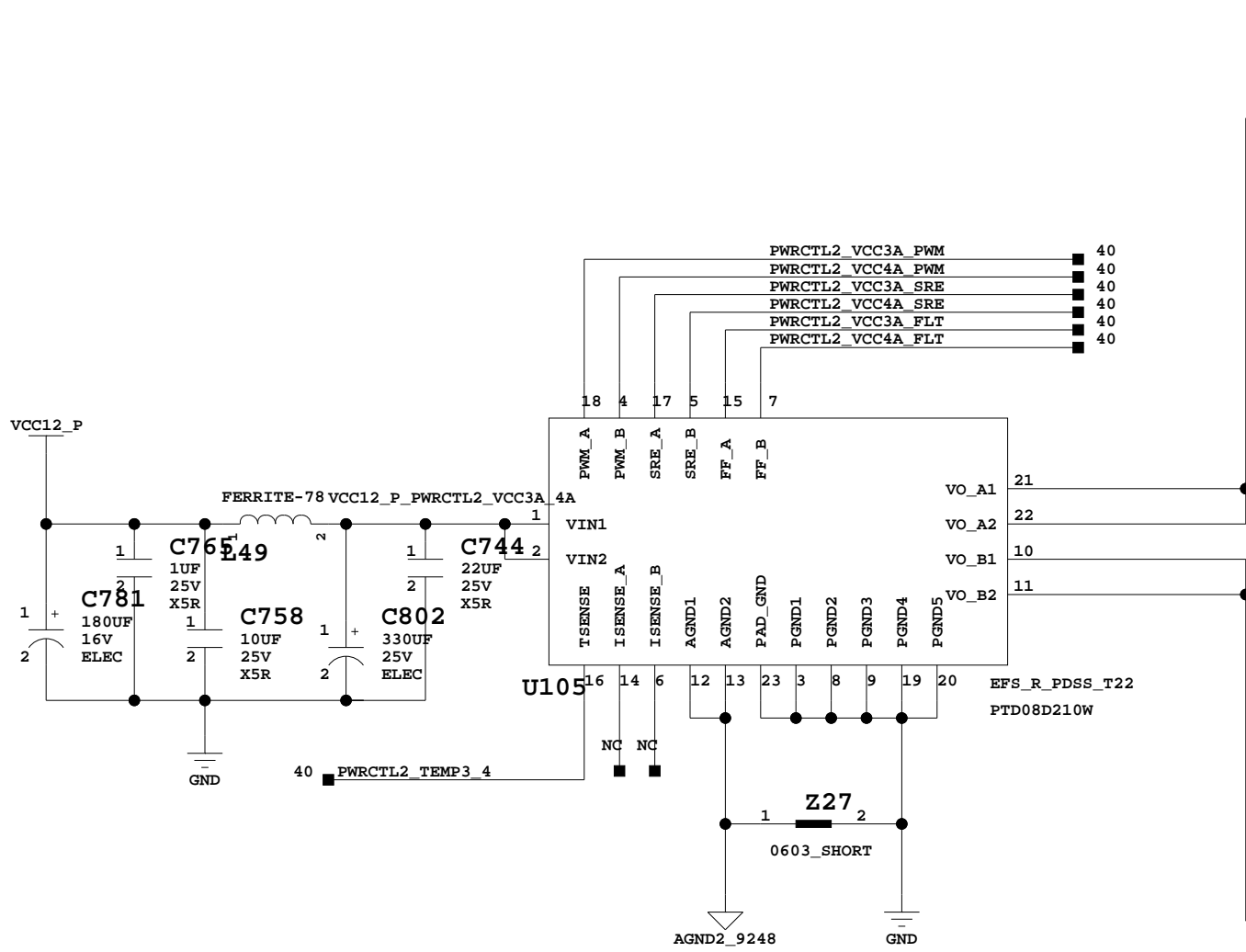


FPGA UCD9240 PMBus Controller #2

Title: FPGA UCD9240 PMBus Controller #2 SCHEM, ROHS COMPLIANT KC705 EVALUATION PLATFORM		
ASSY P/N: 0431641 PCB P/N: 1280565 SCH P/N: 0381397		
Date: 4-2-2012_15:15	Ver: 1.1	
Sheet Size: B	Rev: 01	
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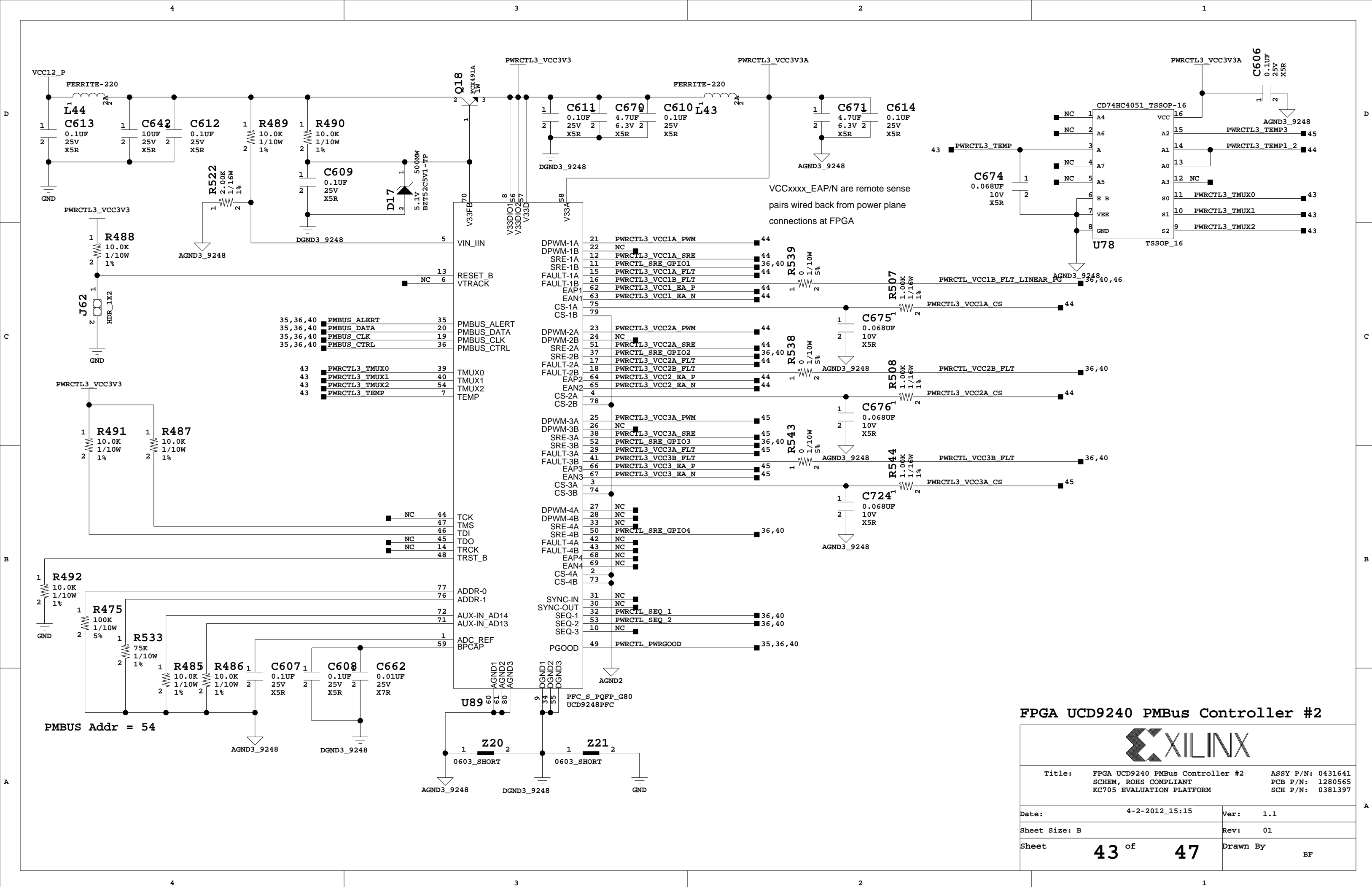


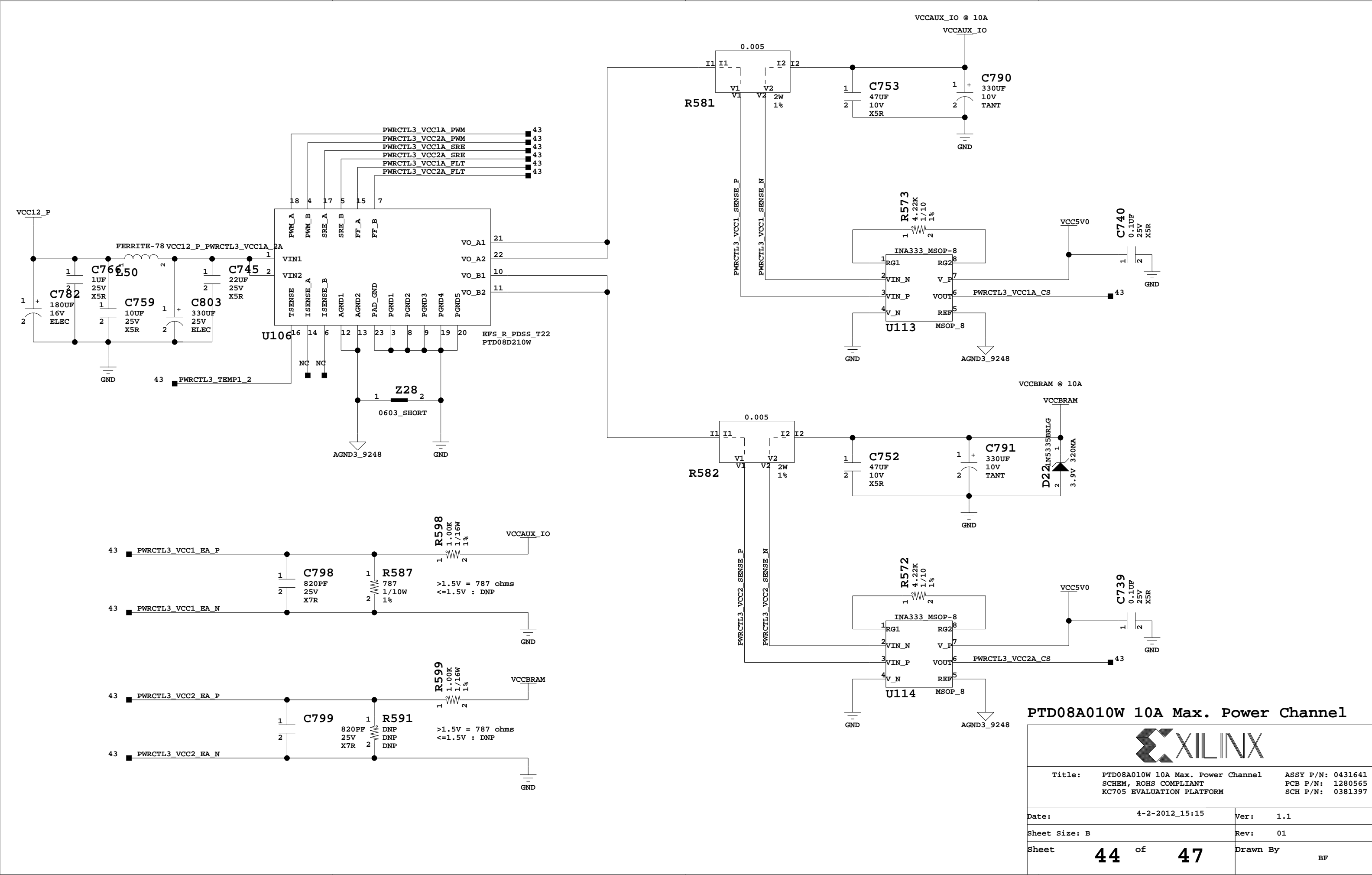


### Dual 10A Max. Power Channels



Title: Dual 10A Max. Power Channels SCHEM, ROHS COMPLIANT KC705 EVALUATION PLATFORM		ASSY P/N: 0431641 PCB P/N: 1280565 SCH P/N: 0381397
Date: 4-2-2012_15:15	Ver: 1.1	
Sheet Size: B	Rev: 01	
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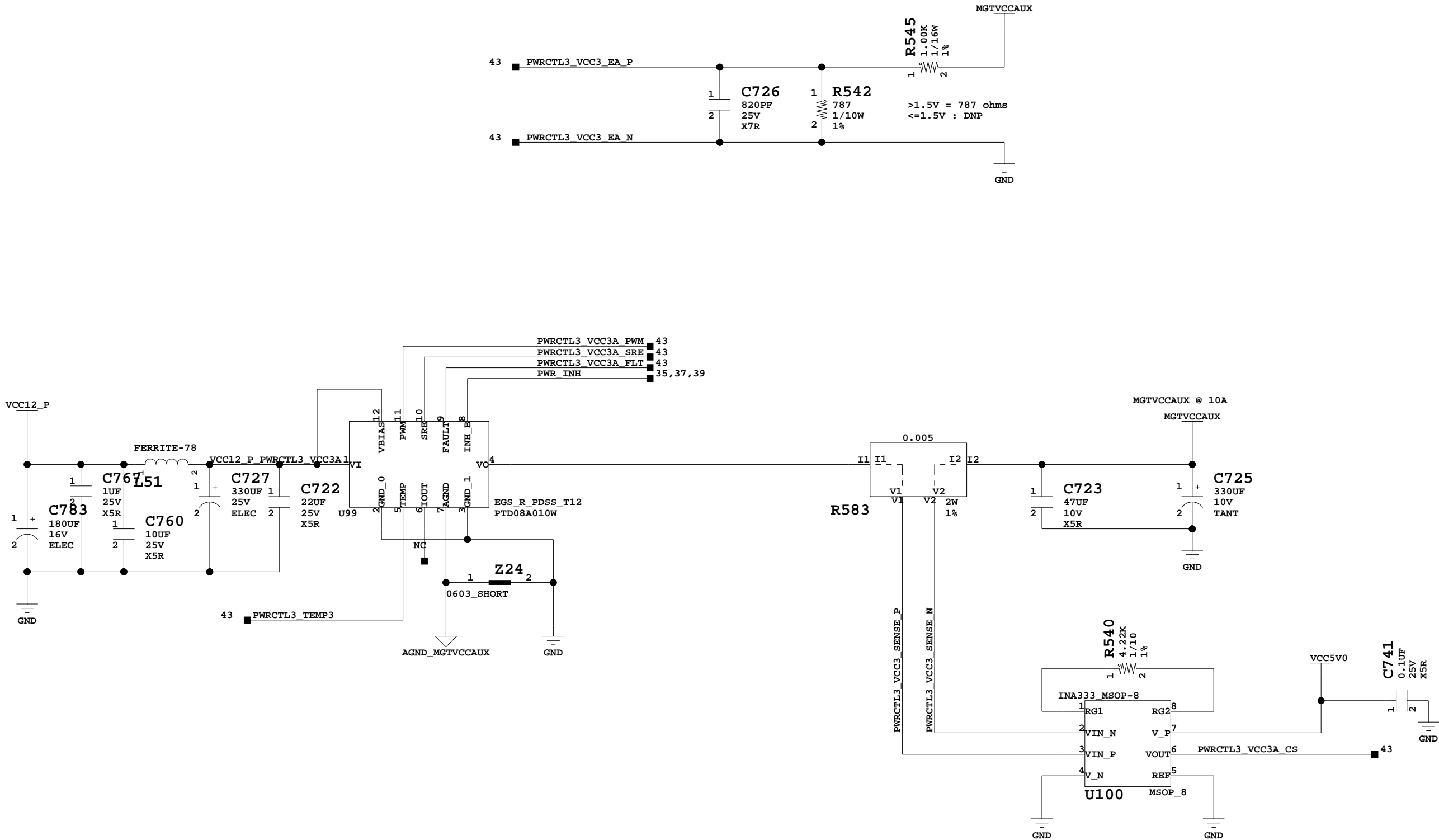




PTD08A010W 10A Max. Power Channel

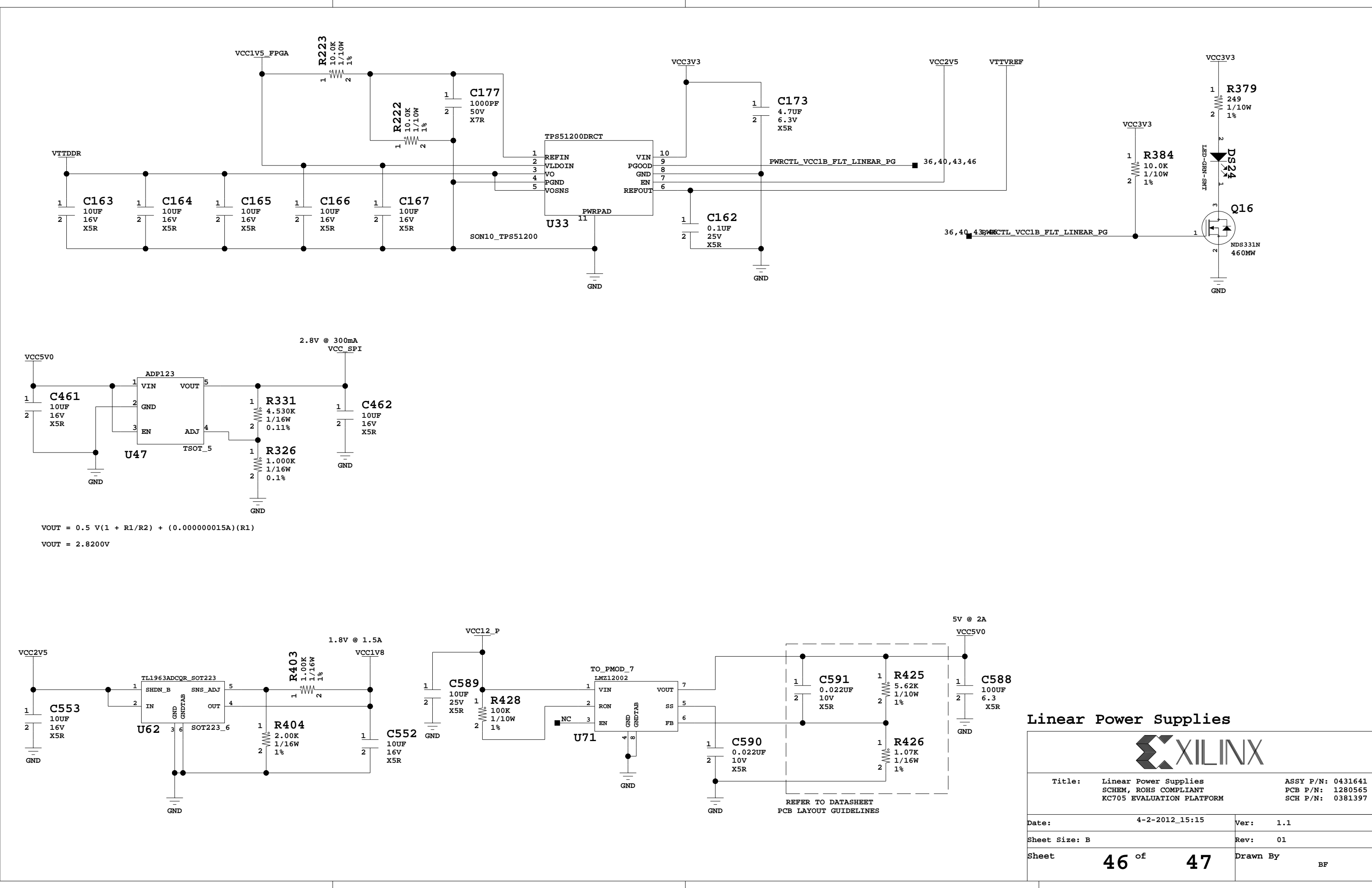


Title: PTD08A010W 10A Max. Power Channel SCHEM, ROHS COMPLIANT KC705 EVALUATION PLATFORM		ASSY P/N: 0431641 PCB P/N: 1280565 SCH P/N: 0381397
Date: 4-2-2012_15:15	Ver: 1.1	
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PTD08A010W 10A Max. Power Channel

Title:		PTD08A010W 10A Max. Power Channel	
SCHEM, ROHS COMPLIANT		ASSY P/N: 0431641	
KC705 EVALUATION PLATFORM		PCB P/N: 1280565	
		SCH P/N: 0381397	
Date:		4-2-2012_15:15	Ver: 1.1
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$$V_{OUT} = 0.5 V(1 + R1/R2) + (0.000000015A)(R1)$$
$$V_{OUT} = 2.8200V$$

Linear Power Supplies			
Title: Linear Power Supplies SCHEM, ROHS COMPLIANT KC705 EVALUATION PLATFORM		ASSY P/N: 0431641 PCB P/N: 1280565 SCH P/N: 0381397	
Date: 4-2-2012_15:15		Ver: 1.1	
Sheet Size: B		Rev: 01	
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