

HW-Z1-ZCU104 Evaluation Board (XCZU7EV-2FFVC1156)

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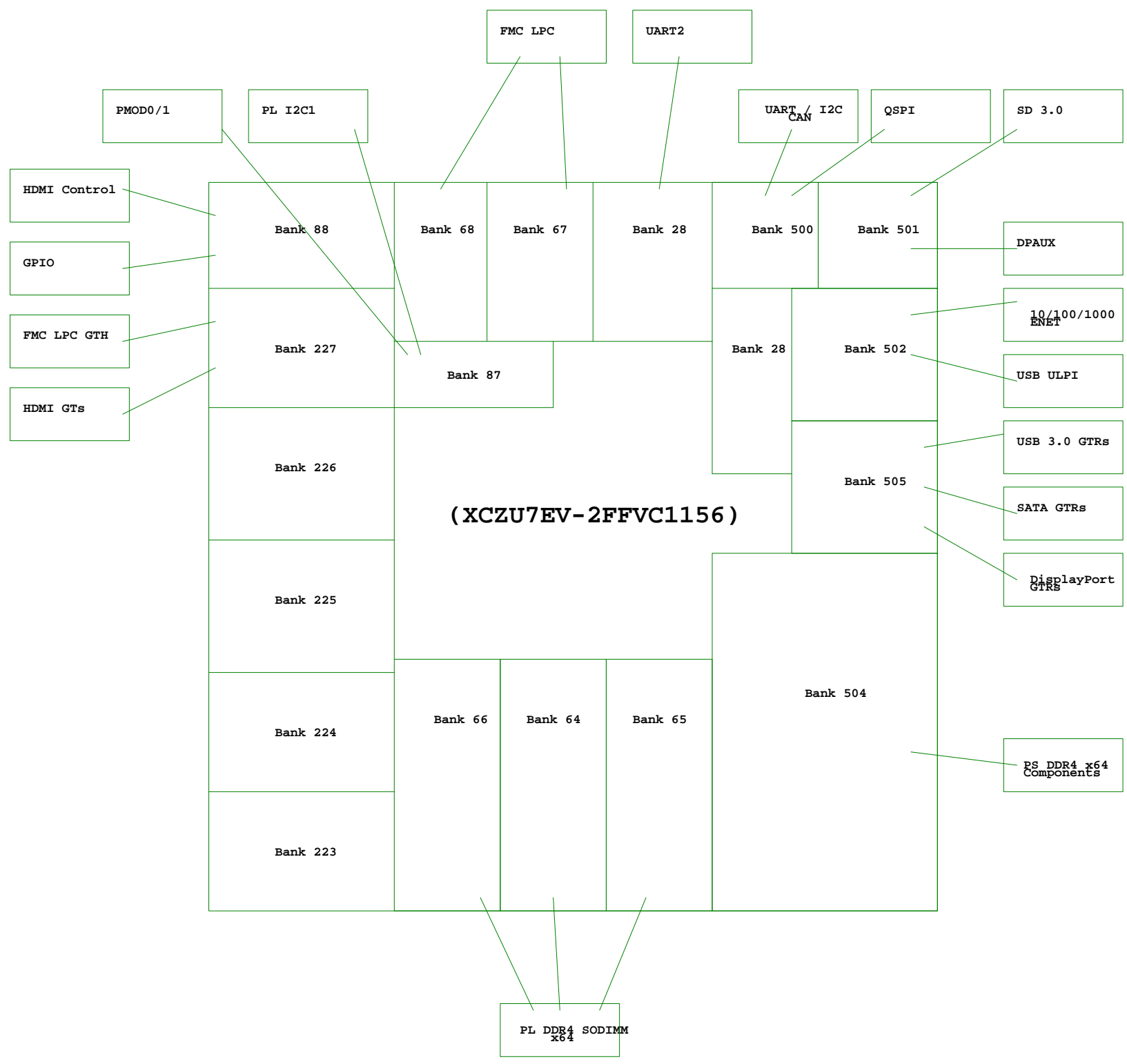
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TITLE: Title Page SCHEM, ROHS COMPLIANT HW-Z1-ZCU104_REV1_0		ASSY P/N: 0432057 PCB P/N: 1280961 SCH P/N: 0381794 TEST P/N: TSS0189
DATE: 01/26/2018:14:16		VER: 1.0
SHEET SIZE: B		REV: 01
SHEET 1 OF 58		DRAWN BY: BF

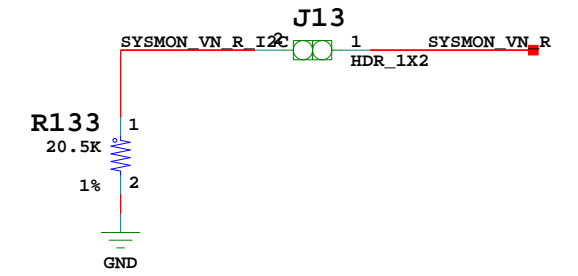
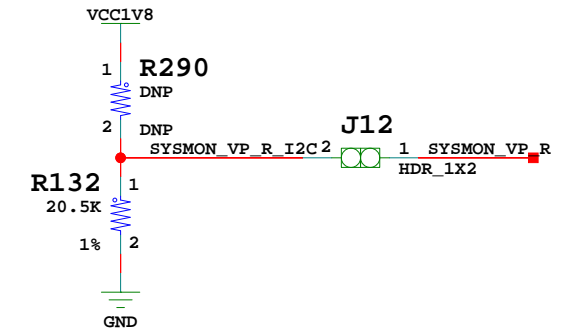
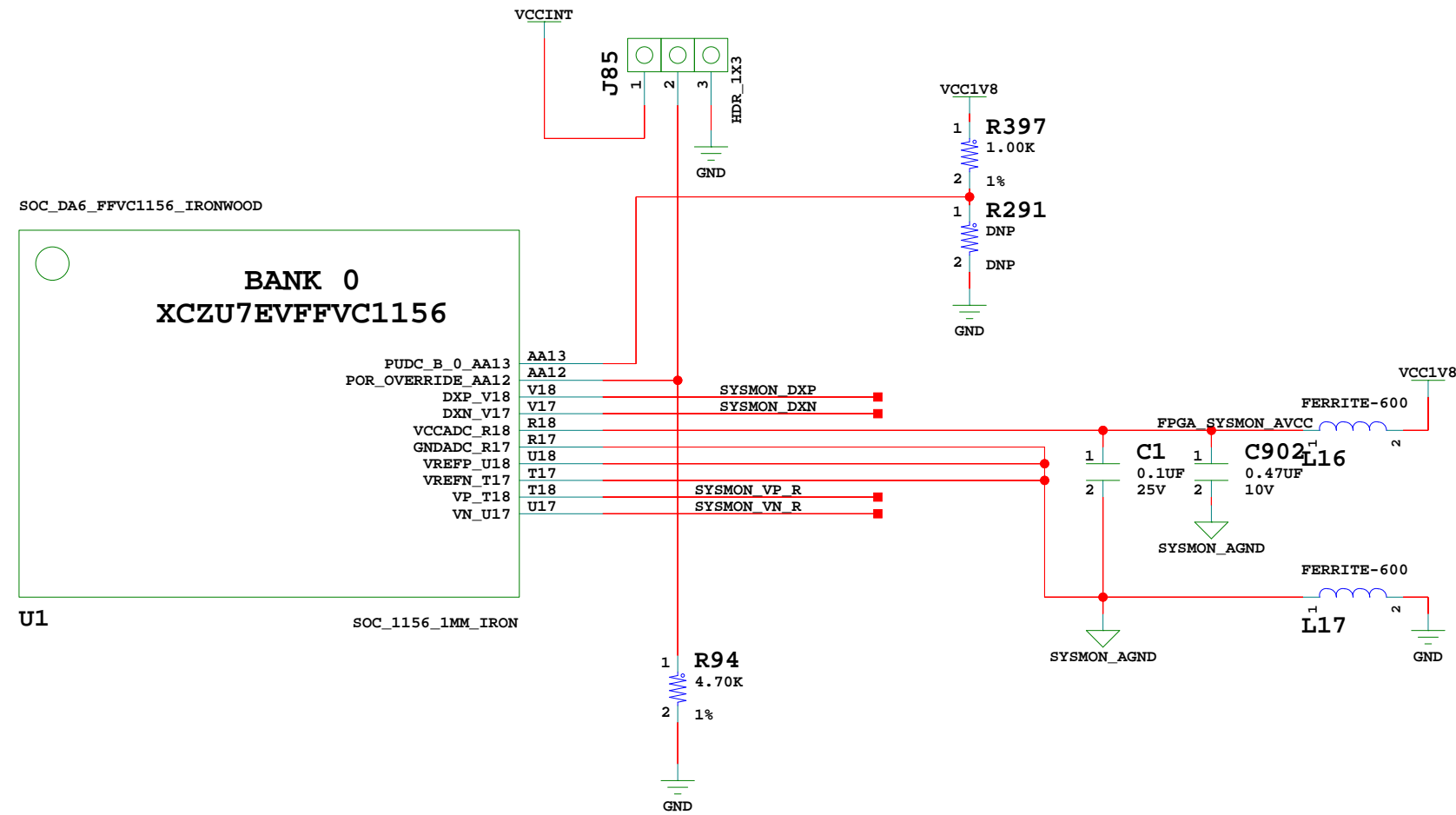


TITLE: Block Diagram
 SCHEM, ROHS COMPLIANT
 HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
 PCB P/N: 1280961
 SCH P/N: 0381794
 TEST P/N: TSS0189

DATE: 01/26/2018:14:16	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 2 OF 58	DRAWN BY: BF

POR_OVERRIDE select
Default: 2-3 GND



SYSMON I2C Address jumpers

Zynq Bank 0



TITLE: Zynq Bank 0
SCHEM, ROHS COMPLIANT
HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
PCB P/N: 1280961
SCH P/N: 0381794
TEST P/N: TSS0189

DATE: 01/26/2018:14:16	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 3 OF 58	DRAWN BY: BF

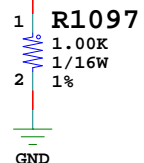
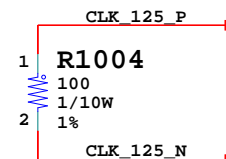
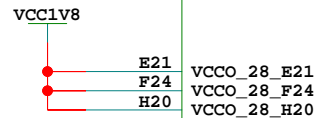
SOC_DA6_FFVC1156_IRONWOOD

BANK 28 XCZU7EVFFVC1156

BANK MIGRATION:
ZU11EG = BANK 67
ZU7CG = BANK 28
ZU7EG = BANK 28

IO_T3U_N12_28_B23
IO_L24N_T3U_N11_28_B21
IO_L24P_T3U_N10_28_B20
IO_L23N_T3U_N9_28_A23
IO_L23P_T3U_N8_28_A22
IO_L22N_T3U_N7_DBC_AD0N_28_B19
IO_L22P_T3U_N6_DBC_AD0P_28_B18
IO_L21N_T3L_N5_AD8N_28_A21
IO_L21P_T3L_N4_AD8P_28_A20
IO_L20N_T3L_N3_AD1N_28_C19
IO_L20P_T3L_N2_AD1P_28_C18
IO_L19N_T3L_N1_DBC_AD9N_28_A19
IO_L19P_T3L_N0_DBC_AD9P_28_A18
IO_T2U_N12_28_F25
IO_L18N_T2U_N11_AD2N_28_G26
IO_L18P_T2U_N10_AD2P_28_G25
IO_L17N_T2U_N9_AD10N_28_C23
IO_L17P_T2U_N8_AD10P_28_D22
IO_L16N_T2U_N7_QBC_AD3N_28_D24
IO_L16P_T2U_N6_QBC_AD3P_28_E24
IO_L15N_T2L_N5_AD11N_28_C22
IO_L15P_T2L_N4_AD11P_28_C21
IO_L14N_T2L_N3_GC_28_G24
IO_L14P_T2L_N2_GC_28_G23
IO_L13N_T2L_N1_GC_QBC_28_E23
IO_L13P_T2L_N0_GC_QBC_28_F23
IO_T1U_N12_28_E20
IO_L12N_T1U_N11_GC_28_F21
IO_L12P_T1U_N10_GC_28_G21
IO_L11N_T1U_N9_GC_28_E22
IO_L11P_T1U_N8_GC_28_F22
IO_L10N_T1U_N7_QBC_AD4N_28_F20
IO_L10P_T1U_N6_QBC_AD4P_28_G20
IO_L9N_T1L_N5_AD12N_28_D21
IO_L9P_T1L_N4_AD12P_28_D20
IO_L8N_T1L_N3_AD5N_28_H22
IO_L8P_T1L_N2_AD5P_28_H21
IO_L7N_T1L_N1_QBC_AD13N_28_D19
IO_L7P_T1L_N0_QBC_AD13P_28_E19
IO_T0U_N12_VRP_28_H23
IO_L6N_T0U_N11_AD6N_28_H24
IO_L6P_T0U_N10_AD6P_28_J24
IO_L5N_T0U_N9_AD14N_28_H26
IO_L5P_T0U_N8_AD14P_28_J25
IO_L4N_T0U_N7_DBC_AD7N_28_K23
IO_L4P_T0U_N6_DBC_AD7P_28_K22
IO_L3N_T0L_N5_AD15N_28_J22
IO_L3P_T0L_N4_AD15P_28_J21
IO_L2N_T0L_N3_28_K24
IO_L2P_T0L_N2_28_L23
IO_L1N_T0L_N1_DBC_28_L22
IO_L1P_T0L_N0_DBC_28_L21
VREF_28_M23

B23 NC
B21 NC
B20 NC
A23 NC
A22 NC
B19 NC
B18 NC
A21 NC
A20 UART2_TXD_FPGA_RXD
C19 UART2_RXD_FPGA_TXD
C18 UART2_RTS_B
A19 UART2_CTS_B
A18 NC
F25 NC
G26 NC
G25 NC
C23 NC
D22 NC
D24 NC
E24 NC
C22 NC
C21 NC
G24 NC
G23 NC
E23 CLK_125_N
F23 CLK_125_P
E20 NC
F21 HDMI_TX_LVDS_OUT_N
G21 HDMI_TX_LVDS_OUT_P
E22 HDMI_REC_CLOCK_N
F22 HDMI_REC_CLOCK_P
F20 NC
G20 NC
D21 NC
D20 NC
H22 NC
H21 NC
D19 NC
E19 NC
H23 NC
H24 NC
J24 NC
H26 NC
J25 NC
K23 NC
K22 NC
J22 NC
J21 NC
K24 NC
L23 NC
L22 NC
L21 NC
M23



U1

SOC_1156_1MM_IRON

Zynq Banks 28



TITLE: Zynq Banks 28
SCHEM, ROHS COMPLIANT
HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
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SHEET 4 OF 58	DRAWN BY: BF

BANK 64 XCZU7EVFFVC1156

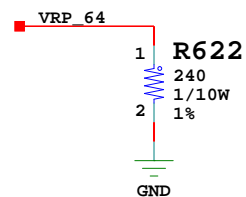
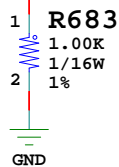
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IO_L24N_T3U_N11_64_AD16
IO_L24P_T3U_N10_64_AD17
IO_L23N_T3U_N9_64_AB14
IO_L23P_T3U_N8_64_AA14
IO_L22N_T3U_N7_DBC_AD0N_64_AA15
IO_L22P_T3U_N6_DBC_AD0P_64_AA16
IO_L21N_T3L_N5_AD8N_64_AB15
IO_L21P_T3L_N4_AD8P_64_AB16
IO_L20N_T3L_N3_AD1N_64_AC16
IO_L20P_T3L_N2_AD1P_64_AC17
IO_L19N_T3L_N1_DBC_AD9N_64_AE15
IO_L19P_T3L_N0_DBC_AD9P_64_AD15
IO_T2U_N12_64_AH16
IO_L18N_T2U_N11_AD2N_64_AG14
IO_L18P_T2U_N10_AD2P_64_AG15
IO_L17N_T2U_N9_AD10N_64_AF15
IO_L17P_T2U_N8_AD10P_64_AF16
IO_L16N_T2U_N7_QBC_AD3N_64_AJ14
IO_L16P_T2U_N6_QBC_AD3P_64_AH14
IO_L15N_T2L_N5_AD11N_64_AF17
IO_L15P_T2L_N4_AD11P_64_AE17
IO_L14N_T2L_N3_GC_64_AG18
IO_L14P_T2L_N2_GC_64_AF18
IO_L13N_T2L_N1_GC_QBC_64_AH17
IO_L13P_T2L_N0_GC_QBC_64_AH18
IO_T1U_N12_64_AL17
IO_L12N_T1U_N11_GC_64_AJ15
IO_L12P_T1U_N10_GC_64_AJ16
IO_L11N_T1U_N9_GC_64_AK17
IO_L11P_T1U_N8_GC_64_AJ17
IO_L10N_T1U_N7_QBC_AD4N_64_AK14
IO_L10P_T1U_N6_QBC_AD4P_64_AK15
IO_L9N_T1L_N5_AD12N_64_AL18
IO_L9P_T1L_N4_AD12P_64_AK18
IO_L8N_T1L_N3_AD5N_64_AL15
IO_L8P_T1L_N2_AD5P_64_AL16
IO_L7N_T1L_N1_QBC_AD13N_64_AM15
IO_L7P_T1L_N0_QBC_AD13P_64_AM16
IO_T0U_N12_VRP_64_AP14
IO_L6N_T0U_N11_AD6N_64_AN16
IO_L6P_T0U_N10_AD6P_64_AN17
IO_L5N_T0U_N9_AD14N_64_AP15
IO_L5P_T0U_N8_AD14P_64_AP16
IO_L4N_T0U_N7_DBC_AD7N_64_AN14
IO_L4P_T0U_N6_DBC_AD7P_64_AM14
IO_L3N_T0L_N5_AD15N_64_AN18
IO_L3P_T0L_N4_AD15P_64_AM18
IO_L2N_T0L_N3_64_AP13
IO_L2P_T0L_N2_64_AN13
IO_L1N_T0L_N1_DBC_64_AP17
IO_L1P_T0L_N0_DBC_64_AP18
VREF_64_AG16

AA17 NC
AD16 DDR4_SODIMM_PARITY
AD17 DDR4_SODIMM_CKE0
AB14 DDR4_SODIMM_RESET_B
AA14 DDR4_SODIMM_CAS_B
AA15 DDR4_SODIMM_CS0_B
AA16 DDR4_SODIMM_WE_B
AB15 DDR4_SODIMM_ALERT_B
AB16 DDR4_SODIMM_BG1
AC16 DDR4_SODIMM_BG0
AC17 DDR4_SODIMM_ACT_B
AE15 DDR4_SODIMM_ODT0
AD15 DDR4_SODIMM_RAS_B
AH16 DDR4_SODIMM_A0
AG14 DDR4_SODIMM_A1
AG15 DDR4_SODIMM_A2
AF15 DDR4_SODIMM_A3
AF16 DDR4_SODIMM_A4
AJ14 DDR4_SODIMM_A5
AH14 DDR4_SODIMM_A6
AF17 DDR4_SODIMM_A7
AE17 NC
AG18 DDR4_SODIMM_CK0_C
AF18 DDR4_SODIMM_CK0_T
AH17 CLK_300_N
AH18 CLK_300_P
AL17 DDR4_SODIMM_CS1_B
AJ15 DDR4_SODIMM_CK1_C
AJ16 DDR4_SODIMM_CK1_T
AK17 DDR4_SODIMM_A8
AJ17 DDR4_SODIMM_A9
AK14 DDR4_SODIMM_A10
AK15 DDR4_SODIMM_A11
AL18 DDR4_SODIMM_A12
AK18 DDR4_SODIMM_A13
AL15 DDR4_SODIMM_BA0
AL16 DDR4_SODIMM_BA1
AM15 DDR4_SODIMM_CKE1
AM16 DDR4_SODIMM_ODT1
AP14 VRP_64
AN16 DDR4_SODIMM_CS3_B
AN17 DDR4_SODIMM_CS2_B
AP15 NC
AP16 NC
AN14 NC
AM14 NC
AN18 NC
AM18 NC
AP13 NC
AN13 NC
AP17 NC
AP18 NC
AG16

VCC1V2
AE16 VCCO_64_AE16
AH15 VCCO_64_AH15
AJ18 VCCO_64_AJ18

U1

SOC_1156_1MM_IRON



BANK 65 XCZU7EVFFVC1156

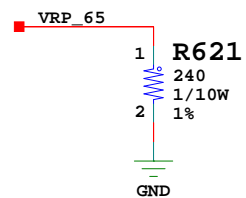
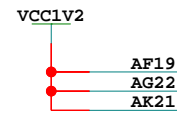
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IO_L24P_T3U_N10_PERSTN1_I2C_SDA_65_AA19
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IO_L23P_T3U_N8_I2C_SCLK_65_AC18
IO_L22N_T3U_N7_DBC_AD0N_65_AB18
IO_L22P_T3U_N6_DBC_AD0P_65_AA18
IO_L21N_T3L_N5_AD8N_65_AE20
IO_L21P_T3L_N4_AD8P_65_AD20
IO_L20N_T3L_N3_AD1N_65_AC19
IO_L20P_T3L_N2_AD1P_65_AB19
IO_L19N_T3L_N1_DBC_AD9N_65_AE19
IO_L19P_T3L_N0_DBC_AD9P_65_AE18
IO_T2U_N12_65_AF20
IO_L18N_T2U_N11_AD2N_65_AE24
IO_L18P_T2U_N10_AD2P_65_AE23
IO_L17N_T2U_N9_AD10N_65_AF22
IO_L17P_T2U_N8_AD10P_65_AF21
IO_L16N_T2U_N7_QBC_AD3N_65_AG23
IO_L16P_T2U_N6_QBC_AD3P_65_AF23
IO_L15N_T2L_N5_AD11N_65_AG20
IO_L15P_T2L_N4_AD11P_65_AG19
IO_L14N_T2L_N3_GC_65_AH21
IO_L14P_T2L_N2_GC_65_AG21
IO_L13N_T2L_N1_GC_QBC_65_AH23
IO_L13P_T2L_N0_GC_QBC_65_AH22
IO_T1U_N12_65_AH19
IO_L12N_T1U_N11_GC_65_AJ22
IO_L12P_T1U_N10_GC_65_AJ21
IO_L11N_T1U_N9_GC_65_AK20
IO_L11P_T1U_N8_GC_65_AJ20
IO_L10N_T1U_N7_QBC_AD4N_65_AK23
IO_L10P_T1U_N6_QBC_AD4P_65_AK22
IO_L9N_T1L_N5_AD12N_65_AK19
IO_L9P_T1L_N4_AD12P_65_AJ19
IO_L8N_T1L_N3_AD5N_65_AL23
IO_L8P_T1L_N2_AD5P_65_AL22
IO_L7N_T1L_N1_QBC_AD13N_65_AL21
IO_L7P_T1L_N0_QBC_AD13P_65_AL20
IO_T0U_N12_VRP_65_AM20
IO_L6N_T0U_N11_AD6N_65_AN23
IO_L6P_T0U_N10_AD6P_65_AM23
IO_L5N_T0U_N9_AD14N_65_AP23
IO_L5P_T0U_N8_AD14P_65_AN22
IO_L4N_T0U_N7_DBC_AD7N_65_AN21
IO_L4P_T0U_N6_DBC_AD7P_SMBALERT_65_AM21
IO_L3N_T0L_N5_AD15N_65_AP22
IO_L3P_T0L_N4_AD15P_65_AP21
IO_L2N_T0L_N3_65_AN19
IO_L2P_T0L_N2_65_AM19
IO_L1N_T0L_N1_DBC_65_AP20
IO_L1P_T0L_N0_DBC_65_AP19
VREF_65_AB20

AE22 NC
AA20 DDR4_SODIMM_DQ8
AA19 DDR4_SODIMM_DQ9
AD19 DDR4_SODIMM_DQ10
AC18 DDR4_SODIMM_DQ11
AB18 DDR4_SODIMM_DQ81_C
AA18 DDR4_SODIMM_DQ81_T
AE20 DDR4_SODIMM_DQ12
AD20 DDR4_SODIMM_DQ13
AC19 DDR4_SODIMM_DQ14
AB19 DDR4_SODIMM_DQ15
AE19 NC
AE18 DDR4_SODIMM_DM1_B
AF20 NC
AE24 DDR4_SODIMM_DQ0
AE23 DDR4_SODIMM_DQ1
AF22 DDR4_SODIMM_DQ2
AF21 DDR4_SODIMM_DQ3
AG23 DDR4_SODIMM_DQ80_C
AF23 DDR4_SODIMM_DQ80_T
AG20 DDR4_SODIMM_DQ4
AG19 DDR4_SODIMM_DQ5
AH21 DDR4_SODIMM_DQ6
AG21 DDR4_SODIMM_DQ7
AH23 NC
AH22 DDR4_SODIMM_DM0_B
AH19 NC
AJ22 DDR4_SODIMM_DQ16
AJ21 DDR4_SODIMM_DQ17
AK20 DDR4_SODIMM_DQ18
AJ20 DDR4_SODIMM_DQ19
AK23 DDR4_SODIMM_DQ82_C
AK22 DDR4_SODIMM_DQ82_T
AK19 DDR4_SODIMM_DQ20
AJ19 DDR4_SODIMM_DQ21
AL23 DDR4_SODIMM_DQ22
AL22 DDR4_SODIMM_DQ23
AL21 NC
AL20 DDR4_SODIMM_DM2_B
AM20 VRP_65
AN23 DDR4_SODIMM_DQ24
AM23 DDR4_SODIMM_DQ25
AP23 DDR4_SODIMM_DQ26
AN22 DDR4_SODIMM_DQ27
AN21 DDR4_SODIMM_DQ83_C
AM21 DDR4_SODIMM_DQ83_T
AP22 DDR4_SODIMM_DQ28
AP21 DDR4_SODIMM_DQ29
AN19 DDR4_SODIMM_DQ30
AM19 DDR4_SODIMM_DQ31
AP20 NC
AP19 DDR4_SODIMM_DM3_B
AB20

VCC1V2
AF19 VCCO_65_AF19
AG22 VCCO_65_AG22
AK21 VCCO_65_AK21

U1

SOC_1156_1MM_IRON



Zynq Banks 64 65



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SCHEM, ROHS COMPLIANT
HW-Z1-ZCU104_REV1_0

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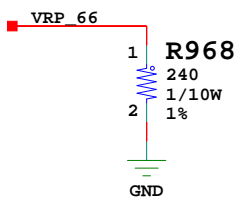
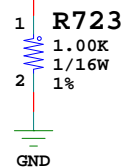
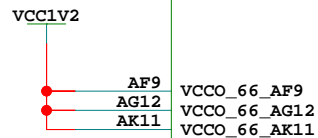
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SHEET 5 OF 58	DRAWN BY: BF

SOC_DA6_FFVC1156_IRONWOOD

BANK 66 XCZU7EVFFVC1156

IO_T3U_N12_66_AC14
IO_L24N_T3U_N11_66_AC13
IO_L24P_T3U_N10_66_AB13
IO_L23N_T3U_N9_66_AF12
IO_L23P_T3U_N8_66_AE12
IO_L22N_T3U_N7_DBC_AD0N_66_AD12
IO_L22P_T3U_N6_DBC_AD0P_66_AC12
IO_L21N_T3L_N5_AD8N_66_AF13
IO_L21P_T3L_N4_AD8P_66_AE13
IO_L20N_T3L_N3_AD1N_66_AE14
IO_L20P_T3L_N2_AD1P_66_AD14
IO_L19N_T3L_N1_DBC_AD9N_66_AF10
IO_L19P_T3L_N0_DBC_AD9P_66_AF11
IO_T2U_N12_66_AH8
IO_L18N_T2U_N11_AD2N_66_AG8
IO_L18P_T2U_N10_AD2P_66_AF8
IO_L17N_T2U_N9_AD10N_66_AG10
IO_L17P_T2U_N8_AD10P_66_AG11
IO_L16N_T2U_N7_QBC_AD3N_66_AH9
IO_L16P_T2U_N6_QBC_AD3P_66_AG9
IO_L15N_T2L_N5_AD11N_66_AH13
IO_L15P_T2L_N4_AD11P_66_AG13
IO_L14N_T2L_N3_GC_66_AJ11
IO_L14P_T2L_N2_GC_66_AH11
IO_L13N_T2L_N1_GC_QBC_66_AJ12
IO_L13P_T2L_N0_GC_QBC_66_AH12
IO_T1U_N12_66_AM13
IO_L12N_T1U_N11_GC_66_AK9
IO_L12P_T1U_N10_GC_66_AJ9
IO_L11N_T1U_N9_GC_66_AK10
IO_L11P_T1U_N8_GC_66_AJ10
IO_L10N_T1U_N7_QBC_AD4N_66_AL8
IO_L10P_T1U_N6_QBC_AD4P_66_AK8
IO_L9N_T1L_N5_AD12N_66_AL12
IO_L9P_T1L_N4_AD12P_66_AK12
IO_L8N_T1L_N3_AD5N_66_AL10
IO_L8P_T1L_N2_AD5P_66_AL11
IO_L7N_T1L_N1_QBC_AD13N_66_AL13
IO_L7P_T1L_N0_QBC_AD13P_66_AK13
IO_T0U_N12_VRP_66_AP8
IO_L6N_T0U_N11_AD6N_66_AM8
IO_L6P_T0U_N10_AD6P_66_AM9
IO_L5N_T0U_N9_AD14N_66_AM10
IO_L5P_T0U_N8_AD14P_66_AM11
IO_L4N_T0U_N7_DBC_AD7N_66_AN8
IO_L4P_T0U_N6_DBC_AD7P_66_AN9
IO_L3N_T0L_N5_AD15N_66_AP11
IO_L3P_T0L_N4_AD15P_66_AN11
IO_L2N_T0L_N3_66_AP9
IO_L2P_T0L_N2_66_AP10
IO_L1N_T0L_N1_DBC_66_AP12
IO_L1P_T0L_N0_DBC_66_AN12
VREF_66_AB12

AC14 NC
AC13 DDR4_SODIMM_DQ32
AB13 DDR4_SODIMM_DQ33
AF12 DDR4_SODIMM_DQ34
AE12 DDR4_SODIMM_DQ35
AD12 DDR4_SODIMM_DQ36
AC12 DDR4_SODIMM_DQ37
AF13 DDR4_SODIMM_DQ38
AE13 DDR4_SODIMM_DQ39
AE14 DDR4_SODIMM_DQ40
AD14 DDR4_SODIMM_DQ41
AF10 NC
AF11 DDR4_SODIMM_DM4_B
AH8 NC
AG8 DDR4_SODIMM_DQ42
AF8 DDR4_SODIMM_DQ43
AG10 DDR4_SODIMM_DQ44
AG11 DDR4_SODIMM_DQ45
AH9 DDR4_SODIMM_DQ46
AG9 DDR4_SODIMM_DQ47
AH13 DDR4_SODIMM_DQ48
AG13 DDR4_SODIMM_DQ49
AJ11 DDR4_SODIMM_DQ50
AH11 DDR4_SODIMM_DQ51
AJ12 NC
AH12 DDR4_SODIMM_DM5_B
AM13 NC
AK9 DDR4_SODIMM_DQ52
AJ9 DDR4_SODIMM_DQ53
AK10 DDR4_SODIMM_DQ54
AJ10 DDR4_SODIMM_DQ55
AL8 DDR4_SODIMM_DQ56
AK8 DDR4_SODIMM_DQ57
AL12 DDR4_SODIMM_DQ58
AK12 DDR4_SODIMM_DQ59
AL10 DDR4_SODIMM_DQ60
AL11 DDR4_SODIMM_DQ61
AL13 NC
AK13 DDR4_SODIMM_DM6_B
AP8 VRP_66
AM8 DDR4_SODIMM_DQ62
AM9 DDR4_SODIMM_DQ63
AM10 DDR4_SODIMM_DQ64
AM11 DDR4_SODIMM_DQ65
AN8 DDR4_SODIMM_DQ66
AN9 DDR4_SODIMM_DQ67
AP11 DDR4_SODIMM_DQ68
AN11 DDR4_SODIMM_DQ69
AP9 DDR4_SODIMM_DQ70
AP10 DDR4_SODIMM_DQ71
AP12 NC
AN12 DDR4_SODIMM_DM7_B
AB12



U1 SOC_1156_1MM_IRON

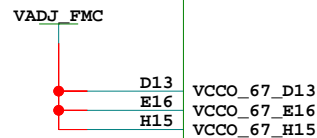
SOC_DA6_FFVC1156_IRONWOOD

BANK 67 XCZU7EVFFVC1156

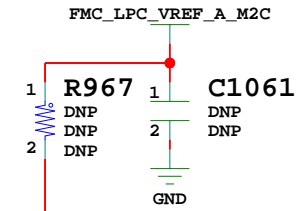
BANK MIGRATION:
ZU11EG = BANK 68
ZU7CG = BANK 67
ZU7EG = BANK 67

IO_T3U_N12_67_J20
IO_L24N_T3U_N11_67_L16
IO_L24P_T3U_N10_67_L17
IO_L23N_T3U_N9_67_K18
IO_L23P_T3U_N8_67_K19
IO_L22N_T3U_N7_DBC_AD0N_67_K15
IO_L22P_T3U_N6_DBC_AD0P_67_L15
IO_L21N_T3L_N5_AD8N_67_J17
IO_L21P_T3L_N4_AD8P_67_K17
IO_L20N_T3L_N3_AD1N_67_J15
IO_L20P_T3L_N2_AD1P_67_J16
IO_L19N_T3L_N1_DBC_AD9N_67_K20
IO_L19P_T3L_N0_DBC_AD9P_67_L20
IO_T2U_N12_67_J19
IO_L18N_T2U_N11_AD2N_67_G16
IO_L18P_T2U_N10_AD2P_67_H16
IO_L17N_T2U_N9_AD10N_67_F18
IO_L17P_T2U_N8_AD10P_67_G18
IO_L16N_T2U_N7_QBC_AD3N_67_H17
IO_L16P_T2U_N6_QBC_AD3P_67_H18
IO_L15N_T2L_N5_AD11N_67_G19
IO_L15P_T2L_N4_AD11P_67_H19
IO_L14N_T2L_N3_GC_67_F15
IO_L14P_T2L_N2_GC_67_G15
IO_L13N_T2L_N1_GC_QBC_67_F16
IO_L13P_T2L_N0_GC_QBC_67_F17
IO_T1U_N12_67_E13
IO_L12N_T1U_N11_GC_67_E14
IO_L12P_T1U_N10_GC_67_E15
IO_L11N_T1U_N9_GC_67_D14
IO_L11P_T1U_N8_GC_67_D15
IO_L10N_T1U_N7_QBC_AD4N_67_F13
IO_L10P_T1U_N6_QBC_AD4P_67_G14
IO_L9N_T1L_N5_AD12N_67_E17
IO_L9P_T1L_N4_AD12P_67_E18
IO_L8N_T1L_N3_AD5N_67_C17
IO_L8P_T1L_N2_AD5P_67_D17
IO_L7N_T1L_N1_QBC_AD13N_67_C16
IO_L7P_T1L_N0_QBC_AD13P_67_D16
IO_T0U_N12_VRP_67_C14
IO_L6N_T0U_N11_AD6N_67_C12
IO_L6P_T0U_N10_AD6P_67_C13
IO_L5N_T0U_N9_AD14N_67_A12
IO_L5P_T0U_N8_AD14P_67_A13
IO_L4N_T0U_N7_DBC_AD7N_67_B13
IO_L4P_T0U_N6_DBC_AD7P_67_B14
IO_L3N_T0L_N5_AD15N_67_A14
IO_L3P_T0L_N4_AD15P_67_A15
IO_L2N_T0L_N3_67_B15
IO_L2P_T0L_N2_67_B16
IO_L1N_T0L_N1_DBC_67_A16
IO_L1P_T0L_N0_DBC_67_A17
VREF_67_L18

J20 NC
L16 FMC LPC LA04 N
L17 FMC LPC LA04 P
K18 FMC LPC LA03 N
K19 FMC LPC LA03 P
K15 FMC LPC LA10 N
L15 FMC LPC LA10 P
J17 FMC LPC LA05 N
K17 FMC LPC LA05 P
J15 FMC LPC LA07 N
J16 FMC LPC LA07 P
K20 FMC LPC LA02 N
L20 FMC LPC LA02 P
J19 NC
G16 FMC LPC LA09 N
H16 FMC LPC LA09 P
F18 FMC LPC LA12 N
G18 FMC LPC LA12 P
H17 FMC LPC LA01 CC N
H18 FMC LPC LA01 CC P
G19 FMC LPC LA06 N
H19 FMC LPC LA06 P
F15 FMC LPC LA13 N
G15 FMC LPC LA13 P
F16 FMC LPC LA00 CC N
F17 FMC LPC LA00 CC P
E13 NC
E14 FMC LPC CLK0 M2C N
E15 FMC LPC CLK0 M2C P
D14 NC
D15 NC
F13 NC
G14 NC
E17 FMC LPC LA08 N
E18 FMC LPC LA08 P
C17 FMC LPC LA16 N
D17 FMC LPC LA16 P
C16 FMC LPC LA15 N
D16 FMC LPC LA15 P
C14 NC
C12 FMC LPC LA14 N
C13 FMC LPC LA14 P
A12 FMC LPC LA11 N
A13 FMC LPC LA11 P
B13 NC
B14 NC
A14 NC
A15 NC
B15 NC
B16 NC
A16 NC
A17 NC
L18



U1 SOC_1156_1MM_IRON



Zynq Banks 66 67



TITLE: Zynq Banks 66 67
SCHEM, ROHS COMPLIANT
HW-Z1-ZCU104_REV1_0
ASSY P/N: 0432057
PCB P/N: 1280961
SCH P/N: 0381794
TEST P/N: TSS0189

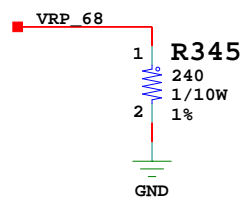
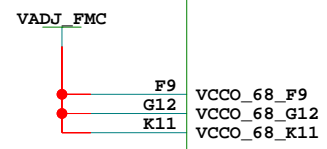
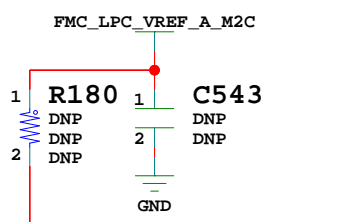
DATE: 01/26/2018:14:16	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 6 OF 58	DRAWN BY: BF

SOC_DA6_FFVC1156_IRONWOOD

BANK 68 XCZU7EVFFVC1156

BANK MIGRATION:
ZU11EG = BANK 69
ZU7CG = BANK 68
ZU7EG = BANK 68

IO_T3U_N12_68_A9	A9	NC
IO_L24N_T3U_N11_68_A11	A11	FMC LPC LA23 N
IO_L24P_T3U_N10_68_B11	B11	FMC LPC LA23 P
IO_L23N_T3U_N9_68_A7	A7	FMC LPC LA27 N
IO_L23P_T3U_N8_68_A8	A8	FMC LPC LA27 P
IO_L22N_T3U_N7_DBC_AD0N_68_A10	A10	FMC LPC LA21 N
IO_L22P_T3U_N6_DBC_AD0P_68_B10	B10	FMC LPC LA21 P
IO_L21N_T3L_N5_AD8N_68_A6	A6	FMC LPC LA24 N
IO_L21P_T3L_N4_AD8P_68_B6	B6	FMC LPC LA24 P
IO_L20N_T3L_N3_AD1N_68_B8	B8	FMC LPC LA26 N
IO_L20P_T3L_N2_AD1P_68_B9	B9	FMC LPC LA26 P
IO_L19N_T3L_N1_DBC_AD9N_68_C6	C6	FMC LPC LA25 N
IO_L19P_T3L_N0_DBC_AD9P_68_C7	C7	FMC LPC LA25 P
IO_T2U_N12_68_G13	G13	NC
IO_L18N_T2U_N11_AD2N_68_C11	C11	FMC LPC LA19 N
IO_L18P_T2U_N10_AD2P_68_D12	D12	FMC LPC LA19 P
IO_L17N_T2U_N9_AD10N_68_E12	E12	FMC LPC LA20 N
IO_L17P_T2U_N8_AD10P_68_F12	F12	FMC LPC LA20 P
IO_L16N_T2U_N7_QBC_AD3N_68_D10	D10	FMC LPC LA18 CC N
IO_L16P_T2U_N6_QBC_AD3P_68_D11	D11	FMC LPC LA18 CC P
IO_L15N_T2L_N5_AD11N_68_H12	H12	FMC LPC LA22 N
IO_L15P_T2L_N4_AD11P_68_H13	H13	FMC LPC LA22 P
IO_L14N_T2L_N3_GC_68_E10	E10	FMC LPC LA17 CC N
IO_L14P_T2L_N2_GC_68_F11	F11	FMC LPC LA17 CC P
IO_L13N_T2L_N1_GC_QBC_68_G11	G11	NC
IO_L13P_T2L_N0_GC_QBC_68_H11	H11	NC
IO_T1U_N12_68_D7	D7	NC
IO_L12N_T1U_N11_GC_68_F10	F10	FMC LPC CLK1 M2C N
IO_L12P_T1U_N10_GC_68_G10	G10	FMC LPC CLK1 M2C P
IO_L11N_T1U_N9_GC_68_G9	G9	NC
IO_L11P_T1U_N8_GC_68_H9	H9	NC
IO_L10N_T1U_N7_QBC_AD4N_68_D9	D9	FMC LPC LA30 N
IO_L10P_T1U_N6_QBC_AD4P_68_E9	E9	FMC LPC LA30 P
IO_L9N_T1L_N5_AD12N_68_E8	E8	FMC LPC LA32 N
IO_L9P_T1L_N4_AD12P_68_F8	F8	FMC LPC LA32 P
IO_L8N_T1L_N3_AD5N_68_C8	C8	FMC LPC LA33 N
IO_L8P_T1L_N2_AD5P_68_C9	C9	FMC LPC LA33 P
IO_L7N_T1L_N1_QBC_AD13N_68_E7	E7	FMC LPC LA31 N
IO_L7P_T1L_N0_QBC_AD13P_68_F7	F7	FMC LPC LA31 P
IO_T0U_N12_VRP_68_H14	H14	VRP 68
IO_L6N_T0U_N11_AD6N_68_K13	K13	NC
IO_L6P_T0U_N10_AD6P_68_L14	L14	NC
IO_L5N_T0U_N9_AD14N_68_J14	J14	NC
IO_L5P_T0U_N8_AD14P_68_K14	K14	NC
IO_L4N_T0U_N7_DBC_AD7N_68_J11	J11	NC
IO_L4P_T0U_N6_DBC_AD7P_68_K12	K12	NC
IO_L3N_T0L_N5_AD15N_68_L11	L11	NC
IO_L3P_T0L_N4_AD15P_68_L12	L12	NC
IO_L2N_T0L_N3_68_J10	J10	FMC LPC LA29 N
IO_L2P_T0L_N2_68_K10	K10	FMC LPC LA29 P
IO_L1N_T0L_N1_DBC_68_L13	L13	FMC LPC LA28 N
IO_L1P_T0L_N0_DBC_68_M13	M13	FMC LPC LA28 P
VRP_68_J12	J12	



U1 SOC_1156_1MM_IRON

Zynq Banks 68



TITLE: Zynq Banks 68
SCHEM, ROHS COMPLIANT
HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
PCB P/N: 1280961
SCH P/N: 0381794
TEST P/N: TSS0189

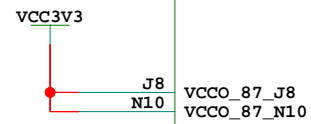
DATE: 01/26/2018:14:16	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 7 OF 58	DRAWN BY: BF

SOC_DA6_FFVC1156_IRONWOOD

BANK 87 XCZU7EVFFVC1156

BANK MIGRATION:
ZU11EG = BANK 88-HD
ZU7CG = BANK 87-HD
ZU7EG = BANK 87-HD

IO_L12N_AD0N_87_G8	G8	PMOD0_0
IO_L12P_AD0P_87_H8	H8	PMOD0_1
IO_L11N_AD1N_87_G7	G7	PMOD0_2
IO_L11P_AD1P_87_H7	H7	PMOD0_3
IO_L10N_AD2N_87_G6	G6	PMOD0_4
IO_L10P_AD2P_87_H6	H6	PMOD0_5
IO_L9N_AD3N_87_J6	J6	PMOD0_6
IO_L9P_AD3P_87_J7	J7	PMOD0_7
IO_L8N_HDGC_AD4N_87_J9	J9	PMOD1_0
IO_L8P_HDGC_AD4P_87_K9	K9	PMOD1_1
IO_L7N_HDGC_AD5N_87_K8	K8	PMOD1_2
IO_L7P_HDGC_AD5P_87_L8	L8	PMOD1_3
IO_L6N_HDGC_AD6N_87_L10	L10	PMOD1_4
IO_L6P_HDGC_AD6P_87_M10	M10	PMOD1_5
IO_L5N_HDGC_AD7N_87_M8	M8	PMOD1_6
IO_L5P_HDGC_AD7P_87_M9	M9	PMOD1_7
IO_L4N_AD8N_87_M11	M11	CPU RESET
IO_L4P_AD8P_87_N11	N11	HDMI_8T49N241_LQL
IO_L3N_AD9N_87_M12	M12	HDMI_8T49N241_RST
IO_L3P_AD9P_87_N13	N13	HDMI_TX_LS_OE
IO_L2N_AD10N_87_N8	N8	HDMI_TX_CT_HPD
IO_L2P_AD10P_87_N9	N9	NC
IO_L1N_AD11N_87_N12	N12	PL_I2C1_SCL_LS
IO_L1P_AD11P_87_P12	P12	PL_I2C1_SDA_LS



U1

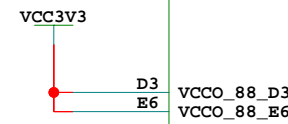
SOC_1156_1MM_IRON

SOC_DA6_FFVC1156_IRONWOOD

BANK 88 XCZU7EVFFVC1156

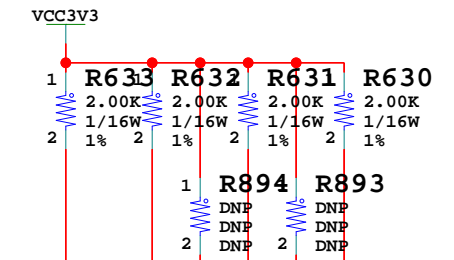
BANK MIGRATION:
ZU11EG = BANK 89-HD
ZU7CG = BANK 88-HD
ZU7EG = BANK 88-HD

IO_L12N_AD8N_88_E5	E5	HDMI_RX_PWR_DET
IO_L12P_AD8P_88_F6	F6	HDMI_RX_HPD
IO_L11N_AD9N_88_D5	D5	GPIO_LED_0_LS
IO_L11P_AD9P_88_D6	D6	GPIO_LED_1_LS
IO_L10N_AD10N_88_A5	A5	GPIO_LED_2_LS
IO_L10P_AD10P_88_B5	B5	GPIO_LED_3_LS
IO_L9N_AD11N_88_F4	F4	GPIO_DIP_SW3
IO_L9P_AD11P_88_F5	F5	GPIO_DIP_SW2
IO_L8N_HDGC_88_D4	D4	GPIO_DIP_SW1
IO_L8P_HDGC_88_E4	E4	GPIO_DIP_SW0
IO_L7N_HDGC_88_B4	B4	GPIO_PB_SW0
IO_L7P_HDGC_88_C4	C4	GPIO_PB_SW1
IO_L6N_HDGC_88_B3	B3	GPIO_PB_SW2
IO_L6P_HDGC_88_C3	C3	GPIO_PB_SW3
IO_L5N_HDGC_88_C2	C2	NC
IO_L5P_HDGC_88_D2	D2	HDMI_RX_SNK_SCL
IO_L4N_AD12N_88_E2	E2	HDMI_RX_SNK_SDA
IO_L4P_AD12P_88_E3	E3	HDMI_TX_HPD
IO_L3N_AD13N_88_A2	A2	HDMI_TX_EN
IO_L3P_AD13P_88_A3	A3	HDMI_TX_CEC
IO_L2N_AD14N_88_B1	B1	HDMI_TX_SRC_SCL
IO_L2P_AD14P_88_C1	C1	HDMI_TX_SRC_SDA
IO_L1N_AD15N_88_D1	D1	HDMI_CTL_SCL
IO_L1P_AD15P_88_E1	E1	HDMI_CTL_SDA



U1

SOC_1156_1MM_IRON



Zynq Banks 87 88

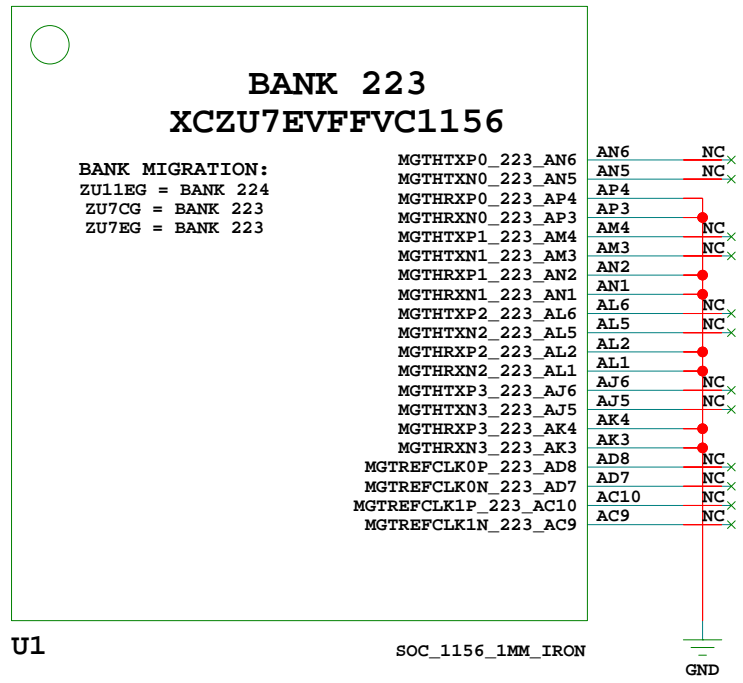


TITLE: Zynq Banks 87 88
SCHEM, ROHS COMPLIANT
HW-Z1-ZCU104_REV1_0

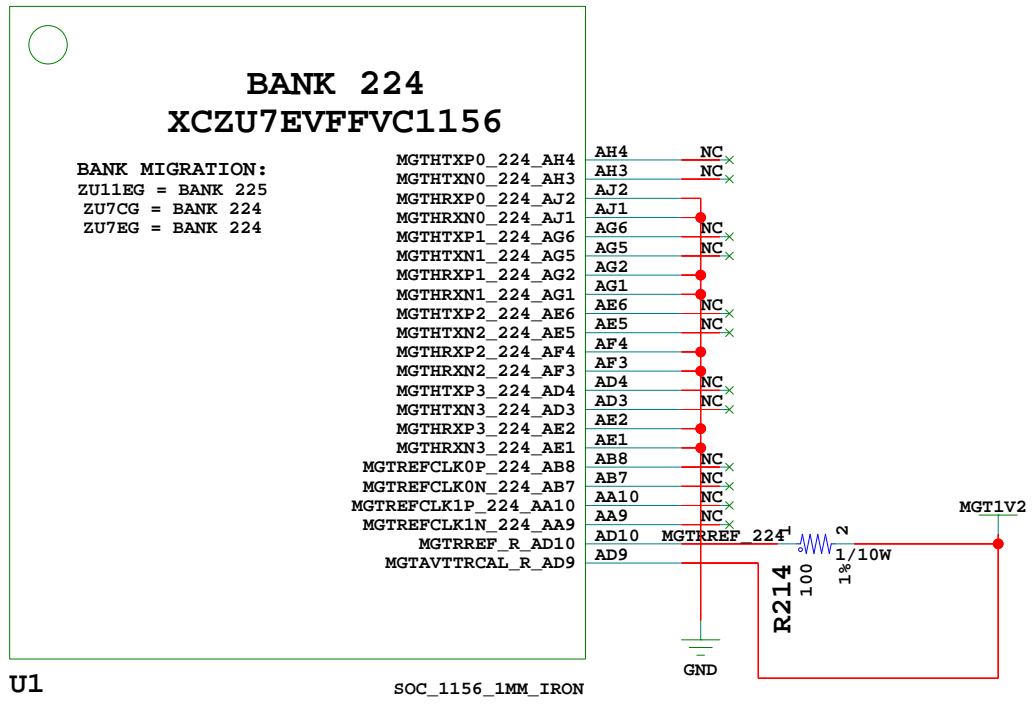
ASSY P/N: 0432057
PCB P/N: 1280961
SCH P/N: 0381794
TEST P/N: TSS0189

DATE: 01/26/2018:14:16	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 8 OF 58	DRAWN BY: BF

SOC_DA6_FFVC1156_IRONWOOD



SOC_DA6_FFVC1156_IRONWOOD



Zynq Banks 223 224



TITLE: Zynq Banks 223 224
SCHEM, ROHS COMPLIANT
HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
PCB P/N: 1280961
SCH P/N: 0381794
TEST P/N: TSS0189

DATE: 01/26/2018:14:16	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 9 OF 58	DRAWN BY: BF

SOC_DA6_FFVC1156_IRONWOOD

BANK 500 XCZU7EVFFVC1156

PS_MIO25_D29	D29	MIO25 CAN RX
PS_MIO24_E28	E28	MIO24 CAN TX
PS_MIO23_B29	B29	NC
PS_MIO22_F28	F28	NC
PS_MIO21_C28	C28	UART1_TXD MIO21_RXD
PS_MIO20_E29	E29	UART1_RXD MIO20_TXD
PS_MIO19_B28	B28	UART0_RXD MIO19_TXD
PS_MIO18_F27	F27	UART0_TXD MIO18_RXD
PS_MIO17_C29	C29	MIO17_I2C1_SDA
PS_MIO16_A28	A28	MIO16_I2C1_SCL
PS_MIO15_E27	E27	NC
PS_MIO14_A27	A27	NC
PS_MIO13_D27	D27	NC
PS_MIO12_C27	C27	NC
PS_MIO11_B26	B26	NC
PS_MIO10_F26	F26	NC
PS_MIO9_C26	C26	NC
PS_MIO8_D26	D26	NC
PS_MIO7_B25	B25	NC
PS_MIO6_A26	A26	NC
PS_MIO5_D25	D25	MIO5_QSPI_LWR_CS_B
PS_MIO4_A25	A25	MIO4_QSPI_LWR_DQ0
PS_MIO3_E25	E25	MIO3_QSPI_LWR_DQ3
PS_MIO2_B24	B24	MIO2_QSPI_LWR_DQ2
PS_MIO1_C24	C24	MIO1_QSPI_LWR_DQ1
PS_MIO0_A24	A24	MIO0_QSPI_LWR_CLK

VCC1V8

C25 VCCO_PSIO0_500_C25
D28 VCCO_PSIO0_500_D28

U1

SOC_1156_1MM_IRON

SOC_DA6_FFVC1156_IRONWOOD

BANK 501 XCZU7EVFFVC1156

PS_MIO51_F34	F34	MIO51_SDIO_CLK_R
PS_MIO50_F33	F33	MIO50_SDIO_CMD_R
PS_MIO49_F32	F32	MIO49_SDIO_DAT3_R
PS_MIO48_F31	F31	MIO48_SDIO_DAT2_R
PS_MIO47_F30	F30	MIO47_SDIO_DAT1_R
PS_MIO46_E34	E34	MIO46_SDIO_DAT0_R
PS_MIO45_E33	E33	MIO45_SDIO_DETECT
PS_MIO44_E32	E32	NC
PS_MIO43_E30	E30	NC
PS_MIO42_D34	D34	NC
PS_MIO41_D32	D32	NC
PS_MIO40_D31	D31	NC
PS_MIO39_D30	D30	NC
PS_MIO38_C34	C34	NC
PS_MIO37_C33	C33	NC
PS_MIO36_C32	C32	NC
PS_MIO35_C31	C31	NC
PS_MIO34_B34	B34	NC
PS_MIO33_B33	B33	NC
PS_MIO32_B31	B31	NC
PS_MIO31_B30	B30	NC
PS_MIO30_A33	A33	MIO30_DP_AUX_IN
PS_MIO29_A32	A32	MIO29_DP_OE
PS_MIO28_A31	A31	MIO28_DP_HPD
PS_MIO27_A30	A30	MIO27_DP_AUX_OUT
PS_MIO26_A29	A29	NC

VCC1V8

B32 VCCO_PSIO1_501_B32
E31 VCCO_PSIO1_501_E31

U1

SOC_1156_1MM_IRON

SOC_DA6_FFVC1156_IRONWOOD

BANK 502 XCZU7EVFFVC1156

PS_MIO77_L34	L34	MIO77_ENET_MDIO
PS_MIO76_L33	L33	MIO76_ENET_MDC
PS_MIO75_L30	L30	MIO75_ENET_RX_CTRL
PS_MIO74_L29	L29	MIO74_ENET_RX_D3
PS_MIO73_K34	K34	MIO73_ENET_RX_D2
PS_MIO72_K33	K33	MIO72_ENET_RX_D1
PS_MIO71_K32	K32	MIO71_ENET_RX_D0
PS_MIO70_K31	K31	MIO70_ENET_RX_CLK
PS_MIO69_K30	K30	MIO69_ENET_TX_CTRL
PS_MIO68_K29	K29	MIO68_ENET_TX_D3
PS_MIO67_K28	K28	MIO67_ENET_TX_D2
PS_MIO66_J34	J34	MIO66_ENET_TX_D1
PS_MIO65_J32	J32	MIO65_ENET_TX_D0
PS_MIO64_J31	J31	MIO64_ENET_TX_CLK
PS_MIO63_J30	J30	MIO63_USB_DATA7_R
PS_MIO62_J29	J29	MIO62_USB_DATA6_R
PS_MIO61_H34	H34	MIO61_USB_DATA5_R
PS_MIO60_H33	H33	MIO60_USB_DATA4_R
PS_MIO59_H32	H32	MIO59_USB_DATA3_R
PS_MIO58_H31	H31	MIO58_USB_STP_R
PS_MIO57_H29	H29	MIO57_USB_DATA1_R
PS_MIO56_G34	G34	MIO56_USB_DATA0_R
PS_MIO55_G33	G33	MIO55_USB_NXT
PS_MIO54_G31	G31	MIO54_USB_DATA2_R
PS_MIO53_G30	G30	MIO53_USB_DIR
PS_MIO52_G29	G29	MIO52_USB_CLK

VCC1V8

H30 VCCO_PSIO2_502_H30
J33 VCCO_PSIO2_502_J33

U1

SOC_1156_1MM_IRON

Zynq Banks 500 501 502 - MIO



TITLE: Zynq Banks 500 501 502 - MIO
SCHEM, ROHS COMPLIANT
HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
PCB P/N: 1280961
SCH P/N: 0381794
TEST P/N: TSS0189

DATE: 01/26/2018:14:16	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 11 OF 58	DRAWN BY: BF

SOC_DA6_FFVC1156_IRONWOOD

BANK 503 XCZU7EVFFVC1156

M24	PS POR B
R25	PS ERR STATUS
T25	PS ERR OUT
P25	PS SRST B
R24	PS REF CLK
K27	FPGA TCK
H28	FPGA TMS
G28	FPGA TDO FMC TDI
J27	FPGA TDI
P24	PS INIT B
T24	PS PROG B
N24	PS DONE
M25	PS PADI
L25	PS PADO
K25	PS_MODE3
K26	PS_MODE2
J26	PS_MODE1
H27	PS_MODE0

VCC1V8

G27 VCCO_PSIO3_503_G27

N25 VCCO_PSIO3_503_N25

U1 SOC_1156_1MM_IRON

R921 20 1/16W 1%
C1033 33PF 50V COG, NP0

R19 4.70K 1/16W 1%
R18 4.70K 1/16W 1%
R17 4.70K 1/16W 1%
R16 4.70K 1/16W 1%

R143 4.7M 5%
X1 32.768KHZ 20PPM
C876 22PF 50V
C875 22PF 50V

C183 0.1UF 25V
R15 4.70K 1%
PS_INIT_B

U43 SN74AVC1T45 SC70_6

C86 0.1UF 25V
R323 1/10W
R326 1/10W 1%
DS1 LED-GRN-RED

INIT_B = 0, RED LED ON
INIT_B = 1, GRN LED ON

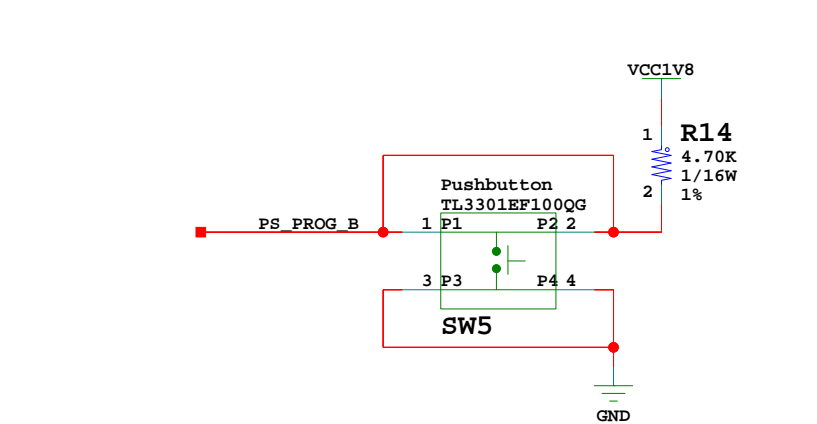
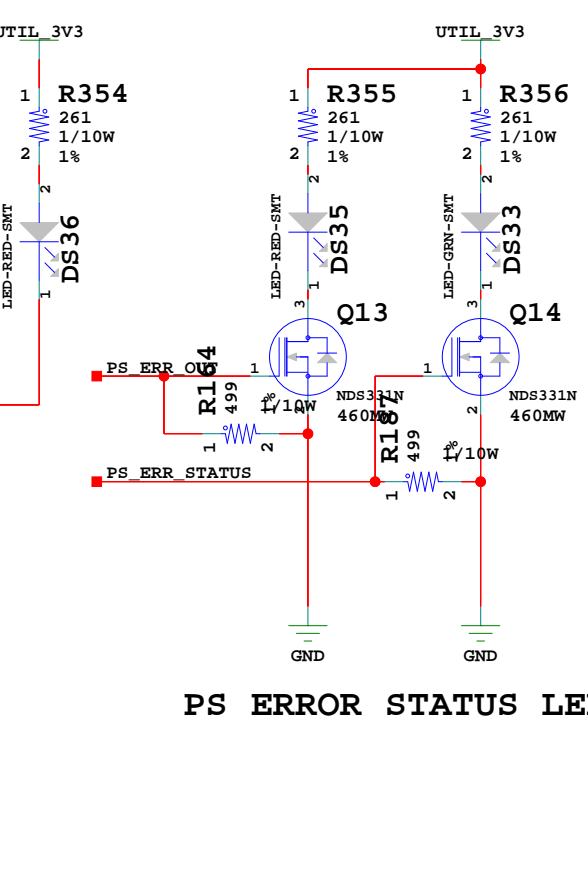
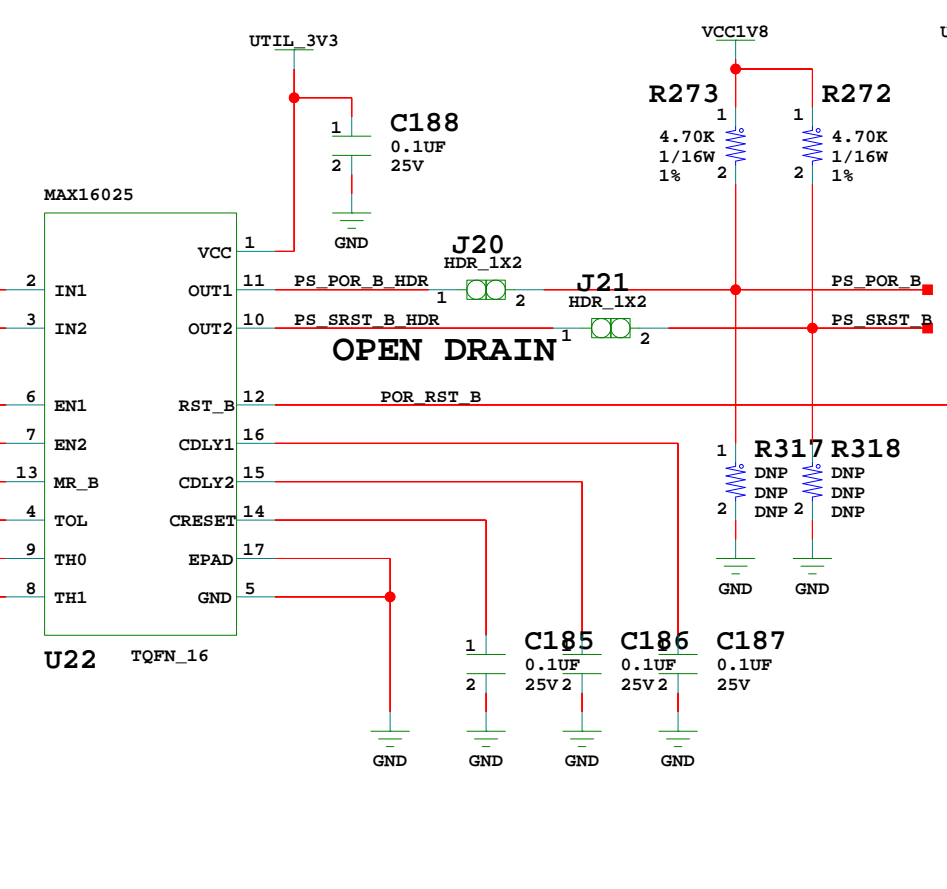
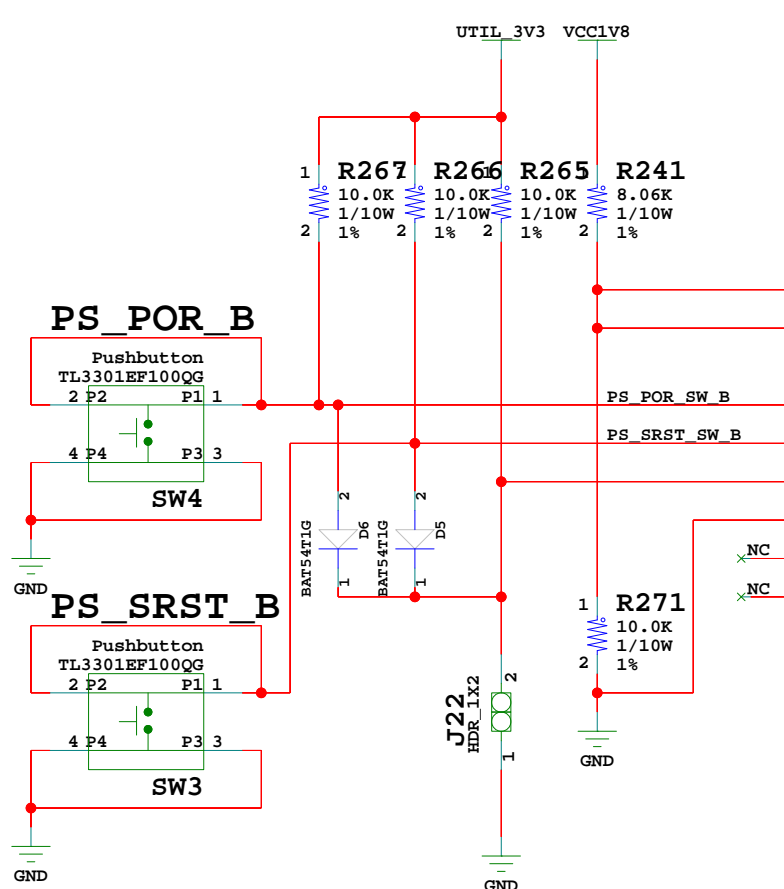
R237 499 1/10W 1%
R238 499 1/10W 1%
R239 499 1/10W 1%
R240 499 1/10W 1%

C181 0.1UF 25V
R13 4.70K 1%
PS_DONE

U44 SN74AVC1T45 SC70_6

C87 0.1UF 25V
R328 1/10W 1%
DS32 LED-GRN-SMT

DONE_0 = 0, DONE LED OFF
DONE_0 = 1, DONE LED ON



Zynq Banks 503 - Config



TITLE: Zynq Banks 503 - Config
SCHEM, ROHS COMPLIANT
HW-Z1-ZCU104_REV1_0

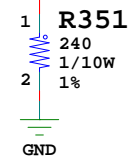
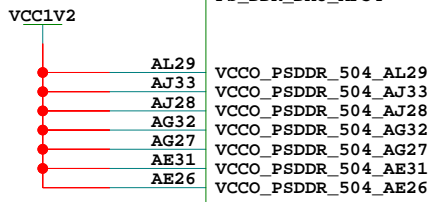
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PCB P/N: 1280961
SCH P/N: 0381794
TEST P/N: TSS0189

DATE: 01/26/2018:14:18	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 12 OF 58	DRAWN BY: BF

SOC_DA6_FFVC1156_IRONWOOD

BANK 504 XCZU7EVFFVC1156

DDR4 A0	AN34	PS_DDR_A0_AN34	PS_DDR_DQ0_AP27	AP27	DDR4 DQ0
DDR4 A1	AM34	PS_DDR_A1_AM34	PS_DDR_DQ1_AP25	AP25	DDR4 DQ1
DDR4 A2	AM33	PS_DDR_A2_AM33	PS_DDR_DQ2_AP26	AP26	DDR4 DQ2
DDR4 A3	AL34	PS_DDR_A3_AL34	PS_DDR_DQ3_AM26	AM26	DDR4 DQ3
DDR4 A4	AL33	PS_DDR_A4_AL33	PS_DDR_DQ4_AP24	AP24	DDR4 DQ4
DDR4 A5	AK33	PS_DDR_A5_AK33	PS_DDR_DQ5_AL25	AL25	DDR4 DQ5
DDR4 A6	AK30	PS_DDR_A6_AK30	PS_DDR_DQ6_AM25	AM25	DDR4 DQ6
DDR4 A7	AJ30	PS_DDR_A7_AJ30	PS_DDR_DQ7_AM24	AM24	DDR4 DQ7
DDR4 A8	AJ31	PS_DDR_A8_AJ31	PS_DDR_DQ8_AM28	AM28	DDR4 DQ8
DDR4 A9	AH31	PS_DDR_A9_AH31	PS_DDR_DQ9_AN28	AN28	DDR4 DQ9
DDR4 A10	AG31	PS_DDR_A10_AG31	PS_DDR_DQ10_AP29	AP29	DDR4 DQ10
DDR4 A11	AF31	PS_DDR_A11_AF31	PS_DDR_DQ11_AP28	AP28	DDR4 DQ11
DDR4 A12	AG30	PS_DDR_A12_AG30	PS_DDR_DQ12_AM31	AM31	DDR4 DQ12
DDR4 A13	AF30	PS_DDR_A13_AF30	PS_DDR_DQ13_AP31	AP31	DDR4 DQ13
DDR4 A14 WE B	AG29	PS_DDR_A14_AG29	PS_DDR_DQ14_AN31	AN31	DDR4 DQ14
DDR4 A15 CAS B	AG28	PS_DDR_A15_AG28	PS_DDR_DQ15_AM30	AM30	DDR4 DQ15
DDR4 A16 RAS B	AF28	PS_DDR_A16_AF28	PS_DDR_DQ16_AF25	AF25	DDR4 DQ16
	AF26	PS_DDR_A17_AF26	PS_DDR_DQ17_AG25	AG25	DDR4 DQ17
DDR4 BA0	AE27	PS_DDR_BA0_AE27	PS_DDR_DQ18_AG26	AG26	DDR4 DQ18
DDR4 BA1	AE28	PS_DDR_BA1_AE28	PS_DDR_DQ19_AJ25	AJ25	DDR4 DQ19
DDR4 ACT B	AE25	PS_DDR_ACT_N_AE25	PS_DDR_DQ20_AG24	AG24	DDR4 DQ20
DDR4 ALERT B	AB26	PS_DDR_ALERT_N_AB26	PS_DDR_DQ21_AK25	AK25	DDR4 DQ21
DDR4 PAR	AA26	PS_DDR_PARITY_AA26	PS_DDR_DQ22_AJ24	AJ24	DDR4 DQ22
DDR4 RESET B	AD26	PS_DDR_RAM_RST_N_AD26	PS_DDR_DQ23_AK24	AK24	DDR4 DQ23
DDR4 BG0	AD27	PS_DDR_BG0_AD27	PS_DDR_DQ24_AH28	AH28	DDR4 DQ24
	AF27	PS_DDR_BG1_AF27	PS_DDR_DQ25_AH27	AH27	DDR4 DQ25
DDR4 CS B	AP33	PS_DDR_CS_NO_AP33	PS_DDR_DQ26_AJ27	AJ27	DDR4 DQ26
	AK32	PS_DDR_CS_N1_AK32	PS_DDR_DQ27_AK27	AK27	DDR4 DQ27
DDR4 CK T	AL31	PS_DDR_CK0_AL31	PS_DDR_DQ28_AL26	AL26	DDR4 DQ28
DDR4 CK C	AN32	PS_DDR_CK_NO_AN32	PS_DDR_DQ29_AL27	AL27	DDR4 DQ29
	AL30	PS_DDR_CK1_AL30	PS_DDR_DQ30_AH29	AH29	DDR4 DQ30
	AL32	PS_DDR_CK_N1_AL32	PS_DDR_DQ31_AL28	AL28	DDR4 DQ31
DDR4 CKE	AN33	PS_DDR_CKE0_AN33	PS_DDR_DQ32_AB29	AB29	DDR4 DQ32
	AH32	PS_DDR_CKE1_AH32	PS_DDR_DQ33_AB30	AB30	DDR4 DQ33
DDR4 ODT	AP32	PS_DDR_ODT0_AP32	PS_DDR_DQ34_AC29	AC29	DDR4 DQ34
	AJ32	PS_DDR_ODT1_AJ32	PS_DDR_DQ35_AD32	AD32	DDR4 DQ35
DDR4 DQS0 T	AN26	PS_DDR_DQS_P0_AN26	PS_DDR_DQ36_AC31	AC31	DDR4 DQ36
DDR4 DQS0 C	AN27	PS_DDR_DQS_NO_AN27	PS_DDR_DQ37_AE30	AE30	DDR4 DQ37
DDR4 DQS1 T	AN29	PS_DDR_DQS_P1_AN29	PS_DDR_DQ38_AC28	AC28	DDR4 DQ38
DDR4 DQS1 C	AP30	PS_DDR_DQS_N1_AP30	PS_DDR_DQ39_AE29	AE29	DDR4 DQ39
DDR4 DQS2 T	AH26	PS_DDR_DQS_P2_AH26	PS_DDR_DQ40_AC27	AC27	DDR4 DQ40
DDR4 DQS2 C	AJ26	PS_DDR_DQS_N2_AJ26	PS_DDR_DQ41_AA27	AA27	DDR4 DQ41
DDR4 DQS3 T	AK28	PS_DDR_DQS_P3_AK28	PS_DDR_DQ42_AA28	AA28	DDR4 DQ42
DDR4 DQS3 C	AK29	PS_DDR_DQS_N3_AK29	PS_DDR_DQ43_AB28	AB28	DDR4 DQ43
DDR4 DQS4 T	AD30	PS_DDR_DQS_P4_AD30	PS_DDR_DQ44_W27	W27	DDR4 DQ44
DDR4 DQS4 C	AD31	PS_DDR_DQS_N4_AD31	PS_DDR_DQ45_W29	W29	DDR4 DQ45
DDR4 DQS5 T	Y27	PS_DDR_DQS_P5_Y27	PS_DDR_DQ46_W28	W28	DDR4 DQ46
DDR4 DQS5 C	Y28	PS_DDR_DQS_N5_Y28	PS_DDR_DQ47_V27	V27	DDR4 DQ47
DDR4 DQS6 T	AB33	PS_DDR_DQS_P6_AB33	PS_DDR_DQ48_AA32	AA32	DDR4 DQ48
DDR4 DQS6 C	AB34	PS_DDR_DQS_N6_AB34	PS_DDR_DQ49_AA33	AA33	DDR4 DQ49
DDR4 DQS7 T	W31	PS_DDR_DQS_P7_W31	PS_DDR_DQ50_AA34	AA34	DDR4 DQ50
DDR4 DQS7 C	W32	PS_DDR_DQS_N7_W32	PS_DDR_DQ51_AE34	AE34	DDR4 DQ51
	AG33	PS_DDR_DQS_P8_AG33	PS_DDR_DQ52_AD34	AD34	DDR4 DQ52
	AG34	PS_DDR_DQS_N8_AG34	PS_DDR_DQ53_AB31	AB31	DDR4 DQ53
DDR4 DM0	AN24	PS_DDR_DM0_AN24	PS_DDR_DQ54_AC34	AC34	DDR4 DQ54
DDR4 DM1	AM29	PS_DDR_DM1_AM29	PS_DDR_DQ55_AC33	AC33	DDR4 DQ55
DDR4 DM2	AH24	PS_DDR_DM2_AH24	PS_DDR_DQ56_AA30	AA30	DDR4 DQ56
DDR4 DM3	AJ29	PS_DDR_DM3_AJ29	PS_DDR_DQ57_Y30	Y30	DDR4 DQ57
DDR4 DM4	AD29	PS_DDR_DM4_AD29	PS_DDR_DQ58_AA31	AA31	DDR4 DQ58
DDR4 DM5	Y29	PS_DDR_DM5_Y29	PS_DDR_DQ59_W30	W30	DDR4 DQ59
DDR4 DM6	AC32	PS_DDR_DM6_AC32	PS_DDR_DQ60_Y33	Y33	DDR4 DQ60
DDR4 DM7	Y32	PS_DDR_DM7_Y32	PS_DDR_DQ61_W33	W33	DDR4 DQ61
	AF34	PS_DDR_DM8_AF34	PS_DDR_DQ62_W34	W34	DDR4 DQ62
			PS_DDR_DQ63_Y34	Y34	DDR4 DQ63
			PS_DDR_DQ64_AF32	AF32	NC
			PS_DDR_DQ65_AE32	AE32	NC
			PS_DDR_DQ66_AH33	AH33	NC
			PS_DDR_DQ67_AE33	AE33	NC
			PS_DDR_DQ68_AF33	AF33	NC
			PS_DDR_DQ69_AH34	AH34	NC
			PS_DDR_DQ70_AJ34	AJ34	NC
			PS_DDR_DQ71_AK34	AK34	NC
			PS_DDR_ZQ_AC26	AC26	SODIMM ZQ



Zynq Banks 504 - Memory



TITLE: Zynq Banks 504 - Memory
 SCHEM, ROHS COMPLIANT
 HW-Z1-ZCU104_REV1_0

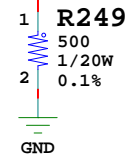
ASSY P/N: 0432057
 PCB P/N: 1280961
 SCH P/N: 0381794
 TEST P/N: TSS0189

DATE: 01/26/2018:14:16	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 13 OF 58	DRAWN BY: BF

SOC_DA6_FFVC1156_IRONWOOD

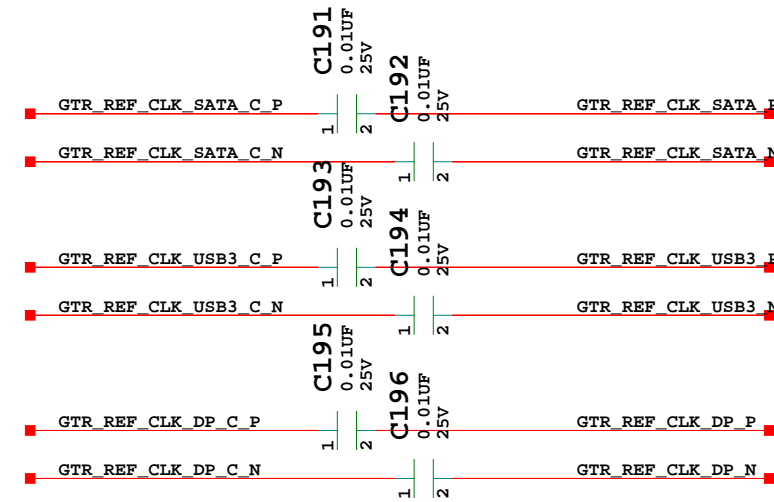
BANK 505
XCZU7EVFFVC1156

PS_MGTRTXP0_505_U29	U29	GT0_DP_TX_P
PS_MGTRTXN0_505_U30	U30	GT0_DP_TX_N
PS_MGTRRXN0_505_U33	U33	NC
PS_MGTRRXN0_505_U34	U34	NC
PS_MGTRRXN0_505_U34	R29	GT1_DP_TX_P
PS_MGTRTXN1_505_R29	R30	GT1_DP_TX_N
PS_MGTRTXN1_505_R30	T31	NC
PS_MGTRRXN1_505_T31	T32	NC
PS_MGTRRXN1_505_T32	P31	GT2_USB0_TX_P
PS_MGTRTXP2_505_P31	P32	GT2_USB0_TX_N
PS_MGTRTXN2_505_P32	R33	GT2_USB0_RX_P
PS_MGTRRXN2_505_R33	R34	GT2_USB0_RX_N
PS_MGTRRXN2_505_R34	N29	GT3_SATA1_TX_P
PS_MGTRTXP3_505_N29	N30	GT3_SATA1_TX_N
PS_MGTRTXN3_505_N30	N33	GT3_SATA1_RX_P
PS_MGTRRXN3_505_N33	N34	GT3_SATA1_RX_N
PS_MGTRRXN3_505_N34	T27	NC
PS_MGTREFCLK0P_505_T27	T28	NC
PS_MGTREFCLK0N_505_T28	P27	GTR_REF_CLK_SATA_C_P
PS_MGTREFCLK1P_505_P27	P28	GTR_REF_CLK_SATA_C_N
PS_MGTREFCLK1N_505_P28	M27	GTR_REF_CLK_USB3_C_P
PS_MGTREFCLK2P_505_M27	M28	GTR_REF_CLK_USB3_C_N
PS_MGTREFCLK2N_505_M28	M31	GTR_REF_CLK_DP_C_P
PS_MGTREFCLK3P_505_M31	M32	GTR_REF_CLK_DP_C_N
PS_MGTREFCLK3N_505_M32	U31	
PS_MGTREF_505_U31		



U1

SOC_1156_1MM_IRON



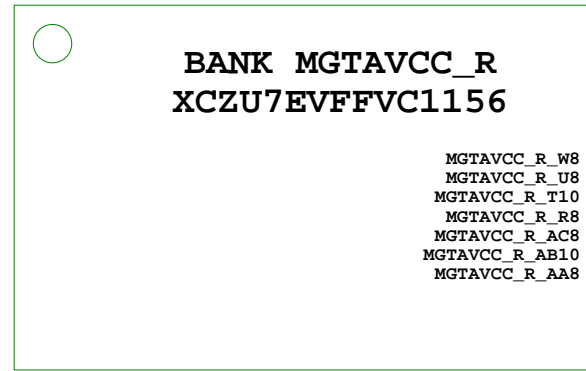
Zynq Banks 505 - GTR



TITLE: Zynq Banks 505 - GTR SCHEM, ROHS COMPLIANT HW-Z1-ZCU104_REV1_0	ASSY P/N: 0432057 PCB P/N: 1280961 SCH P/N: 0381794 TEST P/N: TSS0189
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DATE: 01/26/2018:14:17	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 14 OF 58	DRAWN BY: BF

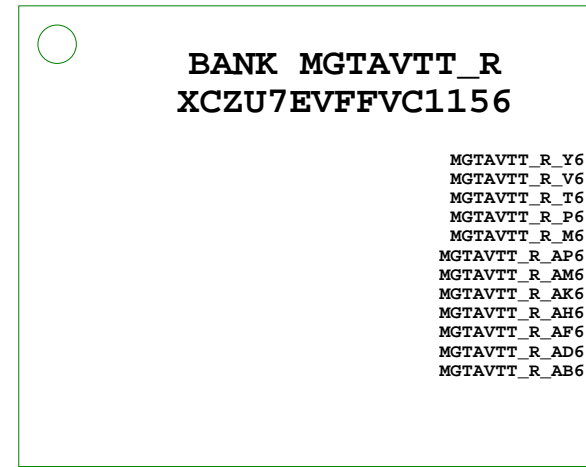
SOC_DA6_FFVC1156_IRONWOOD



U1

SOC_1156_1MM_IRON

SOC_DA6_FFVC1156_IRONWOOD



U1

SOC_1156_1MM_IRON

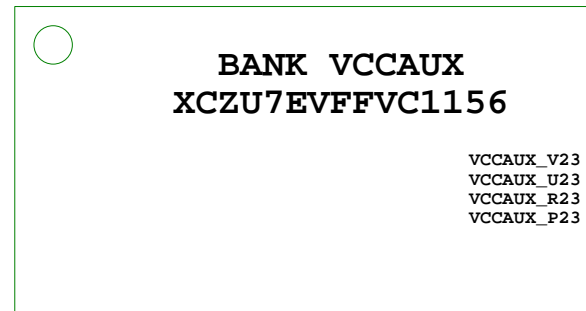
SOC_DA6_FFVC1156_IRONWOOD



U1

SOC_1156_1MM_IRON

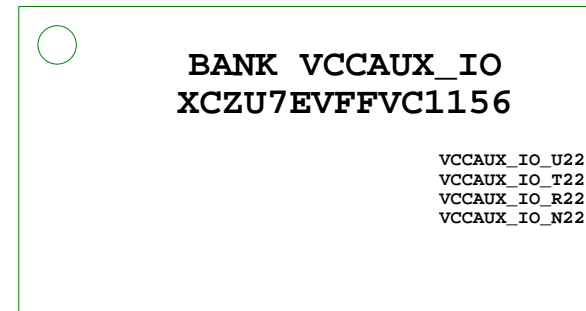
SOC_DA6_FFVC1156_IRONWOOD



U1

SOC_1156_1MM_IRON

SOC_DA6_FFVC1156_IRONWOOD



U1

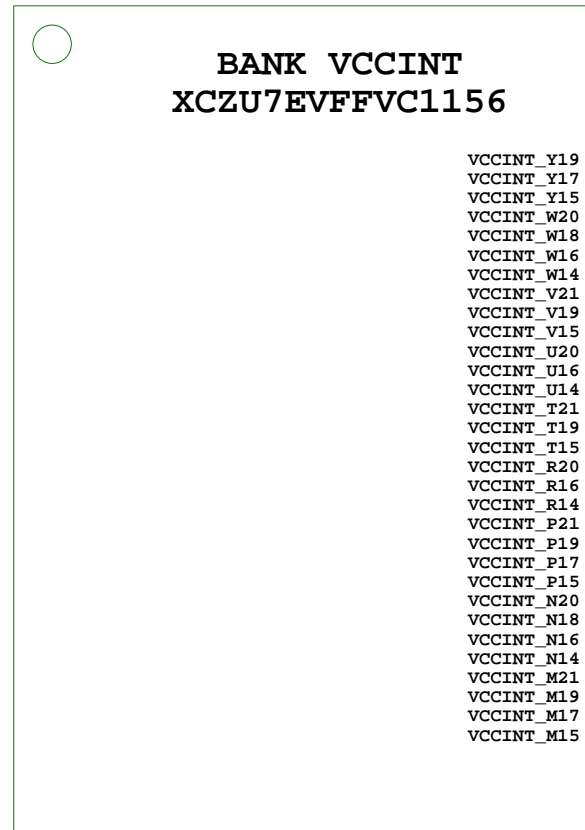
SOC_1156_1MM_IRON

Zynq Power 1

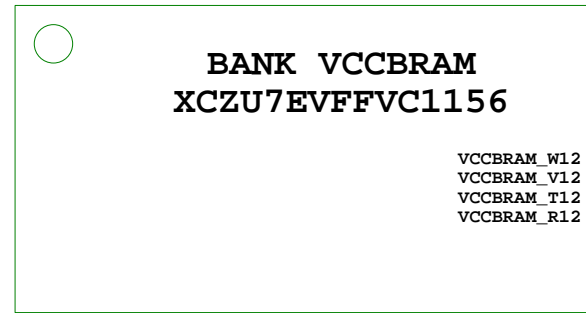


TITLE: Zynq Power 1 SCHEM, ROHS COMPLIANT HW-Z1-ZCU104_REV1_0	ASSY P/N: 0432057 PCB P/N: 1280961 SCH P/N: 0381794 TEST P/N: TSS0189
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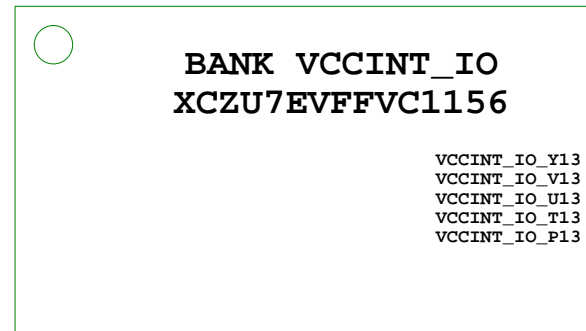
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SHEET SIZE: B	REV: 01
SHEET 15 OF 58	DRAWN BY: BF



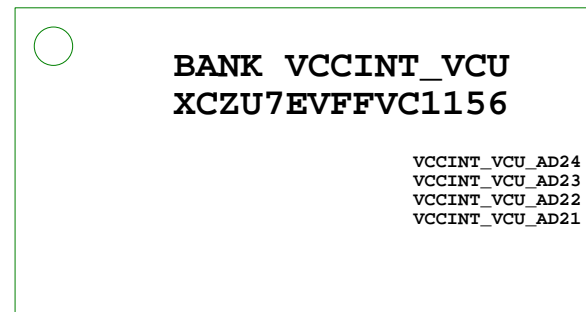
U1 SOC_1156_1MM_IRON



U1 SOC_1156_1MM_IRON



U1 SOC_1156_1MM_IRON



U1 SOC_1156_1MM_IRON

Zynq Power 2

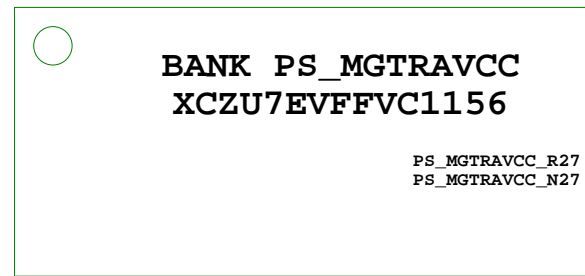


TITLE: Zynq Power 2
SCHEM, ROHS COMPLIANT
HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
PCB P/N: 1280961
SCH P/N: 0381794
TEST P/N: TSS0189

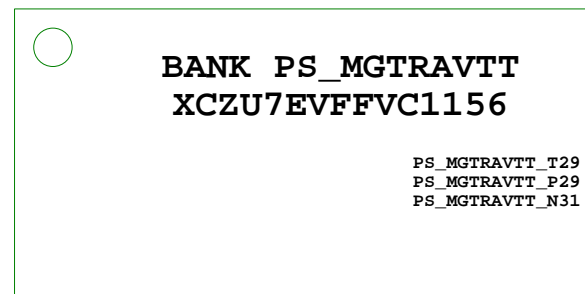
DATE: 01/26/2018:14:16	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 16 OF 58	DRAWN BY: BF

SOC_DA6_FFVC1156_IRONWOOD



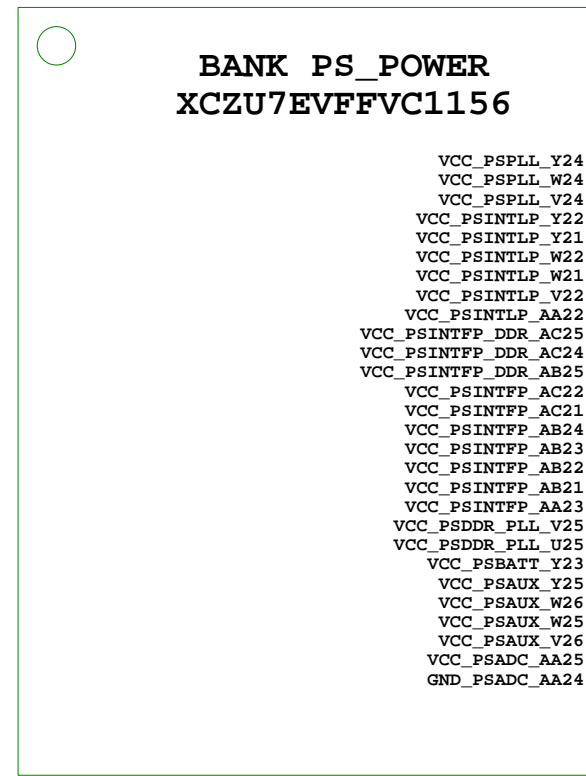
U1 SOC_1156_1MM_IRON

SOC_DA6_FFVC1156_IRONWOOD

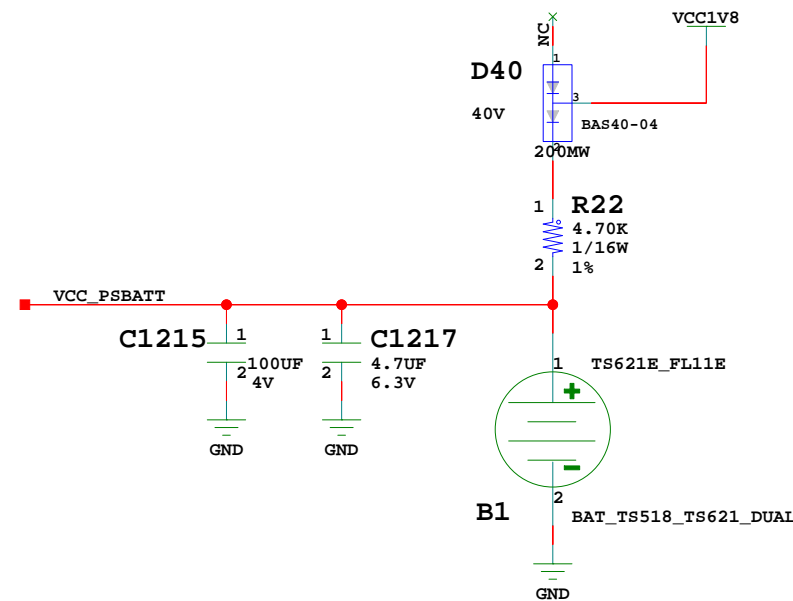
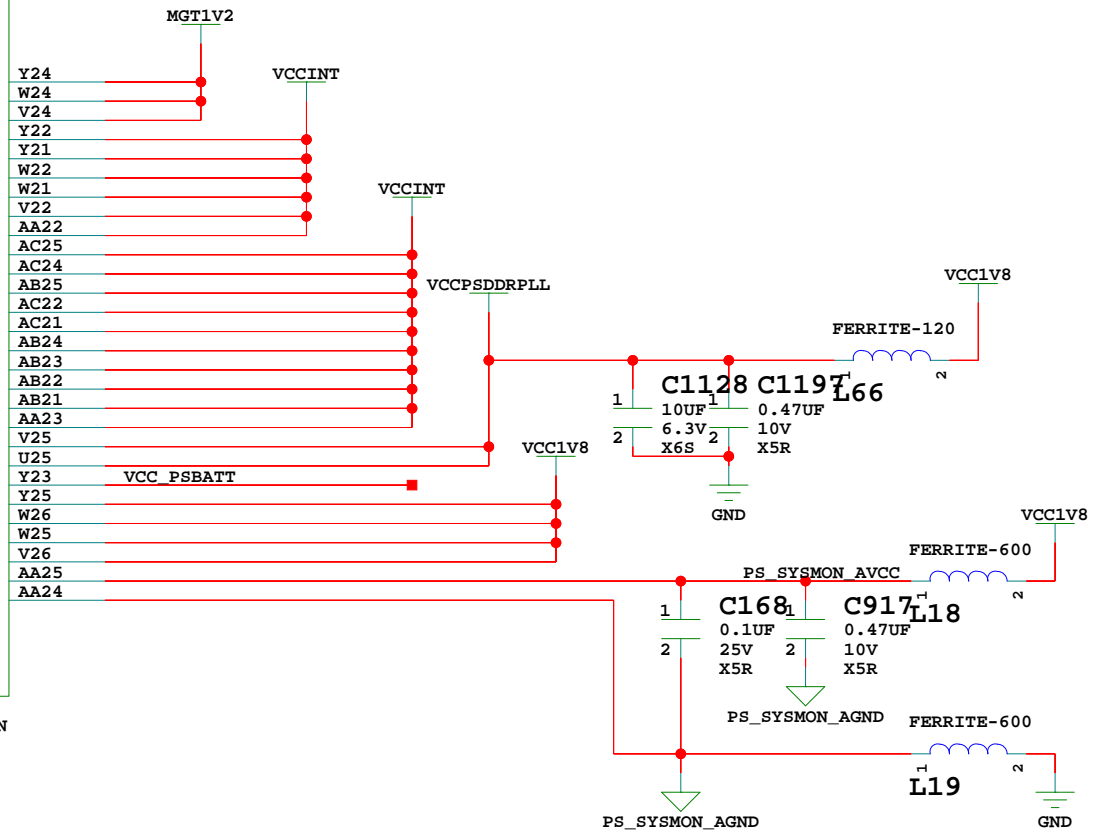


U1 SOC_1156_1MM_IRON

SOC_DA6_FFVC1156_IRONWOOD



U1 SOC_1156_1MM_IRON



Zynq Power 3

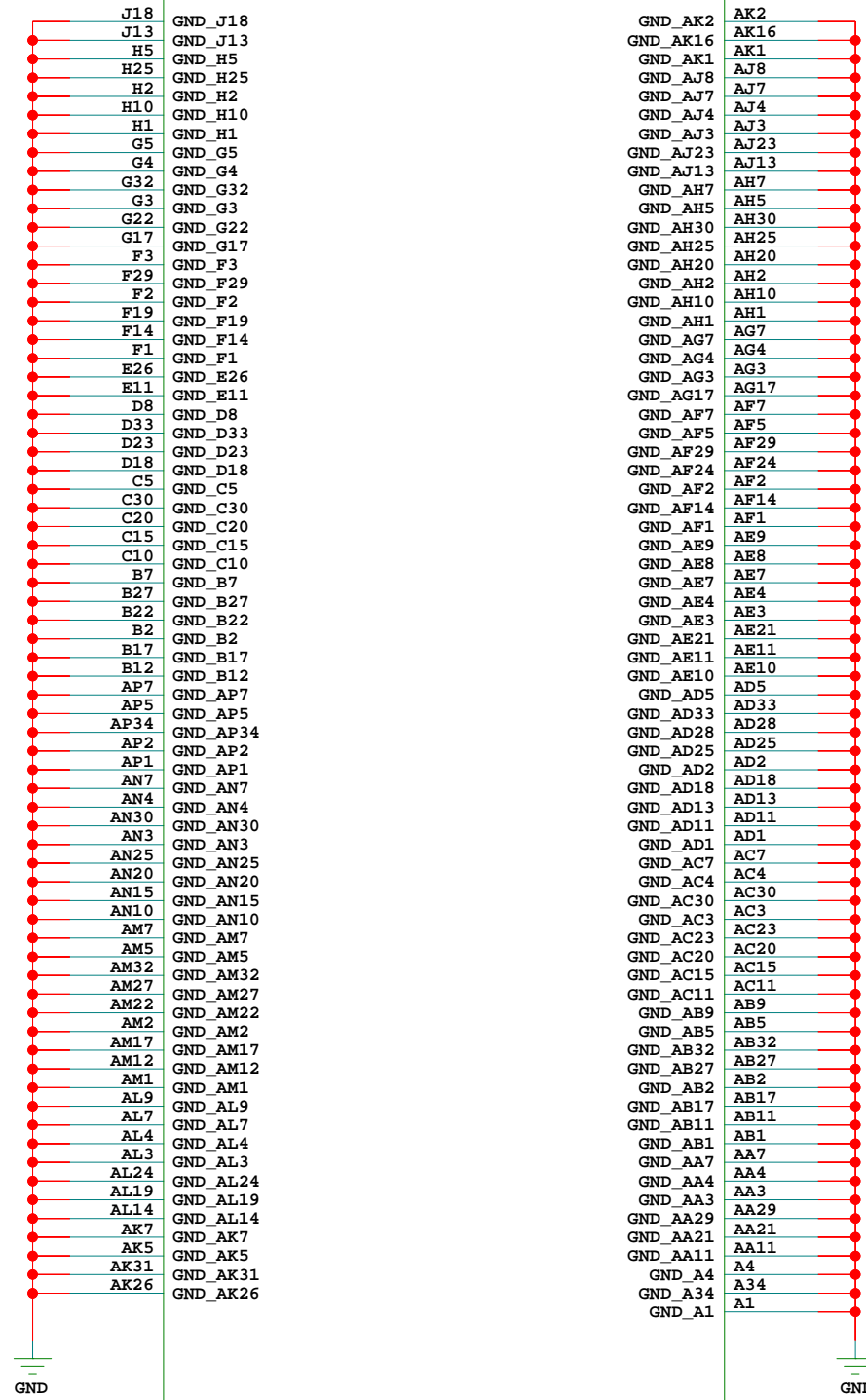


TITLE: Zynq Power 3 SCHEM, ROHS COMPLIANT HW-Z1-ZCU104_REV1_0
 ASSY P/N: 0432057
 PCB P/N: 1280961
 SCH P/N: 0381794
 TEST P/N: TSS0189

DATE: 01/26/2018:14:16	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 17 OF 58	DRAWN BY: BF

SOC_DA6_FFVC1156_IRONWOOD

BANK GND1 XCZU7EVFFVC1156

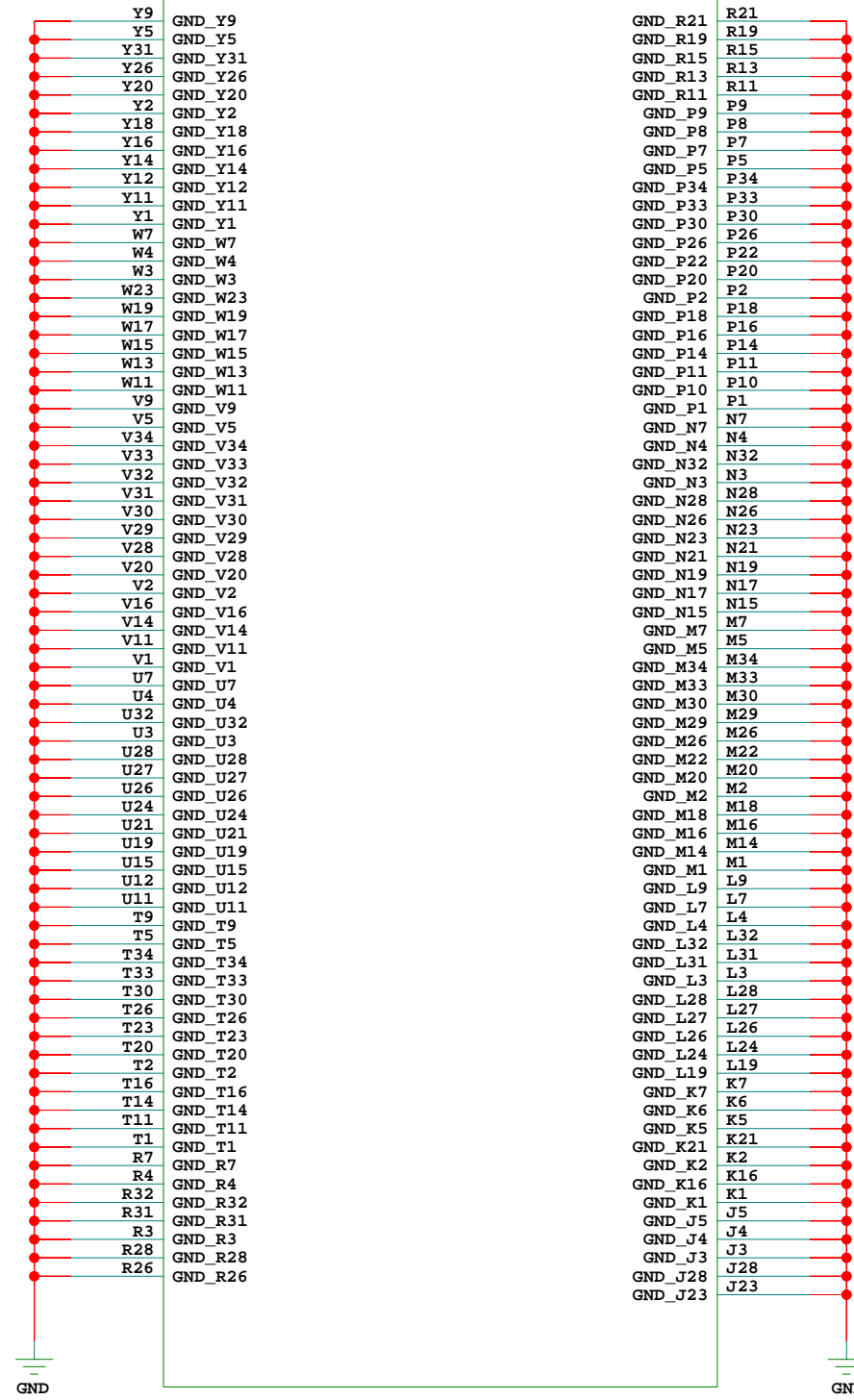


U1

SOC_1156_1MM_IRON

SOC_DA6_FFVC1156_IRONWOOD

BANK GND2 XCZU7EVFFVC1156



U1

SOC_1156_1MM_IRON

Zynq GND

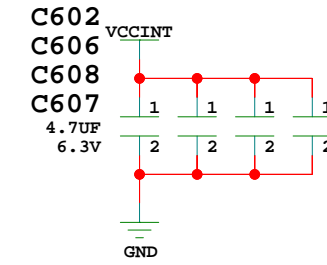
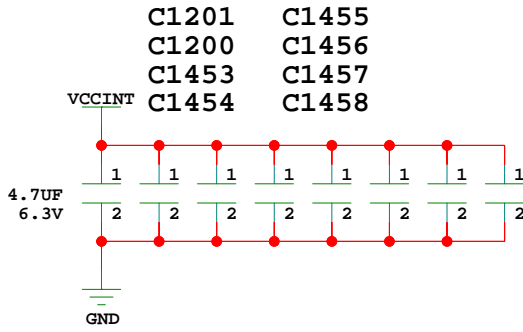
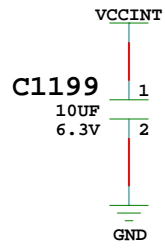
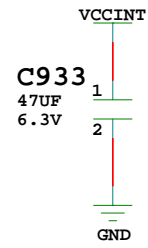
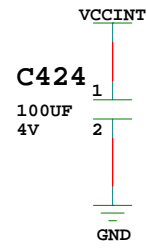
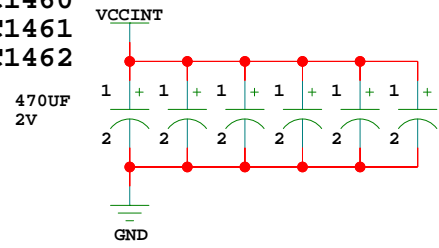


TITLE: Zynq GND SCHEM, ROHS COMPLIANT HW-Z1-ZCU104_REV1_0	ASSY P/N: 0432057 PCB P/N: 1280961 SCH P/N: 0381794 TEST P/N: TSS0189
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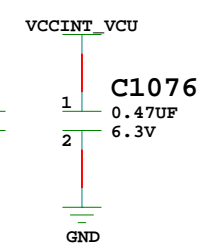
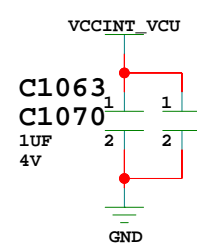
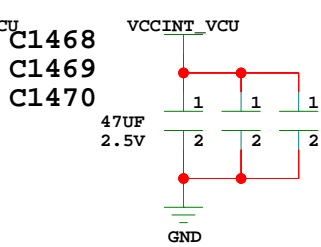
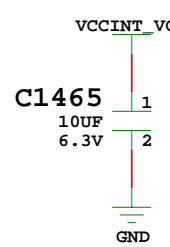
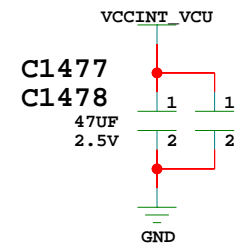
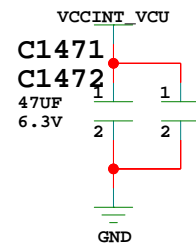
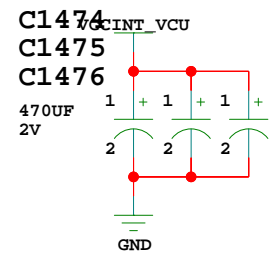
DATE: 01/26/2018:14:16	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 18 OF 58	DRAWN BY: BF

C696 VCCINT / VCCBRAM

C697
C1459
C1460
C1461
C1462

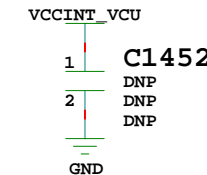


VCCINT_VCU



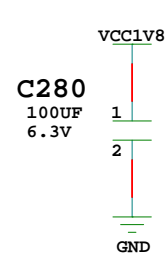
Place these 0201 capacitors directly under U1 near pins AD24/AD23/AD22/AD21

Provide a dual footprint to also support a 0402 cap

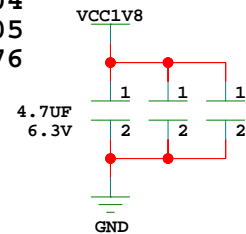


VCCINT_VCU Test Point
Place just outside U1 on bottomside

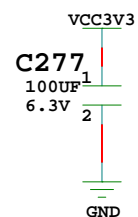
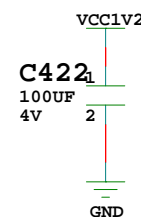
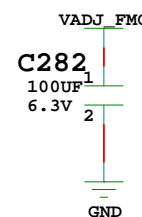
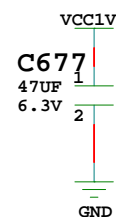
VCCAUX / VCCAUX_IO



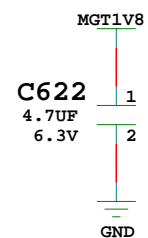
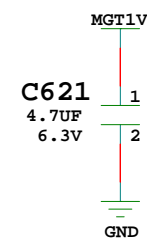
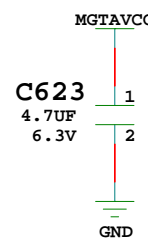
C604
C605
C276



VCCO BANKS 0 28 64 65 66 67 68 87 88



MGT Power Rails



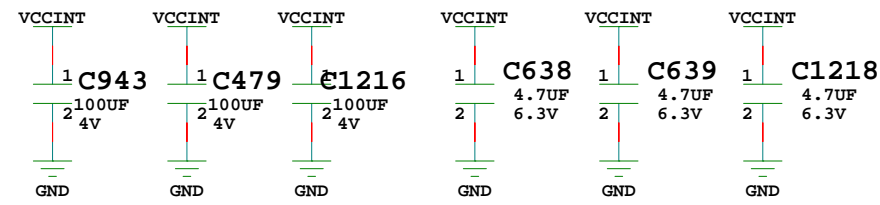
Zynq Decoupling 1



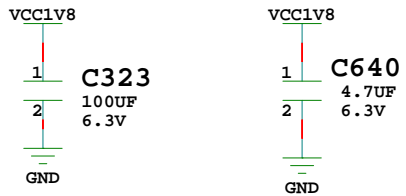
TITLE: Zynq Decoupling 1 SCHEM, ROHS COMPLIANT
HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
PCB P/N: 1280961
SCH P/N: 0381794
TEST P/N: TSS0189

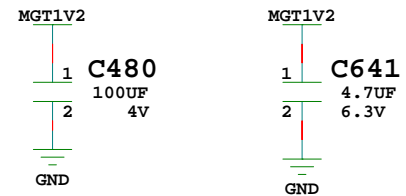
DATE: 01/26/2018:14:16	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 19 OF 58	DRAWN BY: BF



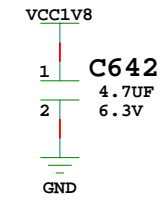
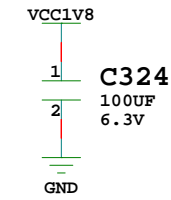
PSINTFP_DDR/PSINTFP/PSINTLP



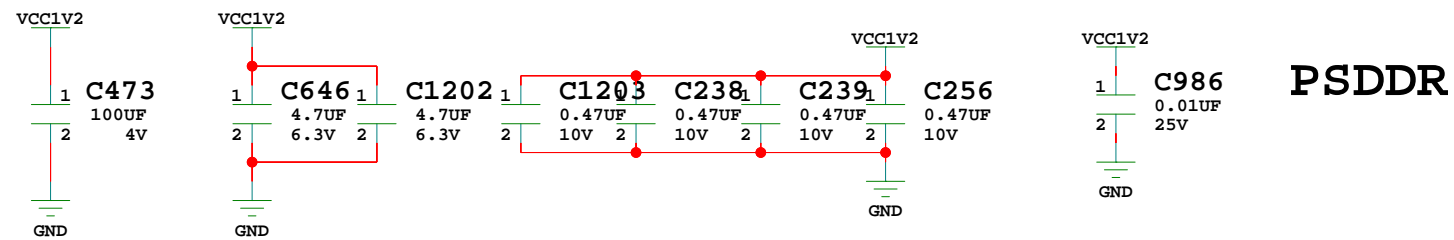
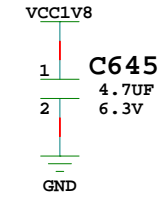
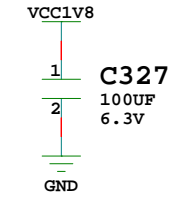
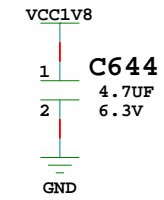
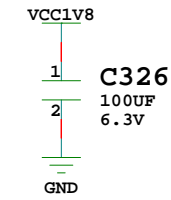
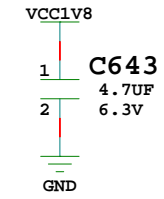
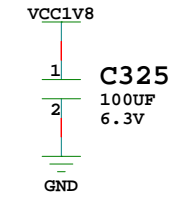
PSAUX



PSPLL



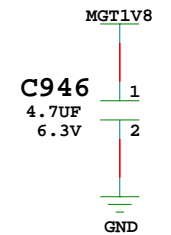
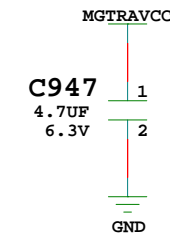
PSIO banks



PSDDR

Place this round pad capacitor directly under U1

Bank 505



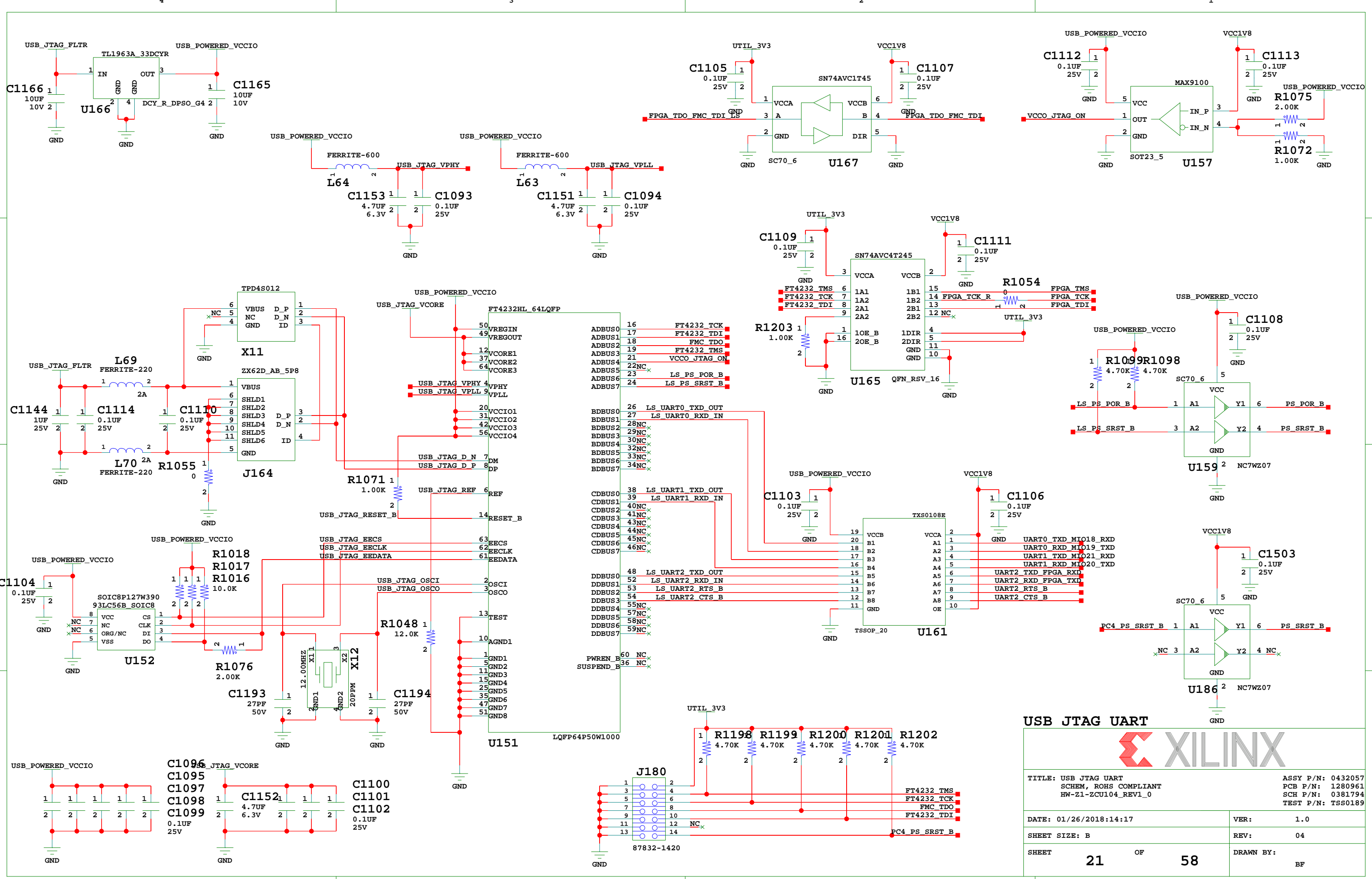
Zynq Decoupling 2



TITLE: Zynq Decoupling 2
 SCHEM, ROHS COMPLIANT
 HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
 PCB P/N: 1280961
 SCH P/N: 0381794
 TEST P/N: TSS0189

DATE: 01/26/2018:14:17	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 20 OF 58	DRAWN BY: BF



USB JTAG UART

TITLE: USB JTAG UART
 SCHEM, ROHS COMPLIANT
 HW-Z1-ZCU104_REV1_0

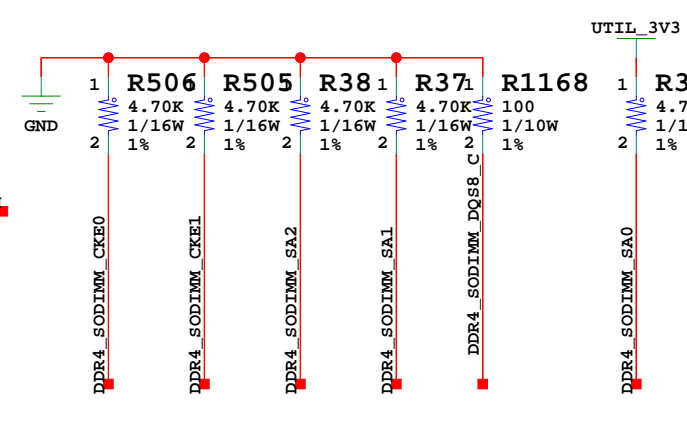
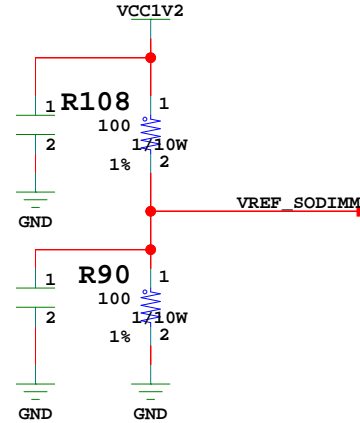
DATE: 01/26/2018:14:17
 SHEET SIZE: B
 SHEET 21 OF 58

ASSY P/N: 0432057
 PCB P/N: 1280961
 SCH P/N: 0381794
 TEST P/N: TSS0189

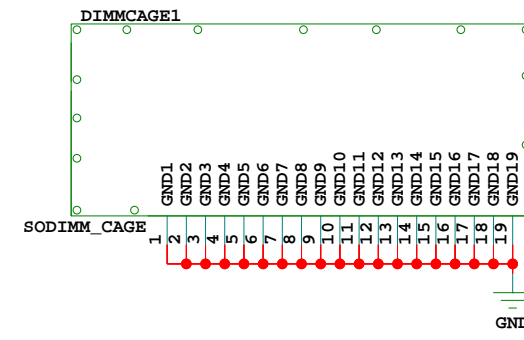
VER: 1.0
 REV: 04
 DRAWN BY: BF

Layout Directive:
Place 0.1uF cap under 1uF memory adjacent to pin

C45
0.1uF
25V



IIC Address = 0b1010001 (0x51)
SODIMM SA[2:0]=001



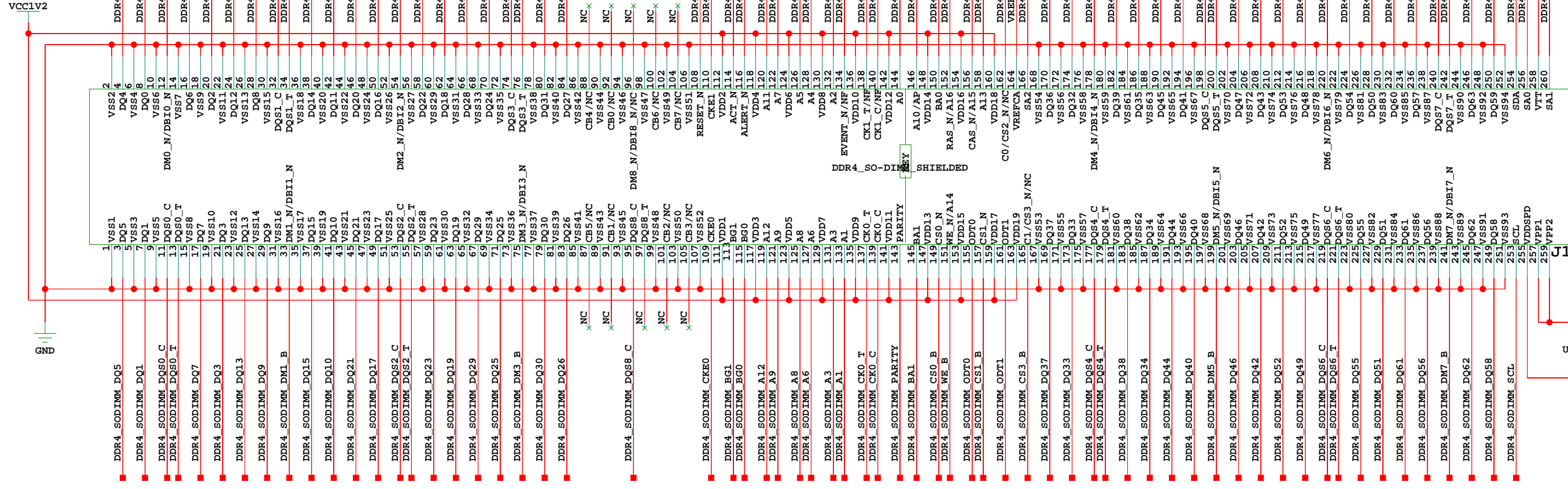
PL DDR4 SODIMM 64 bit



TITLE: PL DDR4 SODIMM 64 bit
SCHEM, ROHS COMPLIANT
HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
PCB P/N: 1280961
SCH P/N: 0381794
TEST P/N: TSS0189

DATE: 01/26/2018:14:17	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 22 OF 58	DRAWN BY: BF



PL_DDR4_VTT

UTIL_2V5

UTIL_3V3

C45

DIMM_CAGE1

SODIMM_CAGE

VCC1V2

UTIL_3V3

VCC1V2

VREF_SODIMM

DDR4_SODIMM_CKE0

DDR4_SODIMM_CKE1

DDR4_SODIMM_SA2

DDR4_SODIMM_SA1

DDR4_SODIMM_SA0

DDR4_SODIMM_EVENT_B

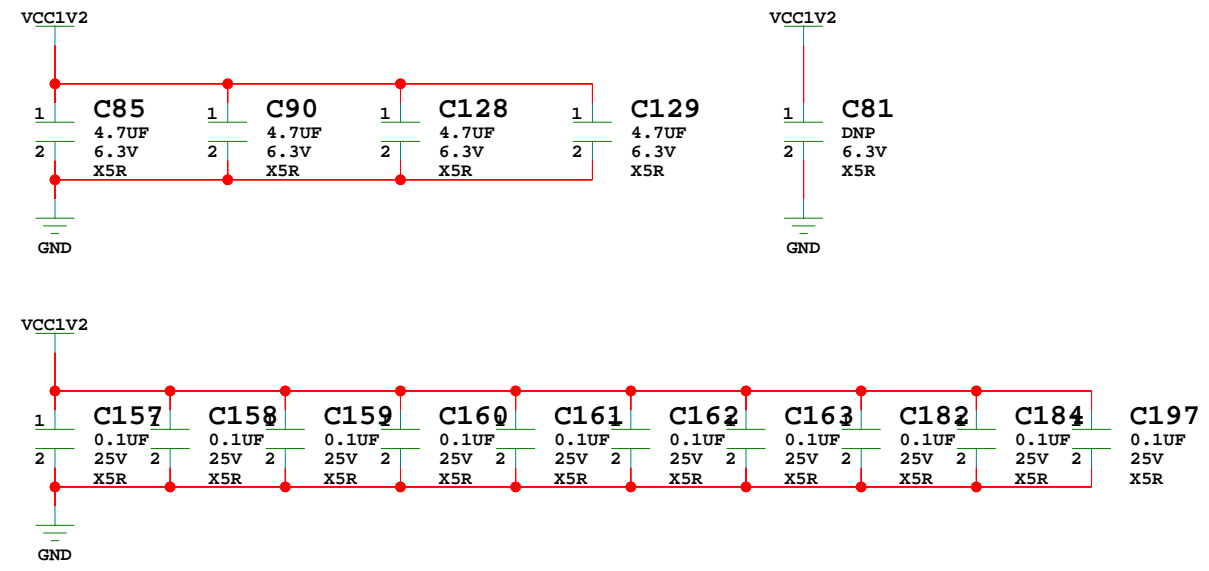
PL DDR4 SODIMM 64 bit



TITLE: PL DDR4 SODIMM 64 bit
SCHEM, ROHS COMPLIANT
HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
PCB P/N: 1280961
SCH P/N: 0381794
TEST P/N: TSS0189

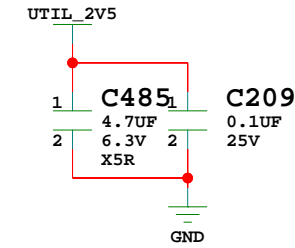
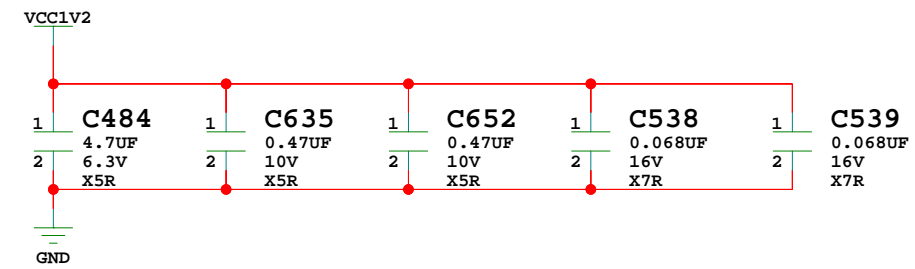
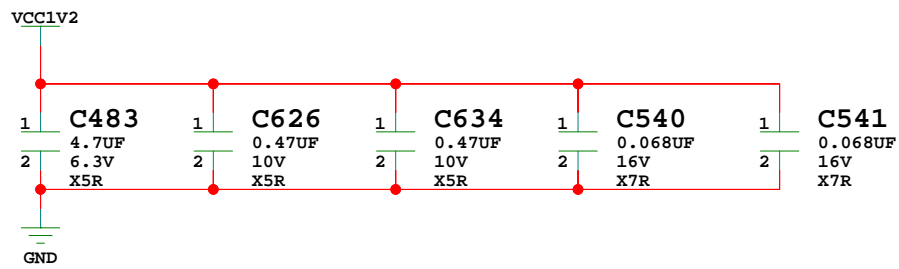
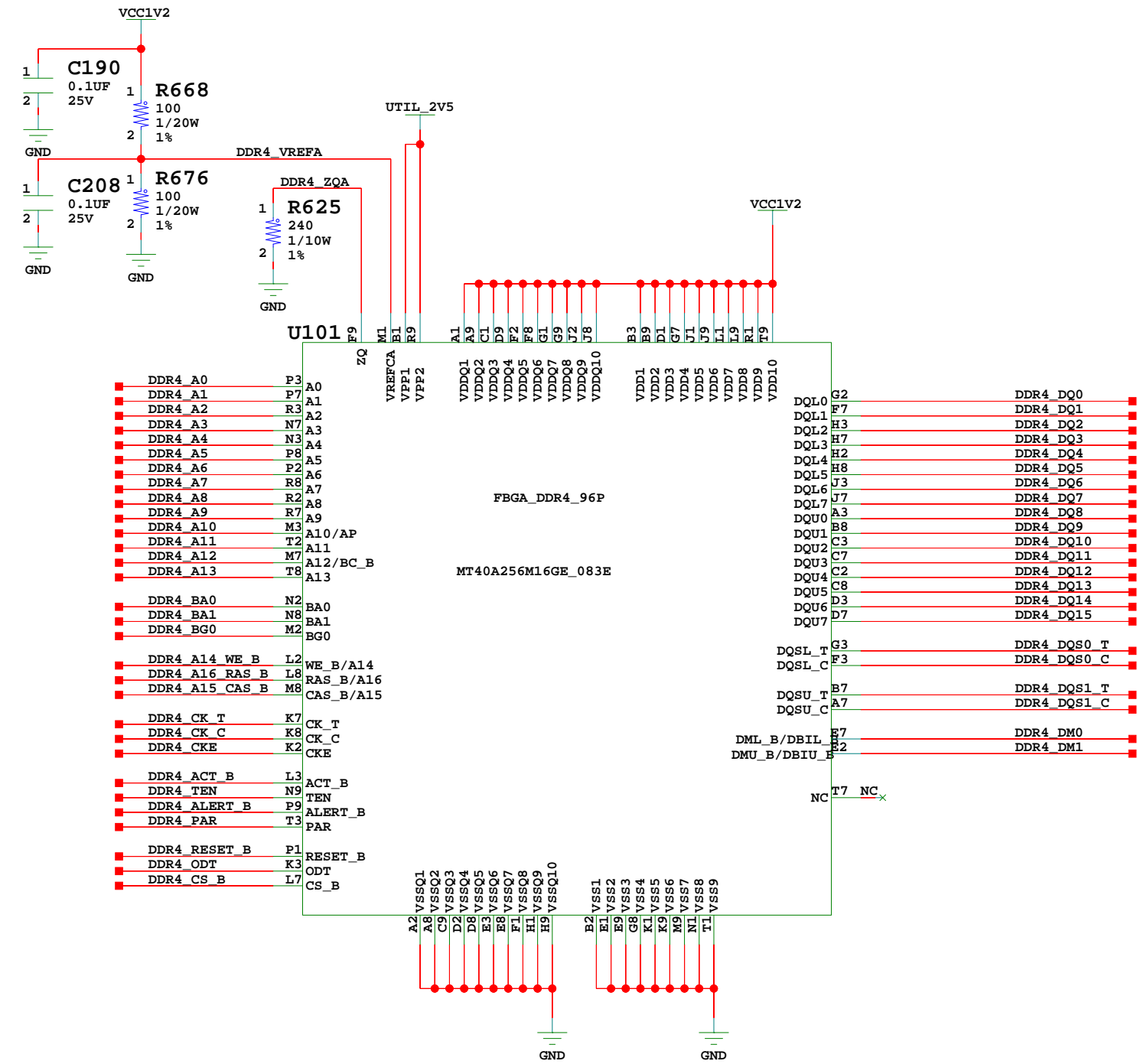
DATE: 01/26/2018:14:17	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 22 OF 58	DRAWN BY: BF



PLACE ABOVE CAPS BENEATH/CLOSE TO DIMM SOCKET

PL DDR4 SODIMM Decoupling

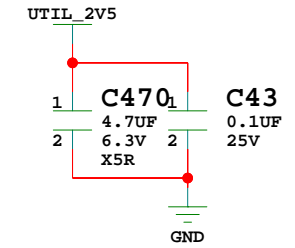
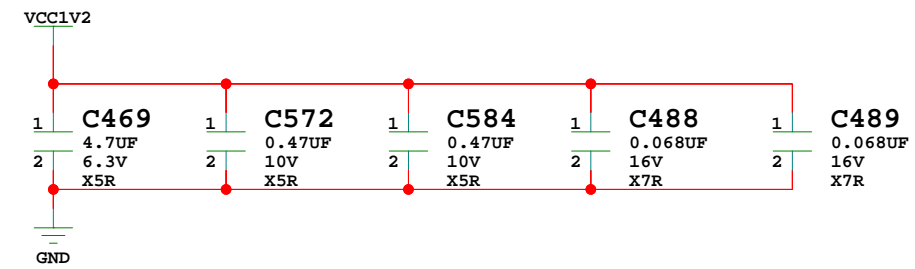
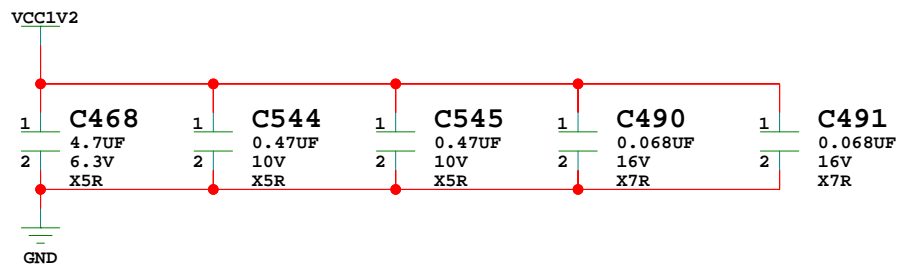
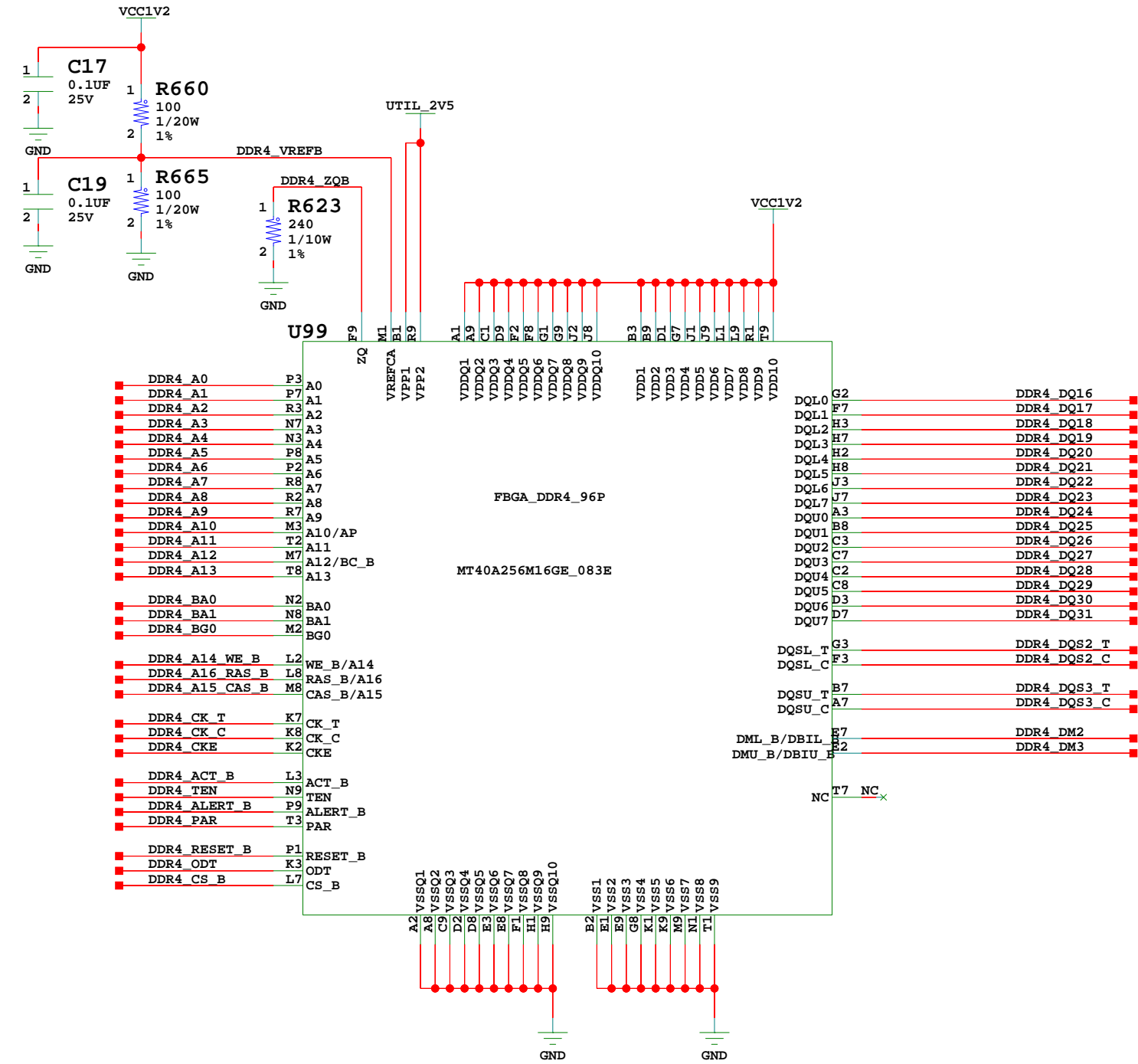
TITLE: PL DDR4 SODIMM Decoupling SCHEM, ROHS COMPLIANT HW-Z1-ZCU104_REV1_0	
ASSY P/N: 0432057 PCB P/N: 1280961 SCH P/N: 0381794 TEST P/N: TSS0189	
DATE: 01/26/2018:14:17	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 23 OF 58	DRAWN BY: BF



PS Component DDR4 Data [15-0]

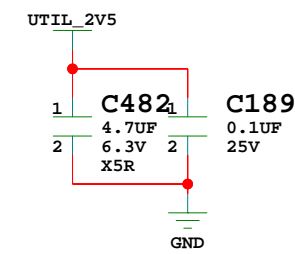
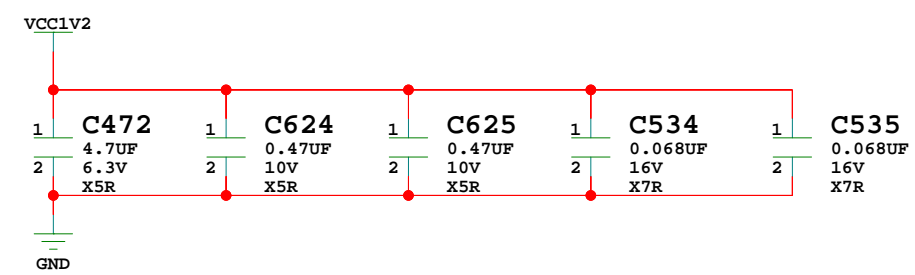
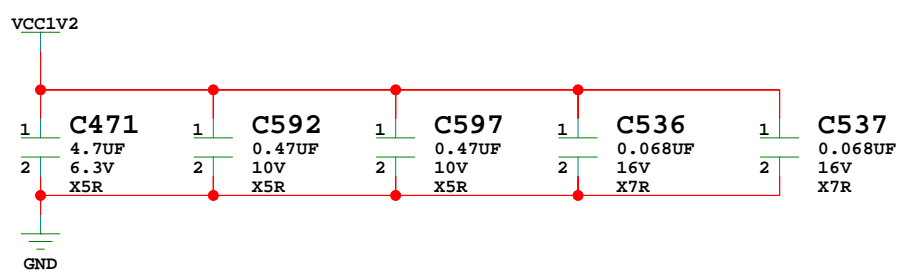
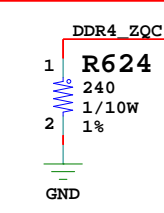
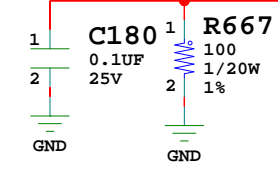
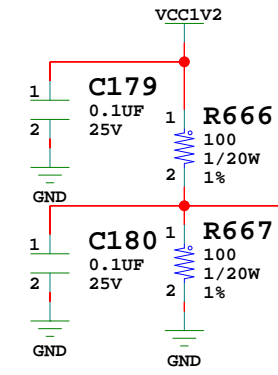
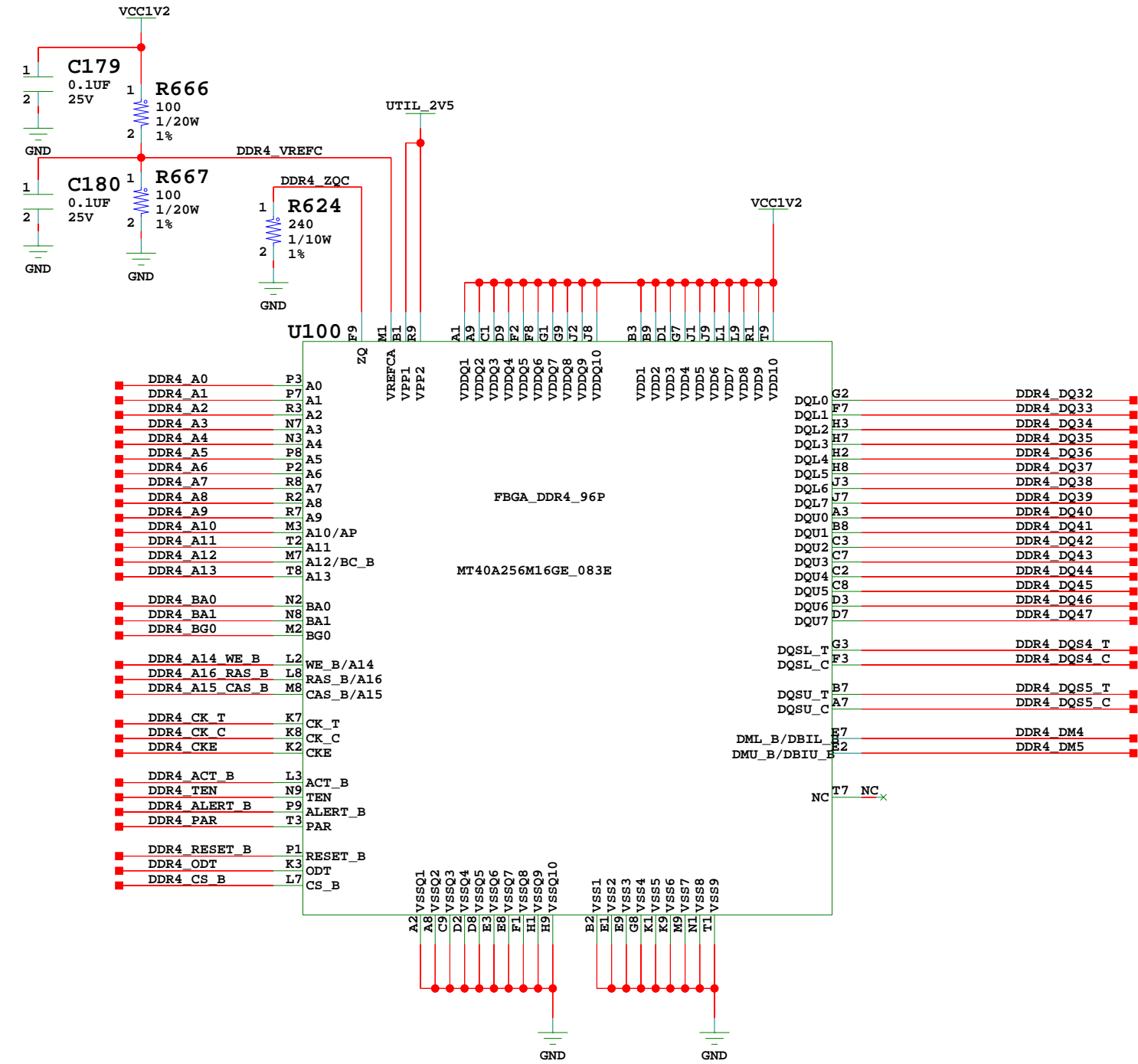
TITLE: PS Component DDR4 Data [15-0]	
SCHEM, ROHS COMPLIANT	
HW-Z1-ZCU104_REV1_0	
DATE: 01/26/2018:14:17	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 24 OF 58	DRAWN BY: BF

ASSY P/N: 0432057
PCB P/N: 1280961
SCH P/N: 0381794
TEST P/N: TSS0189



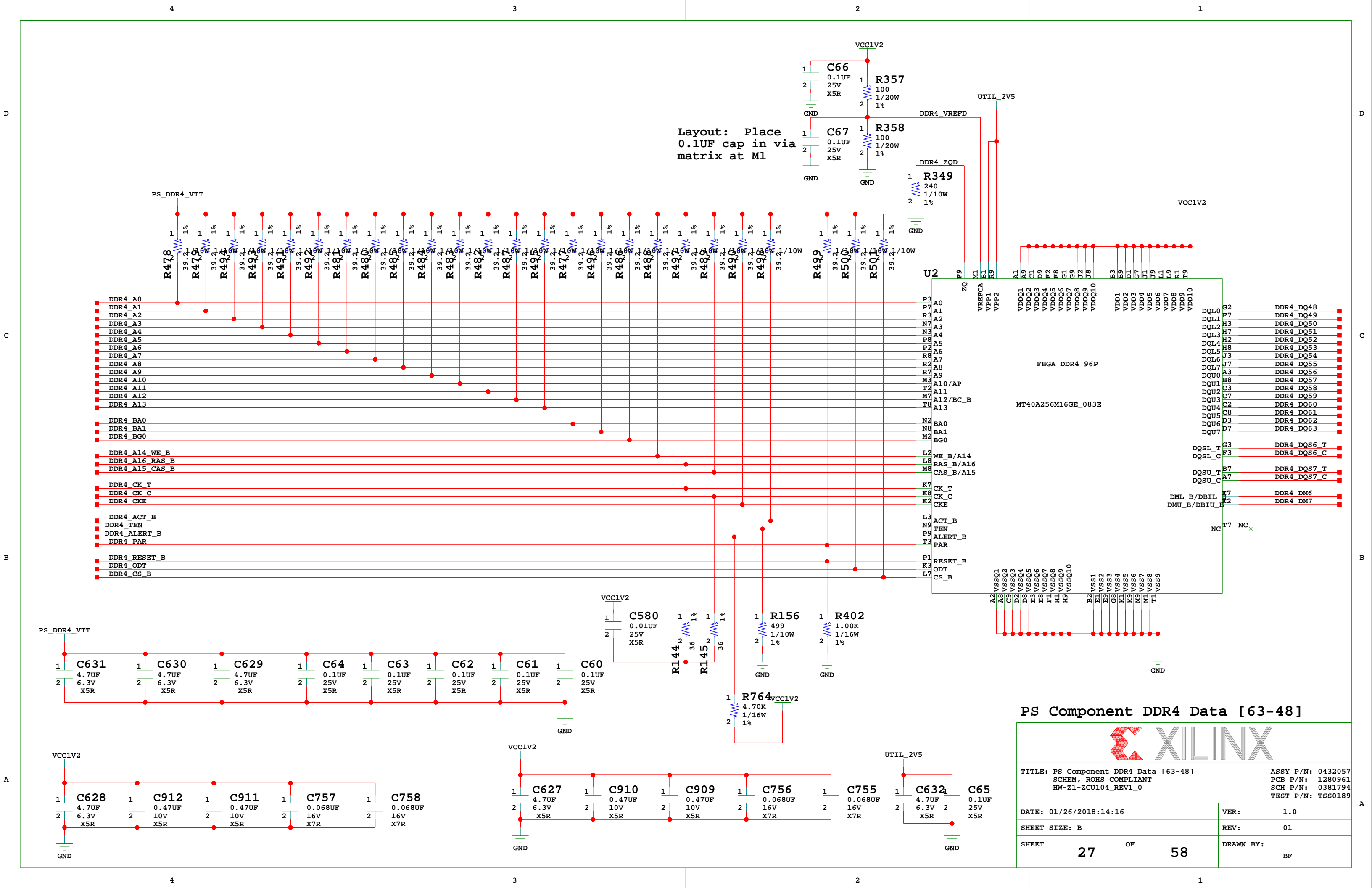
PS Component DDR4 Data [31-16]

TITLE: PS Component DDR4 Data [31-16] SCHEM, ROHS COMPLIANT HW-Z1-ZCU104_REV1_0	
ASSY P/N: 0432057 PCB P/N: 1280961 SCH P/N: 0381794 TEST P/N: TSS0189	
DATE: 01/26/2018:14:17	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 25 OF 58	DRAWN BY: BF



PS Component DDR4 Data [47-32]

TITLE: PS Component DDR4 Data [47-32] SCHEM, ROHS COMPLIANT HW-Z1-ZCU104_REV1_0	
ASSY P/N: 0432057 PCB P/N: 1280961 SCH P/N: 0381794 TEST P/N: TSS0189	
DATE: 01/26/2018:14:17	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 26 OF 58	DRAWN BY: BF



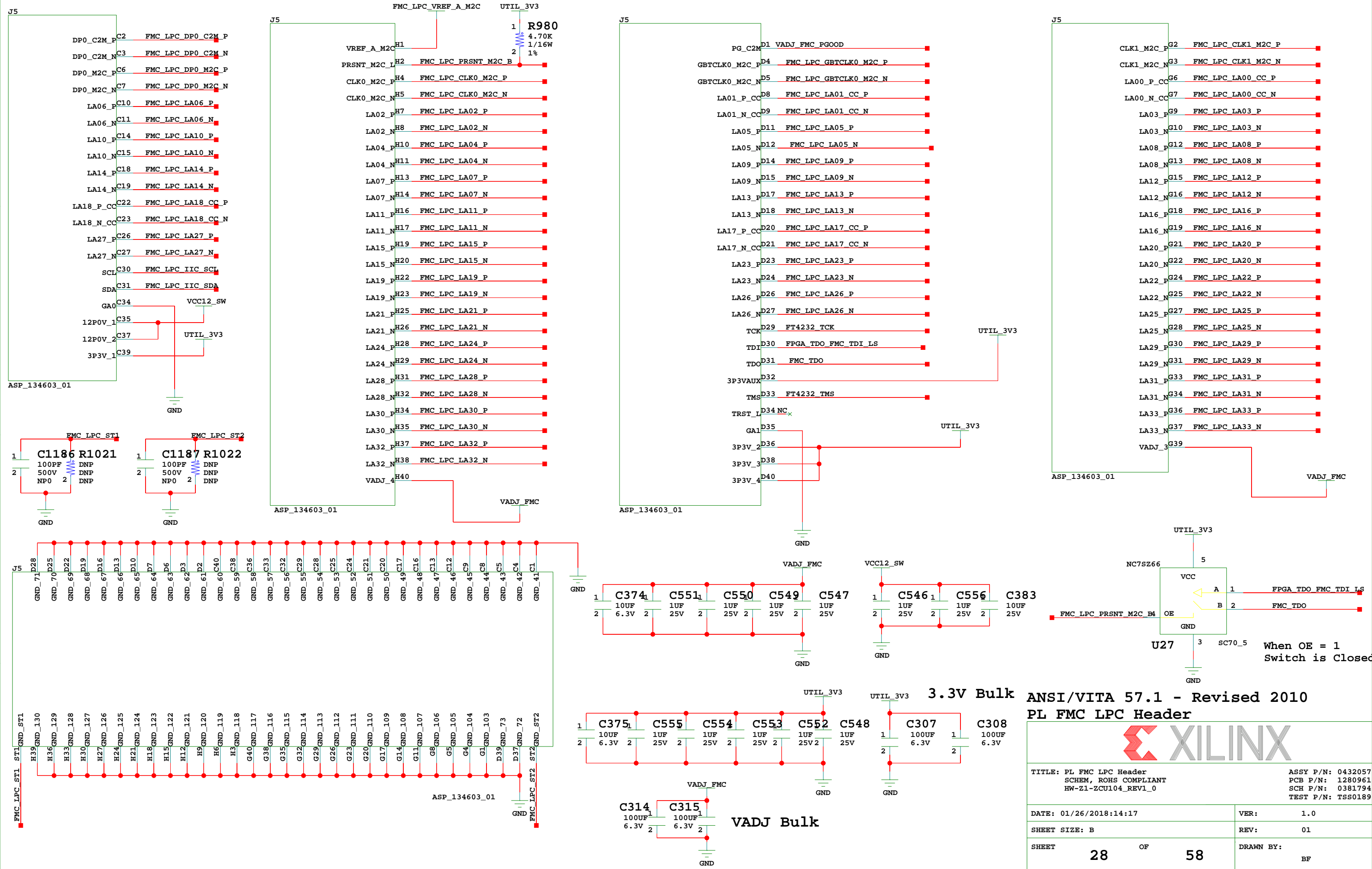
Layout: Place 0.1UF cap in via matrix at M1

PS Component DDR4 Data [63-48]



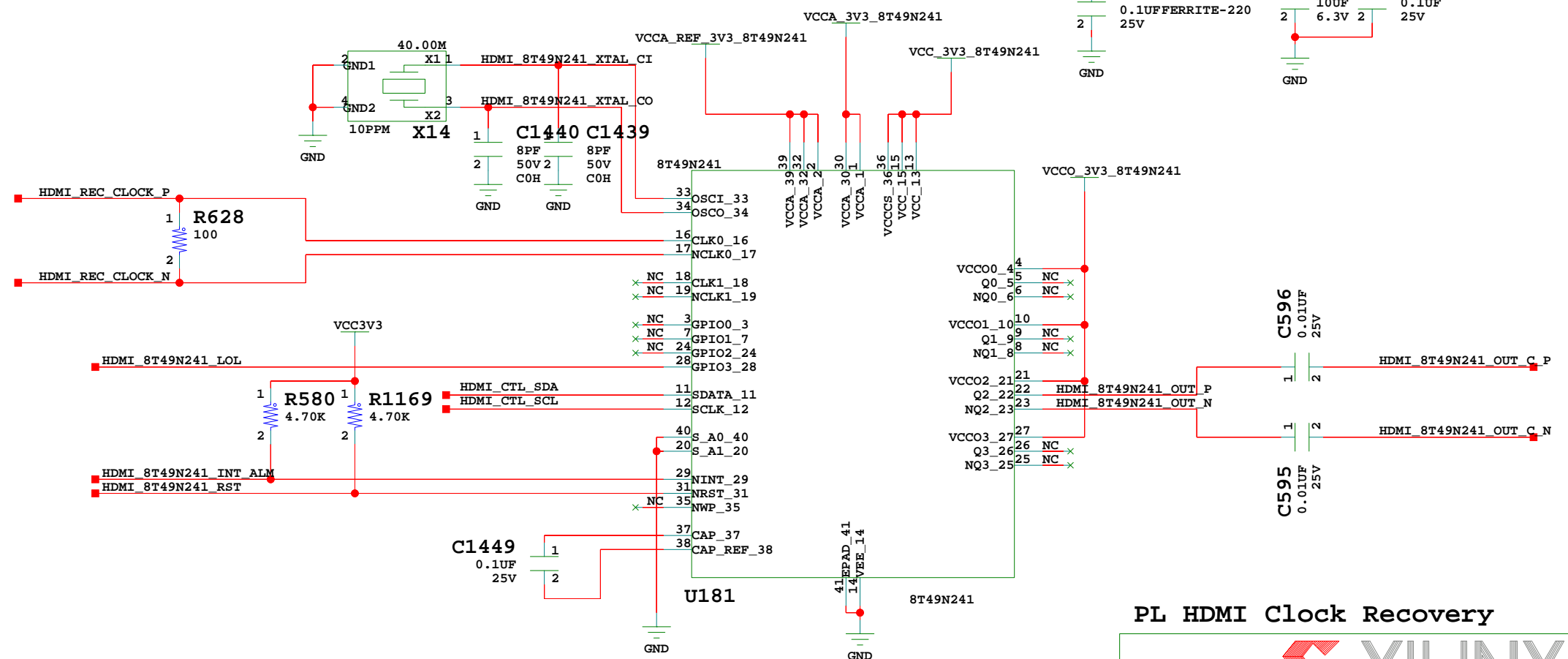
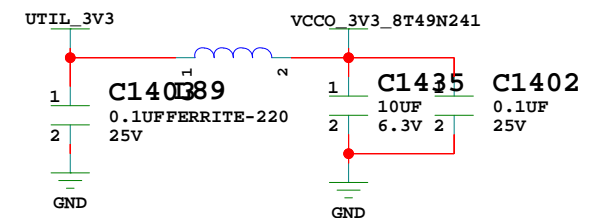
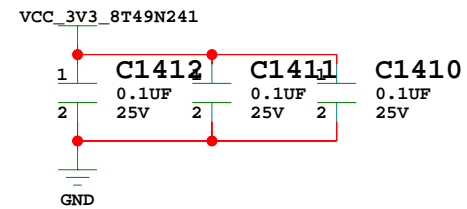
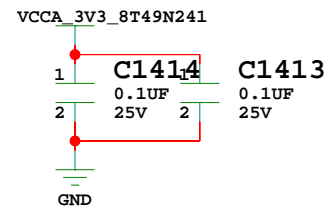
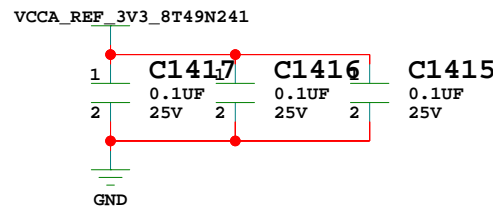
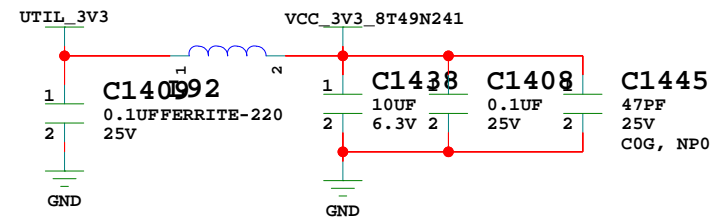
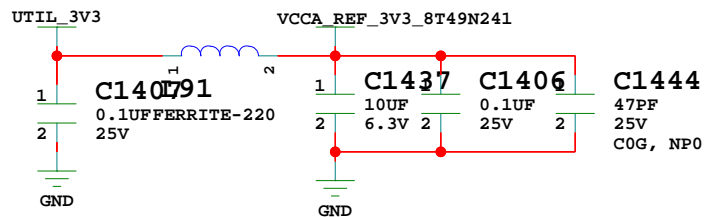
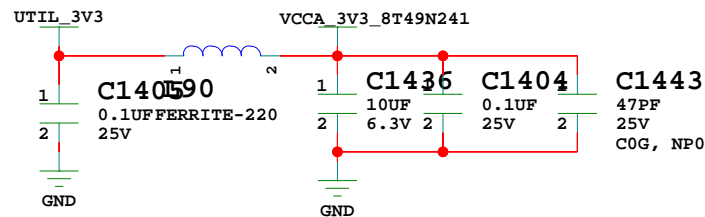
TITLE: PS Component DDR4 Data [63-48] ASSY P/N: 0432057
 SCHEM, ROHS COMPLIANT PCB P/N: 1280961
 HW-Z1-ZCU104_REV1_0 SCH P/N: 0381794
 TEST P/N: TSS0189

DATE: 01/26/2018:14:16	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 27 OF 58	DRAWN BY: BF



**ANSI/VITA 57.1 - Revised 2010
PL FMC LPC Header**

TITLE: PL FMC LPC Header SCHEM, ROHS COMPLIANT HW-Z1-ZCU104_REV1_0		ASSY P/N: 0432057 PCB P/N: 1280961 SCH P/N: 0381794 TEST P/N: TSS0189
DATE: 01/26/2018:14:17	VER: 1.0	
SHEET SIZE: B	REV: 01	
SHEET 28 OF 58	DRAWN BY: BF	



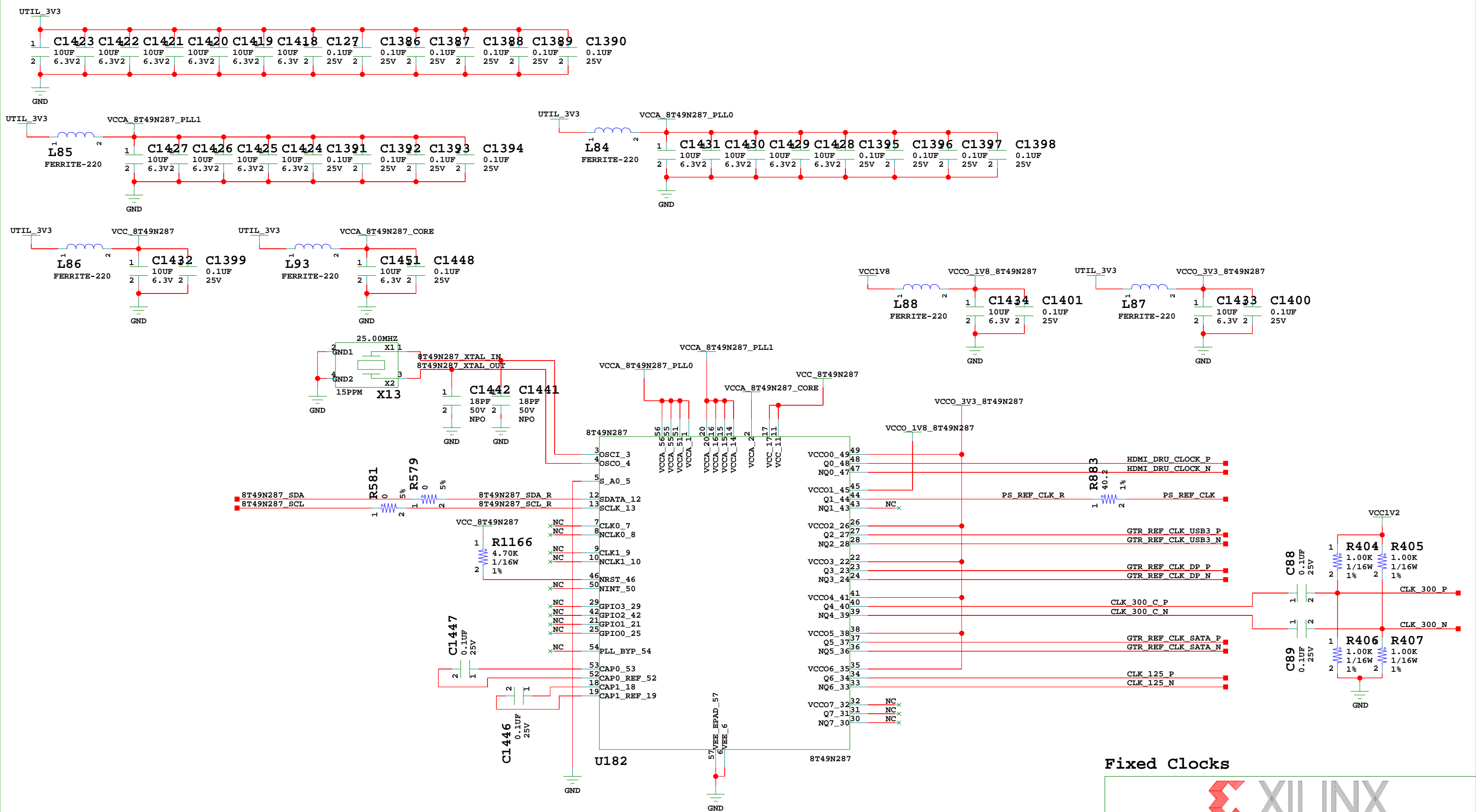
PL HDMI Clock Recovery




TITLE: PL HDMI Clock Recovery
 SCHEM, ROHS COMPLIANT
 HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
 PCB P/N: 1280961
 SCH P/N: 0381794
 TEST P/N: TSS0189

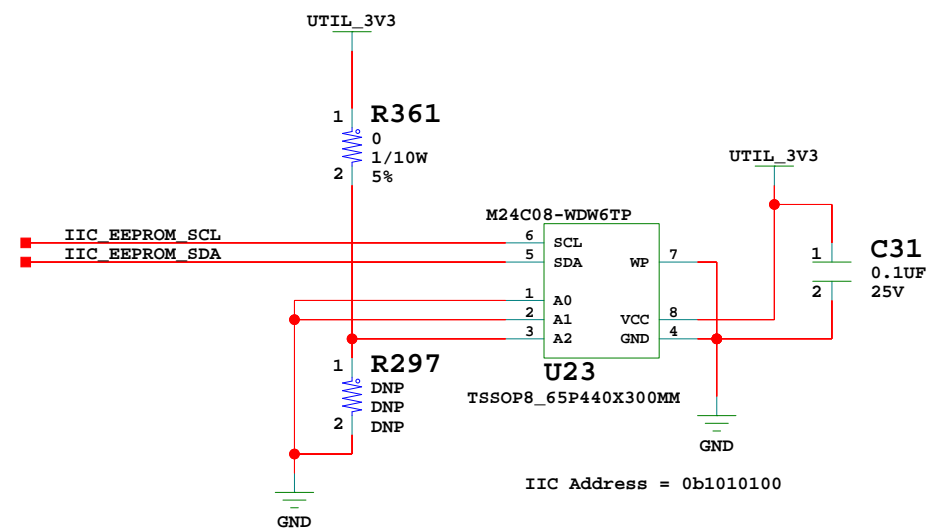
DATE: 01/26/2018:14:21	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 31 OF 58	DRAWN BY: BF



Fixed Clocks



TITLE: Fixed Clocks SCHEM, ROHS COMPLIANT HW-Z1-ZCU104_REV1_0		ASSY P/N: 0432057 PCB P/N: 1280961 SCH P/N: 0381794 TEST P/N: TSS0189	
DATE: 01/26/2018:14:16	VER:	1.0	
SHEET SIZE: B	REV:	01	
SHEET		32	OF 58
	DRAWN BY:	BF	



EEPROM



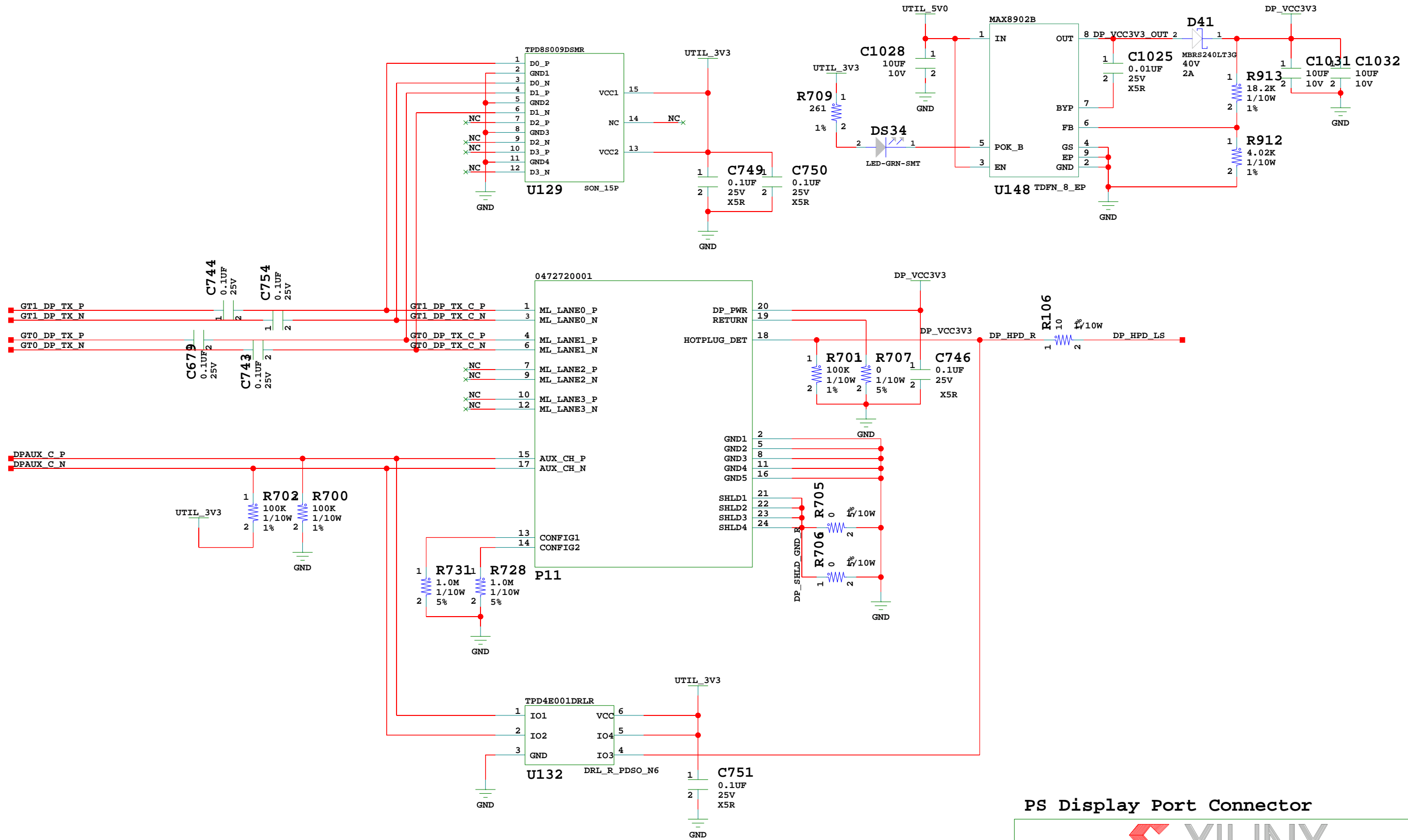
TITLE: EEPROM
SCHEM, ROHS COMPLIANT
HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
PCB P/N: 1280961
SCH P/N: 0381794
TEST P/N: TSS0189

DATE: 01/26/2018:14:16 VER: 1.0

SHEET SIZE: B REV: 01

SHEET 33 OF 58 DRAWN BY: BF



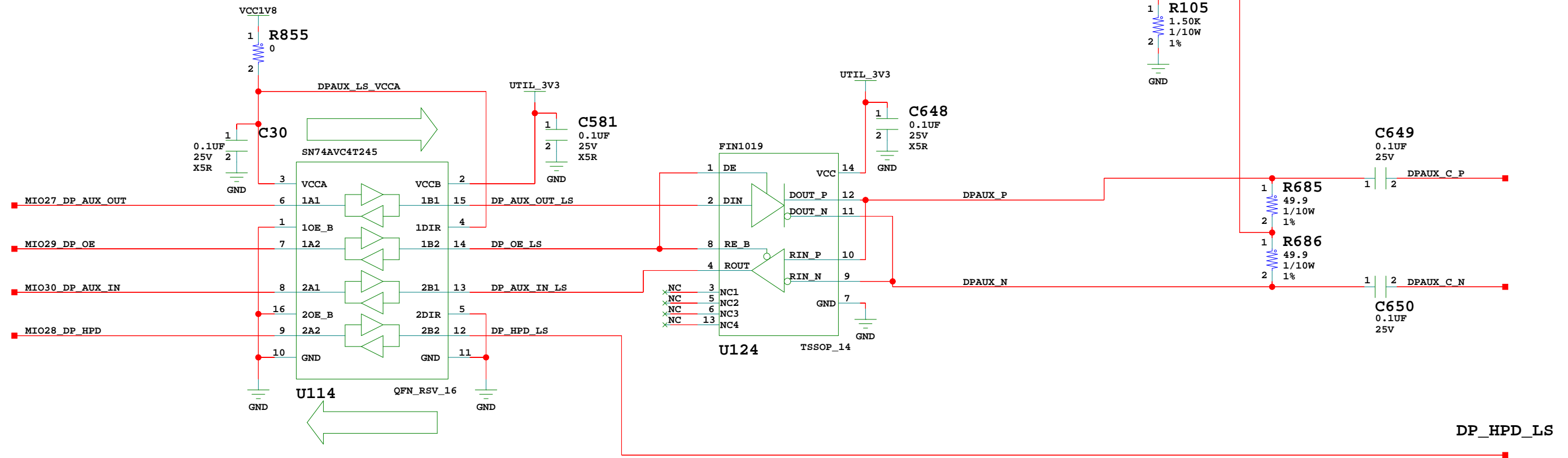
PS Display Port Connector



TITLE: PS Display Port Connector
 SCHEM, ROHS COMPLIANT
 HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
 PCB P/N: 1280961
 SCH P/N: 0381794
 TEST P/N: TSS0189

DATE: 01/26/2018:14:17	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 34 OF 58	DRAWN BY: BF



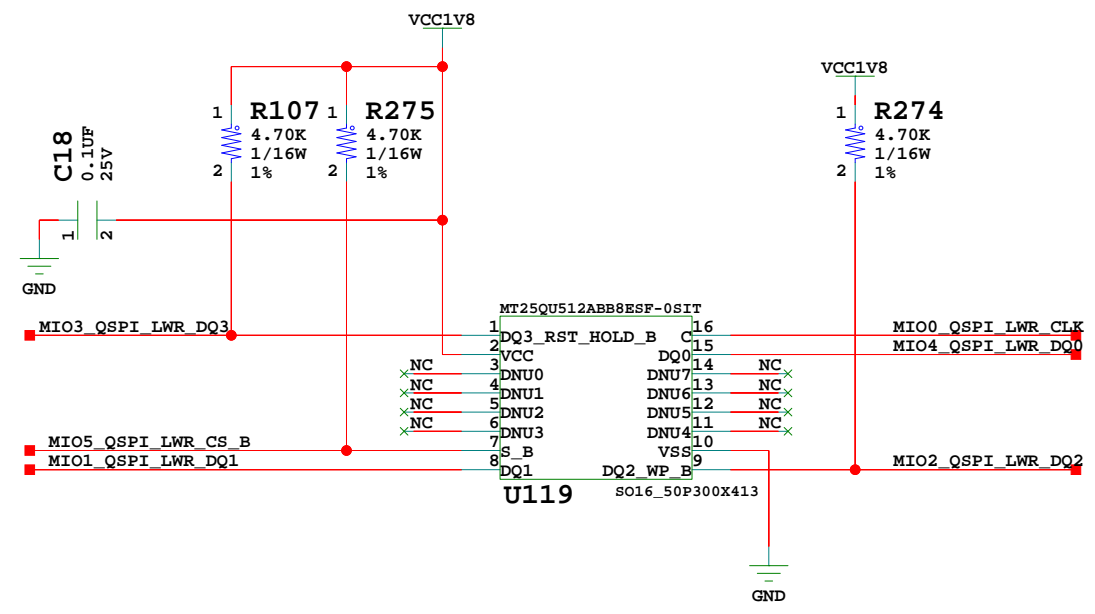
PS Display Port IO



TITLE: PS Display Port IO
 SCHEM, ROHS COMPLIANT
 HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
 PCB P/N: 1280961
 SCH P/N: 0381794
 TEST P/N: TSS0189

DATE: 01/26/2018:14:17	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 35 OF 58	DRAWN BY: BF



PS QSPI

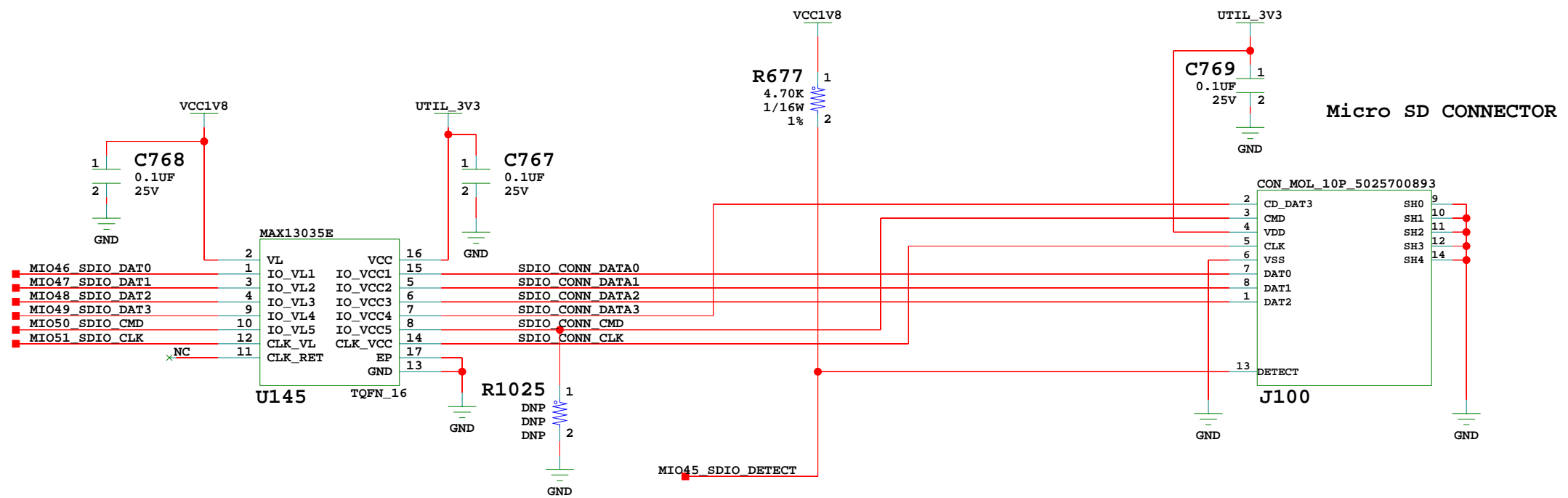


TITLE: PS QSPI SCHEM, ROHS COMPLIANT HW-Z1-ZCU104_REV1_0
 ASSY P/N: 0432057
 PCB P/N: 1280961
 SCH P/N: 0381794
 TEST P/N: TSS0189

DATE: 01/26/2018:14:17 VER: 1.0

SHEET SIZE: B REV: 01

SHEET 36 OF 58 DRAWN BY: BF



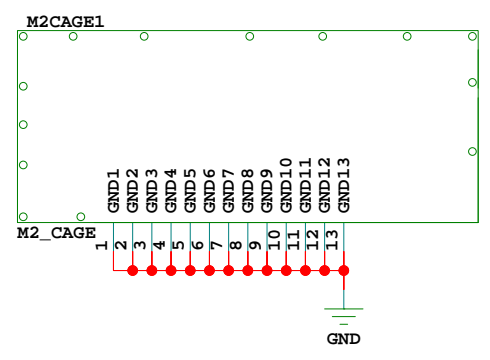
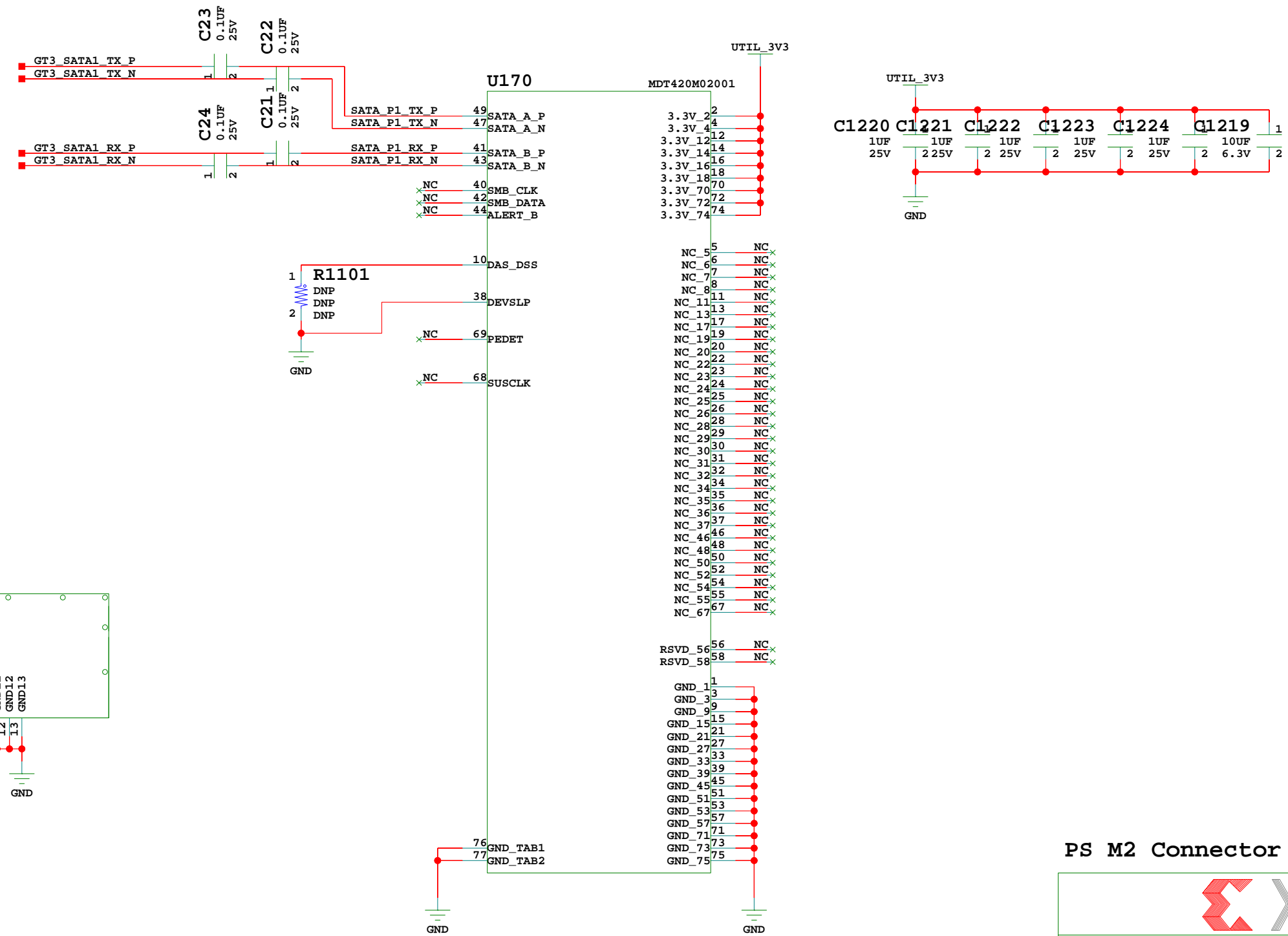
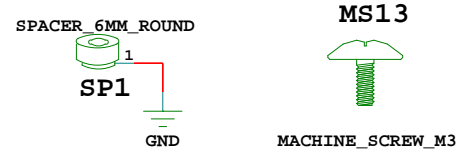
PS SD Card Connector



TITLE: PS SD Card Connector
 SCHEM, ROHS COMPLIANT
 HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
 PCB P/N: 1280961
 SCH P/N: 0381794
 TEST P/N: TSS0189

DATE: 01/26/2018:14:17	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 37 OF 58	DRAWN BY: BF



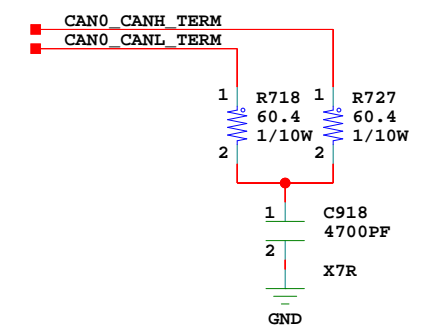
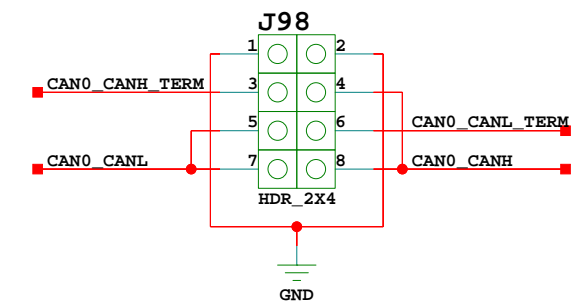
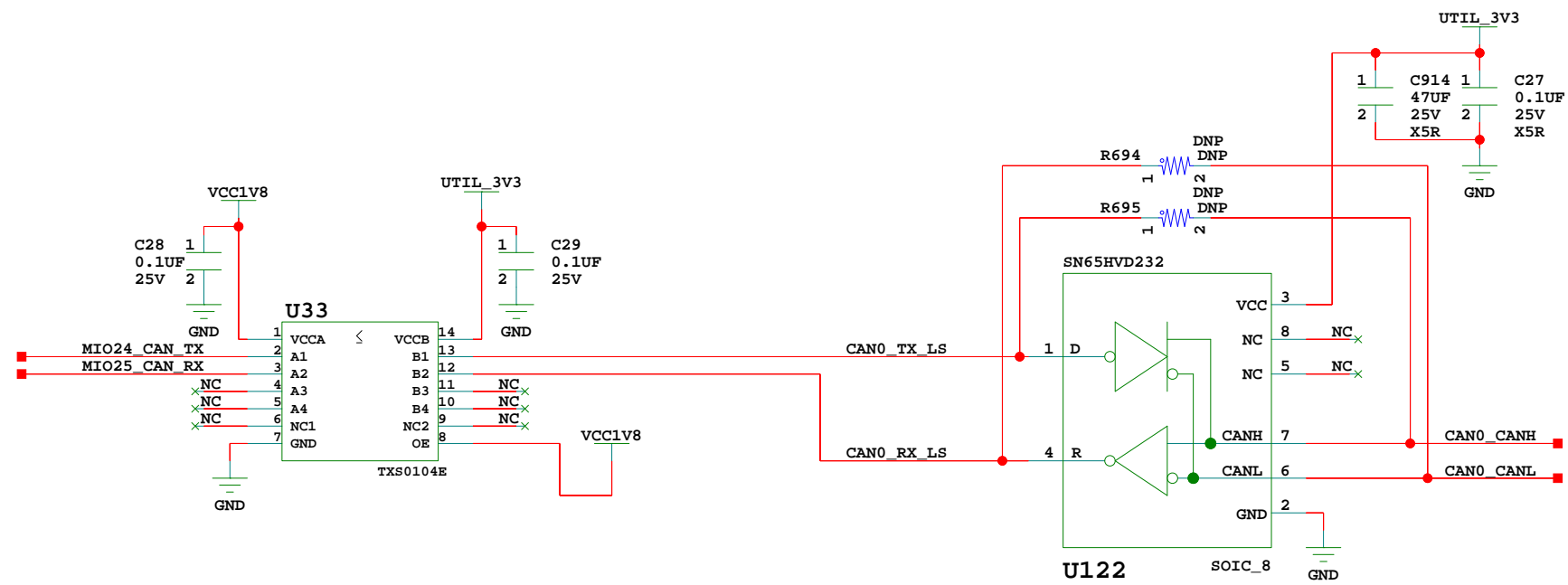
PS M2 Connector



TITLE: PS M2 Connector
 SCHEM, ROHS COMPLIANT
 HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
 PCB P/N: 1280961
 SCH P/N: 0381794
 TEST P/N: TSS0189

DATE: 01/26/2018:14:17	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 38 OF 58	DRAWN BY: BF



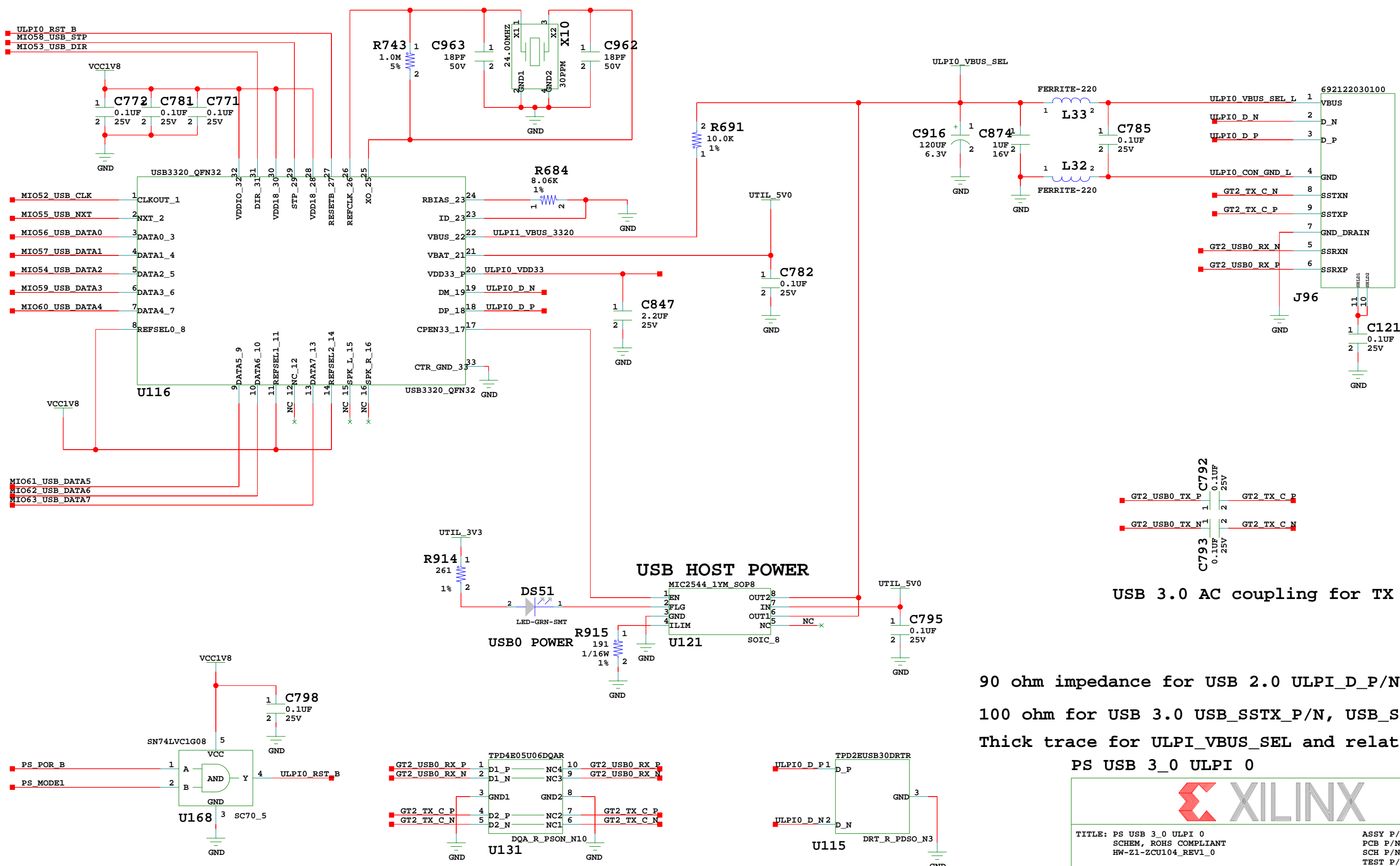
PS CAN Bus



TITLE: PS CAN Bus
 SCHEM, ROHS COMPLIANT
 HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
 PCB P/N: 1280961
 SCH P/N: 0381794
 TEST P/N: TSS0189


DATE: 01/26/2018:14:17	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 39 OF 58	DRAWN BY: BF



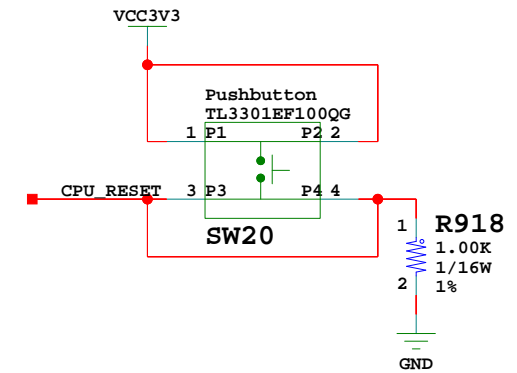
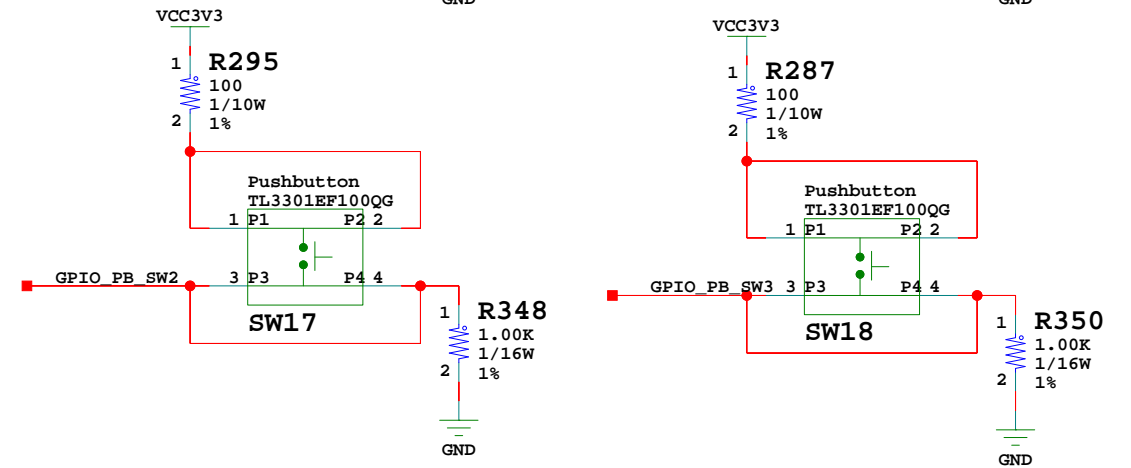
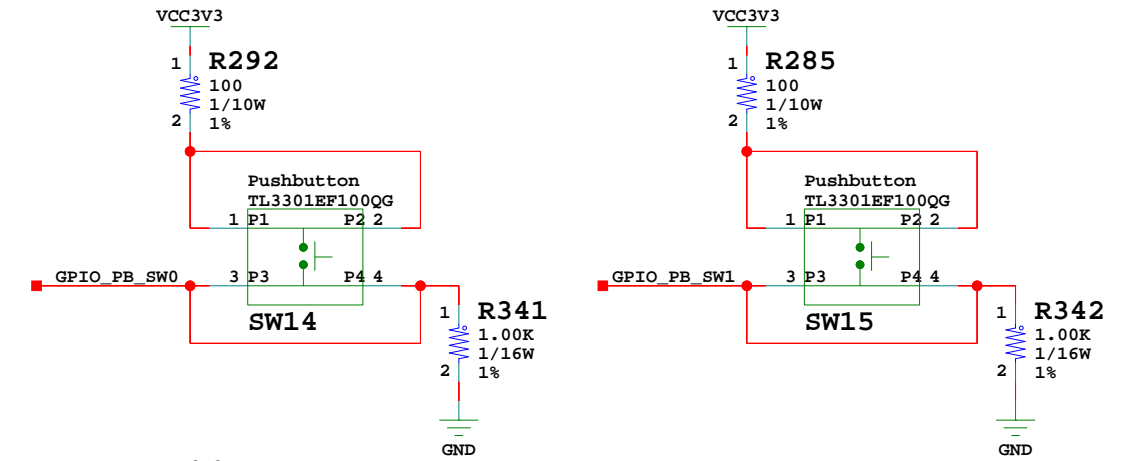
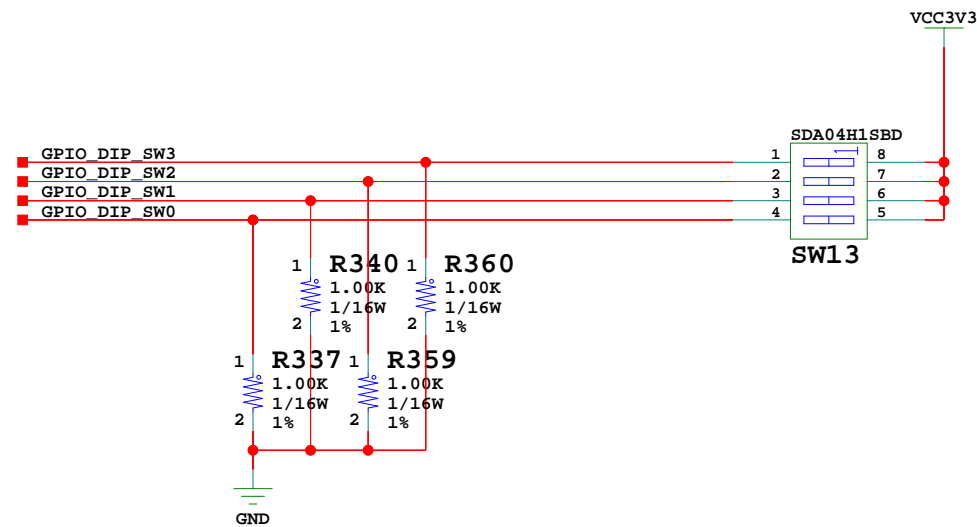
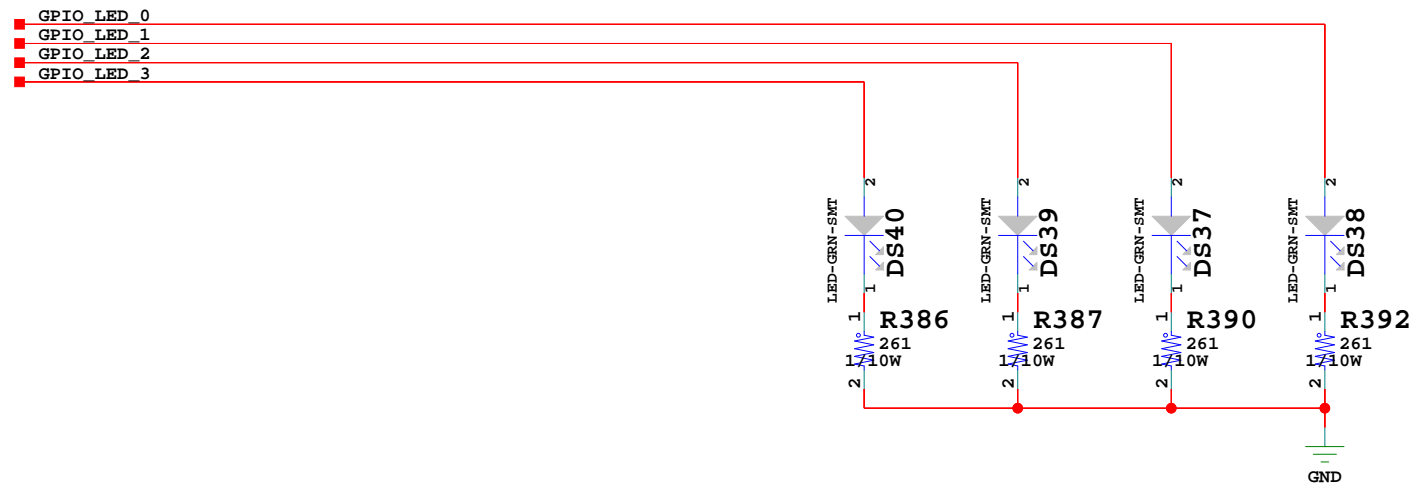
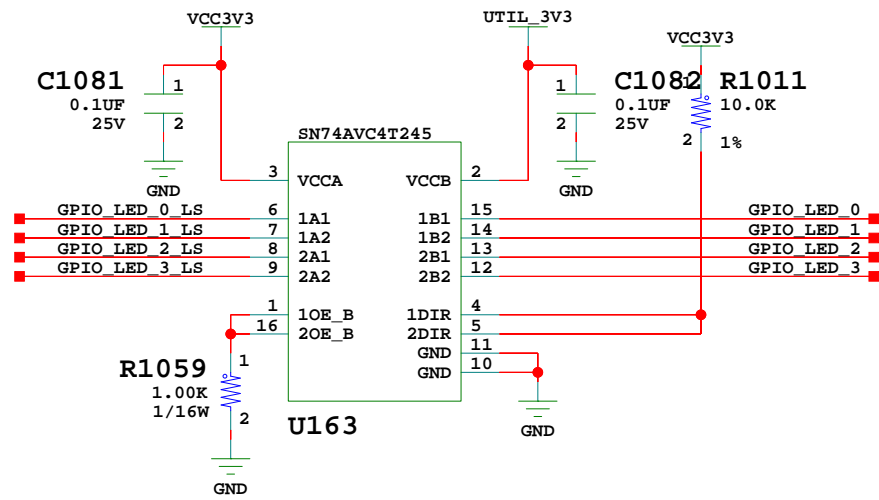
USB 3.0 AC coupling for TX

90 ohm impedance for USB 2.0 ULPI_D_P/N,
 100 ohm for USB 3.0 USB_SSTX_P/N, USB_SSRX_P/N
 Thick trace for ULPI_VBUS_SEL and related nets

PS USB 3_0 ULPI 0



TITLE: PS USB 3_0 ULPI 0 SCHEM, ROHS COMPLIANT HW-Z1-ZCU104_REV1_0		ASSY P/N: 0432057 PCB P/N: 1280961 SCH P/N: 0381794 TEST P/N: TSS0189	
DATE: 01/26/2018:14:17	VER: 1.0		
SHEET SIZE: B	REV: 01		
SHEET 40 OF 58	DRAWN BY: BF		



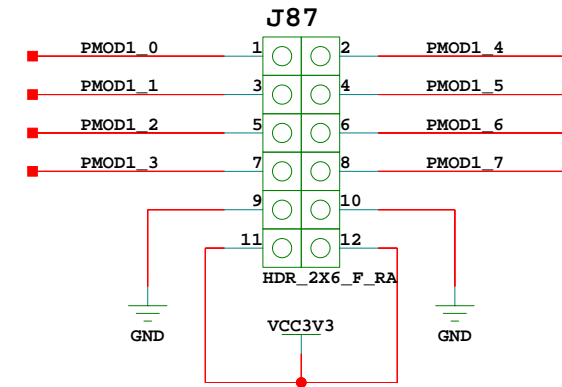
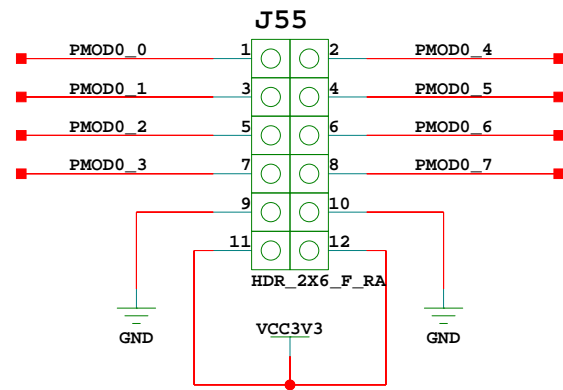
PL Buttons - Switches - LEDs



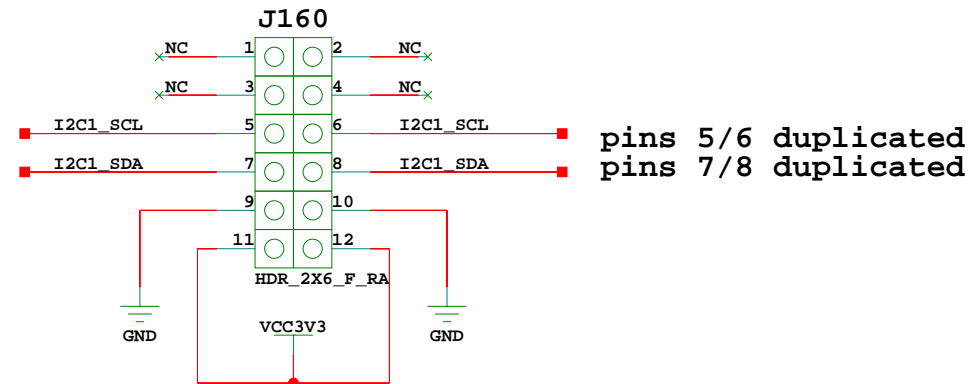
TITLE: PL Buttons - Switches - LEDs
 SCHEM, ROHS COMPLIANT
 HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
 PCB P/N: 1280961
 SCH P/N: 0381794
 TEST P/N: TSS0189

DATE: 01/26/2018:14:17	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 42 OF 58	DRAWN BY: BF

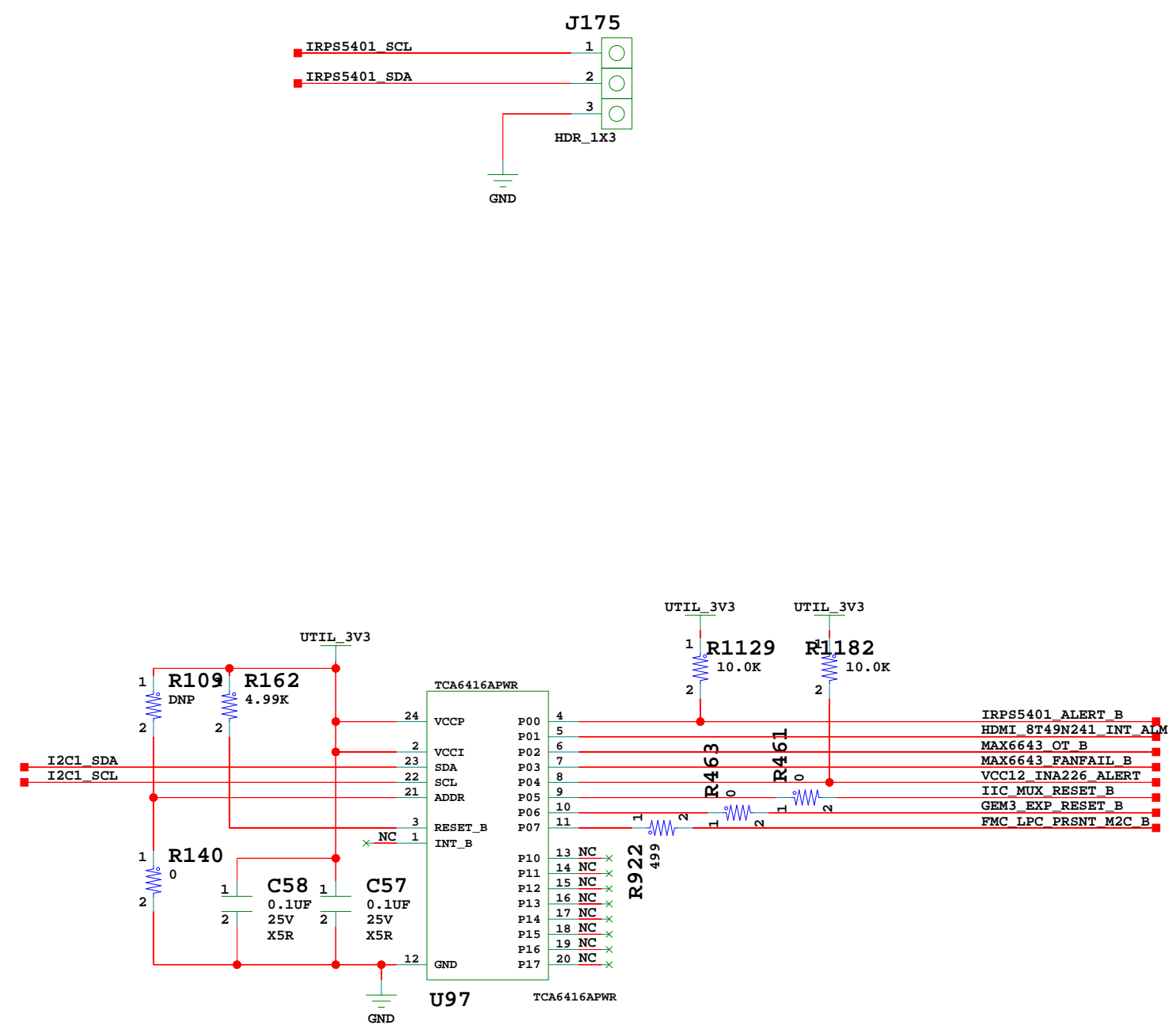


Connects I2C to R.A. Female 2x6 PMOD-style receptacle



PL PMODs

TITLE: PL PMODs SCHEM, ROHS COMPLIANT HW-Z1-ZCU104_REV1_0	
ASSY P/N: 0432057 PCB P/N: 1280961 SCH P/N: 0381794 TEST P/N: TSS0189	
DATE: 01/26/2018:14:17	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 43 OF 58	DRAWN BY: BF



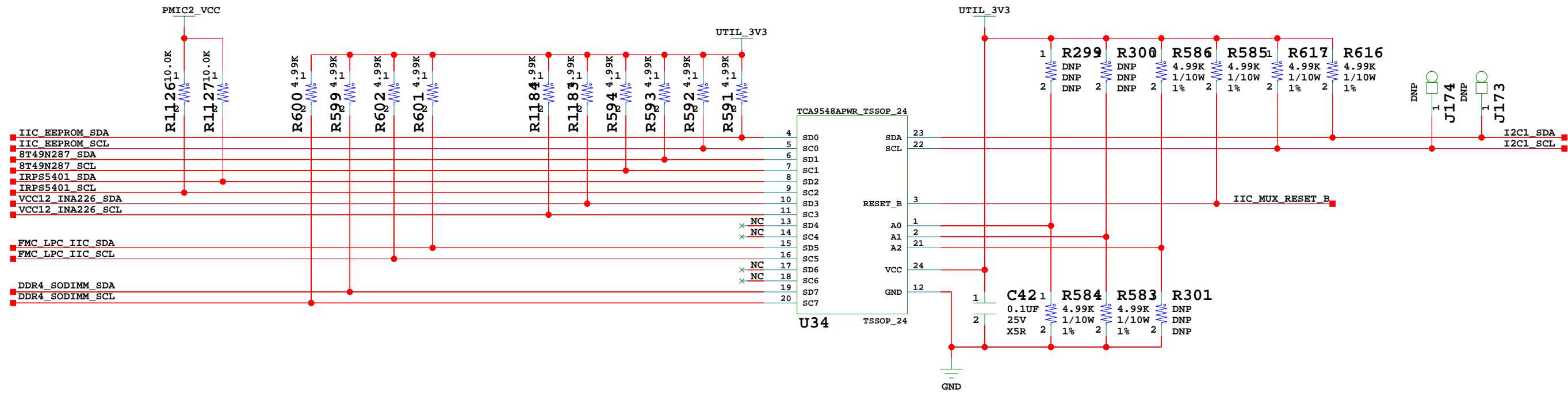
IO Expander PMBUS Header



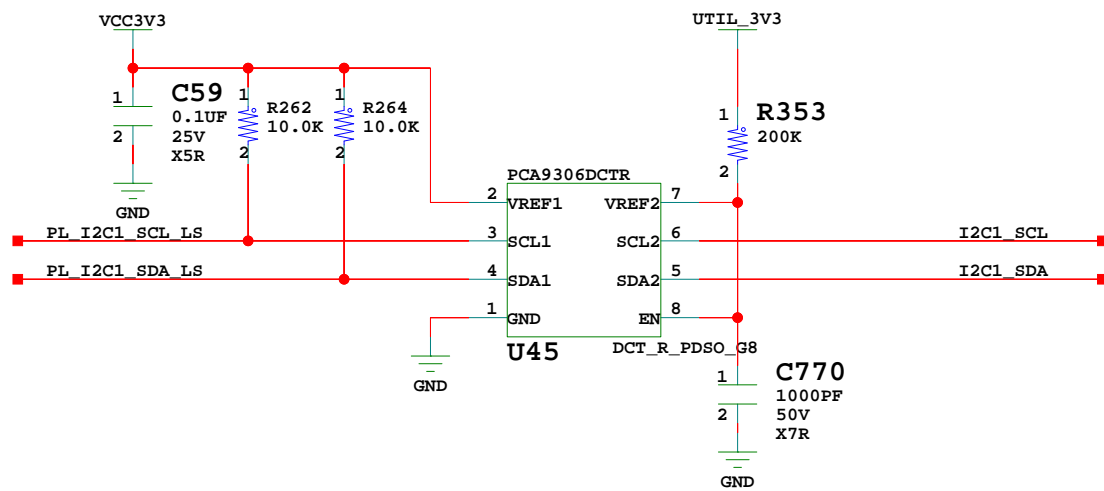
TITLE: IO Expander PMBUS Header
 SCHEM, ROHS COMPLIANT
 HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
 PCB P/N: 1280961
 SCH P/N: 0381794
 TEST P/N: TSS0189

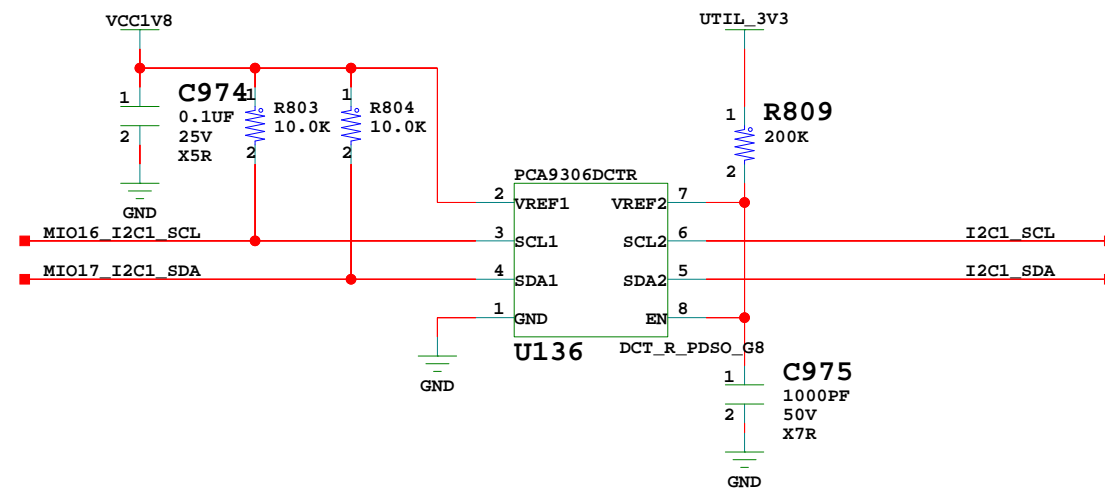
DATE: 01/26/2018:14:16	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 44 OF 58	DRAWN BY: BF



PL I2C Level Shifter (disabled if VREF1 is off)



PS I2C Level Shifter (I2C1)



I2C1 MUX and Level Shifters

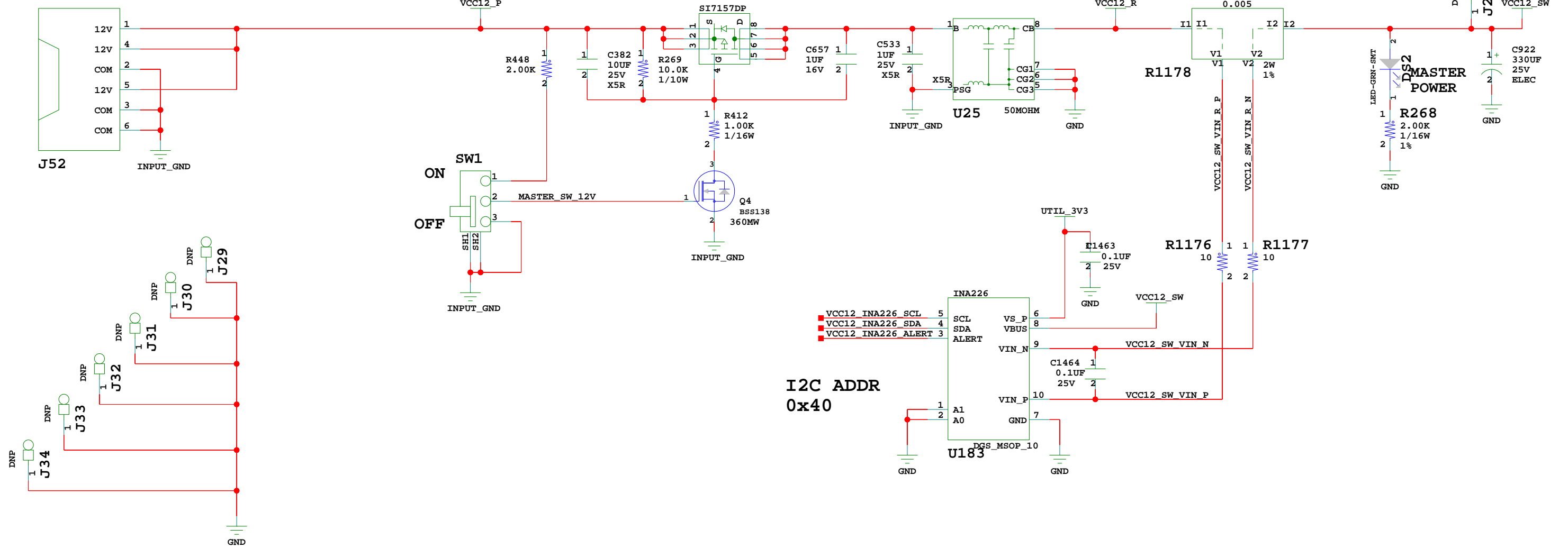


TITLE: I2C1 MUX and Level Shifters
 SCHEM, ROHS COMPLIANT
 HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
 PCB P/N: 1280961
 SCH P/N: 0381794
 TEST P/N: TSS0189

DATE: 01/26/2018:14:16	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 45 OF 58	DRAWN BY: BF

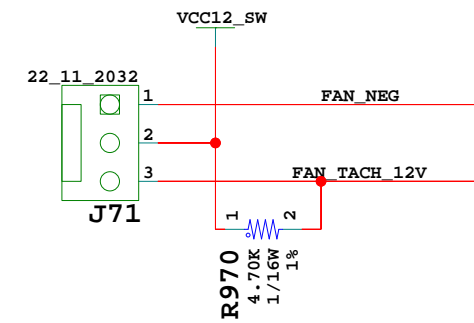
6-PIN MINI-FIT
AC ADAPTER (BRICK)



GND Test points

I2C ADDR
0x40

Keyed Fan Header



12V Power Connectors Switch



TITLE: 12V Power Connectors Switch
SCHEM, ROHS COMPLIANT
HW-Z1-ZCU104_REV1_0

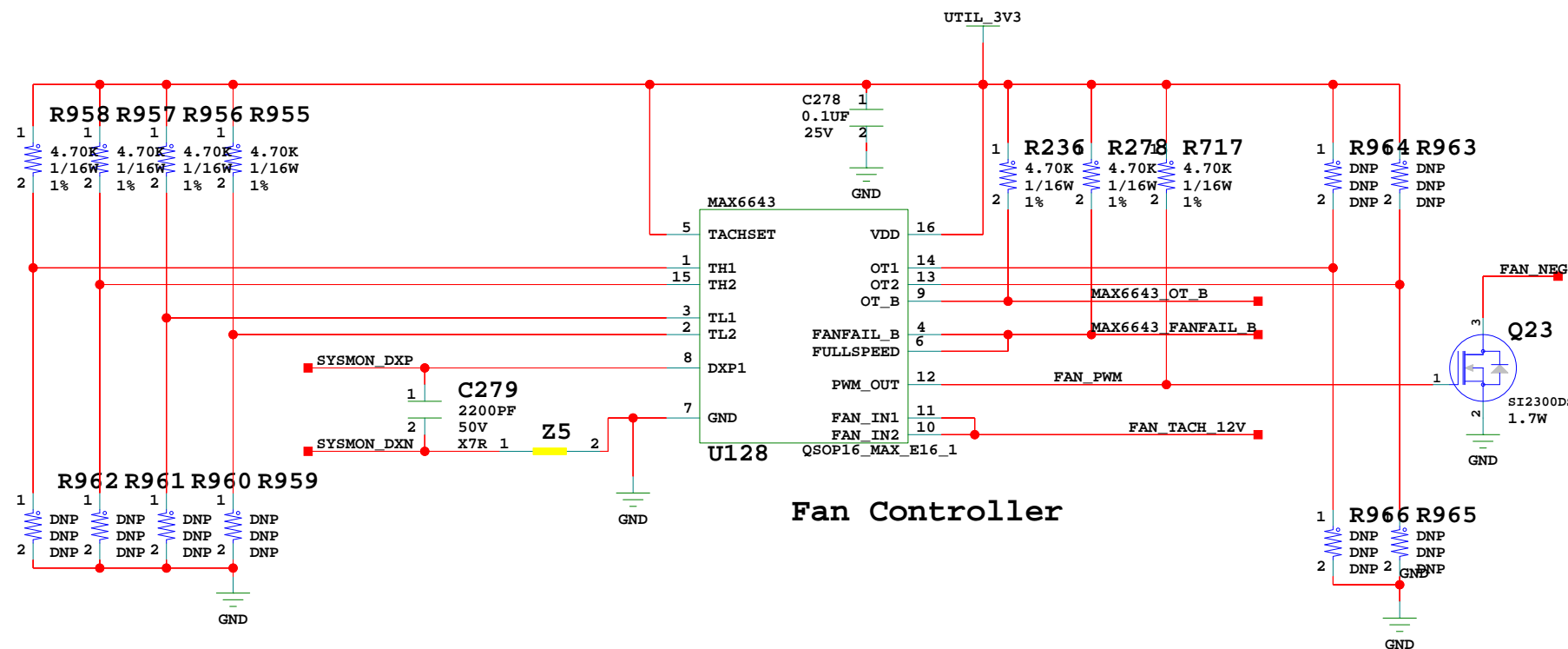
ASSY P/N: 0432057
PCB P/N: 1280961
SCH P/N: 0381794
TEST P/N: TSS0189

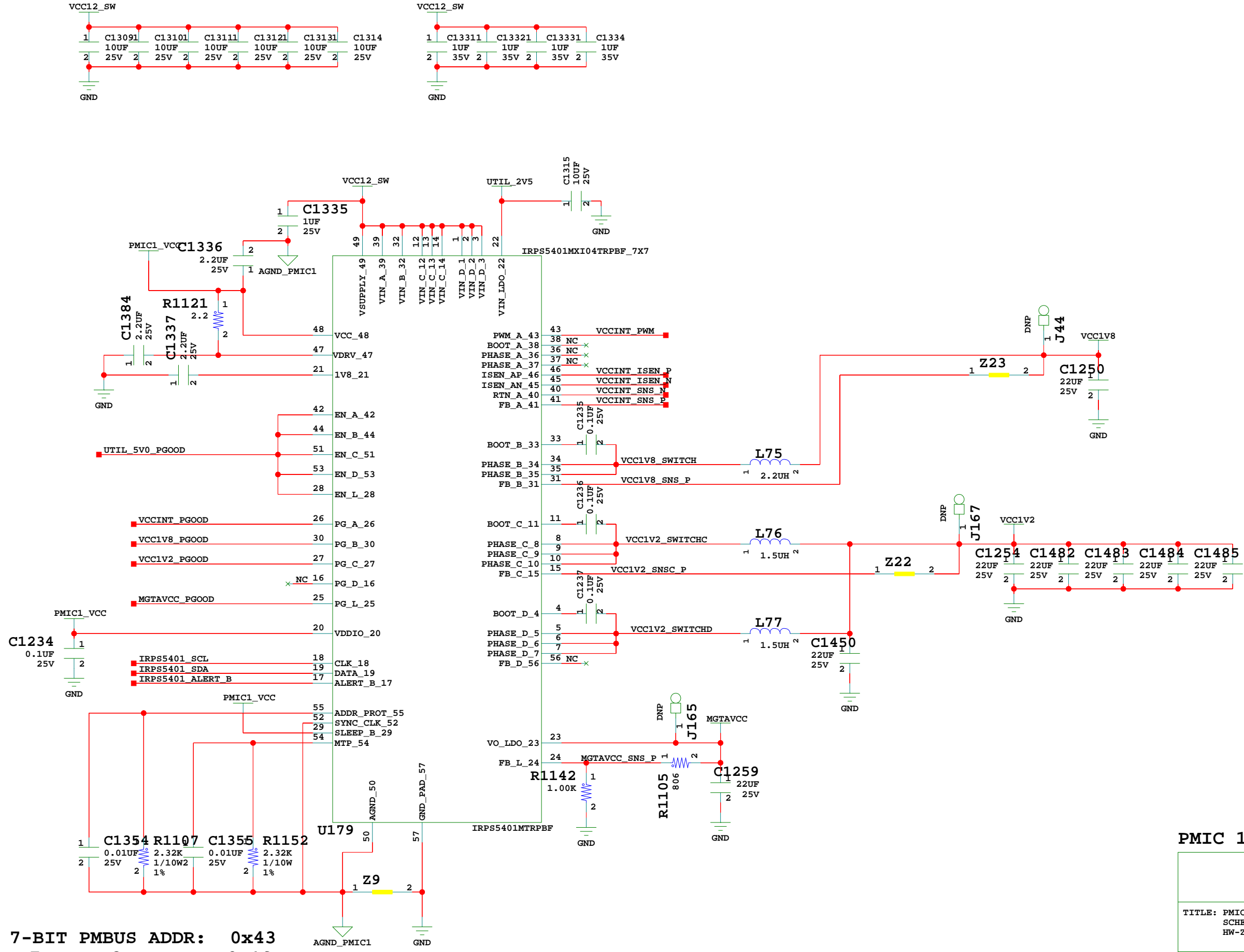
DATE: 01/26/2018:14:16 VER: 1.0

SHEET SIZE: B REV: 01

SHEET 46 OF 58 DRAWN BY: BF

Fan Controller

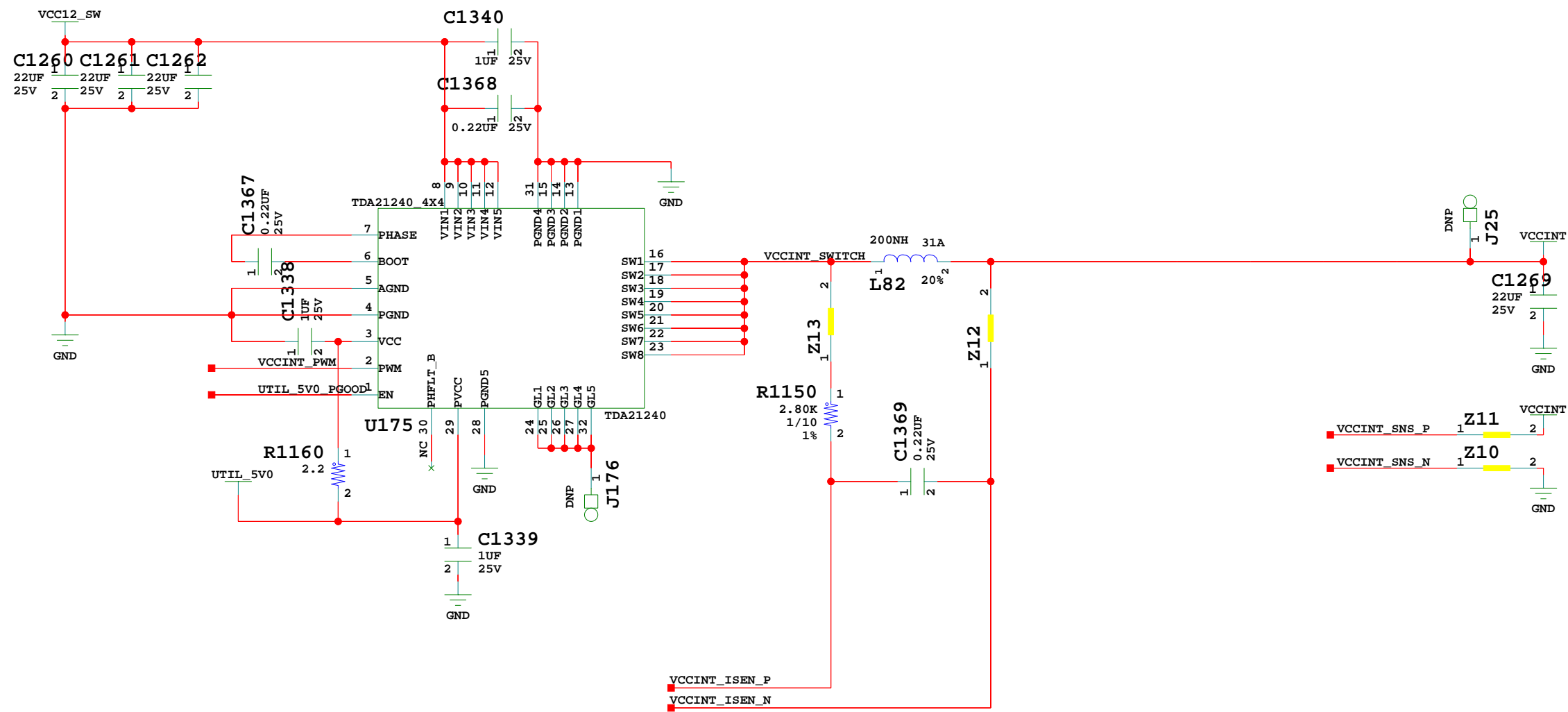





7-BIT PMBUS ADDR: 0x43
 7-BIT I2C ADDR: 0x13

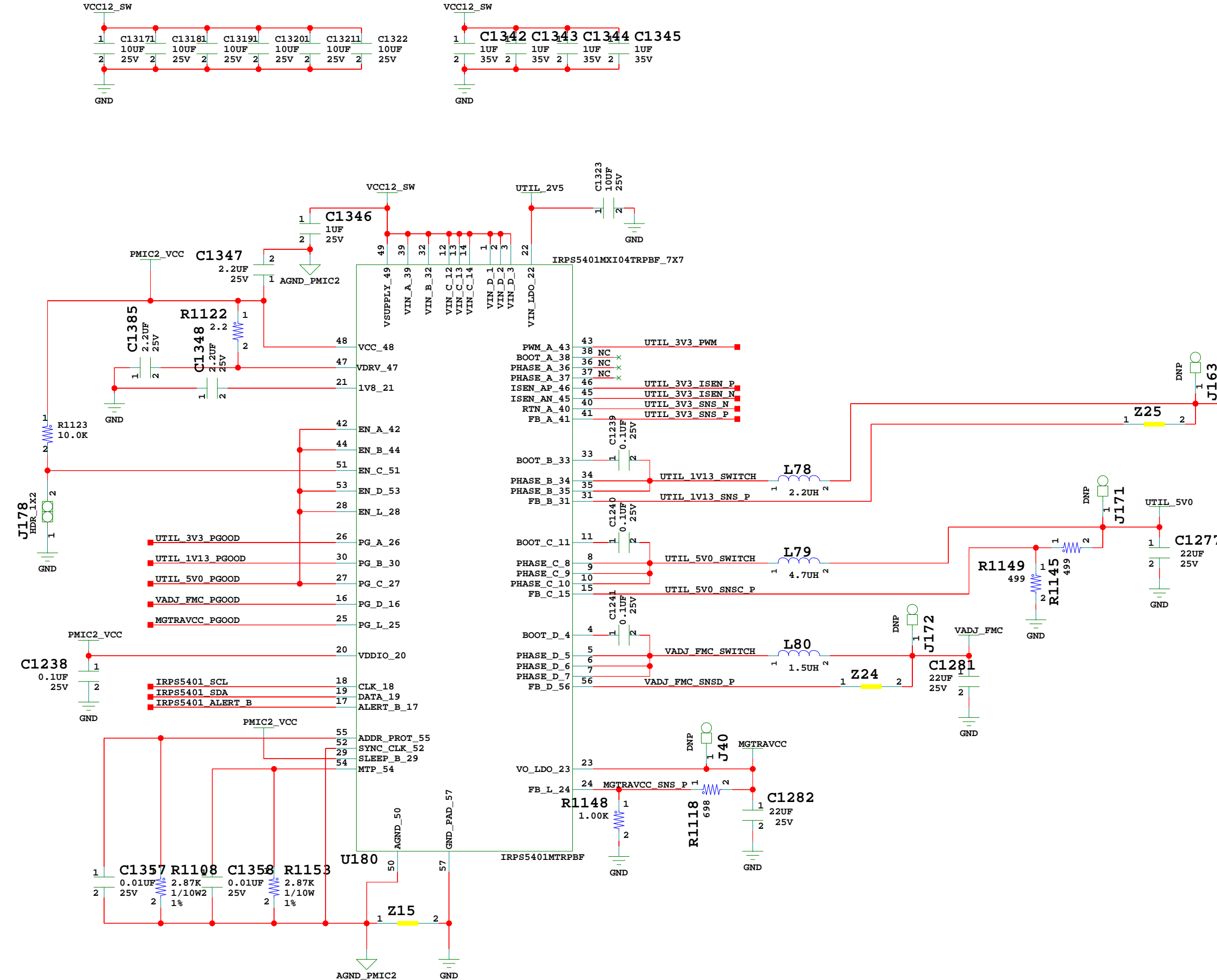
PMIC 1

TITLE: PMIC 1 SCHEM, ROHS COMPLIANT HW-Z1-ZCU104_REV1_0	
ASSY P/N: 0432057 PCB P/N: 1280961 SCH P/N: 0381794 TEST P/N: TSS0189	
DATE: 01/26/2018:14:19	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 47 OF 58	DRAWN BY: BF



PMIC 1 Power Stage

	
TITLE: PMIC 1 Power Stage SCHEM, ROHS COMPLIANT HW-Z1-ZCU104_REV1_0	
ASSY P/N: 0432057 PCB P/N: 1280961 SCH P/N: 0381794 TEST P/N: TSS0189	
DATE: 01/26/2018:14:16	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 48 OF 58	DRAWN BY: BF



PMIC 2

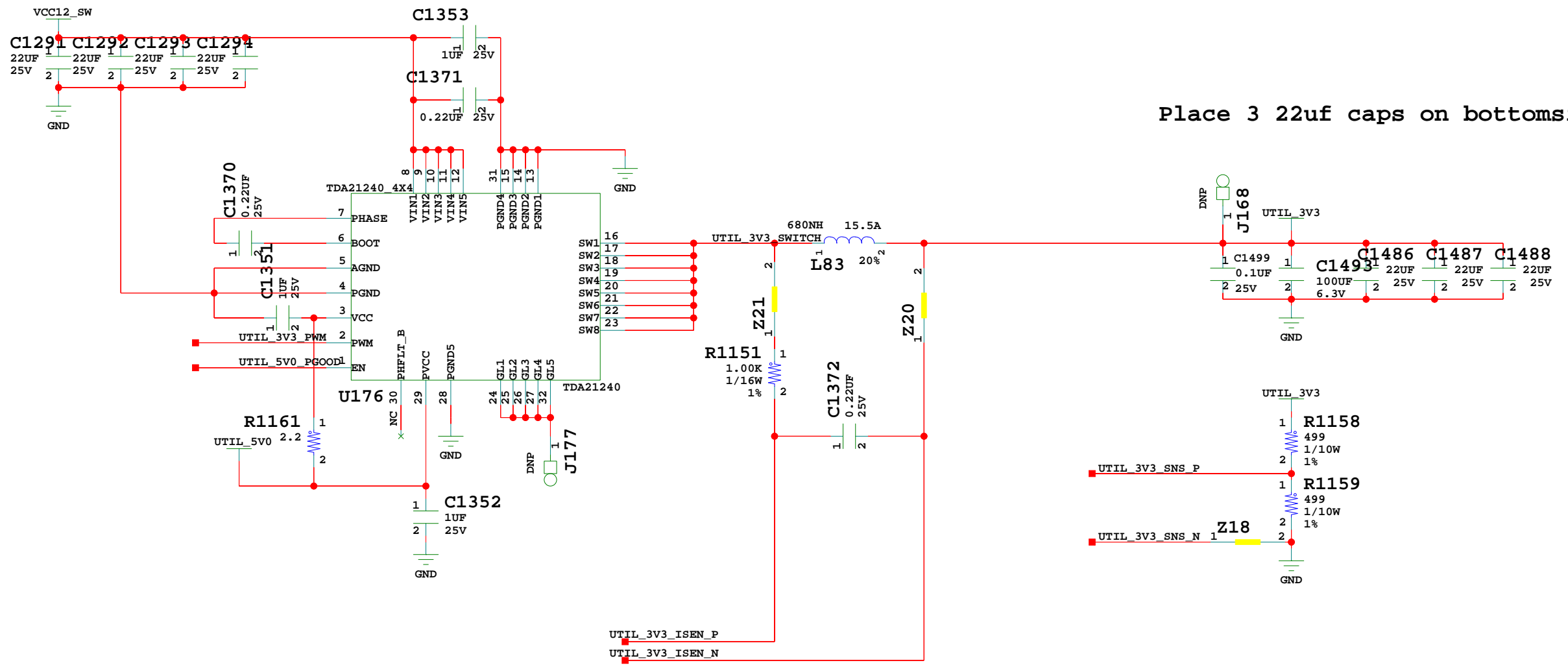


TITLE: PMIC 2
 SCHEM, ROHS COMPLIANT
 HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
 PCB P/N: 1280961
 SCH P/N: 0381794
 TEST P/N: TSS0189

7-BIT PMBUS ADDR: 0x44
 I2C ADDR: 0x14

DATE: 01/26/2018:14:16	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 49 OF 58	DRAWN BY: BF



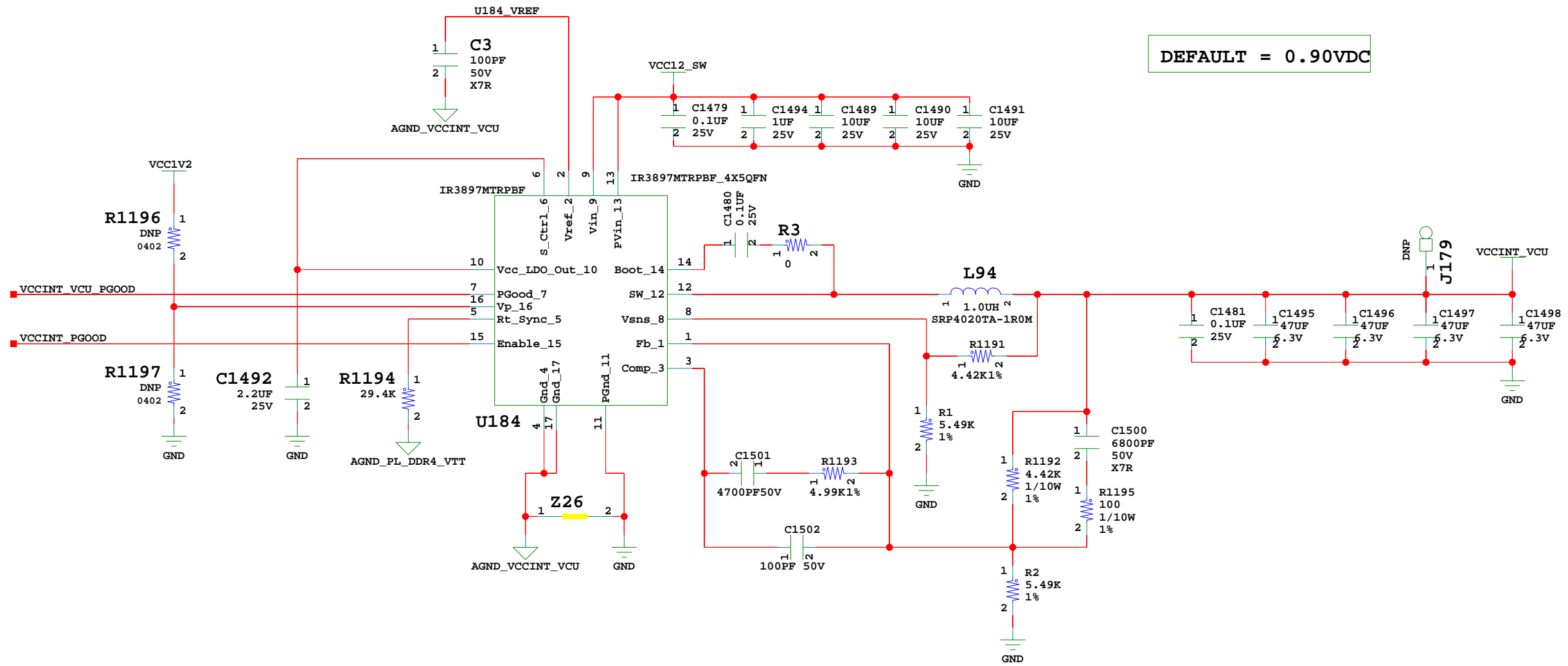
Place 3 22uf caps on bottomside

PMIC 2 Power Stage



TITLE: PMIC 2 Power Stage
 SCHEM, ROHS COMPLIANT
 HW-Z1-ZCU104_REV1_0
 ASSY P/N: 0432057
 PCB P/N: 1280961
 SCH P/N: 0381794
 TEST P/N: TSS0189

DATE: 01/26/2018:14:17	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 50 OF 58	DRAWN BY: BF



DEFAULT = 0.90VDC

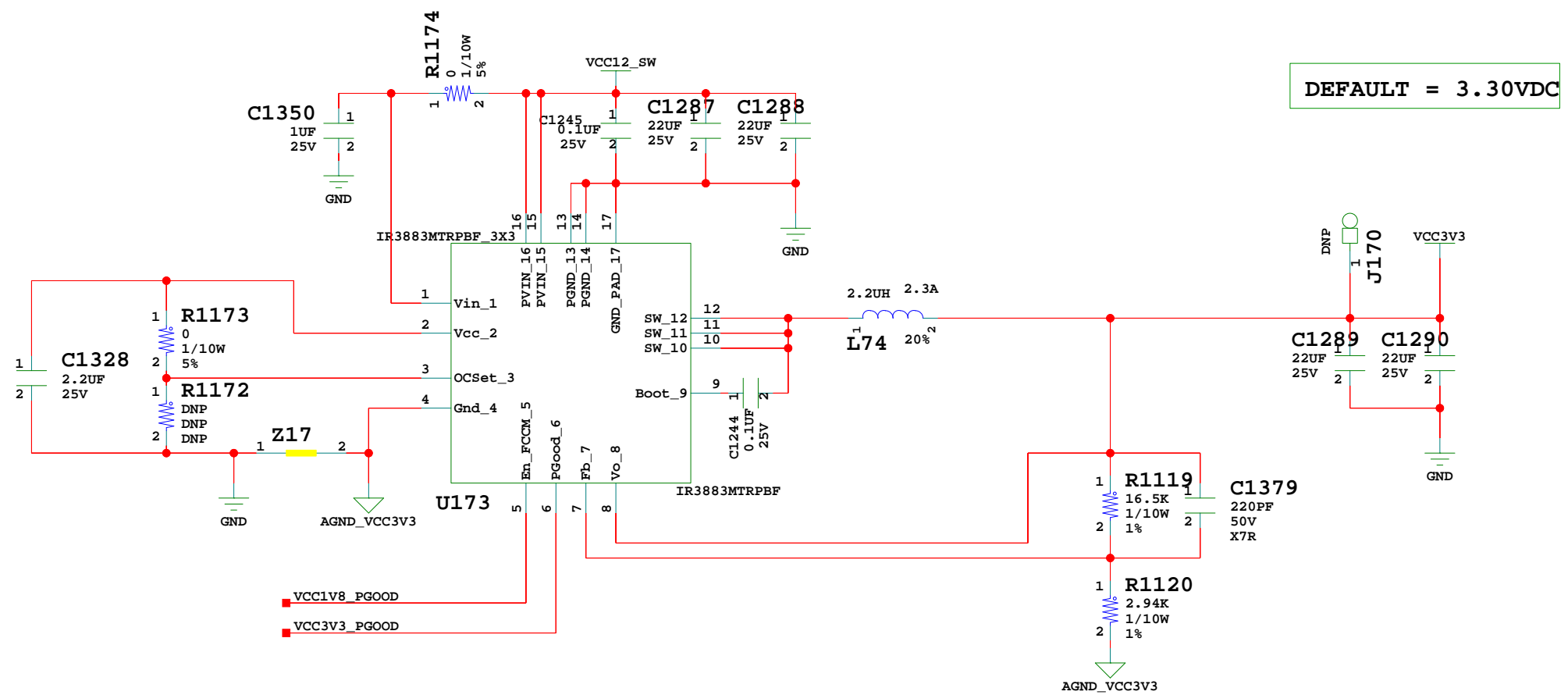
DN update 8-11-17 per Rick L
VCCINT_VCU 3A Regulator



TITLE: VCCINT_VCU 3A Regulator
SCHEM, ROHS COMPLIANT
HW-Z1-ZCU104_REV1_0
ASSY P/N: 0432057
PCB P/N: 1280961
SCH P/N: 0381794
TEST P/N: TSS0189

DATE: 01/26/2018:14:17	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 51 OF 58	DRAWN BY: BF

These VALUES need to change for 0.9V
and voltage sense line needs to be identified



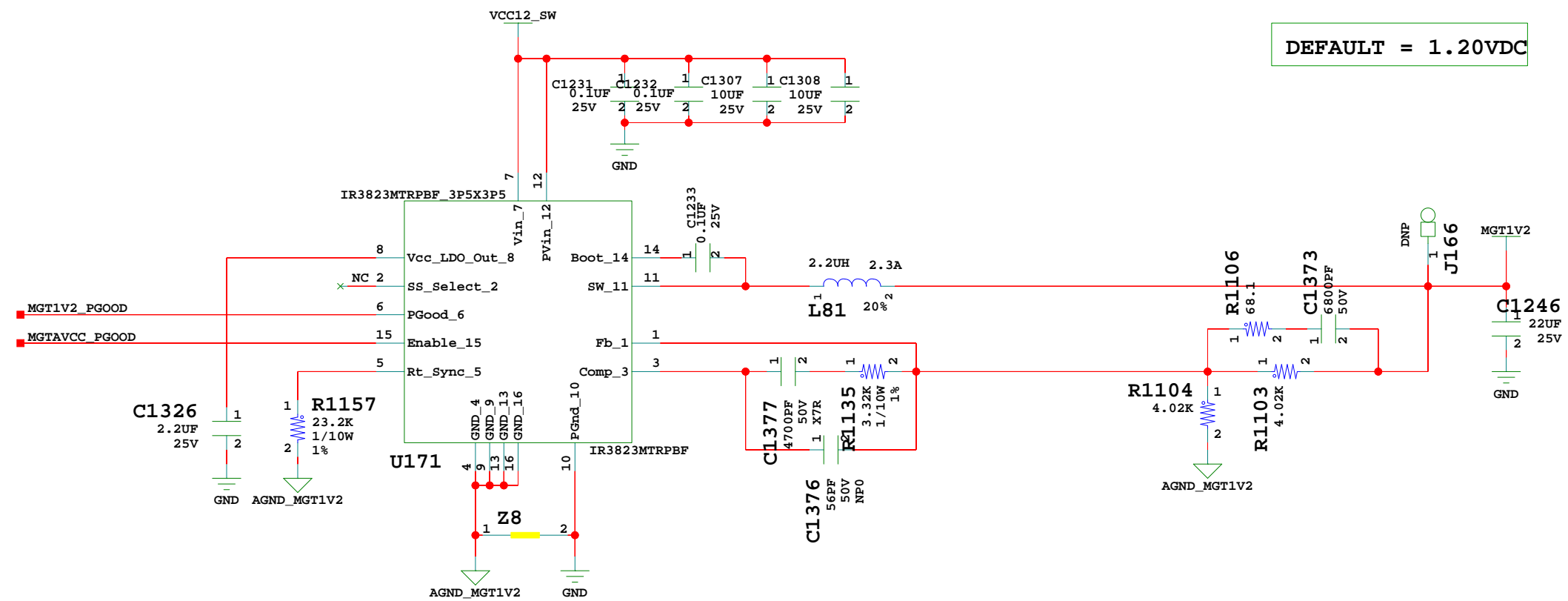
VCC3V3 500mA Regulator



TITLE: VCC3V3 500mA Regulator
 SCHEM, ROHS COMPLIANT
 HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
 PCB P/N: 1280961
 SCH P/N: 0381794
 TEST P/N: TSS0189

DATE: 01/26/2018:14:17	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 52 OF 58	DRAWN BY: BF



DEFAULT = 1.20VDC

MGT1V2 1A Regulator

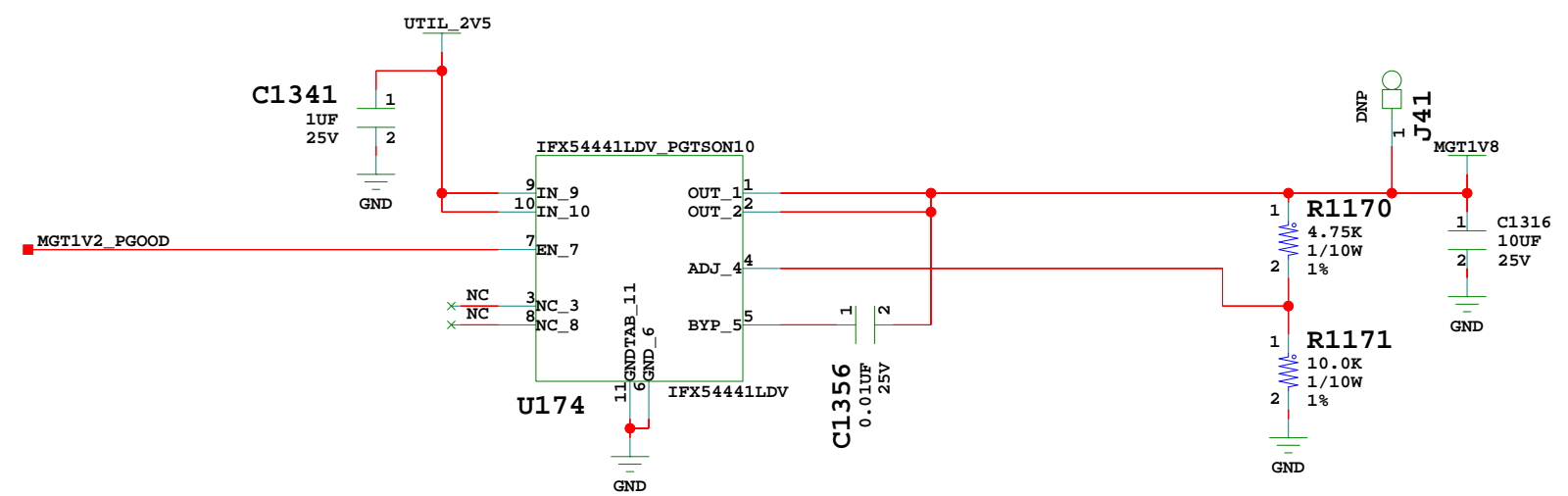


TITLE: MGT1V2 1A Regulator
 SCHEM, ROHS COMPLIANT
 HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
 PCB P/N: 1280961
 SCH P/N: 0381794
 TEST P/N: TSS0189

DATE: 01/26/2018:14:16	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 53 OF 58	DRAWN BY: BF

DEFAULT = 1.81VDC



MGT1V8 100mA Regulator

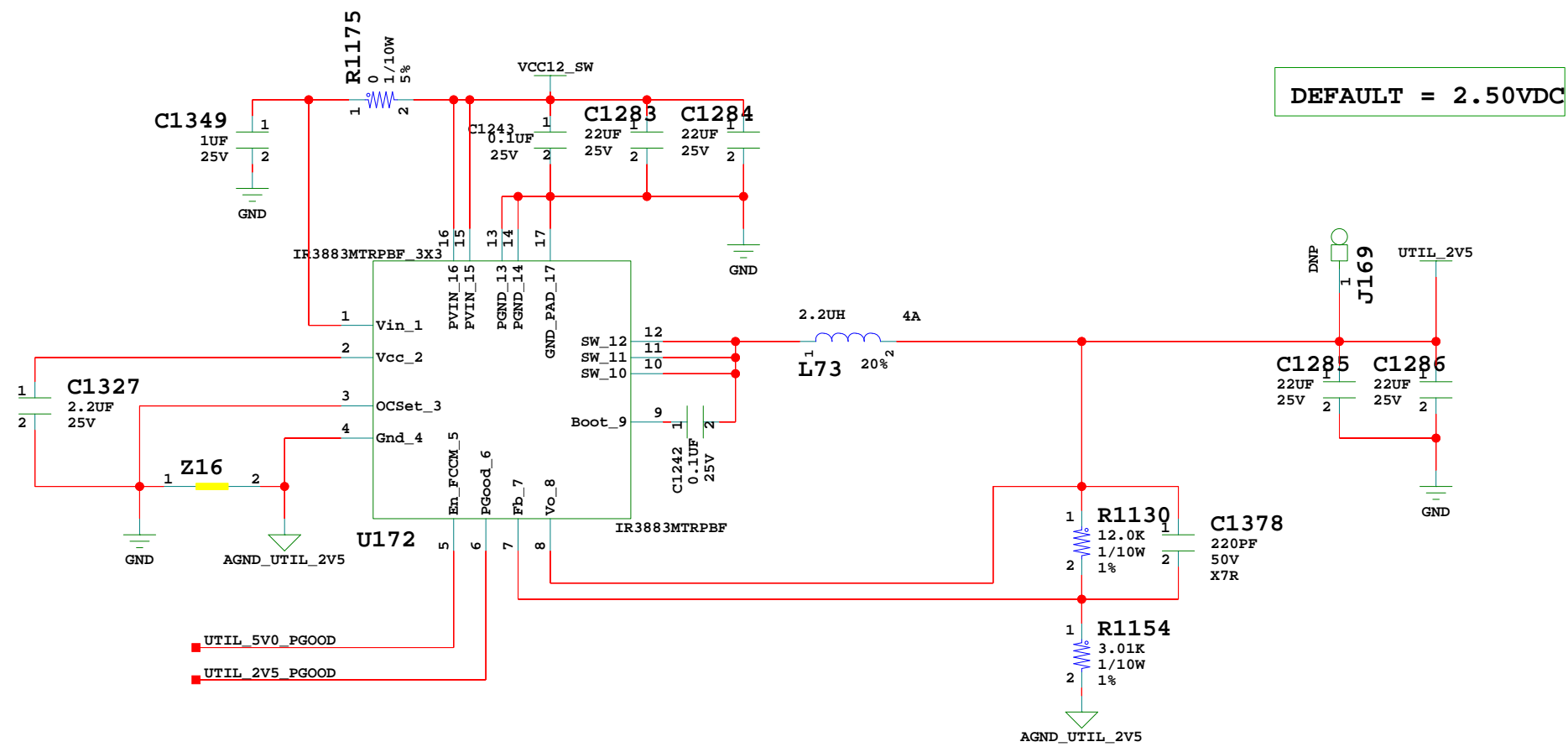


TITLE: MGT1V8 100mA Regulator SCHEM, ROHS COMPLIANT HW-Z1-ZCU104_REV1_0	ASSY P/N: 0432057 PCB P/N: 1280961 SCH P/N: 0381794 TEST P/N: TSS0189
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DATE: 01/26/2018:14:16	VER: 1.0
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SHEET SIZE: B	REV: 01
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SHEET 54 OF 58	DRAWN BY: BF
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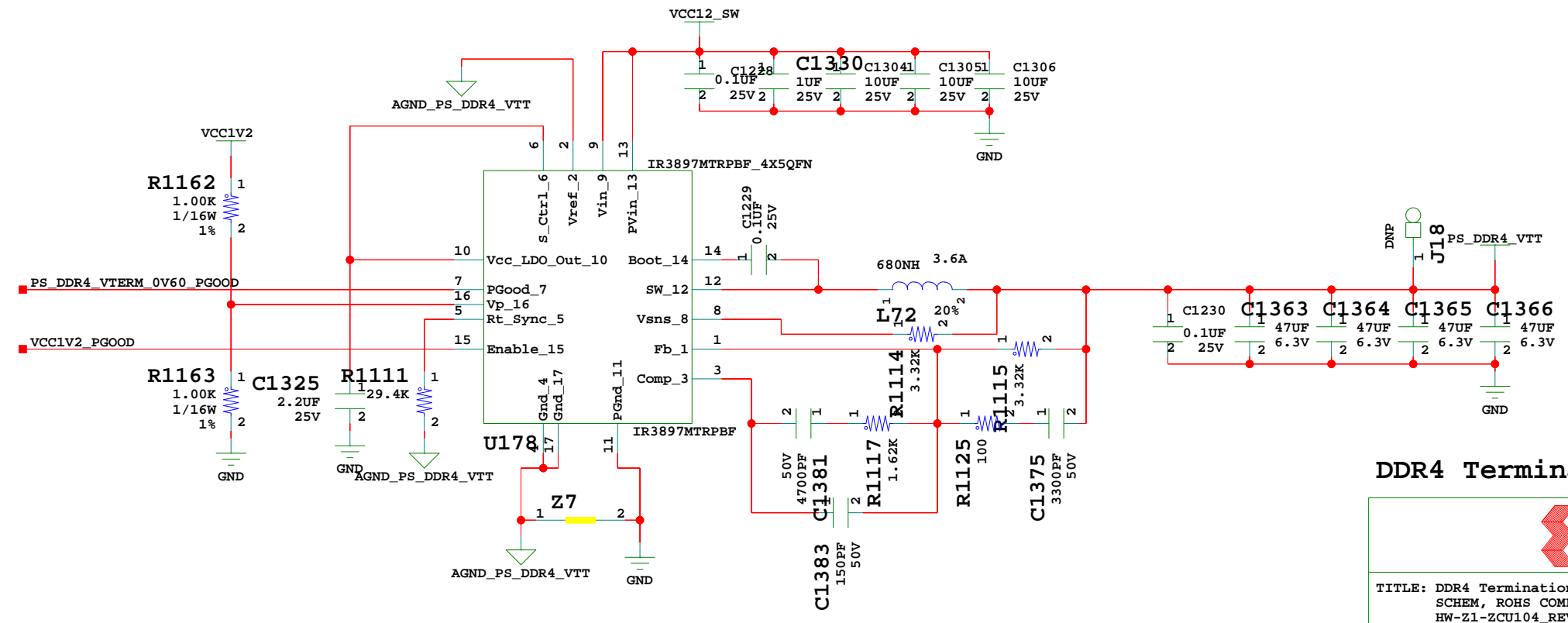
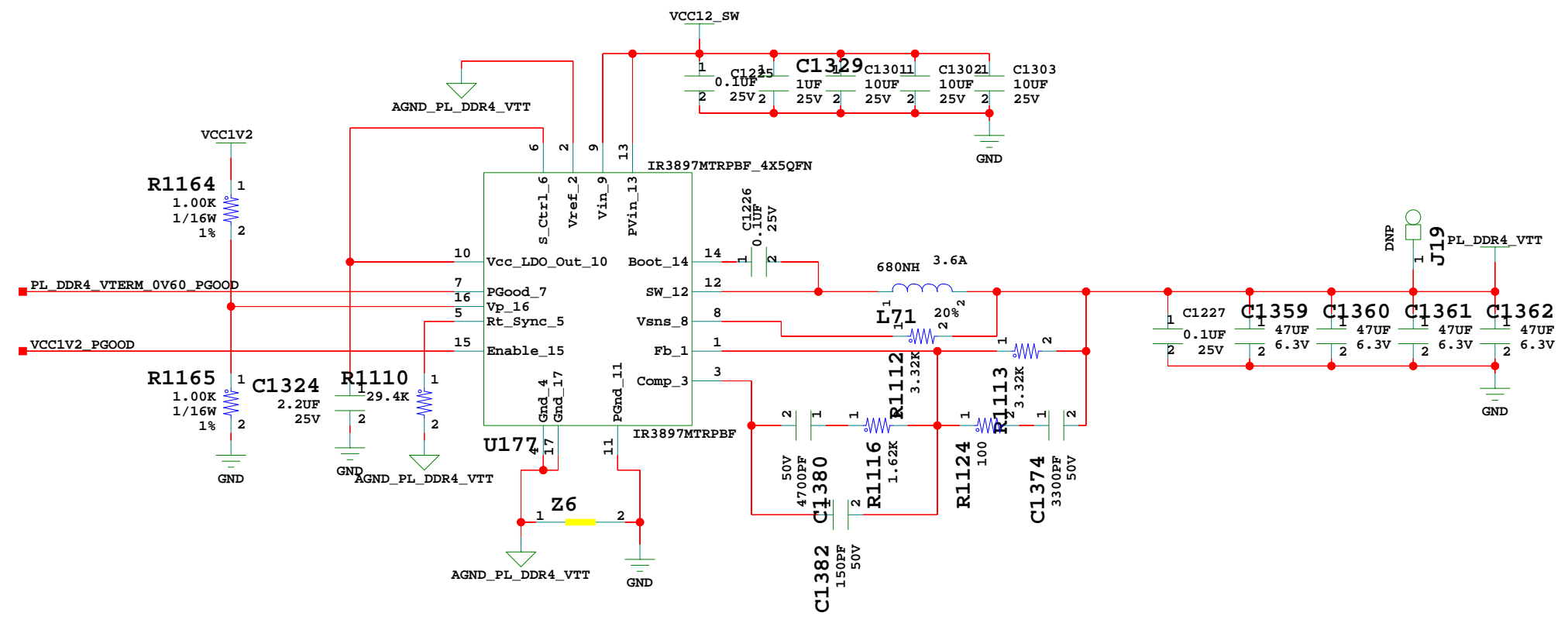
UTIL_2V5 2A Regulator




TITLE: UTIL_2V5 2A Regulator
 SCHEM, ROHS COMPLIANT
 HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
 PCB P/N: 1280961
 SCH P/N: 0381794
 TEST P/N: TSS0189

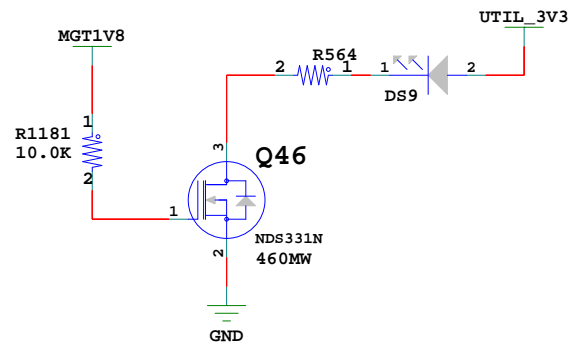
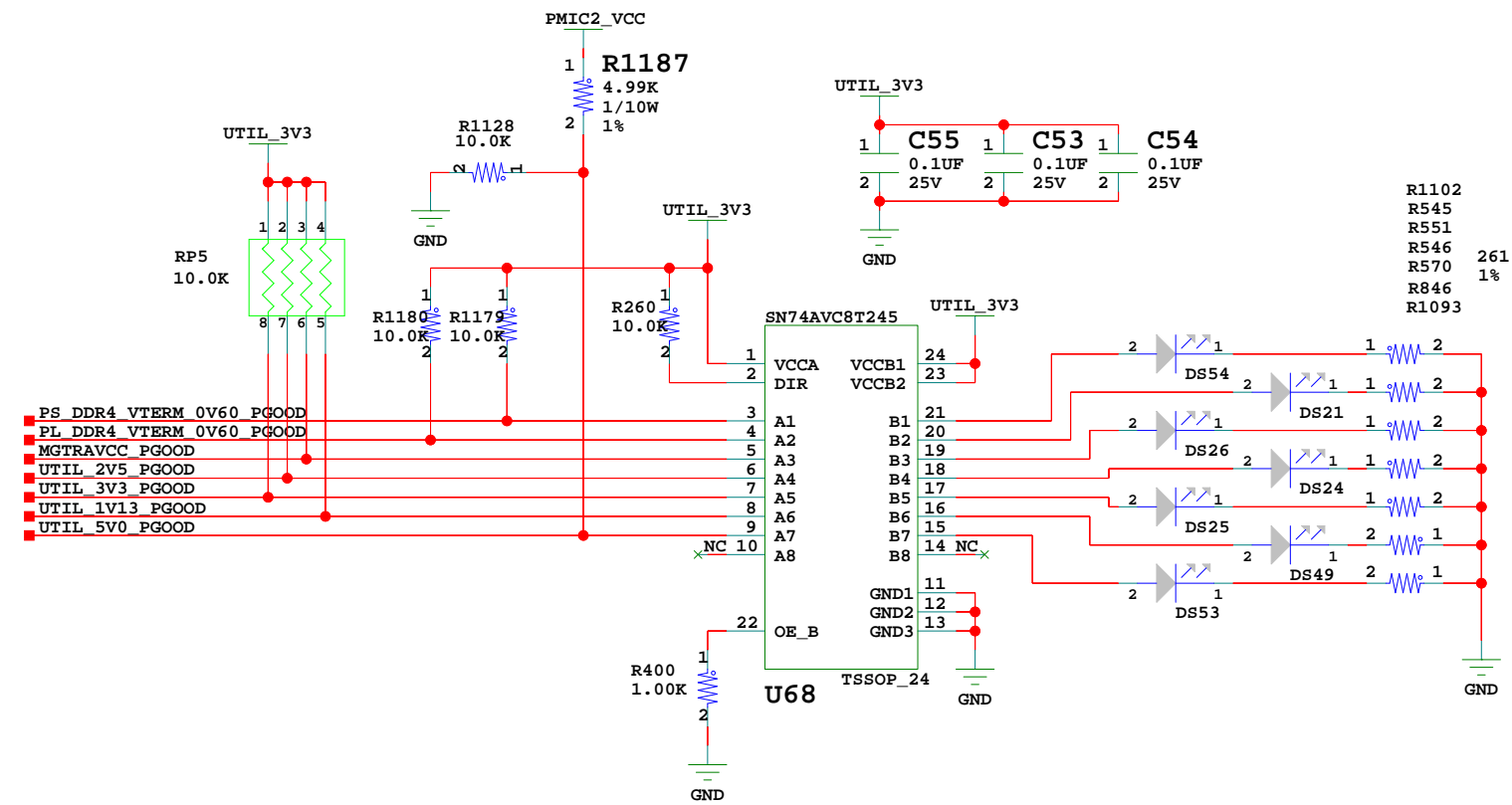
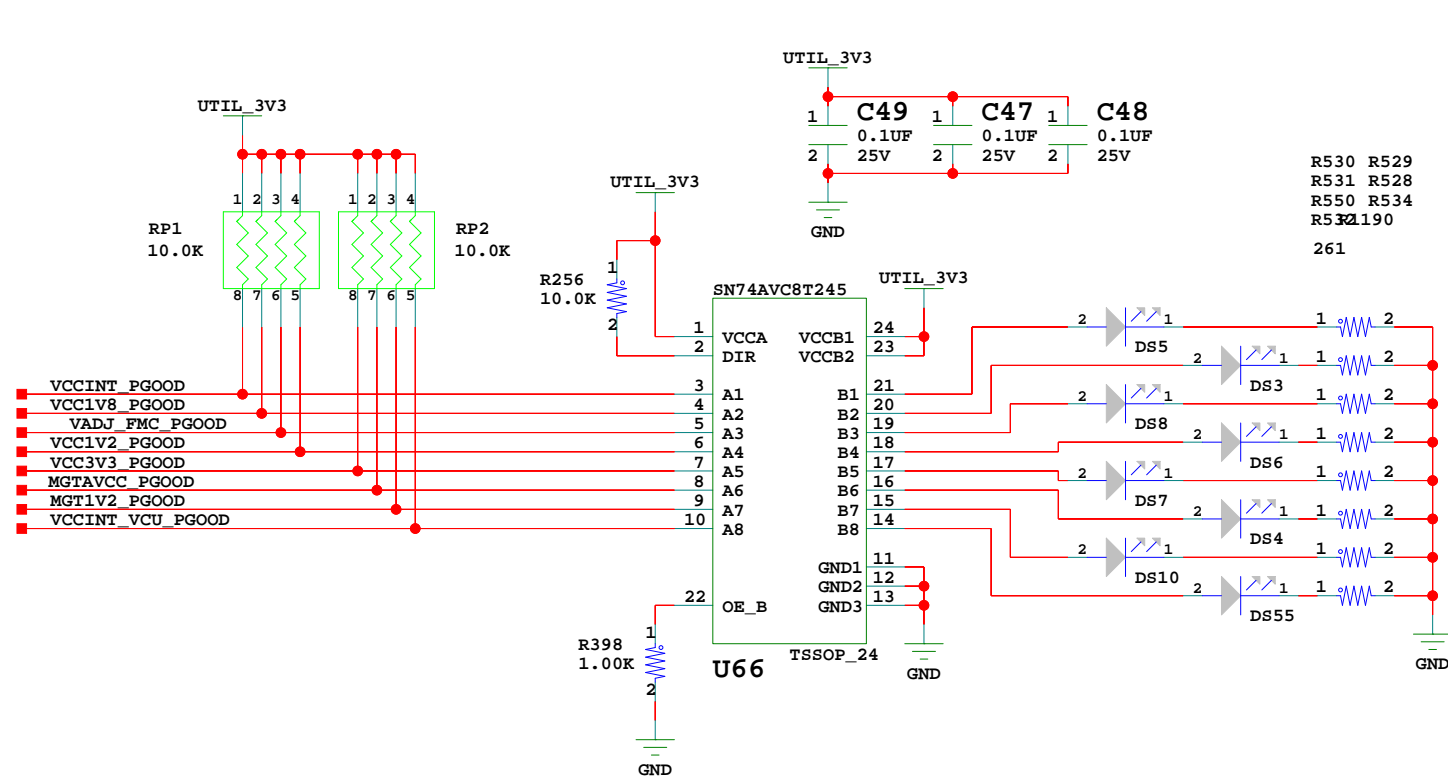
DATE: 01/26/2018:14:17	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 55 OF 58	DRAWN BY: BF



DDR4 Termination Supplies



TITLE: DDR4 Termination Supplies		ASSY P/N: 0432057	
SCHEM, ROHS COMPLIANT		PCB P/N: 1280961	
HW-Z1-ZCU104_REV1_0		SCH P/N: 0381794	
		TEST P/N: TSS0189	
DATE: 01/26/2018:14:21	VER:	1.0	
SHEET SIZE: B	REV:	01	
SHEET	56	OF	58
DRAWN BY:		BF	



R530 R529
R531 R528
R550 R534
R532 R190
261

R1102
R545
R551
R546
R570
R846
R1093
261
1%

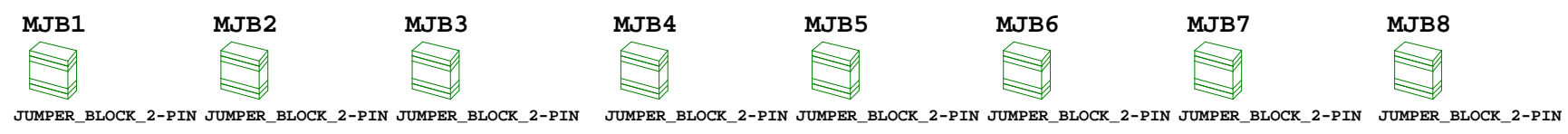
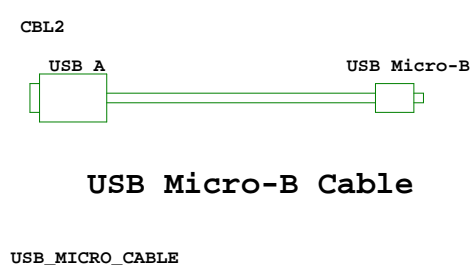
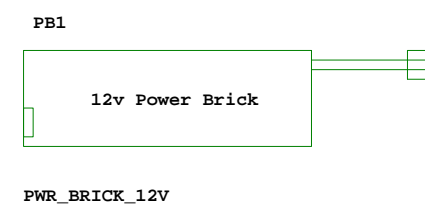
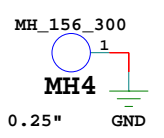
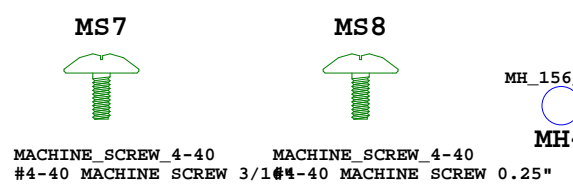
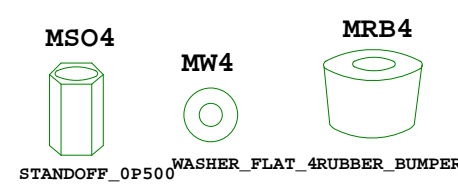
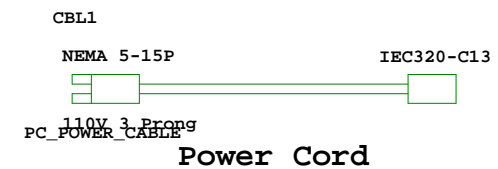
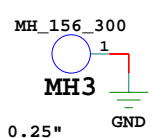
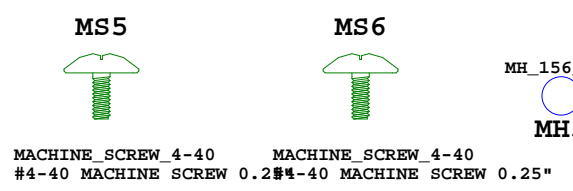
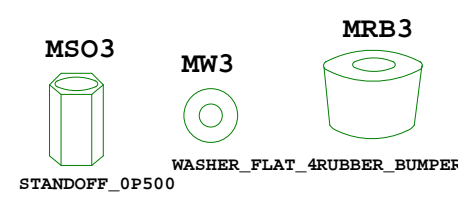
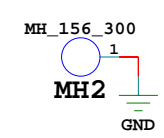
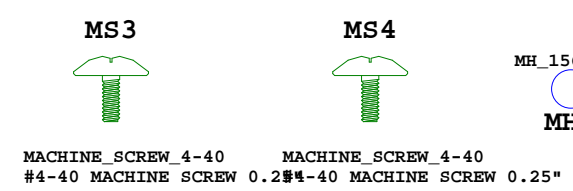
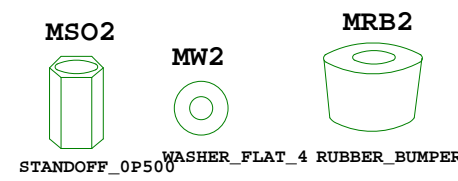
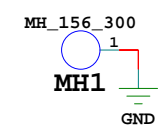
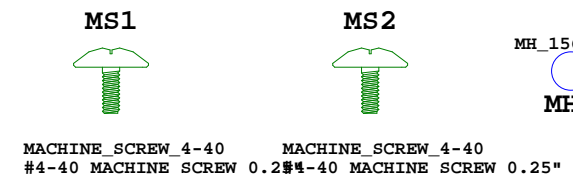
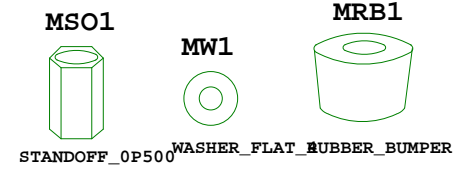
Power Status LEDs



TITLE: Power Status LEDs
SCHEM, ROHS COMPLIANT
HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
PCB P/N: 1280961
SCH P/N: 0381794
TEST P/N: TSS0189

DATE: 01/26/2018:14:16	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 57 OF 58	DRAWN BY: BF



Mechanical Components



TITLE: Mechanical Components
SCHEM, ROHS COMPLIANT
HW-Z1-ZCU104_REV1_0

ASSY P/N: 0432057
PCB P/N: 1280961
SCH P/N: 0381794
TEST P/N: TSS0189

DATE: 01/26/2018:14:16	VER: 1.0
SHEET SIZE: B	REV: 01
SHEET 58 OF 58	DRAWN BY: BF