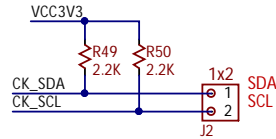
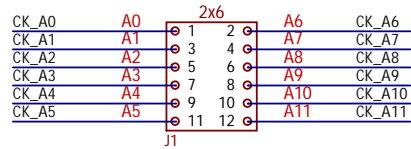


Foot
F1
Foot
F2
Foot
F3
Foot
F4

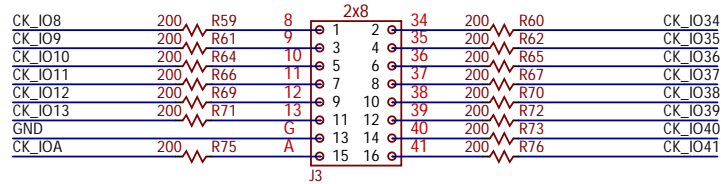
PYNQ	Digilent Inc.	Xilinx	Texas Instruments	CE	ROHS	Chinese ROHS
Title						Rev
PYNQ-Z1						C.0
						Copyright 2016
Circuit						
PMODs, User I/O						
Doc#						6003-500-017
Engineer						GTM
Author						DL
Date						8/10/16
Sheet#						1 out of 13


DIGILENT
 A National Instruments Company

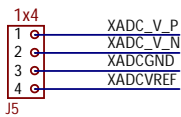
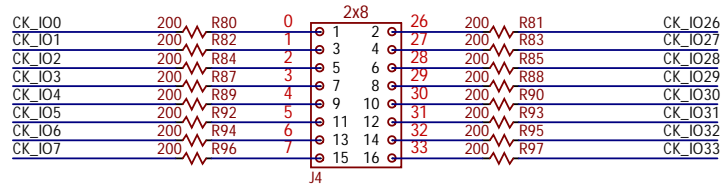
ANALOG



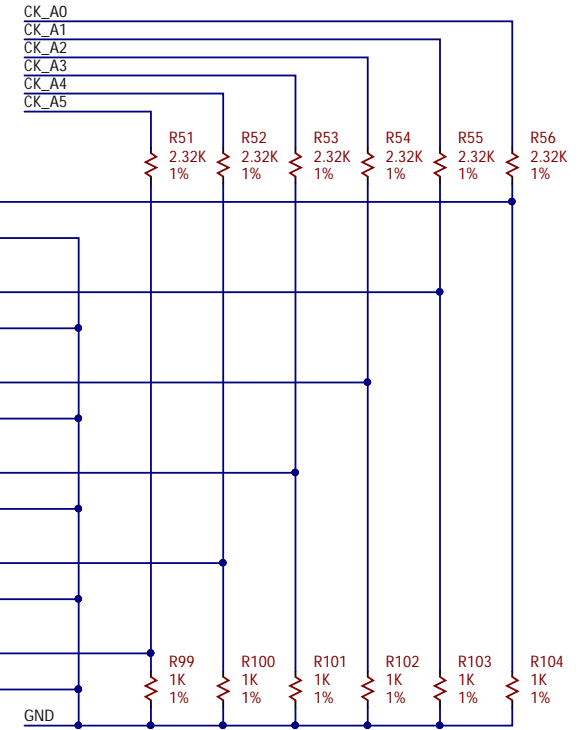
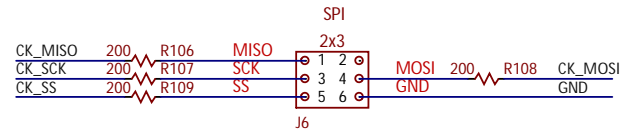
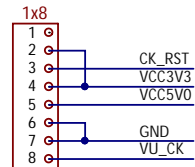
IOH



IOL



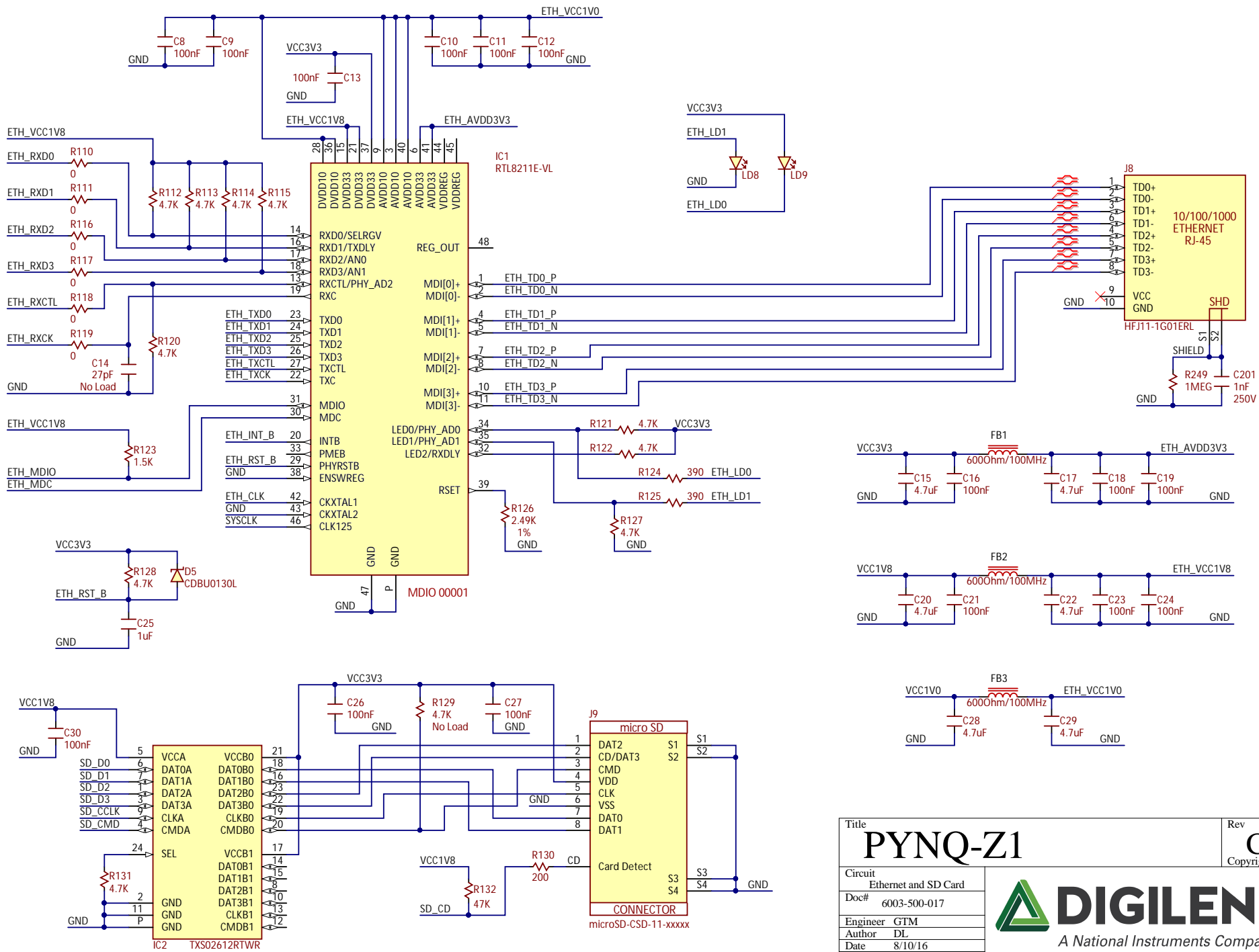
POWER



Note: Terminate N signals next to Analog Header

Title		Rev
PYNQ-Z1		C.0
Circuit		Copyright 2016
CHiP KIT IO		
Doc#		6003-500-017
Engineer		GTM
Author		DL
Date		8/10/16
Sheet#		2 out of 13





Title PYNQ-Z1		Rev C.0 Copyright 2016
Circuit Ethernet and SD Card		
Doc# 6003-500-017		
Engineer GTM		
Author DL		
Date 8/10/16		
Sheet# 3 out of 13		
 DIGILENT A National Instruments Company		

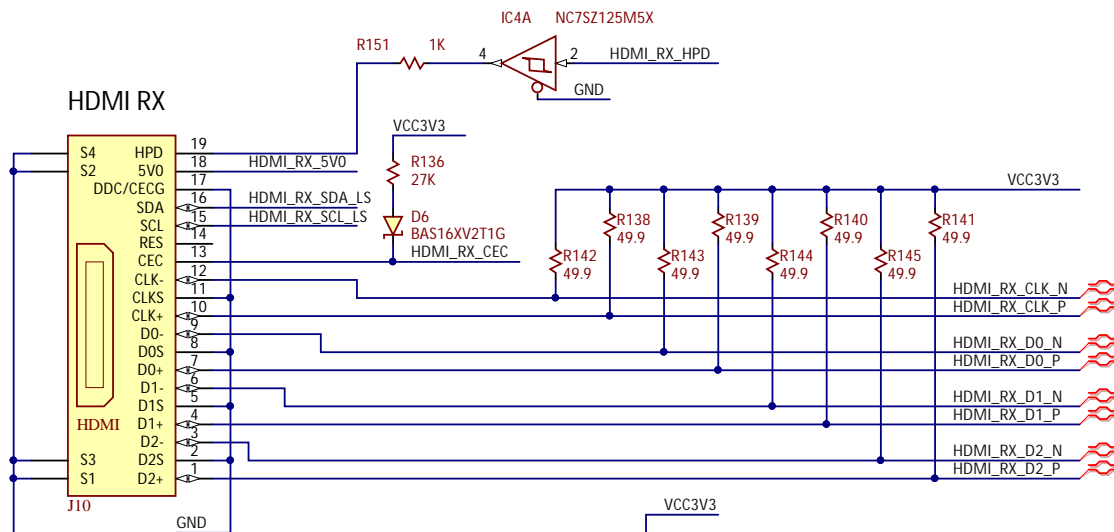
1

2

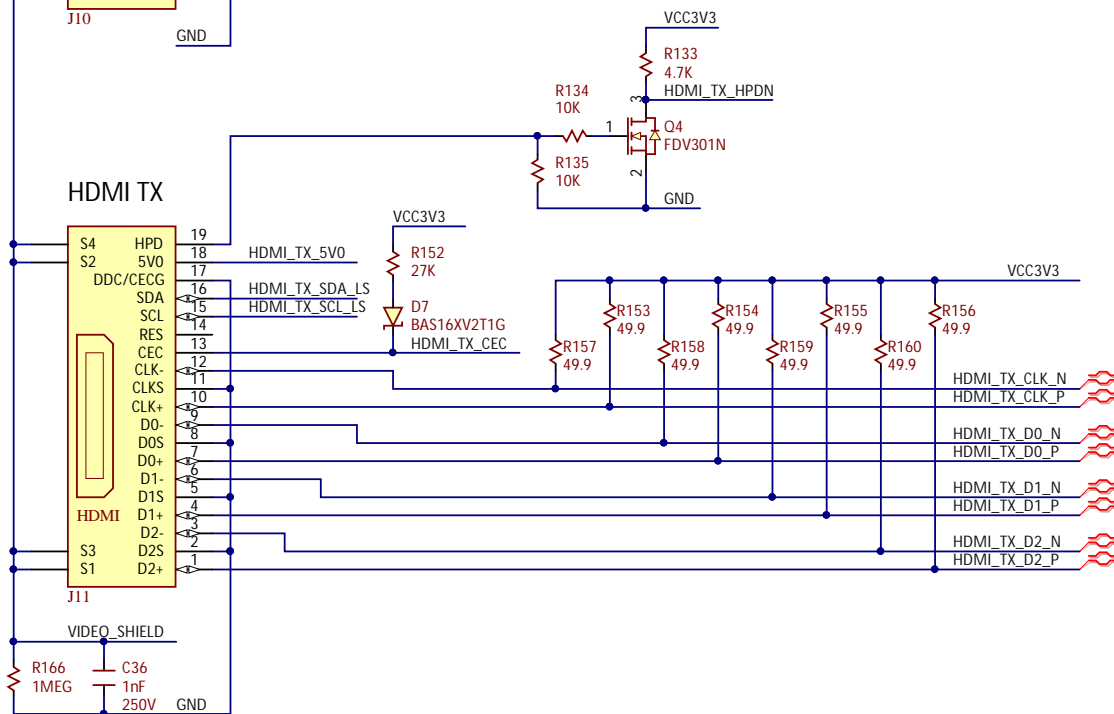
3

4

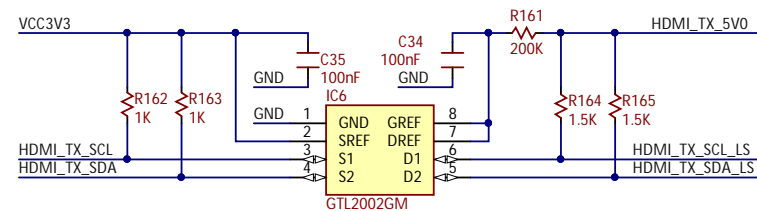
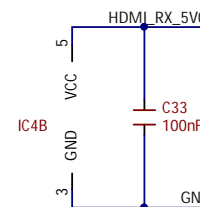
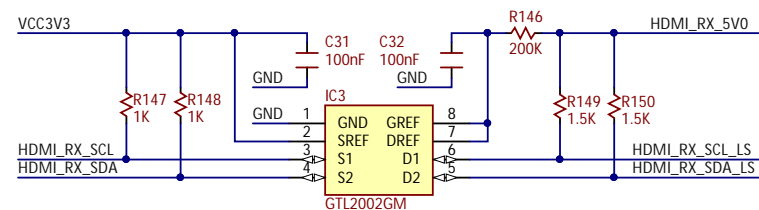
HDMI RX



HDMI TX



HDMI_TX_5V0 R137 VCC5V0
PTS120630V012



Title PYNQ-Z1		Rev C.0 Copyright 2016
Circuit HDMI	 DIGILENT [®] <i>A National Instruments Company</i>	
Doc# 6003-500-017		
Engineer GTM		
Author DL		
Date 8/10/16		
Sheet# 4 out of 13		

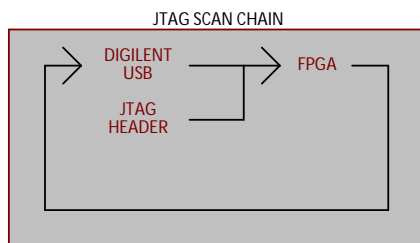
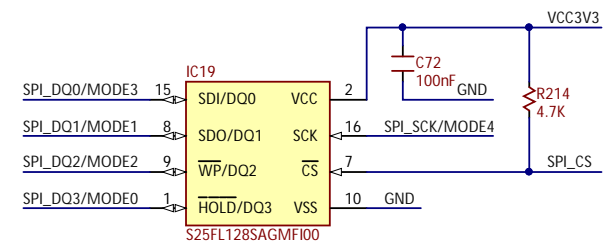
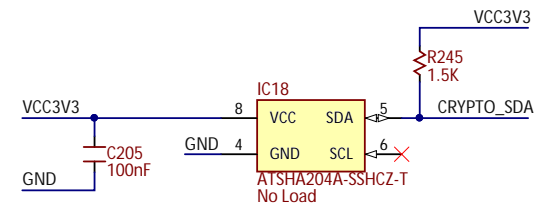
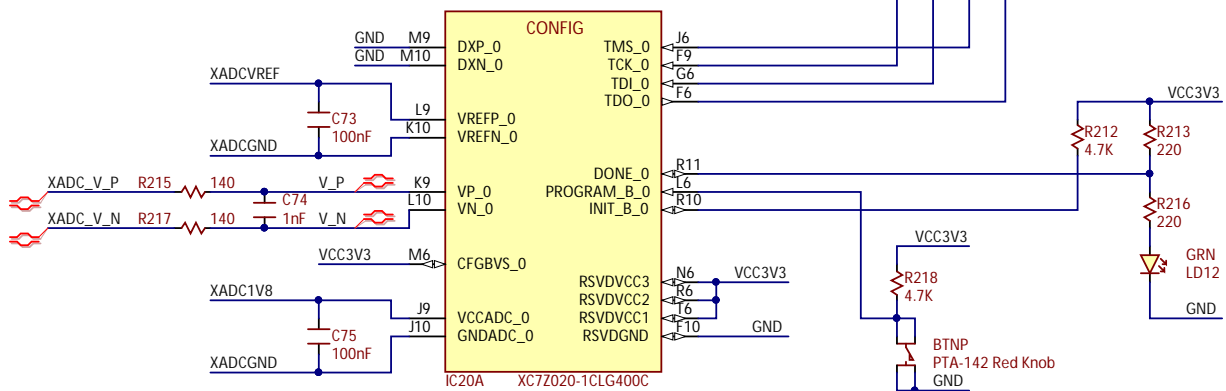
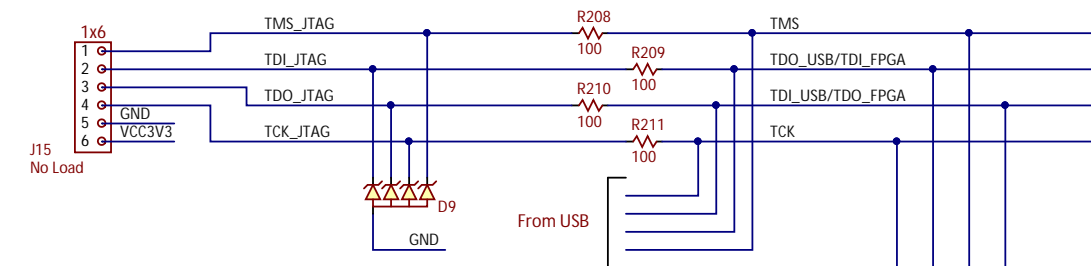
1

2

3

4

This page intentionally left blank.



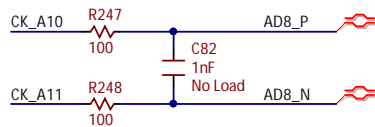
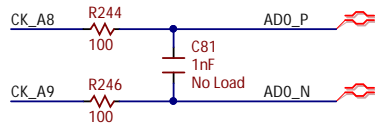
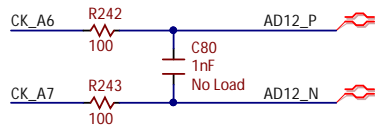
Title		Rev
PYNQ-Z1		C.0
Circuit		Copyright 2016
FPGA Configuration, Flash		
Doc#		6003-500-017
Engineer		GTM
Author		DL
Date		8/10/16
Sheet#		7 out of 13





BANK 13		
IO_L6N_T0_VREF_13	V5	CK_IO27
IO_L11P_T1_SRCC_13	U7	CK_IO29
IO_L11N_T1_SRCC_13	V7	CK_IO30
IO_L12P_T1_MRCC_13	T9	
IO_L12N_T1_MRCC_13	U10	CK_A5
IO_L13P_T2_MRCC_13	V7	CK_IO37
IO_L13N_T2_MRCC_13	V6	CK_IO36
IO_L14P_T2_SRCC_13	V9	CK_IO41
IO_L14N_T2_SRCC_13	V8	CK_IO39
IO_L15P_T2_DQS_13	V8	CK_IO32
IO_L15N_T2_DQS_13	V8	CK_IO38
IO_L16P_T2_T3	W10	CK_IO34
IO_L16N_T2_T3	W9	CK_IO40
IO_L17P_T2_T3	U9	
IO_L17N_T2_T3	U8	CK_IO31
IO_L18P_T2_T3	W11	CK_A2
IO_L18N_T2_T3	V11	CK_A0
IO_L19P_T3_T3	T5	CK_A4
IO_L19N_T3_VREF_13	U5	CK_IO26
IO_L20P_T3_T3	V12	CK_A1
IO_L20N_T3_T3	V13	CK_IOA
IO_L21P_T3_DQS_13	V11	CK_A3
IO_L21N_T3_DQS_13	V10	CK_IO33
IO_L22P_T3_T3	V6	CK_IO28
IO_L22N_T3_T3	W6	CK_IO35

IC20B



VCC3V3

BANK 34		
IO_0_34	R19	HDMI_TX_HPDN
IO_L1P_T0_34	T11	JB2_P
IO_L1N_T0_34	T10	JB2_N
IO_L2P_T0_34	T12	CK_MOSI
IO_L2N_T0_34	U12	CK_IO1
IO_L3P_T0_DQS_PUDC_B_34	U13	CK_IO2
IO_L3N_T0_DQS_34	V13	CK_IO3
IO_L4P_T0_34	V12	JB4_P
IO_L4N_T0_34	W13	JB4_N
IO_L5P_T0_34	T14	CK_IO0
IO_L5N_T0_34	T15	CK_IO5
IO_L6P_T0_34	P14	LED1
IO_L6N_T0_VREF_34	R14	LEDO
IO_L7P_T1_34	V16	JA2_P
IO_L7N_T1_34	V17	JA2_N
IO_L8P_T1_34	W14	JB1_P
IO_L8N_T1_34	V14	JB1_N
IO_L9P_T1_DQS_34	T16	CK_IO10
IO_L9N_T1_DQS_34	U17	CK_IO7
IO_L10P_T1_34	V15	CK_IO4
IO_L10N_T1_34	W15	CK_MISO
IO_L11P_T1_SRCC_34	U14	HDMI_RX_SCL
IO_L11N_T1_SRCC_34	U15	HDMI_RX_SDA
IO_L12P_T1_MRCC_34	U18	JA3_P
IO_L12N_T1_MRCC_34	U19	JA3_N
IO_L13P_T2_MRCC_34	N18	HDMI_RX_CLK_P
IO_L13N_T2_MRCC_34	P19	HDMI_RX_CLK_N
IO_L14P_T2_SRCC_34	N20	HDMI_RX_D2_P
IO_L14N_T2_SRCC_34	P20	HDMI_RX_D2_N
IO_L15P_T2_DQS_34	T20	HDMI_RX_D1_P
IO_L15N_T2_DQS_34	U20	HDMI_RX_D1_N
IO_L16P_T2_34	V20	HDMI_RX_D0_P
IO_L16N_T2_34	W20	HDMI_RX_D0_N
IO_L17P_T2_34	V18	JA1_P
IO_L17N_T2_34	V19	JA1_N
IO_L18P_T2_34	V16	JB3_P
IO_L18N_T2_34	W16	JB3_N
IO_L19P_T3_34	R16	CK_IO6
IO_L19N_T3_VREF_34	R17	CK_IO11
IO_L20P_T3_34	T17	AUD_SD
IO_L20N_T3_34	R18	AUD_PWM
IO_L21P_T3_DQS_34	V17	CK_IO8
IO_L21N_T3_DQS_34	V18	CK_IO9
IO_L22P_T3_34	W18	JA4_P
IO_L22N_T3_34	N17	CK_IO13
IO_L23P_T3_34	P18	CK_IO12
IO_L23N_T3_34	P15	CK_SDA
IO_L24P_T3_34	P16	CK_SCL
IO_L24N_T3_34	T19	HDMI_RX_HPD
IO_25_34		

IC20C

VCC3V3

BANK 35		
IO_0_35	G14	LED5_B
IO_L1P_T0_AD0P_35	C20	AD0_P
IO_L1N_T0_AD0N_35	B20	AD0_N
IO_L2P_T0_AD8P_35	B19	AD8_P
IO_L2N_T0_AD8N_35	A20	AD8_N
IO_L3P_T0_DQS_AD1P_35	E17	CK_AN0_P
IO_L3N_T0_DQS_AD1N_35	D18	CK_AN0_N
IO_L4P_T0_35	D19	BTN0
IO_L4N_T0_35	D20	BTN1
IO_L5P_T0_AD9P_35	E18	CK_AN1_P
IO_L5N_T0_AD9N_35	E19	CK_AN1_N
IO_L6P_T0_35	F16	CK_SS
IO_L6N_T0_VREF_35	F17	M_CLK
IO_L7P_T1_AD2P_35	M19	SW1
IO_L7N_T1_AD2N_35	M20	SW0
IO_L8P_T1_AD10P_35	M17	HDMI_TX_SCL
IO_L8N_T1_AD10N_35	M18	HDMI_TX_SDA
IO_L9P_T1_DQS_AD3P_35	L19	BTN3
IO_L9N_T1_DQS_AD3N_35	L20	BTN2
IO_L10P_T1_AD11P_35	K19	HDMI_TX_D1_P
IO_L10N_T1_AD11N_35	K19	HDMI_TX_D1_N
IO_L11P_T1_SRCC_35	L16	HDMI_TX_CLK_P
IO_L11N_T1_SRCC_35	L17	HDMI_TX_CLK_N
IO_L12P_T1_MRCC_35	K17	HDMI_TX_D0_P
IO_L12N_T1_MRCC_35	K18	HDMI_TX_D0_N
IO_L13P_T2_MRCC_35	H16	SYSCLK
IO_L13N_T2_MRCC_35	H17	HDMI_RX_CEC
IO_L14P_T2_AD4P_SRCC_35	H18	HDMI_TX_D2_P
IO_L14N_T2_AD4N_SRCC_35	F19	AD12_P
IO_L15P_T2_DQS_AD12P_35	F20	AD12_N
IO_L15N_T2_DQS_AD12N_35	G17	LED4_G
IO_L16P_T2_35	G18	M_DATA
IO_L16N_T2_35	L20	CK_AN4_P
IO_L17P_T2_AD5P_35	H20	CK_AN4_N
IO_L17N_T2_AD5N_35	G19	CK_AN5_P
IO_L18P_T2_AD13P_35	G20	CK_AN5_N
IO_L18N_T2_AD13N_35	H15	CK_SCK
IO_L19P_T3_35	G15	HDMI_TX_CEC
IO_L19N_T3_VREF_35	K14	CK_AN2_P
IO_L20P_T3_AD6P_35	J14	CK_AN2_N
IO_L20N_T3_AD6N_35	N15	LED4_R
IO_L21P_T3_DQS_AD14P_35	N16	LED2
IO_L21N_T3_DQS_AD14N_35	L14	LED5_G
IO_L22P_T3_AD7P_35	L15	LED4_B
IO_L22N_T3_AD7N_35	M14	LED3
IO_L23P_T3_35	M15	LED5_R
IO_L23N_T3_35	K16	CK_AN3_P
IO_L24P_T3_AD15P_35	J16	CK_AN3_N
IO_L24N_T3_AD15N_35	J15	CRYPTO_SDA
IO_25_35		

IC20D

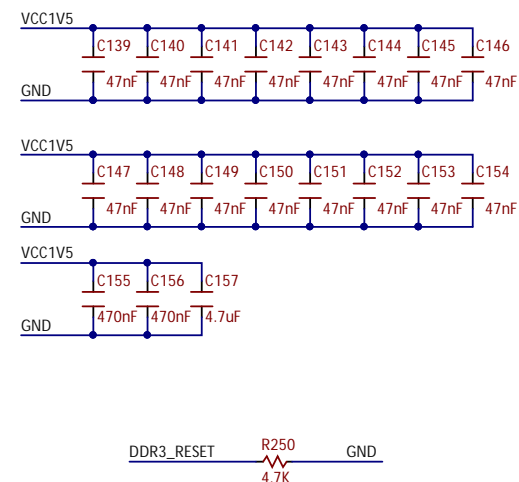
Title
PYNQ-Z1

Rev
C.0
Copyright 2016

Circuit
FPGA Banks, Anti Alias Filters
Doc# 6003-500-017
Engineer GTM
Author DL
Date 8/10/16
Sheet# 9 out of 13

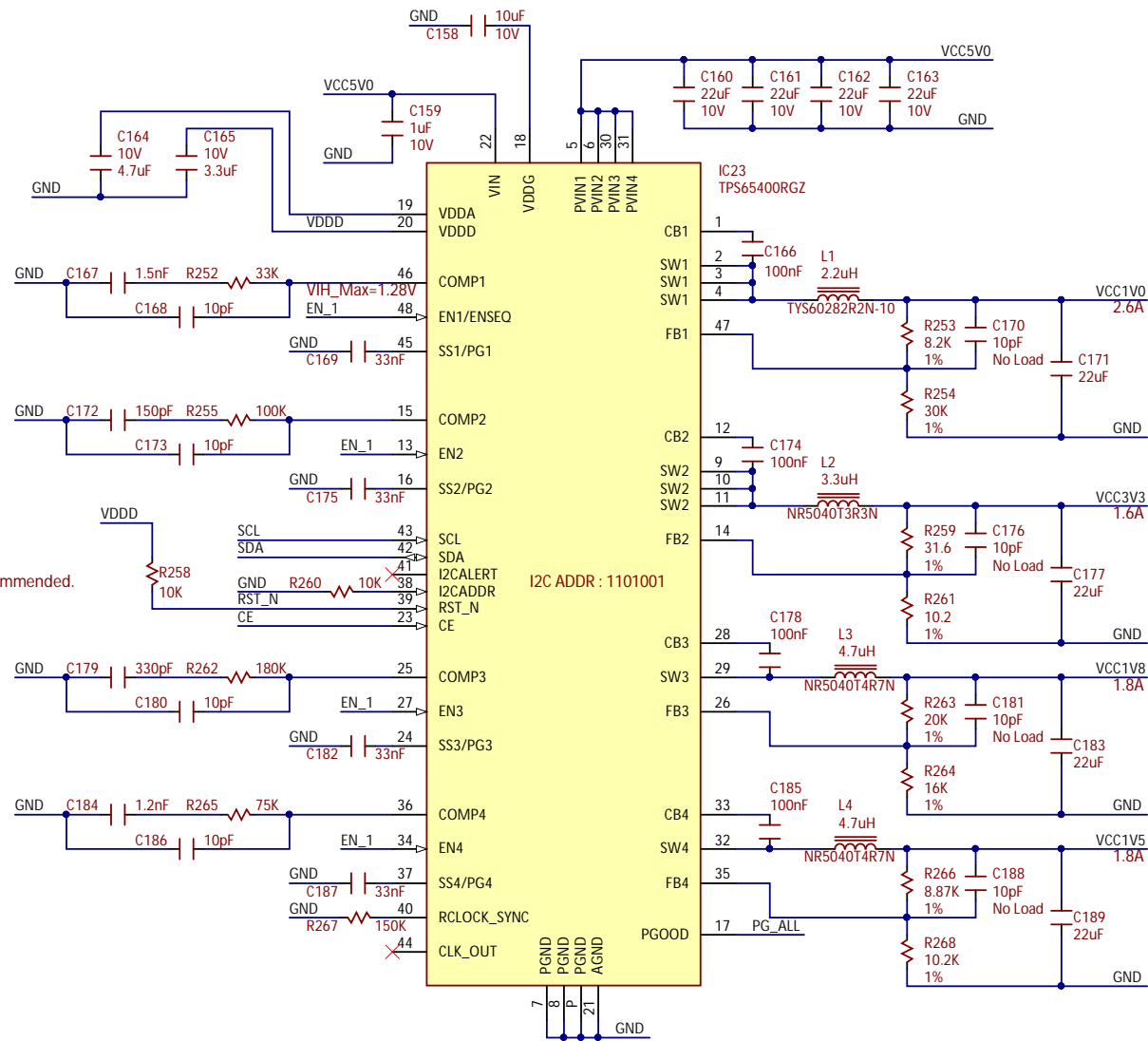
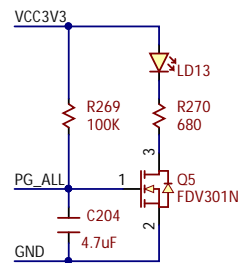
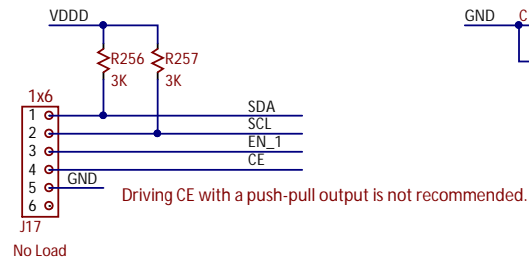
DIGILENT
A National Instruments Company





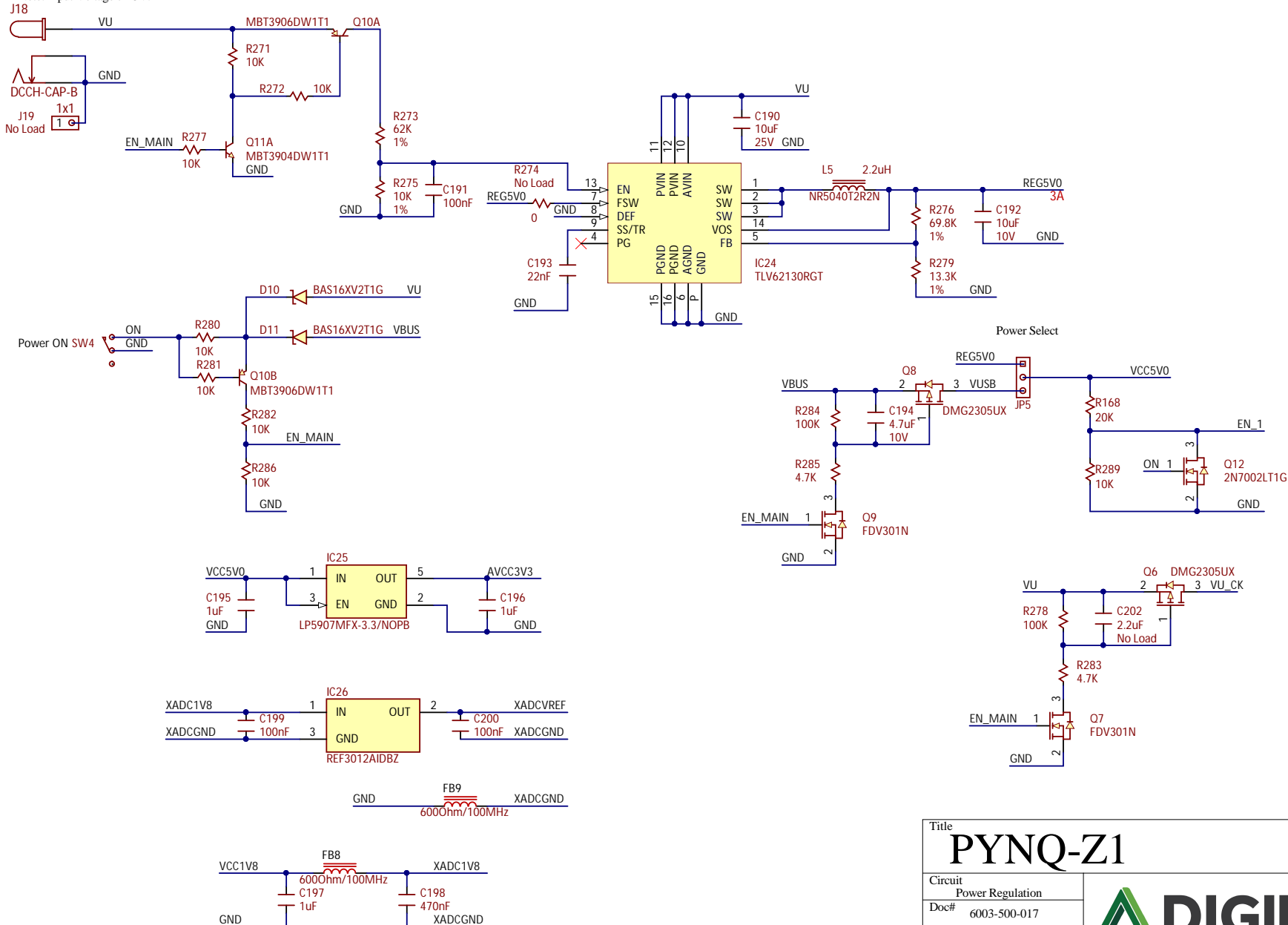
Title PYNQ-Z1		Rev C.0 Copyright 2016
Circuit DDR3 Memory	 DIGILENT [®] <i>A National Instruments Company</i>	
Doc# 6003-500-017		
Engineer GTM		
Author DL		
Date 8/10/16		
Sheet# 11 out of 13		

1. VCC1V0
2. VCC1V8
3. VCC1V5
4. VCC3V3



Title PYNQ-Z1		Rev C.0 Copyright 2016
Circuit Power Regulation	 DIGILENT [®] <i>A National Instruments Company</i>	
Doc# 6003-500-017		
Engineer GTM		
Author DL		
Date 8/10/16		
Sheet# 12 out of 13		

Note: Input Voltage 7-15V.



Title PYNQ-Z1		Rev C.0 Copyright 2016
Circuit Power Regulation	 DIGILENT [®] <i>A National Instruments Company</i>	
Doc# 6003-500-017		
Engineer GTM		
Author DL		
Date 8/10/16		
Sheet# 13 out of 13		