TABLE OF CONTENTS

REVISION HISTORY			
DATE	VERSION	UPDATED BY	REMARKS
26 JAN 2016	1.00		REV A RELEASE
14 JUNE 2016	LIFE-2		LIFE-2 RELEASE
30 NOV 2016	LIFE-3		LIFE-3 RELEASE

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: INDEX PAGE	LIFE 3	SHEET 1 OF 96

FRONT PANEL

POWER SUPPLY

HOST PROCESSOR

SOLAR/ AUX CONNECTOR

RJ45 PORT A

RJ45 PORT B

GPIO'S

SWITCH

PROTECTION

PD CONTROLLER LT4275AIDD

ISOLATED DC-DC CONVERTER LT3748EMS

BATTERY CHARGER LTC4015EUHF

PSE CONTROLLER LTC4274AIUHF

E-FUSE TPS259241

BUCK-BOOST CONVERTER

DC-DC CONVERTERS

PMIC IDTP9180/47

DEBUG BOARD

UART, HDMI, USB

PCIe

GBE PHY WG1210AT

MDI

USB 3.0

PCIe

GPIO's

CONN

DIMM MODULE

DDR

INTEL ATOM E3845

SPI

SPI FLASH W25Q64DWSSI

SATA

LPC

PCIe

TPC SLB9635TT

GBE PHY WG1210AT

MINI-PCIe CONNECTOR

UART

POWER

MDI

USB 2.0

RESET

GPIO'S

MDI

ADAPTER CARD

MII

SWITCH 88E6071-NNC2I000

MDI

MDI

GPIO'S

TIVA TM4C1294NCPD TT3

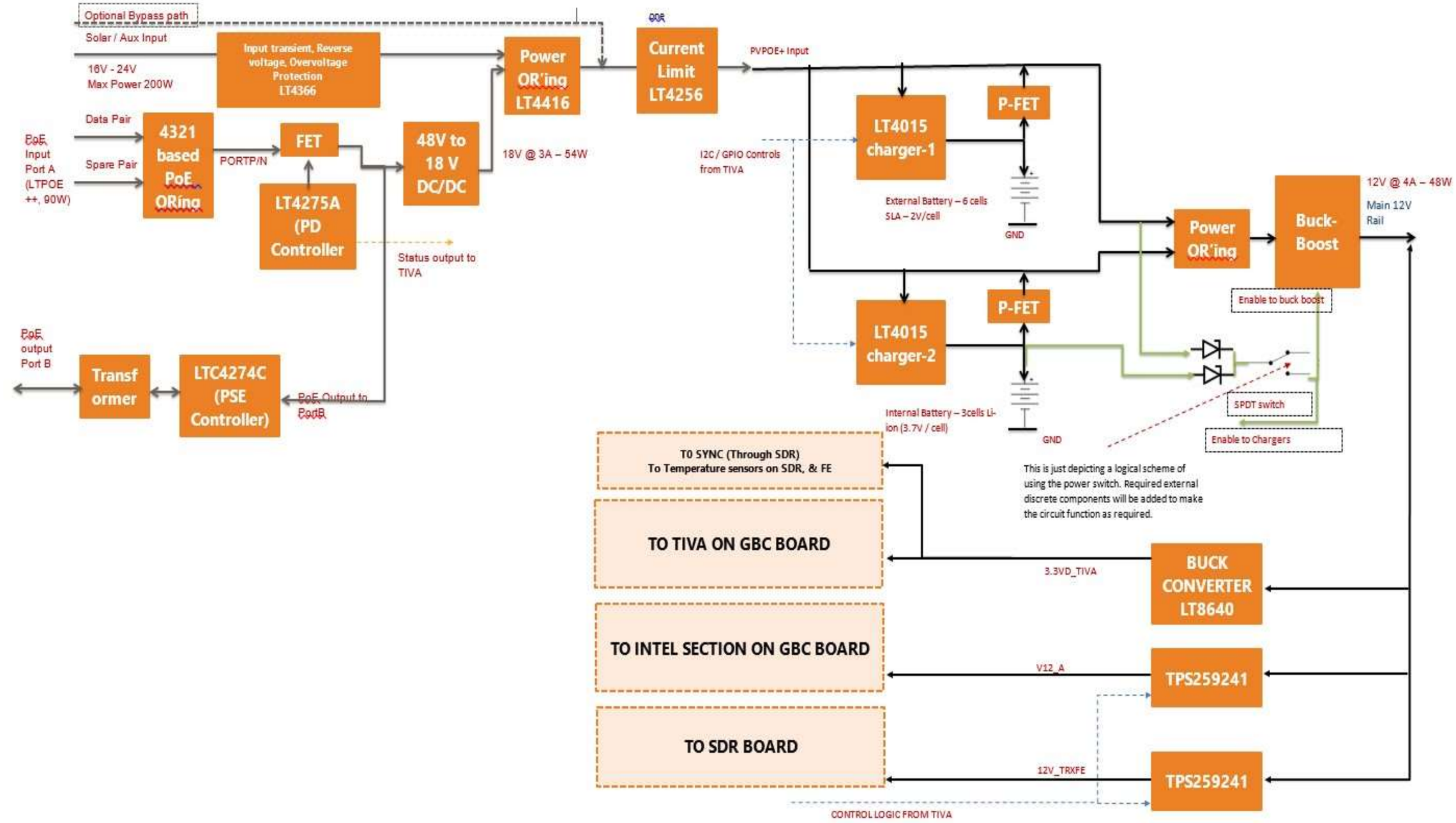
UART

PROG HEADER TMM-110-01

HOUSE KEEPING

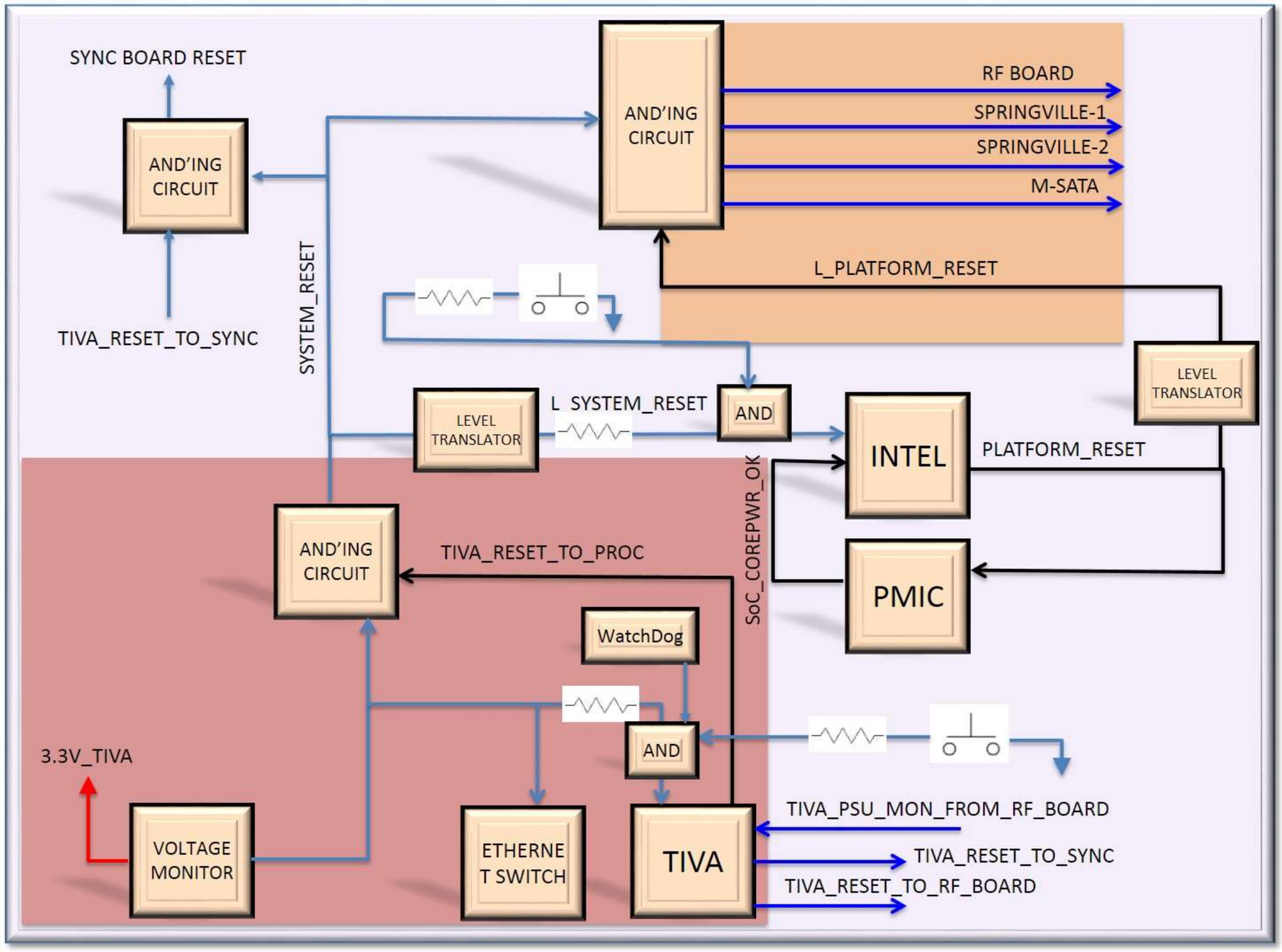
GBC BLOCK DIAGRAM

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: BASEBAND BOARD BLOCK DIAGRAM	LIFE 3	SHEET 2 OF 96



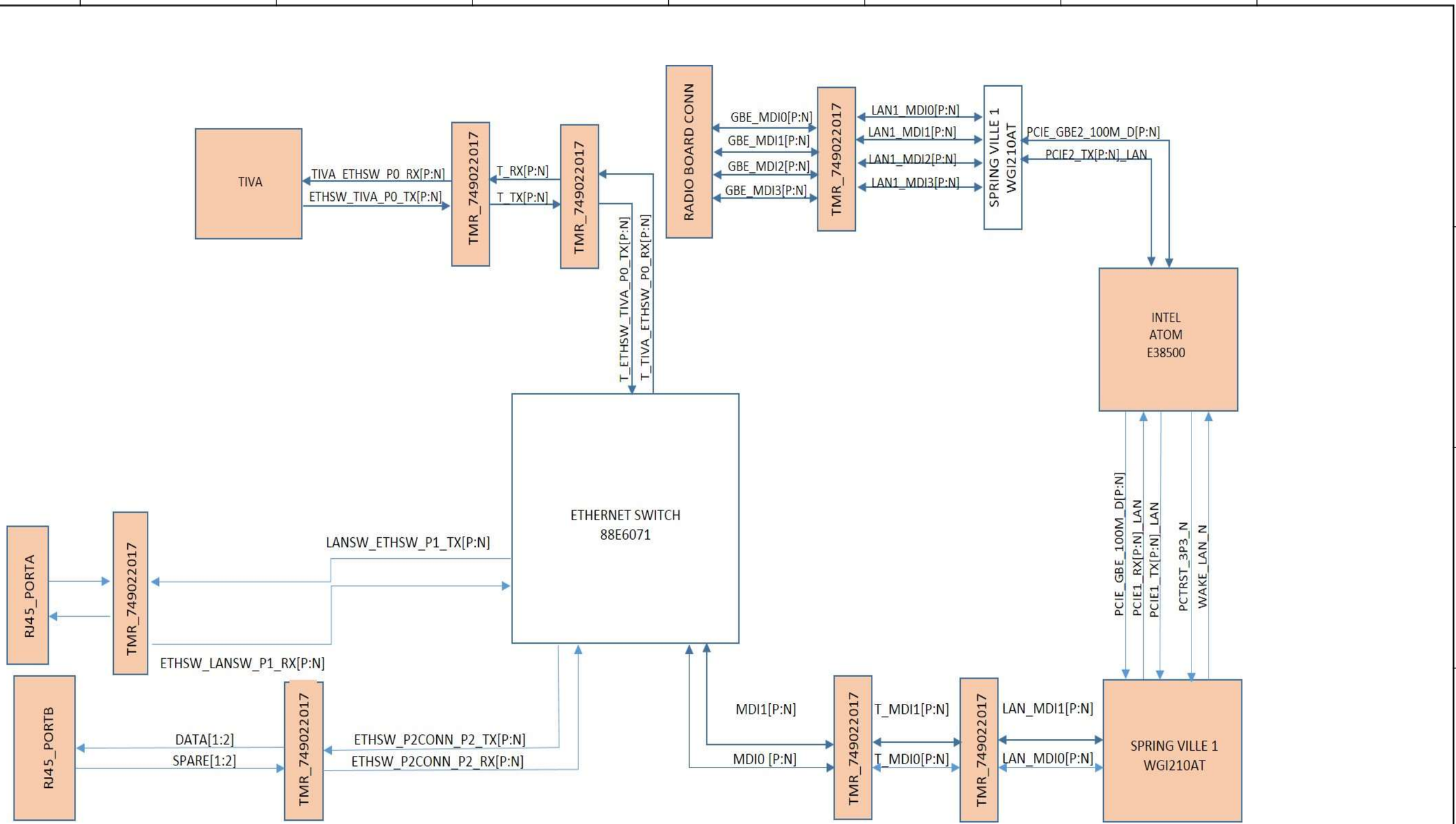
SYSTEM POWER INPUT SCHEME

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: POWER BLOCK DIAGRAM	LIFE 3	SHEET 3 OF 96



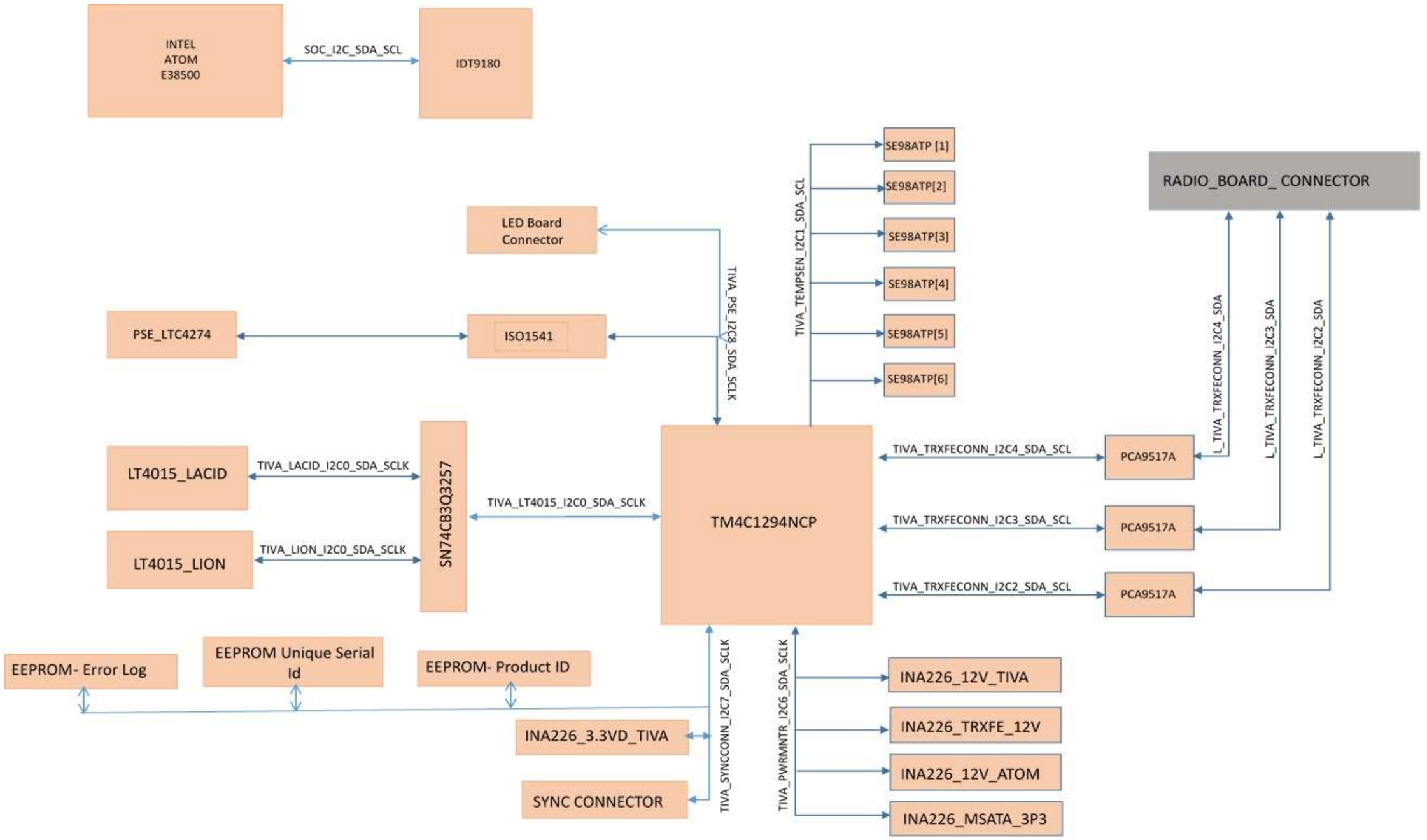
RESET TREE

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: RESET BLOCK DIAGRAM	LIFE 3	SHEET 4 OF 96



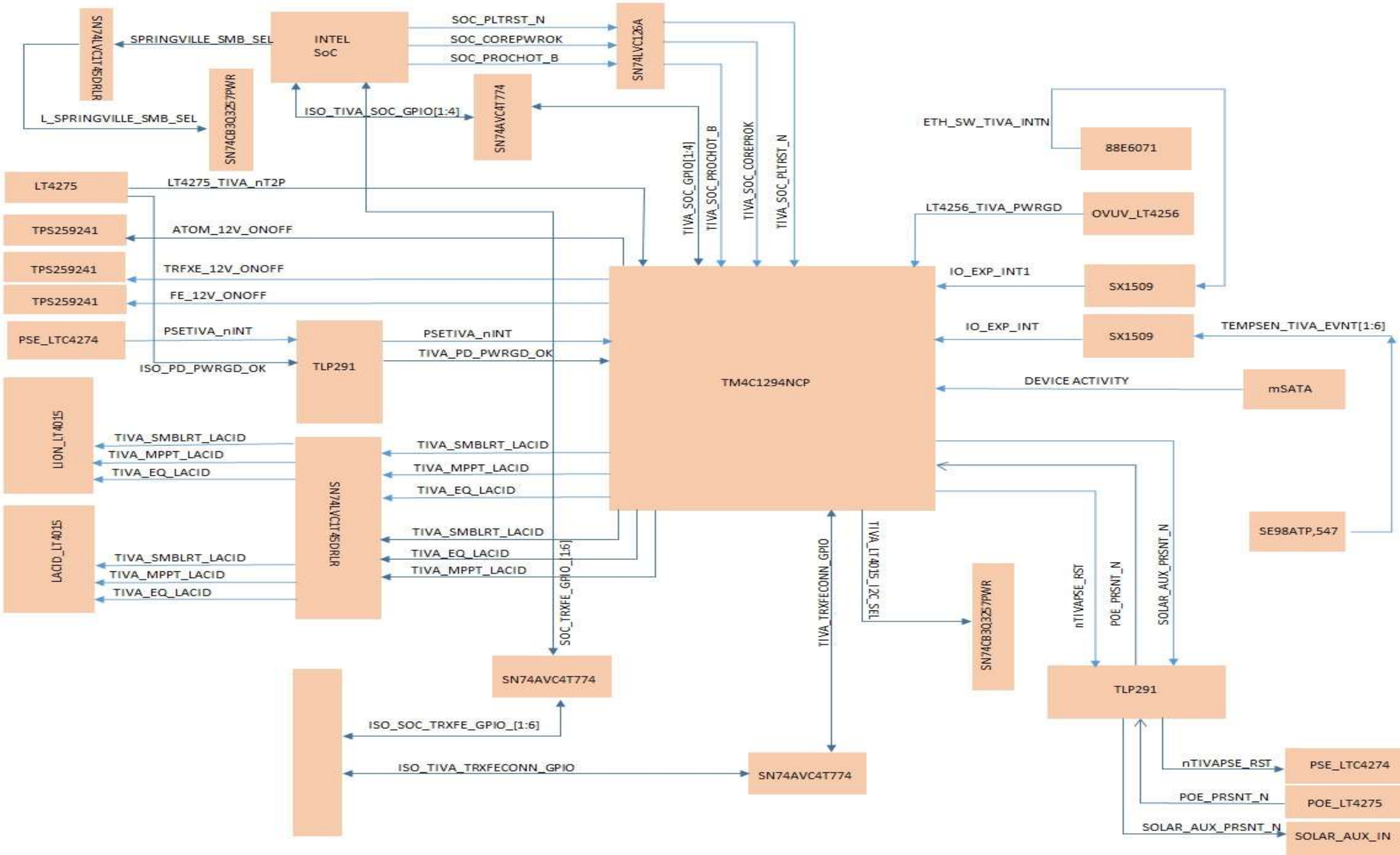
GBC ETHERNET INTERFACES

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: GBC ETHERNET BLOCK DIAGRAM	LIFE 3	SHEET 5 OF 96



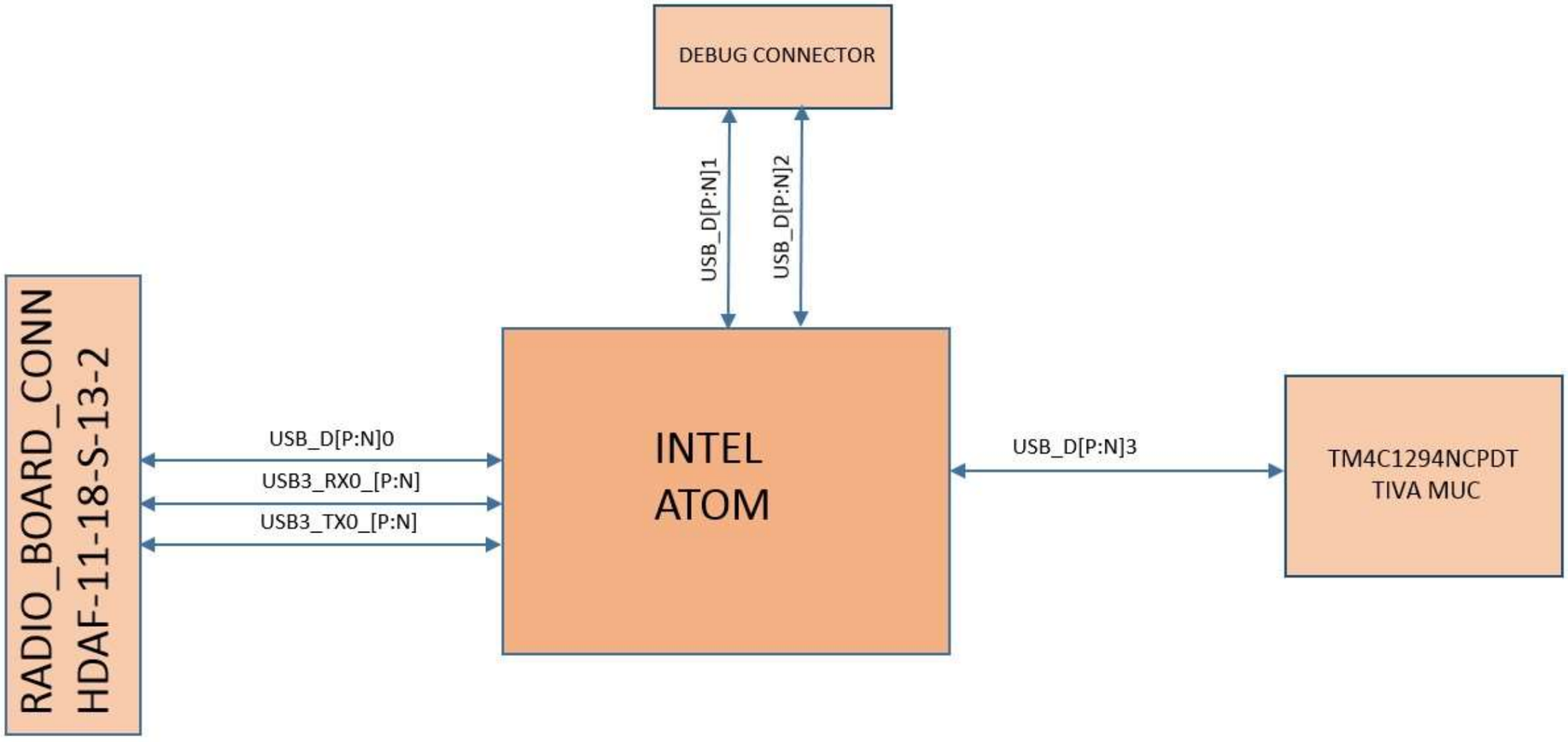
GBC I2C TREE

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: GBC I2C TREE BLOCK DIAGRAM	LIFE 3	SHEET 6 OF 96



CONTROL SIGNALS FROM TIVA

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: SYSTEM GPIO BLOCK DIAGRAM	LIFE 3	SHEET 7 OF 96



USB TREE

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: GBC USB BLOCK DIAGRAM	LIFE 3	SHEET 8 OF 96

U3C1A

BYT_I_SOC_R1P1

BGA1170

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

M_A_A[15..0]

P[20] OUT	0	K45	DRAM0_MA[00]
	1	H47	DRAM0_MA[01]
	2	L41	DRAM0_MA[02]
	3	H44	DRAM0_MA[03]
	4	H50	DRAM0_MA[04]
	5	G53	DRAM0_MA[05]
	6	H49	DRAM0_MA[06]
	7	D50	DRAM0_MA[07]
	8	G52	DRAM0_MA[08]
	9	E52	DRAM0_MA[09]
	10	K48	DRAM0_MA[10]
	11	E51	DRAM0_MA[11]
	12	F47	DRAM0_MA[12]
	13	J51	DRAM0_MA[13]
	14	B49	DRAM0_MA[14]
	15	B50	DRAM0_MA[15]

M_A_DM[7..0]

P[20] BI	0	G36	DRAM0_DM[0]
	1	B36	DRAM0_DM[1]
	2	F38	DRAM0_DM[2]
	3	B42	DRAM0_DM[3]
	4	P51	DRAM0_DM[4]
	5	V42	DRAM0_DM[5]
	6	Y50	DRAM0_DM[6]
	7	Y52	DRAM0_DM[7]

P[20] OUT	M_A_RAS_N	M45	DRAM0_RAS#
P[20] OUT	M_A_CAS_N	M44	DRAM0_CAS#
P[20] OUT	M_A_WE_N	H51	DRAM0_WE#
P[20] OUT	M_A_BS0	K47	DRAM0_BS[0]
P[20] OUT	M_A_BS1	K44	DRAM0_BS[1]
P[20] OUT	M_A_BS2	D52	DRAM0_BS[2]
P[20] OUT	M_A_CS0_N	P44	DRAM0_CS[0]#
P[20] OUT	M_A_CS2_N	P45	DRAM0_CS[2]#
P[20] OUT	M_A_CKE0	C47	DRAM0_CKE[0]
		D48	RESERVED
P[20] OUT	M_A_CKE2	F44	DRAM0_CKE[2]
		E46	RESERVED
P[20] OUT	M_A_ODT0	T41	DRAM0_ODT[0]
P[20] OUT	M_A_ODT2	P42	DRAM0_ODT[2]
P[20] OUT	M_A_CK_DDR0_P	M50	DRAM0_CKP[0]
P[20] OUT	M_A_CK_DDR0_N	M48	DRAM0_CKN[0]
P[20] OUT	M_A_CK_DDR2_P	P50	DRAM0_CKP[2]
P[20] OUT	M_A_CK_DDR2_N	P48	DRAM0_CKN[2]
P[20] OUT	M_A_RST_N	P41	DRAM0_DRAMRST#
P[9] IN	DDR3_VREF	AF44	DRAM_VREF
P[9] IN	DDR3_REFP	AF42	ICLK_DRAM_TERM[0]
P[9] IN	DDR3_REFN	AH42	ICLK_DRAM_TERM[1]
P[9,30] IN	DDR3_DRAM_PWROK	AD42	DRAM_VDD_S4_PWROK
P[33] IN	DDR3_VCCA_PWROK	AB42	DRAM_CORE_PWROK
P[9] BI	DDR3_ODTPU	AD45	DRAM_RCOMP[2]
P[9] BI	DDR3_DQPU	AF45	DRAM_RCOMP[1]
P[9] BI	DDR3_CMDPU	AD44	DRAM_RCOMP[0]
P[9] OUT	DDR3_MON1P	AF40	RESERVED
P[9] OUT	DDR3_MON1N	AF41	RESERVED
P[9] OUT	DDR3_MON2P	AD40	RESERVED
P[9] OUT	DDR3_MON2N	AD41	RESERVED

1 OF 13

IC

M_A_DQ[63..0]

P[20] BI	DRAM0_DQ[00]	M36	0
	DRAM0_DQ[01]	J36	1
	DRAM0_DQ[02]	P40	2
	DRAM0_DQ[03]	M40	3
	DRAM0_DQ[04]	P36	4
	DRAM0_DQ[05]	N36	5
	DRAM0_DQ[06]	K40	6
	DRAM0_DQ[07]	K42	7
	DRAM0_DQ[08]	B32	8
	DRAM0_DQ[09]	C32	9
	DRAM0_DQ[10]	C36	10
	DRAM0_DQ[11]	A37	11
	DRAM0_DQ[12]	C33	12
	DRAM0_DQ[13]	A33	13
	DRAM0_DQ[14]	C37	14
	DRAM0_DQ[15]	B38	15
	DRAM0_DQ[16]	F36	16
	DRAM0_DQ[17]	G38	17
	DRAM0_DQ[18]	F42	18
	DRAM0_DQ[19]	J42	19
	DRAM0_DQ[20]	G40	20
	DRAM0_DQ[21]	C38	21
	DRAM0_DQ[22]	G44	22
	DRAM0_DQ[23]	D42	23
	DRAM0_DQ[24]	A41	24
	DRAM0_DQ[25]	C41	25
	DRAM0_DQ[26]	A45	26
	DRAM0_DQ[27]	B46	27
	DRAM0_DQ[28]	C40	28
	DRAM0_DQ[29]	B40	29
	DRAM0_DQ[30]	B48	30
	DRAM0_DQ[31]	B47	31
	DRAM0_DQ[32]	K52	32
	DRAM0_DQ[33]	K51	33
	DRAM0_DQ[34]	T52	34
	DRAM0_DQ[35]	T51	35
	DRAM0_DQ[36]	L51	36
	DRAM0_DQ[37]	L53	37
	DRAM0_DQ[38]	R51	38
	DRAM0_DQ[39]	R53	39
	DRAM0_DQ[40]	T47	40
	DRAM0_DQ[41]	T45	41
	DRAM0_DQ[42]	Y40	42
	DRAM0_DQ[43]	V41	43
	DRAM0_DQ[44]	T48	44
	DRAM0_DQ[45]	T50	45
	DRAM0_DQ[46]	Y42	46
	DRAM0_DQ[47]	AB40	47
	DRAM0_DQ[48]	V45	48
	DRAM0_DQ[49]	V47	49
	DRAM0_DQ[50]	AD48	50
	DRAM0_DQ[51]	AD50	51
	DRAM0_DQ[52]	V48	52
	DRAM0_DQ[53]	V50	53
	DRAM0_DQ[54]	AB44	54
	DRAM0_DQ[55]	Y45	55
	DRAM0_DQ[56]	V52	56
	DRAM0_DQ[57]	W51	57
	DRAM0_DQ[58]	AC53	58
	DRAM0_DQ[59]	AC51	59
	DRAM0_DQ[60]	W53	60
	DRAM0_DQ[61]	Y51	61
	DRAM0_DQ[62]	AD52	62
	DRAM0_DQ[63]	AD51	63

M_A_DQS_P[7..0]

P[20] BI	DRAM0_DQSP[0]	J38	0
	DRAM0_DQSP[1]	C35	1
	DRAM0_DQSP[2]	D40	2
	DRAM0_DQSP[3]	B44	3
	DRAM0_DQSP[4]	N53	4
	DRAM0_DQSP[5]	T42	5
	DRAM0_DQSP[6]	Y47	6
	DRAM0_DQSP[7]	AB52	7

M_A_DQS_N[7..0]

P[20] BI	DRAM0_DQSN[0]	K38	0
	DRAM0_DQSN[1]	B34	1
	DRAM0_DQSN[2]	F40	2
	DRAM0_DQSN[3]	C43	3
	DRAM0_DQSN[4]	M52	4
	DRAM0_DQSN[5]	T44	5
	DRAM0_DQSN[6]	Y48	6
	DRAM0_DQSN[7]	AA51	7

VDDQ

P[9] OUT DDR3_VREF — R3N24 0 — R3N26 4.7K 1%

C2N34 0.1UF 25V X7R — R3N25 4.7K 1%

P[9,30] BI DDR3_DRAM_PWROK — C2N31 0.1UF X7R 25V NM

P[9] BI DDR3_MON1P — R3N28 44.2 1% NM — R3N27 90.9 1%

P[9] BI DDR3_MON1N — R3N29 44.2 1% NM

P[9] BI DDR3_MON2P — R2N15 44.2 1% NM — R2N13 90.9 1%

P[9] BI DDR3_MON2N — R2N16 44.2 1% NM

P[9] BI DDR3_CMDPU

P[9] BI DDR3_DQPU

P[9] BI DDR3_ODTPU

P[9] BI DDR3_REFN

P[9] BI DDR3_REFP

R2C26 100K — R2C25 100K — R2N12 162 1% — R2N14 29.4 1% — R3N30 23.2 1%

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: E3845:DDR CHANNEL A	LIFE 3	SHEET 9 OF 96

U3C1B

BYT_I_SOC_R1P1

BGA1170

M_B_A[15..0]

P[22]	OUT	0 AY45	DRAM1_MA[00]	
		1 BB47	DRAM1_MA[01]	
		2 AW41	DRAM1_MA[02]	
		3 BB44	DRAM1_MA[03]	
		4 BB50	DRAM1_MA[04]	
		5 BC53	DRAM1_MA[05]	
		6 BB49	DRAM1_MA[06]	
		7 BF50	DRAM1_MA[07]	
		8 BC52	DRAM1_MA[08]	
		9 BE52	DRAM1_MA[09]	
		10 AY48	DRAM1_MA[10]	
		11 BE51	DRAM1_MA[11]	
		12 BD47	DRAM1_MA[12]	
		13 BA51	DRAM1_MA[13]	
		14 BH49	DRAM1_MA[14]	
		15 BH50	DRAM1_MA[15]	

M_B_DM[7..0]

P[22]	BI	0 BD38	DRAM1_DM[0]
		1 BH36	DRAM1_DM[1]
		2 BC36	DRAM1_DM[2]
		3 BH42	DRAM1_DM[3]
		4 AT51	DRAM1_DM[4]
		5 AM42	DRAM1_DM[5]
		6 AK50	DRAM1_DM[6]
		7 AK52	DRAM1_DM[7]

P[22]	OUT	M_B_RAS_N	AV45	DRAM1_RAS#
P[22]	OUT	M_B_CAS_N	AV44	DRAM1_CAS#
P[22]	OUT	M_B_WE_N	BB51	DRAM1_WE#
P[22]	OUT	M_B_BS0	AY47	DRAM1_BS[0]
P[22]	OUT	M_B_BS1	AY44	DRAM1_BS[1]
P[22]	OUT	M_B_BS2	BF52	DRAM1_BS[2]
P[22]	OUT	M_B_CS0_N	AT44	DRAM1_CS[0]#
P[22]	OUT	M_B_CS2_N	AT45	DRAM1_CS[2]#
P[22]	OUT	M_B_CKE0	BG47	DRAM1_CKE[0]
			BF48	RESERVED
P[22]	OUT	M_B_CKE2	BD44	DRAM1_CKE[2]
			BE46	RESERVED
P[22]	OUT	M_B_ODT0	AP41	DRAM1_ODT[0]
P[22]	OUT	M_B_ODT2	AT42	DRAM1_ODT[2]
P[22]	OUT	M_B_CK_DDR0_P	AV50	DRAM1_CKP[0]
P[22]	OUT	M_B_CK_DDR0_N	AV48	DRAM1_CKN[0]
P[22]	OUT	M_B_CK_DDR2_P	AT50	DRAM1_CKP[2]
P[22]	OUT	M_B_CK_DDR2_N	AT48	DRAM1_CKN[2]
P[22]	OUT	M_B_RST_N	AT41	DRAM1_DRAMRST#

M_B_DQ[63..0]

P[22]	BI	DRAM1_DQ[00]	BG38	0
		DRAM1_DQ[01]	BC40	1
		DRAM1_DQ[02]	BA42	2
		DRAM1_DQ[03]	BD42	3
		DRAM1_DQ[04]	BC38	4
		DRAM1_DQ[05]	BD36	5
		DRAM1_DQ[06]	BF42	6
		DRAM1_DQ[07]	BC44	7
		DRAM1_DQ[08]	BH32	8
		DRAM1_DQ[09]	BG32	9
		DRAM1_DQ[10]	BG36	10
		DRAM1_DQ[11]	BJ37	11
		DRAM1_DQ[12]	BG33	12
		DRAM1_DQ[13]	BJ33	13
		DRAM1_DQ[14]	BG37	14
		DRAM1_DQ[15]	BH38	15
		DRAM1_DQ[16]	AU36	16
		DRAM1_DQ[17]	AT36	17
		DRAM1_DQ[18]	AV40	18
		DRAM1_DQ[19]	AT40	19
		DRAM1_DQ[20]	BA36	20
		DRAM1_DQ[21]	AV36	21
		DRAM1_DQ[22]	AY42	22
		DRAM1_DQ[23]	AY40	23
		DRAM1_DQ[24]	BJ41	24
		DRAM1_DQ[25]	BG41	25
		DRAM1_DQ[26]	BJ45	26
		DRAM1_DQ[27]	BH46	27
		DRAM1_DQ[28]	BG40	28
		DRAM1_DQ[29]	BH40	29
		DRAM1_DQ[30]	BH48	30
		DRAM1_DQ[31]	BH47	31
		DRAM1_DQ[32]	AY52	32
		DRAM1_DQ[33]	AY51	33
		DRAM1_DQ[34]	AP52	34
		DRAM1_DQ[35]	AP51	35
		DRAM1_DQ[36]	AW51	36
		DRAM1_DQ[37]	AW53	37
		DRAM1_DQ[38]	AR51	38
		DRAM1_DQ[39]	AR53	39
		DRAM1_DQ[40]	AP47	40
		DRAM1_DQ[41]	AP45	41
		DRAM1_DQ[42]	AK40	42
		DRAM1_DQ[43]	AM41	43
		DRAM1_DQ[44]	AP48	44
		DRAM1_DQ[45]	AP50	45
		DRAM1_DQ[46]	AK42	46
		DRAM1_DQ[47]	AH40	47
		DRAM1_DQ[48]	AM45	48
		DRAM1_DQ[49]	AM47	49
		DRAM1_DQ[50]	AF48	50
		DRAM1_DQ[51]	AF50	51
		DRAM1_DQ[52]	AM48	52
		DRAM1_DQ[53]	AM50	53
		DRAM1_DQ[54]	AH44	54
		DRAM1_DQ[55]	AK45	55
		DRAM1_DQ[56]	AM52	56
		DRAM1_DQ[57]	AL51	57
		DRAM1_DQ[58]	AG53	58
		DRAM1_DQ[59]	AG51	59
		DRAM1_DQ[60]	AL53	60
		DRAM1_DQ[61]	AK51	61
		DRAM1_DQ[62]	AF52	62
		DRAM1_DQ[63]	AF51	63

M_B_DQS_P[7..0]

M_B_DQS_N[7..0]

P[22]	BI	DRAM1_DQSP[0]	BF40	0
P[22]	BI	DRAM1_DQSN[0]	BD40	0
		DRAM1_DQSP[1]	BG35	1
		DRAM1_DQSN[1]	BH34	1
		DRAM1_DQSP[2]	BA38	2
		DRAM1_DQSN[2]	AY38	2
		DRAM1_DQSP[3]	BH44	3
		DRAM1_DQSN[3]	BG43	3
		DRAM1_DQSP[4]	AU53	4
		DRAM1_DQSN[4]	AV52	4
		DRAM1_DQSP[5]	AP42	5
		DRAM1_DQSN[5]	AP44	5
		DRAM1_DQSP[6]	AK47	6
		DRAM1_DQSN[6]	AK48	6
		DRAM1_DQSP[7]	AH52	7
		DRAM1_DQSN[7]	AJ51	7

2 OF 13

IC

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: E3845: DDR CHANNEL B	LIFE 3	SHEET 10OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

U3C1C

BYT_I_SOC_R1P1

BGA1170

P[69] OUT HDMI_DATA2_DP
P[69] OUT HDMI_DATA2_DN
P[69] OUT HDMI_DATA1_DP
P[69] OUT HDMI_DATA1_DN
P[69] OUT HDMI_DATA0_DP
P[69] OUT HDMI_DATA0_DN
P[69] OUT HDMI_CLK_DP
P[69] OUT HDMI_CLK_DN
P[69] IN SOC_HDMI_DDSP_HPD
P[38,69] BI HDMI_SMB_SOC_DAT
P[69] BI HDMI_SMB_SOC_CLK
P[38] IN SOC_HV_DDI2_DDC_SDA

AV3 DDI0_TXP[0]
AV2 DDI0_TXN[0]
AT2 DDI0_TXP[1]
AT3 DDI0_TXN[1]
AR3 DDI0_TXP[2]
AR1 DDI0_TXN[2]
AP3 DDI0_TXP[3]
AP2 DDI0_TXN[3]
AL3 DDI0_AUXP
AL1 DDI0_AUXN
D27 DDI0_HPD
C26 DDI0_DDCDATA
C28 DDI0_DDCCLK
B28 DDI0_VDDEN
C27 DDI0_BKLTEN
B26 DDI0_BKLTCTL
AK12 DDI_RCOMP_P
AK13 DDI_RCOMP_N
AM14 RESERVED
AM13 RESERVED
T2 RESERVED
T3 RESERVED
AB3 RESERVED
AB2 RESERVED
Y3 RESERVED
Y2 RESERVED
W3 RESERVED
W1 RESERVED
V2 RESERVED
V3 RESERVED
R3 RESERVED
R1 RESERVED
AD6 RESERVED
AD4 RESERVED
AB9 RESERVED
AB7 RESERVED
Y4 RESERVED
Y6 RESERVED
V4 RESERVED
V6 RESERVED
A29 RESERVED
C29 RESERVED
AB14 RESERVED
B30 GPIO_S0_NC[12]
C30 RESERVED

R3N8 1 2 402 1%
R2M33 1 2 150 1%

DDI1_TXP[0] AG3
DDI1_TXN[0] AG1
DDI1_TXP[1] AF3
DDI1_TXN[1] AF2
DDI1_TXP[2] AD3
DDI1_TXN[2] AD2
DDI1_TXP[3] AC3
DDI1_TXN[3] AC1
DDI1_AUXP AK3
DDI1_AUXN AK2
DDI1_HPD K30
DDI1_DDCDATA P30
DDI1_DDCCLK G30
DDI1_VDDEN N30
DDI1_BKLTEN J30
DDI1_BKLTCTL M30
RESERVED AH14
RESERVED AH13
RESERVED AF14
RESERVED AF13
VGA_RED BA3
VGA_BLUE AY2
VGA_GREEN BA1
VGA_IREF AW1
VGA_IRTN AY3
VGA_HSYNC BD2
VGA_VSYNC BF2
VGA_DDCCLK BC1
VGA_DDCDATA BC2
MCSI1_CLKN T7
MCSI1_CLKP T9
MCSI1_DN[0] AB13
MCSI1_DP[0] AB12
MCSI1_DN[1] Y12
MCSI1_DP[1] Y13
MCSI1_DN[2] V10
MCSI1_DP[2] V9
MCSI1_DN[3] T12
MCSI1_DP[3] T10
MCSI2_CLKN V14
MCSI2_CLKP V13
MCSI2_DN[0] T14
MCSI2_DP[0] T13
MCSI3_CLKN T6
MCSI3_CLKP T4
MCSI_RCOMP P14
MCSI_GPIO[0] F34
MCSI_GPIO[1] M32
MCSI_GPIO[2] D28
MCSI_GPIO[3] J28
MCSI_GPIO[4] K34
MCSI_GPIO[5] D34
MCSI_GPIO[6] F32
MCSI_GPIO[7] F28
MCSI_GPIO[8] K28
MCSI_GPIO[9] J34
MCSI_GPIO[10] N32
MCSI_GPIO[11] D32

R2M35 1 2 402 1%
V1P8_S
R10811 NM 20K 1%
R10557 20K 1%
R2B43 20K 1%
R2B44 20K 1%
R2B45 20K 1%
DDI1_HPD IN P[38]
HDMI2_SMB_SOC_DAT BI P[38]
R2B19 0 0
R2B15 0 0
TP_ MCSI_COMP
R2M31 150 1% NM

3 OF 13

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: E3845: DISPLAY INTERFACE	LIFE 3	SHEET 11OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

PCIE-0	GEN2
PCIE-1 PCIE-2	GEN1 GEN1

CAD NOTE : ALL SATA TRACES TO BE ROUTED FOR DIFFERENTIAL 85 OHMS IMPEDANCE.

CAD NOTE: ALL THE CAPACITORS SHOULD BE PLACED NEAR U3C1

U3C1D

BYT_I_SOC_R1P1

BGA1170

P[25] OUT SATA_TXP0 → BF6 SATA_TXP[0]
P[25] OUT SATA_TXN0 → BG7 SATA_TXN[0]
P[25] IN SATA_RXP0 → AU16 SATA_RXP[0]
P[25] IN SATA_RXN0 → AV16 SATA_RXN[0]
BD10 SATA_TXP[1]
BF10 SATA_TXN[1]
SATA_RXP1 → AY16 SATA_RXP[1]
SATA_RXN1 → BA16 SATA_RXN[1]

R2N19 10K 2 NM
R2N18 10K 2 NM

BA12 SATA_GP[0]
AY14 SATA_GP[1]
P[25] OUT SATA_LED_N → AY12 SATA_LED#
R3N14 1 2 402 1%
AU18 SATA_RCOMP_P
AT18 SATA_RCOMP_N

AT22 MMC1_CLK
AV20 MMC1_D[0]
AU22 MMC1_D[1]
AV22 MMC1_D[2]
AT20 MMC1_D[3]
AY24 MMC1_D[4]
AU26 MMC1_D[5]
AT26 MMC1_D[6]
AU20 MMC1_D[7]
AV26 MMC1_CMD
BA24 MMC1_RST#

SOC_RCOMP_SDMMC1 → R3N15 49.9 1% 2
AY18 MMC1_RCOMP

BA18 SD2_CLK
AY20 SD2_D[0]
BD20 SD2_D[1]
BA20 SD2_D[2]
BD18 SD2_D[3]_CD#
BC18 SD2_CMD

TP2C1 T_POINT1 1 TP → TP_SDMMC3_1P8_EN → AT28 SD3_D[0]
BD26 SD3_D[1]
AU28 SD3_D[2]
BA26 SD3_D[3]
TP2C2 T_POINT1 1 TP → TP_SDMMC3_PWR_EN_B → BC24 SD3_CD#
AV28 SD3_CMD
BF22 SD3_1P8EN
BD22 SD3_PWREN#

R3N20 1 2 49.9 1% V1P8_S → SOC_SDMMC3_RCOMP → BF26 SD3_RCOMP
BD5 SD3_WP

R2B32 1 2 10K NM V1P8_S → SOC_PCIE_CLKREQ4_B

AY26 SD3_CLK

4 OF 13

IC

PCIE_TXP[0] AY7 ← C2000 1 2 0.1uF 25V X7R ← PCIE0_TXP → OUT P[76]
PCIE_TXN[0] AY6 ← C1999 1 2 0.1uF 25V X7R ← PCIE0_TXN → OUT P[76]
PCIE_RXP[0] AT14 ← PCIE0_RXP → IN P[76]
PCIE_RXN[0] AT13 ← PCIE0_RXN → IN P[76]
PCIE_TXP[1] AV6 ← C2B30 1 2 0.1UF X7R ← PCIE1_TXP_LAN → OUT P[26]
PCIE_TXN[1] AV4 ← C2B29 1 2 0.1UF X7R ← PCIE1_TXN_LAN → OUT P[26]
PCIE_RXP[1] AT10 ← PCIE1_RXP_LAN → IN P[26]
PCIE_RXN[1] AT9 ← PCIE1_RXN_LAN → IN P[26]
PCIE_TXP[2] AT7 ← C2B32 1 2 0.1UF X7R ← PCIE2_TXP_LAN → OUT P[28]
PCIE_TXN[2] AT6 ← C2B31 1 2 0.1UF X7R ← PCIE2_TXN_LAN → OUT P[28]
PCIE_RXP[2] AP12 ← PCIE2_RXP_LAN → IN P[28]
PCIE_RXN[2] AP10 ← PCIE2_RXN_LAN → IN P[28]
PCIE_TXP[3] AP6
PCIE_TXN[3] AP4
PCIE_RXP[3] AP9
PCIE_RXN[3] AP7

SOC_PCIE_CLKREQ0_B → IN P[76]
PCIE_CLKREQ[0]# BG3
PCIE_CLKREQ[1]# BD7 ← LAN_PCIE_CLKREQ1B → IN P[12,13]
PCIE_CLKREQ[2]# BG5 ← SOC_PCIE_CLKREQ2_B
PCIE_CLKREQ[3]# BE3 ← SOC_PCIE_CLKREQ3_B

V1P8_S → R3M10 10K 1 2 NM

PCIE_RCOMP_P AP14
PCIE_RCOMP_N AP13 ← R3N7 1 2 402 1%

RESERVED BB4
RESERVED BB3
RESERVED AV10
RESERVED AV9

HDA_LPE_RCOMP BF20 ← HDA_RCOMP ← R3N16 1 2 49.9 1%
HDA_RST# BG22
HDA_SYNC BH20
HDA_CLK BJ21
HDA_SDO BG20
HDA_SDI[0] BG19
HDA_SDI[1] BG21
GPIO_S0_SC[14] BH18
GPIO_S0_SC[15] BG18

LPE_I2S2_CLK BF28
LPE_I2S2_FRM BA30 → SOC_GP_SSP_2_FS → IN P[38]
LPE_I2S2_DATAOUT BC30
LPE_I2S2_DATAIN BD28 → SOC_GP_SSP_2_TXD → IN P[38]

RESERVED P34
RESERVED N34
RESERVED AK9
RESERVED AK7

TP2C3 T_POINT1 1 TP

PROCHOT# C24 → SOC_PROCHOT_B → IN P[33]

V1P8_S → R2N20 10K 2 NM
V1P8_S → R2N21 10K 2 NM
SOC_PCIE_CLKREQ0_B
SOC_PCIE_CLKREQ2_B

V1P8_S → R2N2 10K 2 NM
LAN_PCIE_CLKREQ1B
P[12,13] BI

V1P8_S → R3A20 4.7K 1% 2
SOC_PCIE_CLKREQ2_B

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: E3845 : I/O INTERFACES	LIFE 3	SHEET 12OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

U3C1E
BYT_I_SOC_R1P1
BGA1170

Y3B2 25.000MHZ CASE XTAL G14398-001 C3B22 10PF 50V COG C3B32 10PF 50V COG
R3B5 1M
TP3B3 TP_SFRANAC
TP3B4 TP_HFHPLLC
TP3B5 TP_EXTBGREF
P[13] OUT ICLKICOMP
P[13] OUT ICLKRCOMP
P[76] OUT PCIE0_GBE_CLKN
P[76] OUT PCIE0_GBE_CLKP
P[26] OUT PCIE_GBE_100M_DN
P[26] OUT PCIE_GBE_100M_DP
P[28] OUT PCIE_GBE2_100M_DN
P[28] OUT PCIE_GBE2_100M_DP
TP136 TP131 TP132 TP133 TP134 TP135
ICLKRCOMP IN P[13] R2M32 47.5 1%
ICLKICOMP IN P[13] R2M34 4.02K 1%
R3C5 1K R3B15 1K NM

V1P8_A
R11023 10K NM
L_JTAG_DEBUGGER_PREQ
R11024 10K

P[39] IN SOC_SRTCRST_N
P[93] IN SOC_JTAG_TCK
P[94] IN SOC_JTAG_TRST_N
P[93] IN SOC_JTAG_TMS
P[94] IN SOC_JTAG_TDI
P[94] OUT SOC_JTAG_TDO
P[94] OUT L_JTAG_DEBUGGER_PRDY R11021 0
P[94] IN L_JTAG_DEBUGGER_PREQ R11022 0

P[24] OUT SOC_SPI_CS0_N
P[24] IN SOC_SPI_MISO
P[24] OUT SOC_SPI_MOSI
P[24] OUT SOC_SPI_CLK

P[12] LAN_PCIE_CLKREQ1B R3B9
P[84] BI SOC_TRXFE_GPIO1 R10546 0
P[84] BI SOC_TRXFE_GPIO2 R10547 0
P[84] BI SOC_TRXFE_GPIO3 R10548 0
P[84] BI SOC_TRXFE_GPIO4 R10549 0
TPM_GPIO_0
P[41] OUT TPM_GPIO_2
P[41] OUT SOC_USBSW_SEL
P[85] OUT
P[83,91] BI ISO_TIVA_SOC_GPIO3
P[83,91] BI ISO_TIVA_SOC_GPIO4 R2N8 0

V1P8_A
R3C14 4.7K 1%
P[26] IN WAKE_LAN_N
P[28] IN WAKE_LAN_N R3C11 0
R3C17 2.2K NM
R2N7 49.9 1%

AH12 ICLK_OSCIN
AH10 ICLK_OSCOUT
AD9 RESERVED
AD14 ICLK_ICOMP
AD13 ICLK_RCOMP
AD10 RESERVED
AD12 RESERVED
AF6 PCIE_CLKN[0]
AF4 PCIE_CLKP[0]
AF9 PCIE_CLKN[1]
AF7 PCIE_CLKP[1]
AK4 PCIE_CLKN[2]
AK6 PCIE_CLKP[2]
AM4 PCIE_CLKN[3]
AM6 PCIE_CLKP[3]
AM9 RESERVED
AM10 RESERVED
BH7 PMC_PLT_CLK[0]
BH5 PMC_PLT_CLK[1]
BH4 PMC_PLT_CLK[2]
BH8 PMC_PLT_CLK[3]
BH6 PMC_PLT_CLK[4]
BJ9 PMC_PLT_CLK[5]
C12 ILB_RTC_RST#
D14 TAP_TCK
G12 TAP_TRST#
F14 TAP_TMS
F12 TAP_TDI
G16 TAP_TDO
D18 TAP_PRDY#
F16 TAP_PREQ#
AT34 RESERVED
C21 PCU_SPI_CS[1]#
C23 PCU_SPI_CS[0]#
B22 PCU_SPI_MISO
A21 PCU_SPI_MOSI
C22 PCU_SPI_CLK
B18 GPIO_S5[00]
B16 GPIO_S5[01]
C18 GPIO_S5[02]
A17 GPIO_S5[03]
C17 GPIO_S5[04]
C16 GPIO_S5[05]
B14 GPIO_S5[06]
C15 GPIO_S5[07]
C13 GPIO_S5[08]
A13 GPIO_S5[09]
C19 GPIO_S5[10]
J24 GPIO_S5[17]
N26 GPIO_RCOMP
5 OF 13
IC

SIO_UART1_RXD AU34
SIO_UART1_TXD AV34
SIO_UART1_RTS# BA34
SIO_UART1_CTS# AY34
SIO_UART2_RXD BF34
SIO_UART2_TXD BD34
SIO_UART2_RTS# BD32
SIO_UART2_CTS# BF32
R10550 22 ISO_TIVA_SOC_UART1_TX IN P[83]
R10551 22 ISO_TIVA_SOC_UART1_RX OUT P[83]
R11165 22 ISO_TIVA_SOC_UART1_CTS OUT P[83]
R11166 22 ISO_TIVA_SOC_UART1_RTS IN P[83]
R10552 10K NM
V1P8_A R3C18 10K 1%

PMC_SUSPWRDNACK D26 SOC_SUSPWRDNACK NM OUT P[33]
PMC_SUSCLK[0] G24
RESERVED F18
PMC_SLP_S4# F22 SOC_SLP_S0IX_B OUT P[33,87] SOC_SLP_S4_B OUT P[33]
PMC_SLP_S3# D22 SOC_SLP_S3_B OUT P[33]
V1P8_A
PMC_ACPRESENT D20 PMU_AC_PRESENT R3C8 2.2K 1%
PMC_WAKE_PCIE[0]# F26 SOC_WAKE_N R3C20 10K
PMC_BATLOW# K26 SOC_PMU_BATLOW_B R3C19 20K
PMC_PWRBTN# J26 SOC_PWRBTN_B IN P[33]
PMC_RSTBTN# BG9 SYSTEM_RESET_N_SW IN P[77]
PMC_PLTRST# F20 SOC_PLTRST_N OUT P[17,33,78,94]

PMC_SUS_STAT# G18 SUS_STAT_B_R R2A13 0 SUS_STAT_B OUT P[41]
V3P3_A
ILB_RTC_TEST# C11 SOC_RTEST_N NM IN P[39] R3B17 10K NM
PMC_RSMRST# B10 SOC_RSMRST_B IN P[13,33]
PMC_CORE_PWROK B7 SOC_COREPWROK IN P[13,33,78,94]

ILB_RTC_X1 C9
ILB_RTC_X2 A9
ILB_RTC_EXTPAD B8 C2M20 0.1UF 25V X7R
R2M43 10M
Y2M2 32.768KHZCRYSTAL XTAL G41053-001
G2N1 18PF 1% COG 50V
C2M16 18PF 1% COG 50V

SVID_ALERT# B24 16.9 R3C12 1% R3C10 20 1%
SVID_DATA A25 SOC_SVID_ALERT_B BI P[30]
SVID_CLK C25 SOC_SVID_DATA BI P[30]
SOC_SVID_CLK BI P[30]
R3C16 20 1%

SIO_PWM[0] AU32
SIO_PWM[1] AT32
GPIO_S5[22] K24
GPIO_S5[23] N24
GPIO_S5[24] M20
GPIO_S5[25] J18
GPIO_S5[26] M18
GPIO_S5[27] K18
GPIO_S5[28] K20
GPIO_S5[29] M22
GPIO_S5[30] M24
SIO_SPI_CS# AV32
SIO_SPI_MISO BA28
SIO_SPI_MOSI AY28
SIO_SPI_CLK AY30

P[13,33,78,94] BI SOC_COREPWROK
P[13,33] BI SOC_RSMRST_B
R11155 100K NM C3C1 0.1UF X7R 25V NM
C3B33 0.1UF X7R 25V NM

OpenCellular
DOCUMENT NUMBER: 232-000036
TITLE: E3845 : CLOCK SPI PWR JTAG
LIFE 3
SHEET 13OF 96

SECTION 2.31 OF E3800 DATA SHEET SUGGESTS TO CONNECT RSVD_GND PIN TO COMMON GND PIN.

U3C1G

BYT_I_SOC_R1P1

BGA1170

AM2	RSVD_GND[1]	RSVD_GND[0]	AM3
AD25	VSS	VSS	A43
A23	VSS	VSS	A39
AD21	VSS	VSS	AG36
AD19	VSS	VSS	A35
AC38	VSS	VSS	AG25
AC36	VSS	VSS	AG16
AC35	VSS	VSS	AF10
AC33	VSS	VSS	AF47
AC25	VSS	VSS	AF32
AC21	VSS	VSS	AF25
AC19	VSS	VSS	AF12
AC18	VSS	VSS	AE9
A19	VSS	VSS	AE8
AC16	VSS	VSS	AE6
AB6	VSS	VSS	A31
AB51	VSS	VSS	AE53
AB50	VSS	VSS	AE51
AB48	VSS	VSS	AE50
AB47	VSS	VSS	AE48
AB45	VSS	VSS	AE46
AB41	VSS	VSS	AE45
AB4	VSS	VSS	AE43
AB10	VSS	VSS	AE42
A15	VSS	VSS	AE40
AA53	VSS	VSS	AE4
AA38	VSS	VSS	A27
AA35	VSS	VSS	AE3
AA32	VSS	VSS	AE14
AA3	VSS	VSS	AE12
AA21	VSS	VSS	AE11
AA19	VSS	VSS	AE1
AA16	VSS	VSS	AD7
AA1	VSS	VSS	AD47
A47	VSS	VSS	AD33
A11	VSS	VSS	AD32

6 OF 13

IC

U3C1I

BYT_I_SOC_R1P1

BGA1170

AH2	RSVD_GND[3]	RSVD_GND[2]	AH3
AM40	VSS	VSS	AH6
AH45	VSS	VSS	AH51
AM36	VSS	VSS	AT19
AM35	VSS	VSS	AH50
AM33	VSS	VSS	AT16
AM29	VSS	VSS	AT12
AM25	VSS	VSS	AP40
AM24	VSS	VSS	AN9
AM19	VSS	VSS	AN8
M28	VSS	VSS	AN6
AM12	VSS	VSS	AN53
AK44	VSS	VSS	AN51
AH41	VSS	VSS	AN5
AK41	VSS	VSS	AN49
AK33	VSS	VSS	AH48
AK16	VSS	VSS	AN48
AK14	VSS	VSS	AN46
AK10	VSS	VSS	AN45
AJ53	VSS	VSS	AN43
AJ38	VSS	VSS	AN42
AJ35	VSS	VSS	AN40
AJ33	VSS	VSS	AN38
AJ32	VSS	VSS	AN36
AH4	VSS	VSS	AN35
AJ30	VSS	VSS	AN33
AJ3	VSS	VSS	AH47
AJ29	VSS	VSS	AN3
AJ27	VSS	VSS	AN22
AJ25	VSS	VSS	AN14
AJ21	VSS	VSS	AN12
AJ16	VSS	VSS	AN11
AJ1	VSS	VSS	AN1
AH9	VSS	VSS	AM7
AH7	VSS	VSS	AM51
AG38	VSS	VSS	AM44

7 OF 13

IC

U3C1F

BYT_I_SOC_R1P1

BGA1170

BB10	RSVD_GND[4]	RSVD_GND[5]	BC10
BA14	VSS	VSS	AU1
AT35	VSS	VSS	AT52
AY9	VSS	VSS	BF24
AY50	VSS	VSS	AT47
AY4	VSS	VSS	BF16
AY36	VSS	VSS	BF12
AY32	VSS	VSS	BE8
AY22	VSS	VSS	BE35
AY10	VSS	VSS	BE2
AW35	VSS	VSS	BE19
AW3	VSS	VSS	BF38
AW27	VSS	VSS	BD35
AT30	VSS	VSS	BD30
AW19	VSS	VSS	BD27
AW13	VSS	VSS	AT4
AV7	VSS	VSS	BD24
AV51	VSS	VSS	BD19
AV47	VSS	VSS	BC42
AV38	VSS	VSS	BC34
AV35	VSS	VSS	BC32
AV30	VSS	VSS	BC28
AV27	VSS	VSS	BC26
AV24	VSS	VSS	BC22
AT27	VSS	VSS	BC20
AV19	VSS	VSS	BB35
AV18	VSS	VSS	AT38
AV14	VSS	VSS	BB27
AV13	VSS	VSS	BB19
AV12	VSS	VSS	BA53
AU51	VSS	VSS	BA40
AU38	VSS	VSS	BA35
AU30	VSS	VSS	BA32
AU3	VSS	VSS	BA27
AU24	VSS	VSS	BA22
AT24	VSS	VSS	BA19

8 OF 13

IC

U3C1H

BYT_I_SOC_R1P1

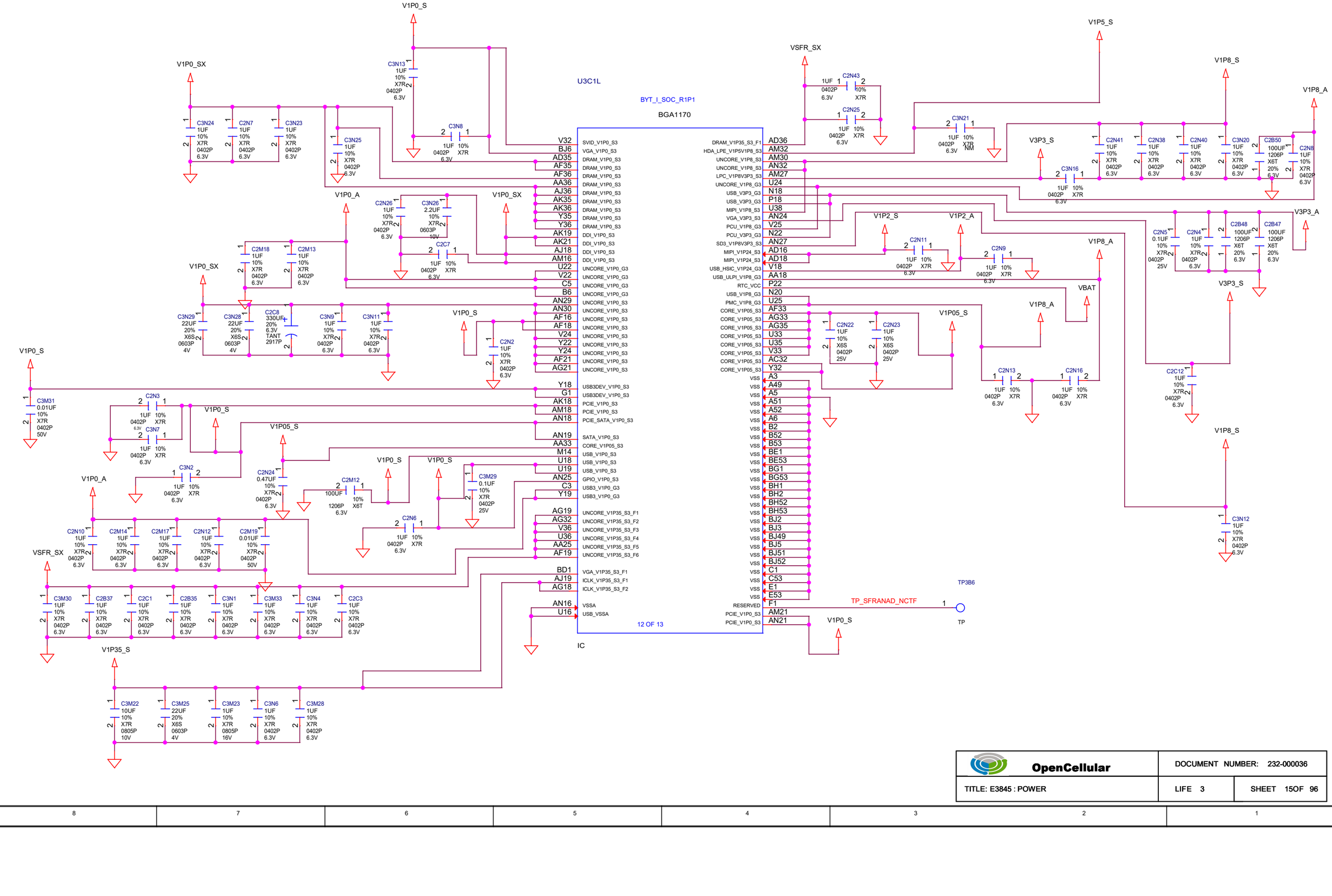
BGA1170

BB5	RSVD_GND[6]	RSVD_GND[7]	BB7
F30	VSS	VSS	BG49
BG31	VSS	VSS	BG45
F27	VSS	VSS	K50
F24	VSS	VSS	BG42
F2	VSS	VSS	K4
F19	VSS	VSS	K36
E8	VSS	VSS	K32
E35	VSS	VSS	K22
E19	VSS	VSS	K14
D36	VSS	VSS	G10
D30	VSS	VSS	J53
D24	VSS	VSS	J40
BF4	VSS	VSS	J35
D16	VSS	VSS	J32
D12	VSS	VSS	BG39
C49	VSS	VSS	J27
C45	VSS	VSS	J22
C42	VSS	VSS	J19
C39	VSS	VSS	J16
C34	VSS	VSS	J1
C31	VSS	VSS	H35
C14	VSS	VSS	H27
BJ7	VSS	VSS	H19
BF36	VSS	VSS	G42
BJ47	VSS	VSS	G34
BJ43	VSS	VSS	BG34
BJ39	VSS	VSS	G32
BJ35	VSS	VSS	G28
BJ31	VSS	VSS	G26
BJ27	VSS	VSS	G22
BJ23	VSS	VSS	G20
BJ19	VSS	VSS	F7
BJ15	VSS	VSS	F5
BJ11	VSS	VSS	D38
BF30	VSS	VSS	F35

9 OF 13

IC

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: E3845 : POWER GROUND	LIFE 3	SHEET 14OF 96


U3C1L
BYT_I_SOC_R1P1
BGA1170
12 OF 13
IC
V1P0_S
V1P0_SX
V1P0_A
V1P05_S
V1P35_S
VSFR_SX
V1P2_S
V1P2_A
V1P5_S
V1P8_S
V1P8_A
V3P3_S
V3P3_A
VBAT
TP_SFRANAD_NCTF
TP3B6
TP
V32 SVID_V1P0_S3
BJ6 VGA_V1P0_S3
AD35 DRAM_V1P0_S3
AF35 DRAM_V1P0_S3
AF36 DRAM_V1P0_S3
AA36 DRAM_V1P0_S3
AJ36 DRAM_V1P0_S3
AK35 DRAM_V1P0_S3
AK36 DRAM_V1P0_S3
Y35 DRAM_V1P0_S3
Y36 DRAM_V1P0_S3
AK19 DDI_V1P0_S3
AK21 DDI_V1P0_S3
AJ18 DDI_V1P0_S3
AM16 DDI_V1P0_S3
U22 UNCORE_V1P0_G3
V22 UNCORE_V1P0_G3
C5 UNCORE_V1P0_G3
B6 UNCORE_V1P0_G3
AN29 UNCORE_V1P0_S3
AN30 UNCORE_V1P0_S3
AF16 UNCORE_V1P0_S3
AF18 UNCORE_V1P0_S3
V24 UNCORE_V1P0_S3
Y22 UNCORE_V1P0_S3
Y24 UNCORE_V1P0_S3
AF21 UNCORE_V1P0_S3
AG21 UNCORE_V1P0_S3
Y18 USB3DEV_V1P0_S3
G1 USB3DEV_V1P0_S3
AK18 PCIE_V1P0_S3
AM18 PCIE_V1P0_S3
AN18 PCIE_SATA_V1P0_S3
AN19 SATA_V1P0_S3
AA33 CORE_V1P05_S3
M14 USB_V1P0_S3
U18 USB_V1P0_S3
U19 USB_V1P0_S3
AN25 GPIO_V1P0_S3
C3 USB3_V1P0_G3
Y19 USB3_V1P0_G3
AG19 UNCORE_V1P35_S3_F1
AG32 UNCORE_V1P35_S3_F2
V36 UNCORE_V1P35_S3_F3
U36 UNCORE_V1P35_S3_F4
AA25 UNCORE_V1P35_S3_F5
AF19 UNCORE_V1P35_S3_F6
BD1 VGA_V1P35_S3_F1
AJ19 ICLK_V1P35_S3_F1
AG18 ICLK_V1P35_S3_F2
AN16 VSSA
U16 USB_VSSA
DRAM_V1P35_S3_F1 AD36
HDA_LPE_V1P5V1P8_S3 AM32
UNCORE_V1P8_S3 AM30
UNCORE_V1P8_S3 AN32
LPC_V1P8V3P3_S3 AM27
UNCORE_V1P8_G3 U24
USB_V3P3_G3 N18
USB_V3P3_G3 P18
MIPI_V1P8_S3 U38
VGA_V3P3_S3 AN24
PCU_V1P8_G3 V25
PCU_V3P3_G3 N22
SD3_V1P8V3P3_S3 AN27
MIPI_V1P24_S3 AD16
MIPI_V1P24_S3 AD18
USB_HSIC_V1P24_G3 V18
USB_ULPI_V1P8_G3 AA18
RTC_VCC P22
USB_V1P8_G3 N20
PMC_V1P8_G3 U25
CORE_V1P05_S3 AF33
CORE_V1P05_S3 AG33
CORE_V1P05_S3 AG35
CORE_V1P05_S3 U33
CORE_V1P05_S3 U35
CORE_V1P05_S3 V33
CORE_V1P05_S3 AC32
CORE_V1P05_S3 Y32
VSS A3
VSS A49
VSS A5
VSS A51
VSS A52
VSS A6
VSS B2
VSS B52
VSS B53
VSS BE1
VSS BE53
VSS BG1
VSS BG53
VSS BH1
VSS BH2
VSS BH52
VSS BH53
VSS BJ2
VSS BJ3
VSS BJ49
VSS BJ5
VSS BJ51
VSS BJ52
VSS C1
VSS C53
VSS E1
VSS E53
RESERVED F1
PCIE_V1P0_S3 AM21
PCIE_V1P0_S3 AN21
C3M31 0.01UF 10% X7R 0402P 50V
C2N3 1UF 10% X7R 0402P 6.3V
C3N7 1UF 10% X7R 0402P 6.3V
C3N2 1UF 10% X7R 0402P 6.3V
C2N24 0.47UF 10% X7R 0402P 6.3V
C2M12 100UF 10% X6T 1206P 6.3V
C2N6 1UF 10% X7R 0402P 6.3V
C3M29 0.1UF 10% X7R 0402P 25V
C3M30 1UF 10% X7R 0402P 6.3V
C2B37 1UF 10% X7R 0402P 6.3V
C2C1 1UF 10% X7R 0402P 6.3V
C2B35 1UF 10% X7R 0402P 6.3V
C3N1 1UF 10% X7R 0402P 6.3V
C3M33 1UF 10% X7R 0402P 6.3V
C3N4 1UF 10% X7R 0402P 6.3V
C2C3 1UF 10% X7R 0402P 6.3V
C3M22 10UF 10% X7R 0805P 10V
C3M25 22UF 20% X6S 0603P 4V
C3M23 1UF 10% X7R 0805P 16V
C3N6 1UF 10% X7R 0402P 6.3V
C3M28 1UF 10% X7R 0402P 6.3V
C3N13 1UF 10% X7R 0402P 6.3V
C3N8 1UF 10% X7R 0402P 6.3V
C3N24 1UF 10% X7R 0402P 6.3V
C2N7 1UF 10% X7R 0402P 6.3V
C3N23 1UF 10% X7R 0402P 6.3V
C3N25 1UF 10% X7R 0402P 6.3V
C2N26 1UF 10% X7R 0402P 6.3V
C3N26 2.2UF 10% X7R 0603P 10V
C2C7 1UF 10% X7R 0402P 6.3V
C2M18 1UF 10% X7R 0402P 6.3V
C2M13 1UF 10% X7R 0402P 6.3V
C3N29 22UF 20% X6S 0603P 4V
C3N28 22UF 20% X6S 0603P 4V
C2C8 330UF 20% 6.3V TANT 2917P
C3N9 1UF 10% X7R 0402P 6.3V
C3N11 1UF 10% X7R 0402P 6.3V
C2N2 1UF 10% X7R 0402P 6.3V
C2M10 1UF 10% X7R 0402P 6.3V
C2M14 1UF 10% X7R 0402P 6.3V
C2M17 1UF 10% X7R 0402P 6.3V
C2N12 1UF 10% X7R 0402P 6.3V
C2M19 0.01UF 10% X7R 0402P 50V
C2N43 1UF 10% X7R 0402P 6.3V
C2N25 1UF 10% X7R 0402P 6.3V
C3N21 1UF 10% X7R 0402P 6.3V NM
C3N16 1UF 10% X7R 0402P 6.3V
C2N41 1UF 10% X7R 0402P 6.3V
C2N38 1UF 10% X7R 0402P 6.3V
C2N40 1UF 10% X7R 0402P 6.3V
C3N20 1UF 10% X7R 0402P 6.3V
C2B50 100UF 1206P X6T 20% 6.3V
C2N8 1UF 10% X7R 0402P 6.3V
C2N5 0.1UF 10% X7R 0402P 25V
C2N4 1UF 10% X7R 0402P 6.3V
C2B48 100UF 1206P X6T 20% 6.3V
C2B47 100UF 1206P X6T 20% 6.3V
C2N11 1UF 10% X7R 0402P 6.3V
C2N9 1UF 10% X7R 0402P 6.3V
C2N22 1UF 10% X6S 0402P 25V
C2N23 1UF 10% X6S 0402P 25V
C2N13 1UF 10% X7R 0402P 6.3V
C2N16 1UF 10% X7R 0402P 6.3V
C2C12 1UF 10% X7R 0402P 6.3V
C3N12 1UF 10% X7R 0402P 6.3V
OpenCellular
DOCUMENT NUMBER: 232-000036
TITLE: E3845 : POWER
LIFE 3
SHEET 15OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

U3C1K
BYT_I_SOC_R1P1
BGA1170

CAD NOTE : ALL USB2 TRACES TO BE ROUTED FOR DIFFERENTIAL 85 OHMS IMPEDANCE.

V1P8_A
R2N1 10K 1%
USB_ULPI_RST_N

V1P8_A
R2B38 10K 1%
R2B39 10K 1%
USB_OC0_N
USB_OC1_N

R3B12 1K 1%
R3B13 1K 1%
USB_REFCLKN
USB_REFCLKP

V1P8_S
R2C1 4.7K 1%
R2B34 4.7K 1%
R2B33 4.7K 1%
SMB_SOC_DAT
SMB_SOC_CLK
SMB_ALERT_N

R3B8 45.3 1%
R3B10 NM
USB_RCOMP
USB_OBSP

R3B14 45.3 1%
R3N6 49.9 1%
USB_HSIC_RCOMP

G2	USB_ULPI_CLK			
M3	USB_ULPI_DATA[0]			
L1	USB_ULPI_DATA[1]			
K2	USB_ULPI_DATA[2]			
K3	USB_ULPI_DATA[3]			
M2	USB_ULPI_DATA[4]			
N3	USB_ULPI_DATA[5]			
P2	USB_ULPI_DATA[6]			
L3	USB_ULPI_DATA[7]			
J3	USB_ULPI_DIR			
P3	USB_ULPI_NXT			
H3	USB_ULPI_STP			
B12	USB_ULPI_REFCLK			
J20	USB_ULPI_RST#			
M16	USB_DP[0]	P[76]	BI	USB_DP0
K16	USB_DN[0]	P[76]	BI	USB_DN0
J14	USB_DP[1]	P[69]	BI	USB_DP1
G14	USB_DN[1]	P[69]	BI	USB_DN1
K12	USB_DP[2]	P[69]	BI	USB_DP2
J12	USB_DN[2]	P[69]	BI	USB_DN2
K10	USB_DP[3]	P[61]	BI	USB_DP3
H10	USB_DN[3]	P[61]	BI	USB_DN3
F10	ICLK_USB_TERM[0]			
D10	ICLK_USB_TERM[1]			
C20	USB_OC[0]#			
B20	USB_OC[1]#			
D6	USB_RCOMPO			
C7	USB_RCOMPI			
M13	USB_PLL_MON			
B4	USB_HSIC0_DATA			
B5	USB_HSIC0_STROBE			
E2	USB_HSIC1_DATA			
D2	USB_HSIC1_STROBE			
A7	USB_HSIC_RCOMP			
BF18	LPC_RCOMP			
BH16	ILB_LPC_AD[0]	P[41]	OUT	SOC_LPC_AD0
BJ17	ILB_LPC_AD[1]	P[41]	OUT	SOC_LPC_AD1
BJ13	ILB_LPC_AD[2]	P[41]	OUT	SOC_LPC_AD2
BG14	ILB_LPC_AD[3]	P[41]	OUT	SOC_LPC_AD3
BG17	ILB_LPC_FRAME#	P[41]	OUT	SOC_LPC_FRAME_N
BG15	ILB_LPC_CLK[0]	P[41]	OUT	SOC_LPC_CLKOUT0
BH14	ILB_LPC_CLK[1]			
BG16	ILB_LPC_CLKRUN#	P[41]	OUT	SOC_LPC_CLKRUNB
BG13	ILB_LPC_SERIRQ	P[41]	IN	SOC_ILB_SERIRQ
BG12	PCU_SMB_DATA	P[16,19]	BI	SMB_SOC_DAT
BH10	PCU_SMB_CLK	P[16,19]	BI	SMB_SOC_CLK
BG11	PCU_SMB_ALERT#			SMB_ALERT_N

11 OF 13

TP3B1 TP3B2

RESERVED	M10	TP_USB3_ATB0_0		
RESERVED	M9	TP_USB3_ATB0_1		
RESERVED	P7	USB3_P0_ICLK_DN		
RESERVED	P6	USB3_P0_ICLK_DP		
USB3DEV_REXT[0]	M7			
USB3DEV_RXN[0]	P12			
USB3DEV_RXP[0]	P10			
USB3DEV_TXN[0]	M6			
USB3DEV_TXP[0]	M4			
RESERVED	H8	USB3_P1_ICLK_DN		
RESERVED	H7			
RESERVED	H5			
RESERVED	H4	USB3_P1_ICLK_DP		
USB3_REXT[0]	M12			
USB3_RXN[0]	E3	USB3_RX0_N	IN	P[85]
USB3_RXP[0]	D4	USB3_RX0_P	IN	P[85]
USB3_TXN[0]	K7	USB3_TX0_N	OUT	P[85]
USB3_TXP[0]	K6	USB3_TX0_P	OUT	P[85]
GPIO_S0_SC[055]	BD12	SOC_TRXFE_GPIO5	BI	P[84]
GPIO_S0_SC[056]	BC12	SOC_MHSI_ACFLAG	IN	P[38]
GPIO_S0_SC[057]	BD14	PCU_TXD	OUT	P[69]
GPIO_S0_SC[058]	BC14	ISO_TIVA_SOC_GPIO1	BI	P[83,91]
GPIO_S0_SC[059]	BF14	ISO_TIVA_SOC_GPIO2	BI	P[83,91]
GPIO_S0_SC[060]	BD16	SOC_TRXFE_GPIO6	BI	P[84]
GPIO_S0_SC[061]	BC16			
ILB_8254_SPKR	BH12	PCU_RXD	IN	P[69]
SIO_I2C0_DATA	BH22	SOC_I2C_SDA	BI	P[33]
SIO_I2C0_CLK	BG23	SOC_I2C_SCL	BI	P[33]
SIO_I2C1_DATA	BG24			
SIO_I2C1_CLK	BH24			
SIO_I2C2_DATA	BG25	SOC_I2C2_SDA		
SIO_I2C2_CLK	BJ25	SOC_I2C2_SCL		
SIO_I2C3_DATA	BG26			
SIO_I2C3_CLK	BH26			
SIO_I2C4_DATA	BF27			
SIO_I2C4_CLK	BG27			
SIO_I2C5_DATA	BH28			
SIO_I2C5_CLK	BG28			
SIO_I2C6_DATA	BJ29	TP128		
SIO_I2C6_CLK	BG29			
GPIO_S0_SC[092]	BH30	TP129		
GPIO_S0_SC[093]	BG30			

V1P0_S
R2M41 100K 1%
R2M39 100K 1%
R2M40 1.24K 1%

CAD NOTE:
PLACE R2M40 CLOSE TO U3C1 AND CONNECT TO PACKAGE GROUND WITH A SHORT TRACE.

V1P0_A
R2M38 100K 1%
R2M36 100K 1%
R2M45 1.24K 1%

CAD NOTE:
PLACE R2M45 CLOSE TO U3C1
AND CONNECT TO PACKAGE GROUND
WITH A SHORT TRACE.

C1982 0.1uF 25V X7R
C1981 0.1uF 25V X7R

CAD NOTE: CAPACITORS SHOULD BE PLACED NEAR U3C1

R11157 0
R11156 0

V1P8_S
R2C9 33 5%
R2C12 33 5%

V1P8_S
R1B23 1.8K 1%
R1B24 1.8K 1%

V1P8_S
R1B14 1.8K 1%
R1B8 1.8K 1%
SOC_I2C_SDA
SOC_I2C_SCL

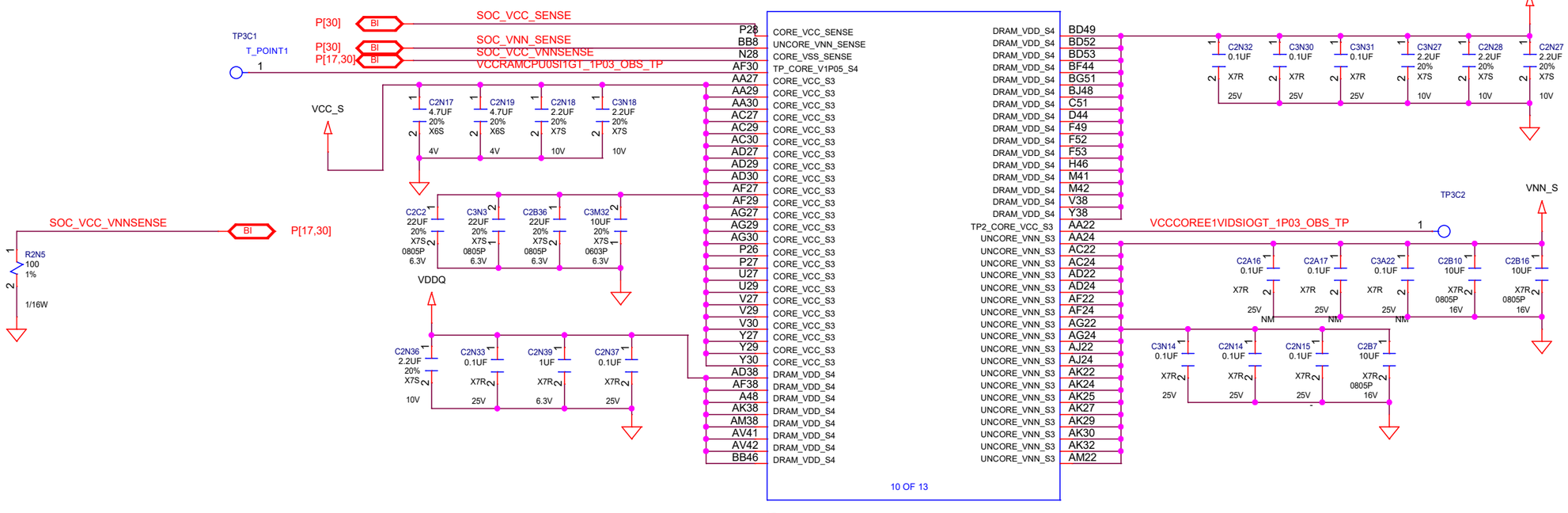
OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: E3845 : USB AND GPIO INTERFACE	LIFE 3	SHEET 16OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

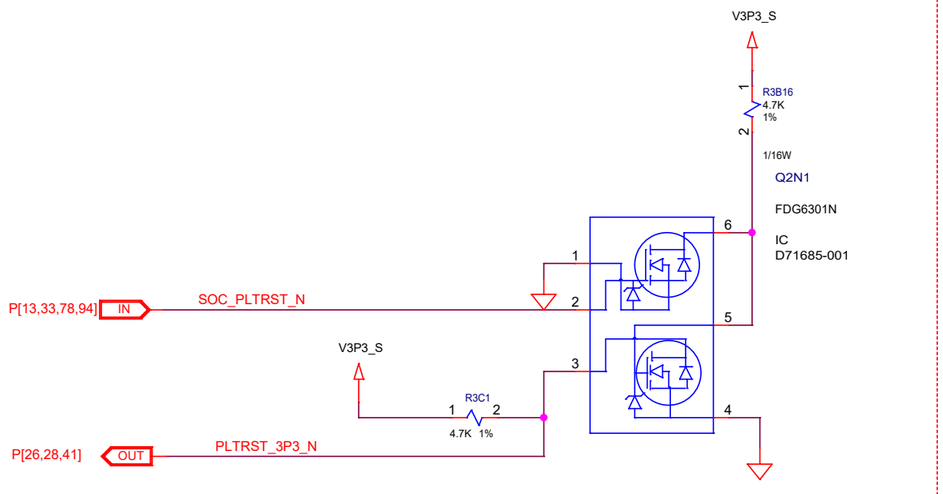
U3C1J

BYT_I_SOC_R1P1

BGA1170



IC



LEVEL TRANSLATOR FOR SOC_PLTRST_N

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: E3845 : POWER	LIFE 3	SHEET 17OF 96

U3C1M

BYT_I_SOC_R1P1

BGA1170

U40	VSS	VSS	M27
L27	VSS	VSS	Y9
U32	VSS	VSS	Y7
U30	VSS	VSS	M26
U3	VSS	VSS	Y44
U21	VSS	VSS	Y41
U14	VSS	VSS	Y33
U12	VSS	VSS	Y25
U11	VSS	VSS	Y21
U1	VSS	VSS	Y16
T40	VSS	VSS	Y14
P9	VSS	VSS	Y10
L19	VSS	VSS	V7
P52	VSS	VSS	V51
P47	VSS	VSS	M19
P4	VSS	VSS	V44
P38	VSS	VSS	V40
P35	VSS	VSS	V35
P32	VSS	VSS	V21
P24	VSS	VSS	V19
P20	VSS	VSS	V16
P19	VSS	VSS	V12
P16	VSS	VSS	U9
L13	VSS	VSS	U8
P13	VSS	VSS	U6
N51	VSS	VSS	L35
N38	VSS	VSS	U53
N16	VSS	VSS	U51
N1	VSS	VSS	U5
M51	VSS	VSS	U49
M47	VSS	VSS	U48
M38	VSS	VSS	U46
M35	VSS	VSS	U45
M34	VSS	VSS	U43
K9	VSS	VSS	U42

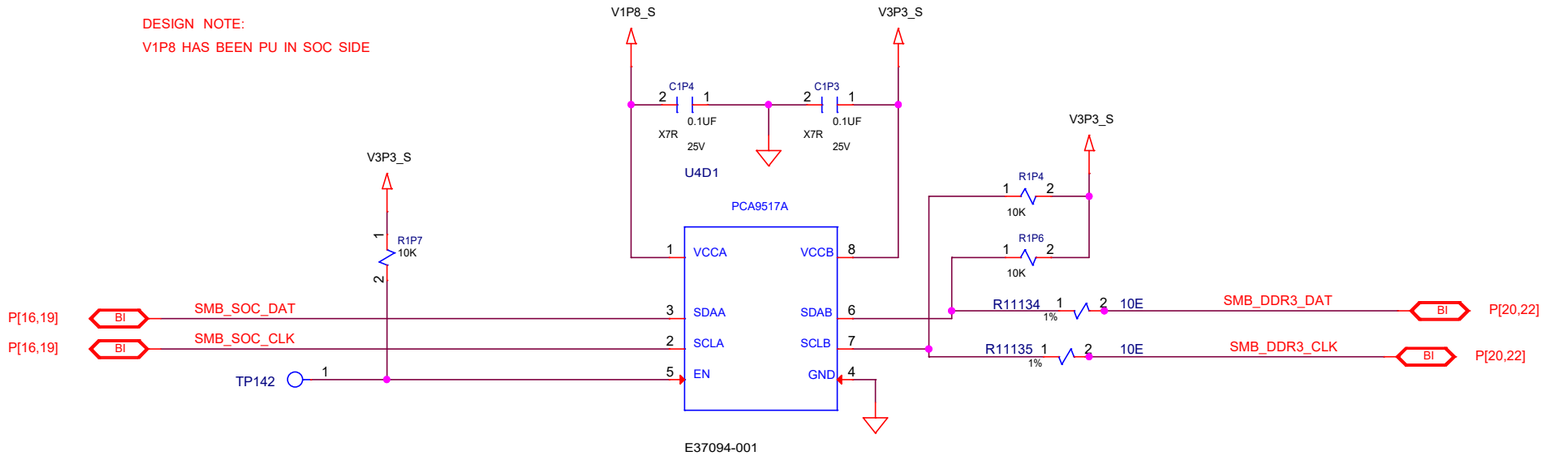
13 OF 13

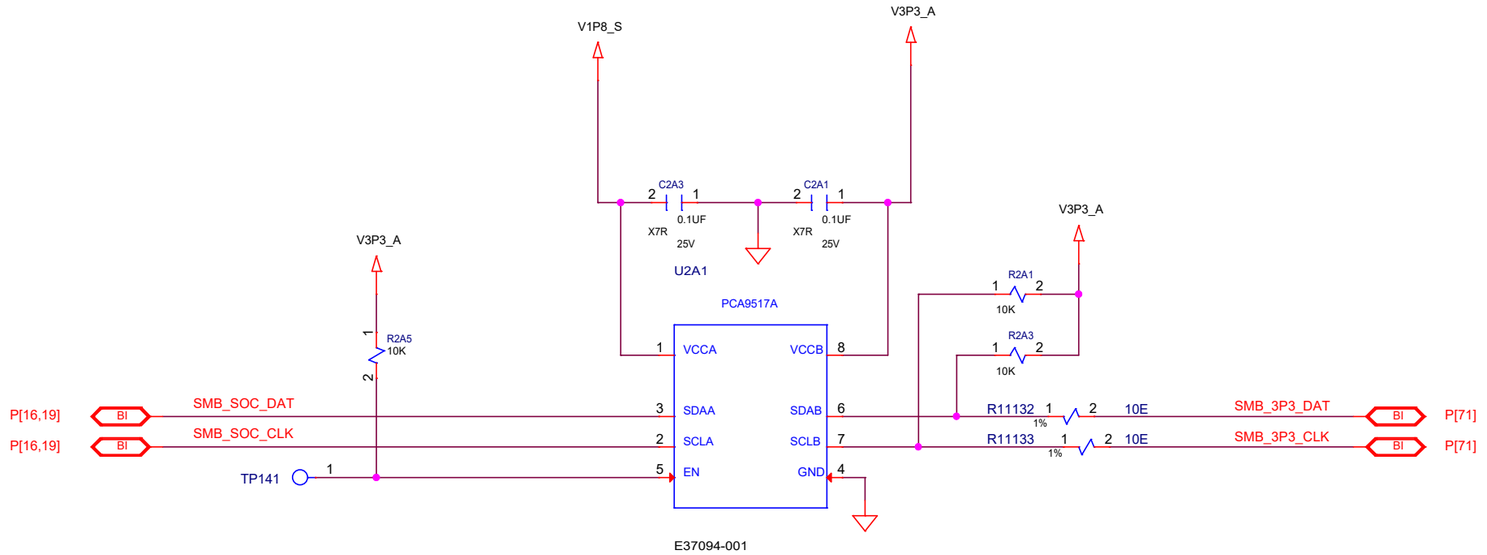
IC

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: E3845 : POWER GROUND	LIFE 3	SHEET 18OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

DESIGN NOTE:
V1P8 HAS BEEN PU IN SOC SIDE

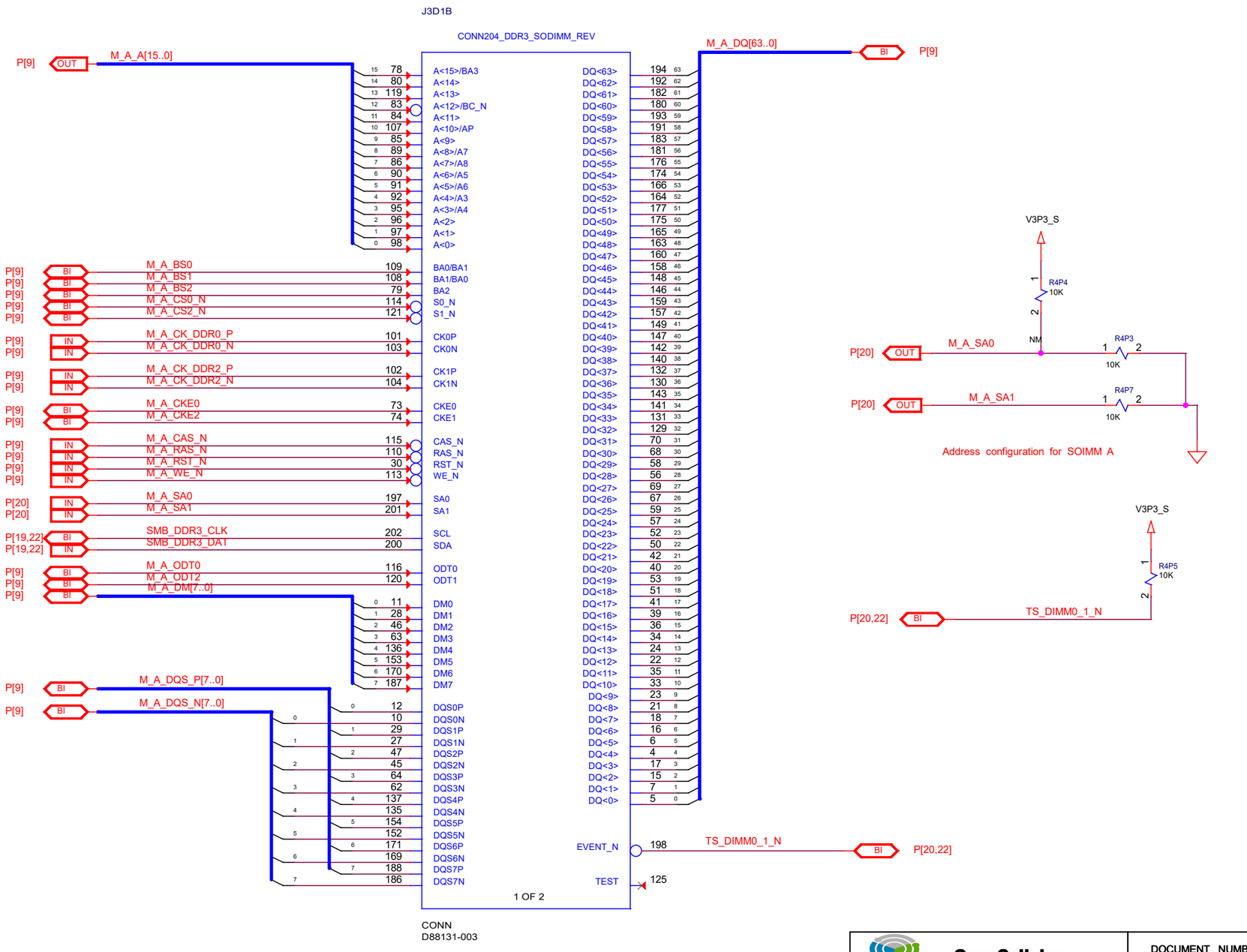




OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: E3845 : DDR 3P3 SMBUS CONTROL	LIFE 3	SHEET 19OF 96

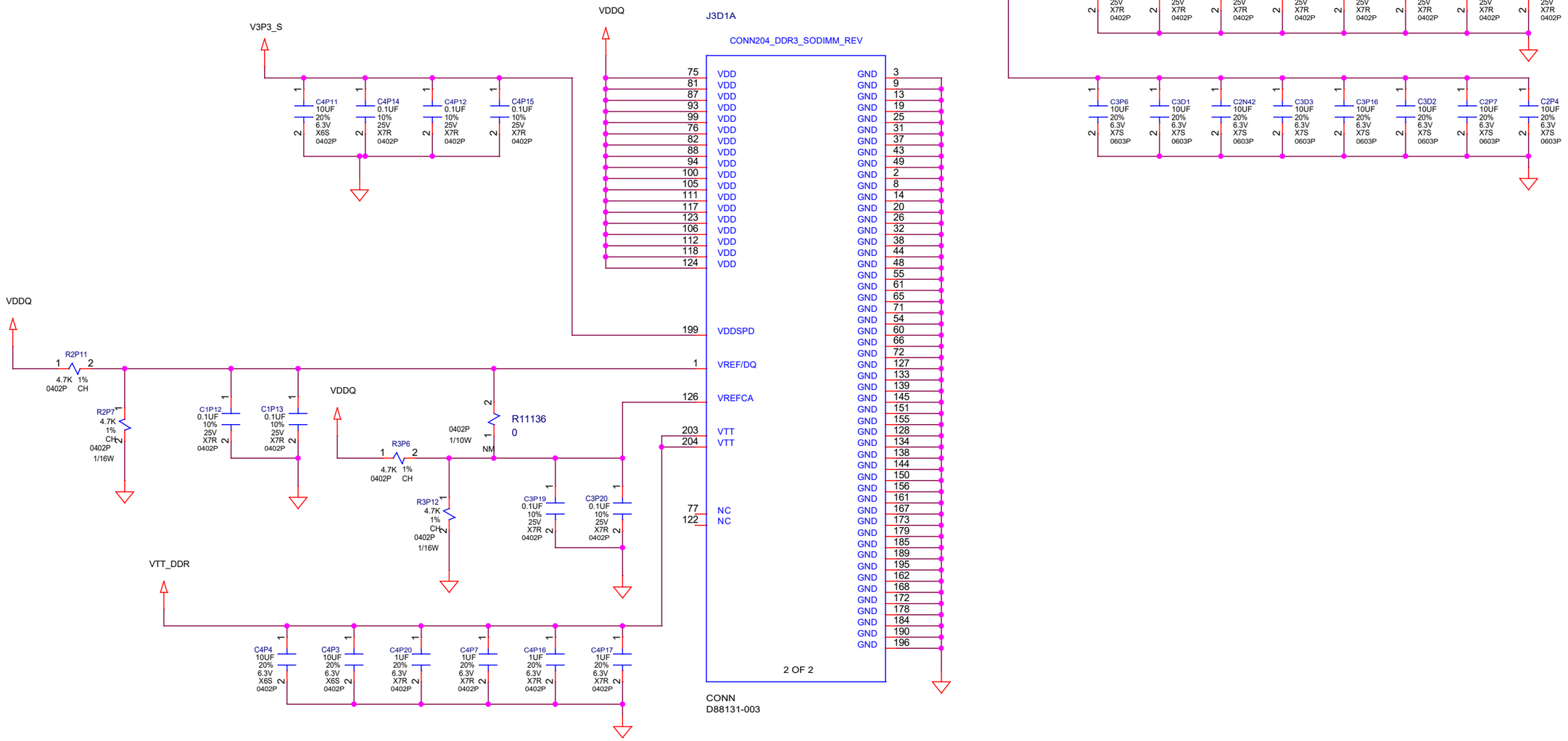
UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

CHANNEL A DIMM A0 1 of 2



OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: DDR DIMMO CH A 1 OF 2	LIFE 3	SHEET 20OF 96

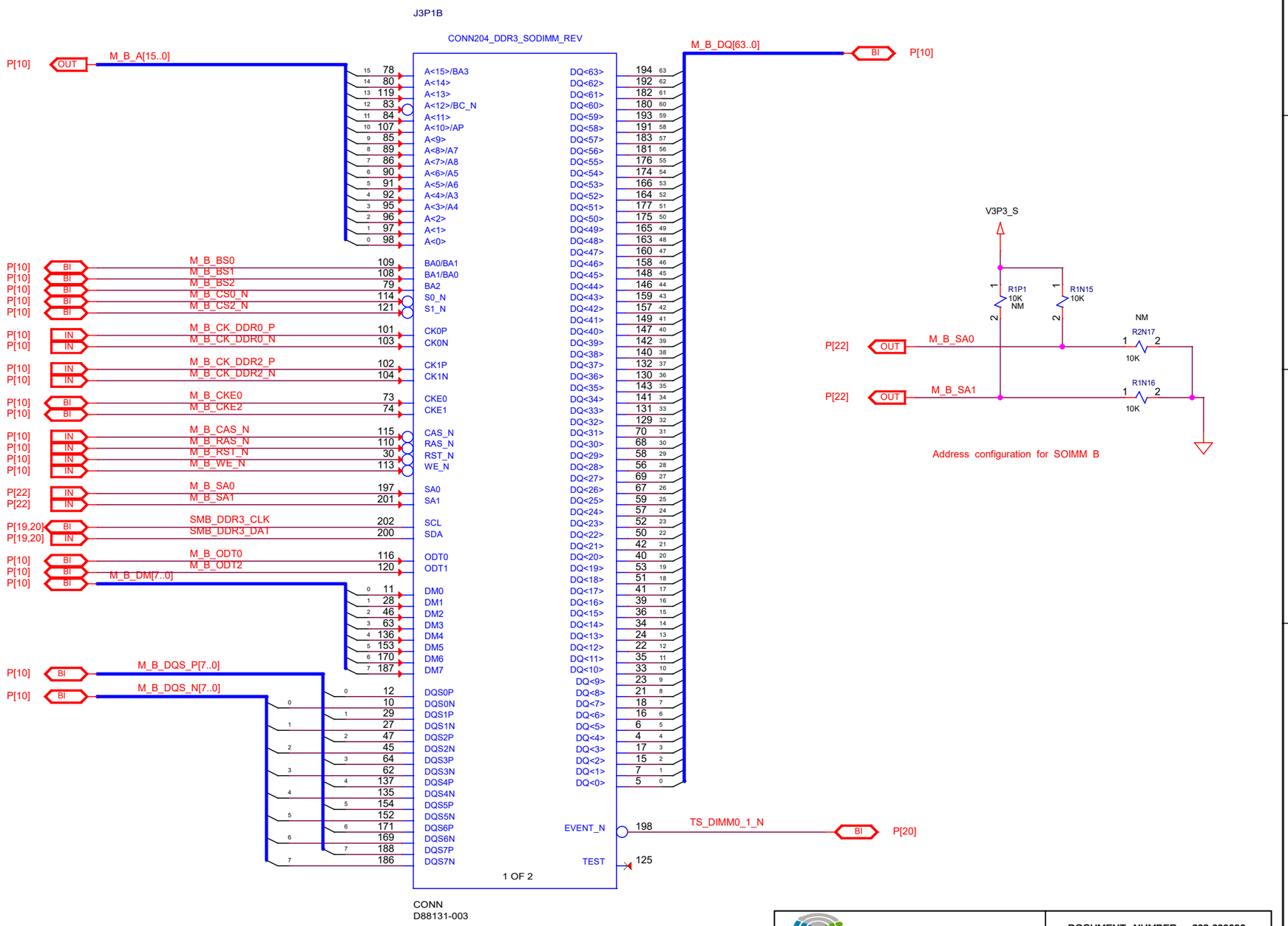
CHANNEL A DIMM A0 2 of 2



OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: DDR DIMMO CHA 2 OF 2	LIFE 3	SHEET 21OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

CHANNEL B DIMM B0 1 OF 2



OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: DDR DIMMO CH B 1 OF 2	LIFE 3	SHEET 22OF 96

CHANNEL B DIMM B0 2 OF 2

V3P3_S

C1N13 10UF 20% 10V X6S 0603P
C1N18 0.1UF 10% 25V X7R 0402P
C1N14 0.1UF 10% 25V X7R 0402P
C1N17 0.1UF 10% 25V X7R 0402P

VDDQ

C3P23 330UF 20% 6.3V TANT 7343P NM
C3P12 0.1UF 10% 25V X7R 0402P
C3P18 0.1UF 10% 25V X7R 0402P
C3P15 0.1UF 10% 25V X7R 0402P
C2P11 0.1UF 10% 25V X7R 0402P
C3P17 0.1UF 10% 25V X7R 0402P
C3P1 0.1UF 10% 25V X7R 0402P
C3P13 0.1UF 10% 25V X7R 0402P
C3P7 0.1UF 10% 25V X7R 0402P

C2P8 10UF 20% 6.3V X7S 0603P
C2P6 10UF 20% 6.3V X7S 0603P
C2P14 10UF 20% 6.3V X7S 0603P
C2P12 10UF 20% 6.3V X7S 0603P
C2P15 10UF 20% 6.3V X7S 0603P
C2P13 10UF 20% 6.3V X7S 0603P
C3P21 10UF 20% 6.3V X7S 0603P
C3P22 10UF 20% 6.3V X7S 0603P

VDDQ

R3P2 4.7K 1% 0402P CH
R4N8 4.7K 1% CH 0402P 1/16W
C4P1 0.1UF 10% 25V X7R 0402P
C4P2 0.1UF 10% 25V X7R 0402P

VDDQ

R11137 0 0402P 1/10W NM
R2P3 4.7K 1% 0402P CH
R2P2 4.7K 1% CH 0402P 1/16W
C2P2 0.1UF 10% 25V X7R 0402P
C2P1 0.1UF 10% 25V X7R 0402P

VTT_DDR

C1P7 10UF 20% 6.3V X6S 0402P
C1P5 10UF 20% 6.3V X6S 0402P
C1P10 1UF 20% 6.3V X7R 0402P
C1P6 1UF 20% 6.3V X7R 0402P
C1P9 1UF 20% 6.3V X7R 0402P
C1P11 1UF 20% 6.3V X7R 0402P

J3P1A
CONN204_DDR3_SODIMM_REV

75	VDD	GND	3
81	VDD	GND	9
87	VDD	GND	13
93	VDD	GND	19
99	VDD	GND	25
76	VDD	GND	31
82	VDD	GND	37
88	VDD	GND	43
94	VDD	GND	49
100	VDD	GND	2
105	VDD	GND	8
111	VDD	GND	14
117	VDD	GND	20
123	VDD	GND	26
106	VDD	GND	32
112	VDD	GND	38
118	VDD	GND	44
124	VDD	GND	48
		GND	55
		GND	61
		GND	65
		GND	71
199	VDDSPD	GND	54
		GND	60
		GND	66
		GND	72
1	VREF/DQ	GND	127
		GND	133
		GND	139
126	VREFCA	GND	145
		GND	151
		GND	155
203	VTT	GND	128
204	VTT	GND	134
		GND	138
		GND	144
		GND	150
		GND	156
77	NC	GND	161
122	NC	GND	167
		GND	173
		GND	179
		GND	185
		GND	189
		GND	195
		GND	162
		GND	168
		GND	172
		GND	178
		GND	184
		GND	190
		GND	196

2 OF 2

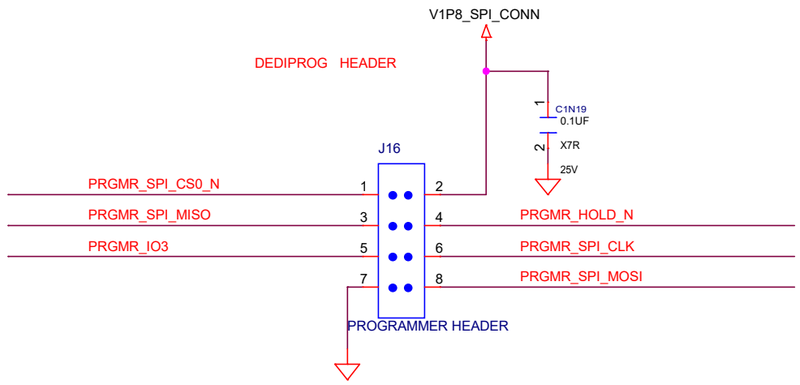
CONN
D88131-003

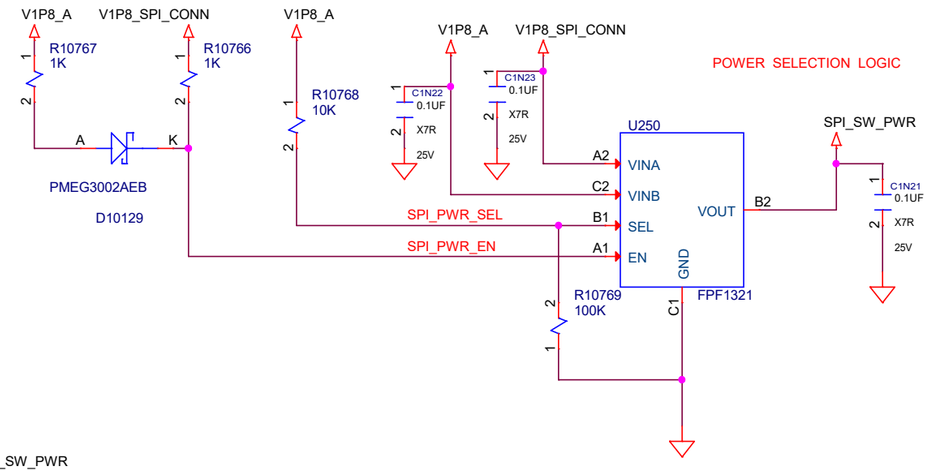
A11

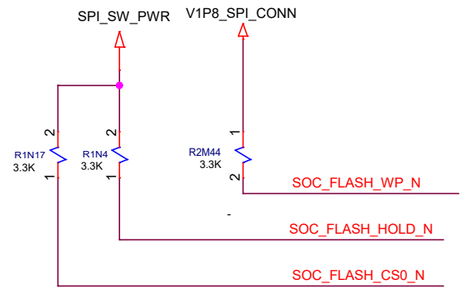
DDR2 DIMM Module

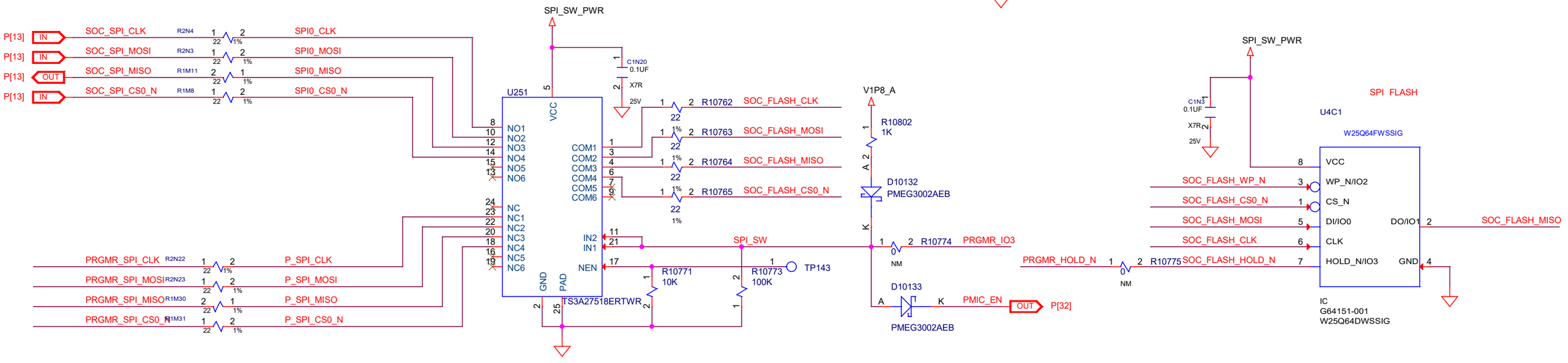
OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: DDR DIMMO CH B 2 OF 2	LIFE 3	SHEET 23OF 96

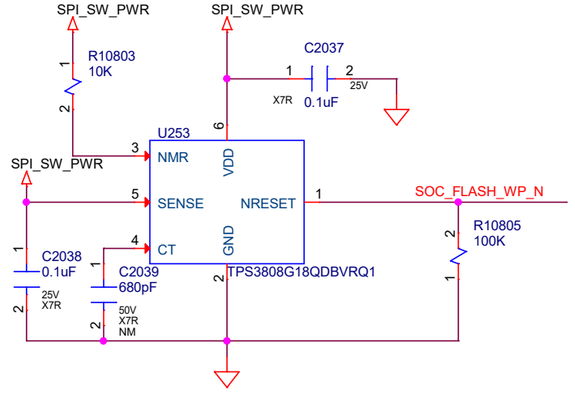
UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%











FUNCTION TABLE FOR SPI MUX	
SPI_SW	FUNCTION
LOW	NC<6..0> TO COM<6..0>
HIGH	NO<6..0> TO COM<6..0>

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: SPI FLASH	LIFE 3	SHEET 24OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

MPCIE_52P_NUTS_KIT
HALF_MINI_CARD
J3M1

MSATA_3.3VD

C3N32 22UF 20% X7S 0805P 10V
C3A15 10uF 10V X6S 0603P
C3L11 0.1uF 25V X7R

6 +1.5V
2 +3.3VAUX
1 WAKE_N
7 CLKREQ_N
3 COEX1
5 COEX2
KEY
28 +1.5V
48 +1.5V
24 +3.3VAUX
39 +3.3VAUX
41 +3.3VAUX
52 +3.3VAUX
20 W_DISABLE_N
22 PERST_N
17 RESERVED/UIM_C8
19 RESERVED/UIM_C4
45 RESERVED
47 RESERVED
49 RESERVED
51 RESERVED
MP1
MP2

REFCLK+ 13
REFCLK- 11
UIM_DATA 10
UIM_CLK 12
UIM_RESET 14
UIM_PWR 8
UIM_VPP 16
GND 4
GND 9
GND 15
PETP0 33
PETN0 31
PERP0 25
PERN0 23
LED_WPAN_N 46
LED_WLAN_N 44
LED_WWAN_N 42
USB_D+ 38
USB_D- 36
SMB_DATA 32
SMB_CLK 30
GND 18
GND 21
GND 26
GND 27
GND 29
GND 34
GND 35
GND 37
GND 40
GND 43
GND 50

C1833 10NF X7R SATA_TXP0 BI P[12]
C1834 10NF X7R SATA_TXN0 BI P[12]
C1835 10NF X7R SATA_RXN0 OUT P[12]
C1836 10NF X7R SATA_RXP0 OUT P[12]

CAD NOTE: PLACE C1833 AND C1834 NEAR U3C1
CAD NOTE: PLACE C1835 AND C1836 NEAR J3M1

MSATA_3.3VD
R10368 10K
P[68] IN MSATA_RESET

MSATA_DAS
R10689 0
R2B37 0 CH NM

A10 mSATA mini 3ME3
A9 MSATA Spacer

KIT_PARTS = (NUT: QTY=1)
G52469-001

mSATA CONNECTOR

3.3VD_TIVA
R10703 10K
R10704 0E
MSATA_TIVA_DAS OUT P[61]
Q126 2N7002L
MSATA_DAS
R10701 100K
C2010 0.1uF 25V X7R

Provision,If mSATA does not have LED indication

V3P3_S
R4A16 4.7K 1% NM
Q3A2 FDG6301N D71685-001
V1P8_S
R2L13 10K NM
mSATA STATUS LED
P[12] IN SATA_LED_N
V3P3_S
R3A14 4.7K 1% NM
NM
V3P3_S
R3A15 330 NM
D15 LED NM

3.3VD_TIVA
C2003 0.1uF 25V X7R
U239
VS
GND
INA226
IN+
IN-
VBUS
A0
A1
ALERT
SDA
SCL
C2004 0.1uF 25V X7R
R10676 10E 1%
R10672 10E 1%
R10673 0.002 1% 2W
V3P3_S
MSATA_3.3VD_SW
R10671 10K
R10678 10K
3.3VD_TIVA
P[39,61] OUT SOC_PWR_ALERT
P[39,56,58,61,67,75] BI TIVA_PWRMNTR_I2C6_SDA
P[39,56,58,61,67,75] IN TIVA_PWRMNTR_I2C6_SCLK
ADDRESS 45
mSATA CURRENT MONITOR

MSATA_3.3VD_SW
mSATA LOAD SWITCH
MSATA_3.3VD
U3B2
TPS22922
C3B47 10UF 20% X6S 6.3V
2A MAX
C3B48 0.1UF X7R 25V
C3B49 22UF 20% X7S 0603P 10V
P[92] IN MSATA_PWR_EN
R2L15 0E
VIN1 VIN2 ON VOUT1 VOUT2 GND
IC E64793-001

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: MSATA	LIFE 3	SHEET 25OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

CAD NOTE: CAPACITORS SHOULD BE PLACED NEAR U2M1

P[12] OUT PCIE1_RXP_LAN — C2M4 0.1UF 25V X7R — LAN_PET_DP IN P[26]

P[12] OUT PCIE1_RXN_LAN — C2M6 0.1UF 25V X7R — LAN_PET_DN IN P[26]

GBE PHY (SPRINGVILLE)

U2M1 WGI210AT

CAD NOTE : ALL PCIE TRACES TO BE ROUTED FOR DIFFERENTIAL 85 OHMS IMPEDANCE.

CAD NOTE : ALL ETHERNET TRACES TO BE ROUTED FOR DIFFERENTIAL 100 OHMS IMPEDANCE.

V3P3_A — R2M13 10K — LAN_DEV_OFF_N; R2M17 10K — SPRINGVILLE-1_RESET

V1P5_LAN — R10130 49.9 1% — LAN_MDI2P; R10128 49.9 1% — LAN_MDI2N; R10129 49.9 1% — LAN_MDI3P; R10131 49.9 1% — LAN_MDI3N

PCIE
- P[13] IN PCIE_GBE_100M_DP — 26 PCIEP
- P[13] IN PCIE_GBE_100M_DN — 25 PCIEN
- P[12] IN PCIE1_TXP_LAN — 24 PE_RP
- P[12] IN PCIE1_TXN_LAN — 23 PE_RN
- P[26] OUT LAN_PET_DP — 21 PE_TP
- P[26] OUT LAN_PET_DN — 20 PE_TN

PHY PINS
- MDI_PLUS_0/NC — 58 — LAN_MDI0P — P[27] IN
- MDI_MINUS_0/SFP_I2C_DATA — 57 — LAN_MDI0N — P[27] IN
- MDI_PLUS_1/SFP_I2C_CLK — 55 — LAN_MDI1P — P[27] IN
- MDI_MINUS_1/SRDS_SIG_DET — 54 — LAN_MDI1N — P[27] IN
- MDI_PLUS_2 — 53 — LAN_MDI2P
- MDI_MINUS_2/SET_N — 52 — LAN_MDI2N
- MDI_PLUS_3_SERP — 50 — LAN_MDI3P
- MDI_MINUS_3_SERN — 49 — LAN_MDI3N
- XTAL1 — 46 — LAN_XTALIN — BI P[26]
- XTAL2 — 45 — LAN_XTALOUT — BI P[26]
- RSET — 48 — LAN_RSET — R2M10 4.99K 1%

P[17,28,41] IN PLTRST_3P3_N — R2M23 0 — PLTRST_LAN_N — 17 PE_RST_N

P[13] OUT WAKE_LAN_N — R2M30 127E — LAN_WAKE — 16 PE_WAKE_N

V3P3_A — R2M29 10K

V3P3_A — R2M1 10K

FLASH
- 12 NVM_SI
- 14 NVM_SO
- NC
- 13 NVM_SK
- 15 NVM_CS_N

SMBUS
- SV1_SMB_3P3_DAT — 36 SMB_DATA
- SV1_SMB_3P3_CLK — 34 SMB_CLK
- 35 SMB_ALRT_N

MISC
- DEV_OFF_N — 28 — LAN_DEV_OFF_N
- SDP0 — 63
- SDP1_PCIE_DIS — 61
- SDP2 — 62
- SDP3 — 60
- LAN_PWR_GOOD — 1 — SPRINGVILLE-1_RESET — BI P[68,87]
- NC — 22 — C3B14 0.1UF X7R — C2M3 0.039UF 0603P 50V X7R

NC-SI/TESTABILITY
- LAN_NC_SI_CRS_DV — BI P[26]P[26] — LAN_NC_SI_RXD0 — 6 NC_SI_RXD0
- LAN_NC_SI_CLK_IN — BI P[26]P[26] — LAN_NC_SI_RXD1 — 5 NC_SI_RXD1
- LAN_NC_SI_TX_EN — BI P[26]P[26] — LAN_NC_SI_TXD0 — 9 NC_SI_TXD0
- P[26] BI — LAN_NC_SI_TXD1 — 8 NC_SI_TXD1
- P[26] BI — LAN_NC_SI_TX_EN — 7 NC_SI_TX_EN
- P[26] BI — LAN_NC_SI_CLK_IN — 2 NC_SI_CLK_IN
- P[26] BI — LAN_NC_SI_ARB_IN — 43 NC_SI_ARB_IN
- P[26] BI — LAN_NC_SI_ARB_OUT — 44 NC_SI_ARB_OUT
- P[26] BI — LAN_NC_SI_CRS_DV — 3 NC_SI_CRS_DV

V3P3_A — R2M19 10K; R2M18 10K; R2M20 10K

V3P3_A — R2M16 10K; R2M15 10K; R2M24 10K; R2M14 10K

P[92] IN SW_SV1_JTAG_TDI — 29 JTAG_TDI
P[28] OUT SV1_SV2_JTAG_TDO — 4 JTAG_TDO
P[93] IN SV1_JTAG_TCK — 19 JTAG_CLK
P[93] IN SV1_JTAG_TMS — 18 JTAG_TMS

R10843 0E

LEDS
- TP3B9 — LAN_LED0 — 31 LED0
- TP3B10 — LAN_LED1 — 30 LED1
- TP3B11 — LAN_LED2 — 33 LED2

POWER SUPPORT
- CBOT — 37 — C3B10 0.01UF; C3B16 0.1UF; C3B5 0.1UF; C3B7 0.1UF; C3B20 1UF; C2143 15uF 20% 16V 1210P
- CTOP — 40

POWER
- VDD0P9 — 11
- VDD0P9 — 32
- VDD0P9 — 42
- VDD0P9 — 59
- VDD3P3 — 10
- VDD3P3 — 27
- VDD3P3 — 41
- VDD3P3 — 51
- VDD3P3 — 64
- VDD1P5 — 47
- VDD1P5 — 56
- VDD0P9_OUT — 38
- VDD1P5_OUT — 39
- GND — 65

V3P3_A — C2M7 0.01UF; C2M9 0.1UF; C3B19 0.1UF; C3B18 0.1UF; C2M5 1UF; C2141 15uF 20% 16V 1210P

V1P5_LAN — C3B11 0.01UF; C3B13 0.1UF; C3B6 0.1UF; C3B8 0.1UF; C3B9 1UF; C2142 15uF 20% 16V 1210P

IC G47144-005

V3P3_A — R2M5 10K; R2M6 10K; R2M27 10K; R2M28 10K; R2M25 10K; R2M26 10K; R2M3 10K; R2M7 10K

SV1_SMB_3P3_DAT
SV1_SMB_3P3_CLK

LAN_NC_SI_RXD0 — BI P[26]
LAN_NC_SI_RXD1 — BI P[26]
LAN_NC_SI_TXD0 — BI P[26]
LAN_NC_SI_TXD1 — BI P[26]
LAN_NC_SI_ARB_IN — BI P[26]
LAN_NC_SI_ARB_OUT — BI P[26]

LAN_XTALOUT — BI P[26]
LAN_XTALIN — BI P[26]

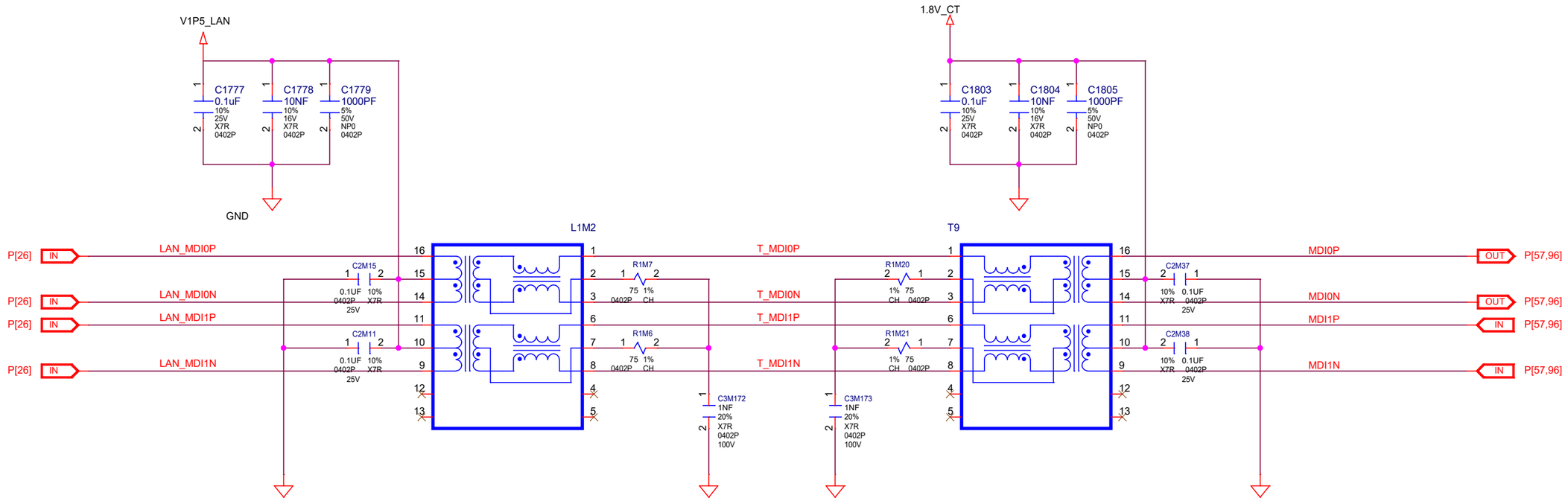
R2M9 1M NM

C2M1 10PF 50V NPO

Y2M1 25.000MHZ XTAL G14398-001

C2M2 10PF 50V NPO

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: GBE PHY - 1	LIFE 3	SHEET 26OF 96



OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: ETHERNET -1	LIFE 3	SHEET 27OF 96

CAD NOTE: CAPACITORS SHOULD BE PLACED NEAR U2M2

P[12] OUT PCIE2_RXP_LAN — C2M22 0.1uF 25V X7R — LAN1_PET_DP IN P[28]

P[12] OUT PCIE2_RXN_LAN — C2M21 0.1uF 25V X7R — LAN1_PET_DN IN P[28]

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

V3P3_A — R2M74 10K — R10391 10K 5% — V1P5_LAN_1

LAN1_DEV_OFF_N

SPRINGVILLE-2_RESET

U2M2

WGI210AT

GBE PHY (SPRINGVILLE)

CAD NOTE : ALL PCIE TRACES TO BE ROUTED FOR DIFFERENTIAL 85 OHMS IMPEDANCE.

CAD NOTE : ALL ETHERNET TRACES TO BE ROUTED FOR DIFFERENTIAL 100 OHMS IMPEDANCE.

PCIE
P[13] IN PCIE_GBE2_100M_DP 26 PCIEP
P[13] IN PCIE_GBE2_100M_DN 25 PCIEN
P[12] IN PCIE2_TXP_LAN 24 PE_RP
P[12] IN PCIE2_TXN_LAN 23 PE_RN
P[28] OUT LAN1_PET_DP 21 PE_TP
P[28] OUT LAN1_PET_DN 20 PE_TN
P[17,26,41] IN PLTRST_3P3_N — R2M57 0 — PLTRST_LAN1_N 17 PE_RST_N
P[13] OUT WAKE_LAN2_N — R2M62 127E — LAN1_WAKE 16 PE_WAKE_N

FLASH
V3P3_A — R2M67 10K
12 NVM_SI
14 NVM_SO
13 NVM_SK
NC
15 NVM_CS_N

V3P3_A — R2M53 10K

SMBUS
SV2_SMB_3P3_DAT 36 SMB_DATA
SV2_SMB_3P3_CLK 34 SMB_CLK
35 SMB_ALRT_N

NC-SI/TESTABILITY
LAN1_NC_SI_CRS_DV BI P[28] — R2M46 10K
LAN1_NC_SI_CLK_IN BI P[28] — R2M48 10K
LAN1_NC_SI_TX_EN BI P[28] — R2M50 10K
P[28] BI LAN1_NC_SI_RXD0 6 NC_SI_RXD0
P[28] BI LAN1_NC_SI_RXD1 5 NC_SI_RXD1
P[28] BI LAN1_NC_SI_TXD0 9 NC_SI_TXD0
P[28] BI LAN1_NC_SI_TXD1 8 NC_SI_TXD1
P[28] BI LAN1_NC_SI_TX_EN 7 NC_SI_TX_EN
P[28] BI LAN1_NC_SI_CLK_IN 2 NC_SI_CLK_IN
P[28] BI LAN1_NC_SI_ARB_IN 43 NC_SI_ARB_IN
P[28] BI LAN1_NC_SI_ARB_OUT 44 NC_SI_ARB_OUT
P[28] BI LAN1_NC_SI_CRS_DV 3 NC_SI_CRS_DV

V3P3_A — R2M64 10K — R2M58 10K — R2M59 10K
P[26] IN SV1_SV2_JTAG_TDO — 0E — R10839 — SV2_TIVA_JTAG_TDI 29 JTAG_TDI
P[28,92] OUT SV2_TIVA_JTAG_TDO 4 JTAG_TDO
P[93] IN SV2_JTAG_TCK 19 JTAG_CLK
P[93] IN SV2_JTAG_TMS 18 JTAG_TMS
R1N19 3.3K NM

LEDS
TP3B14 TP3B13 TP3B12
LAN1_LED0 31 LED0
LAN1_LED1 30 LED1
LAN1_LED2 33 LED2

P[28,92] OUT SV2_TIVA_JTAG_TDI

IC
G47144-005

PHY PINS
MDI_PLUS_0/NC 58 LAN1_MDI0P IN P[29]
MDI_MINUS_0/SFP_I2C_DATA 57 LAN1_MDI0N IN P[29]
MDI_PLUS_1/SFP_I2C_CLK 55 LAN1_MDI1P IN P[29]
MDI_MINUS_1/SRDS_SIG_DET 54 LAN1_MDI1N IN P[29]
MDI_PLUS_2 53 LAN1_MDI2P IN P[29]
MDI_MINUS_2/SET_N 52 LAN1_MDI2N IN P[29]
MDI_PLUS_3_SERP 50 LAN1_MDI3P IN P[29]
MDI_MINUS_3_SERN 49 LAN1_MDI3N IN P[29]
XTAL1 46 LAN1_XTALIN BI P[28]
XTAL2 45 LAN1_XTALOUT BI P[28]
RSET 48 LAN1_RSET — 4.99K R2M72

R10134 49.9 1% NM — R10132 49.9 1% NM — R10133 49.9 1% NM — R10135 49.9 1% NM
LAN1_MDI2P
LAN1_MDI2N
LAN1_MDI3P
LAN1_MDI3N

MISC
DEV_OFF_N 28 LAN1_DEV_OFF_N
SDP0 63
SDP1_PCIE_DIS 61
SDP2 62
SDP3 60
LAN_PWR_GOOD 1 SPRINGVILLE-2_RESET BI P[68,87]
NC 22 — C3B34 0.1uF X7R

POWER SUPPORT
CBOT 37 — C2M23 0.039UF 0603P X7R 50V
CTOP 40

POWER
VDD0P9 11
VDD0P9 32
VDD0P9 42
VDD0P9 59
VDD3P3 10
VDD3P3 27
VDD3P3 41
VDD3P3 51
VDD3P3 64
VDD1P5 47
VDD1P5 56
VDD0P9_OUT 38
VDD1P5_OUT 39
GND 65

C3B36 1UF X7R 6.3V — C3B39 0.1uF X7R 25V — C3B42 0.1uF X7R 25V — C3B45 0.1uF X7R 25V — C3B44 0.01UF X7R 50V — C2144 15uF 20% 16V 1210P
V3P3_A

C2M28 0.01UF X7R 50V — C2M25 0.1uF X7R 25V — C3B41 0.1uF X7R 25V — C3B40 0.1uF X7R 25V — C2M24 1UF X7R 6.3V — C2145 15uF 20% 16V 1210P
V1P5_LAN_1

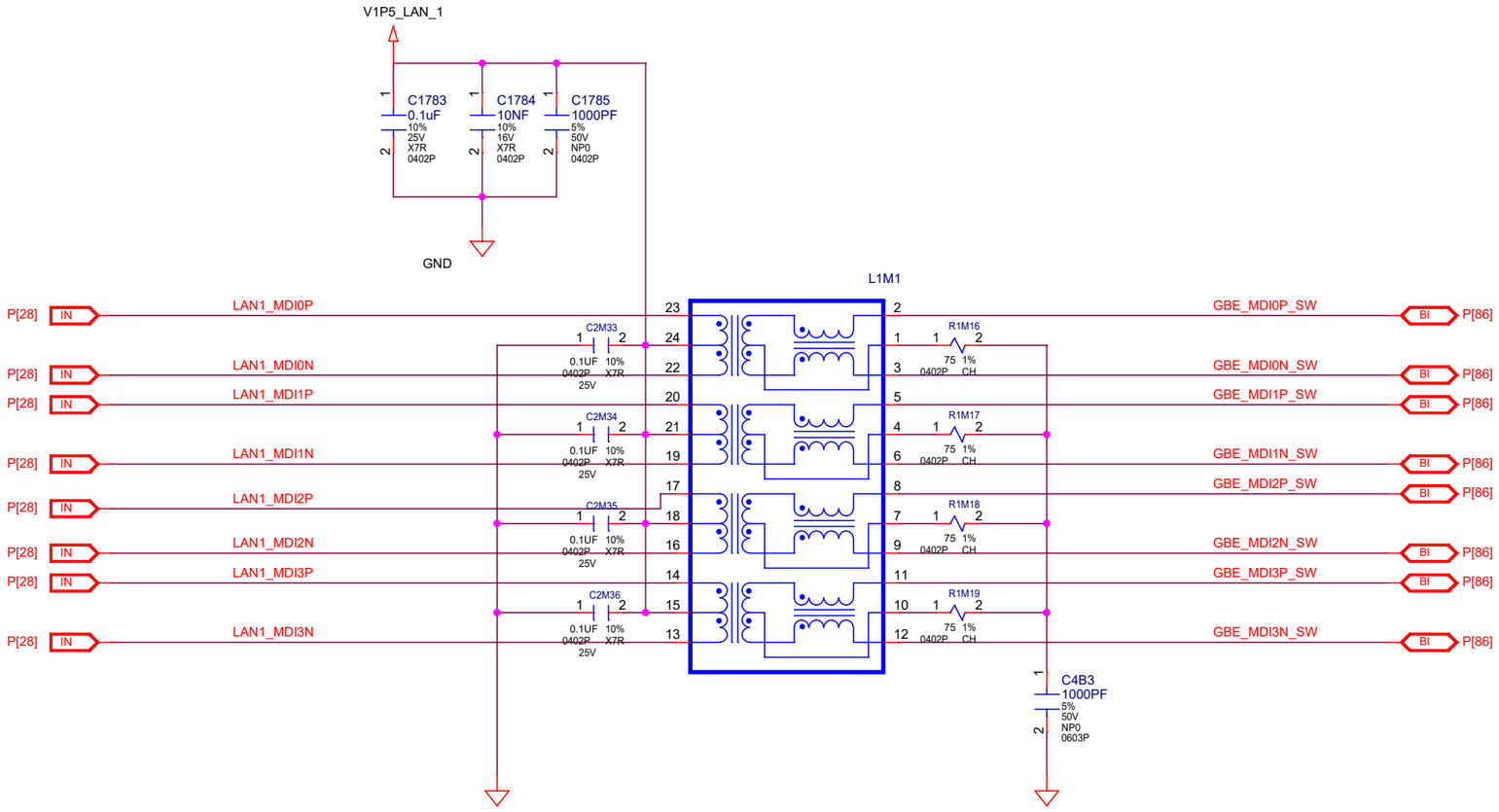
C3B46 0.01UF X7R 50V — C3B38 0.1uF X7R 25V — C3B37 0.1uF X7R 25V — C3B43 0.1uF X7R 25V — C3B35 1UF X7R 6.3V — C2146 15uF 20% 16V 1210P

LAN1_XTALOUT BI P[28]
LAN1_XTALIN BI P[28]

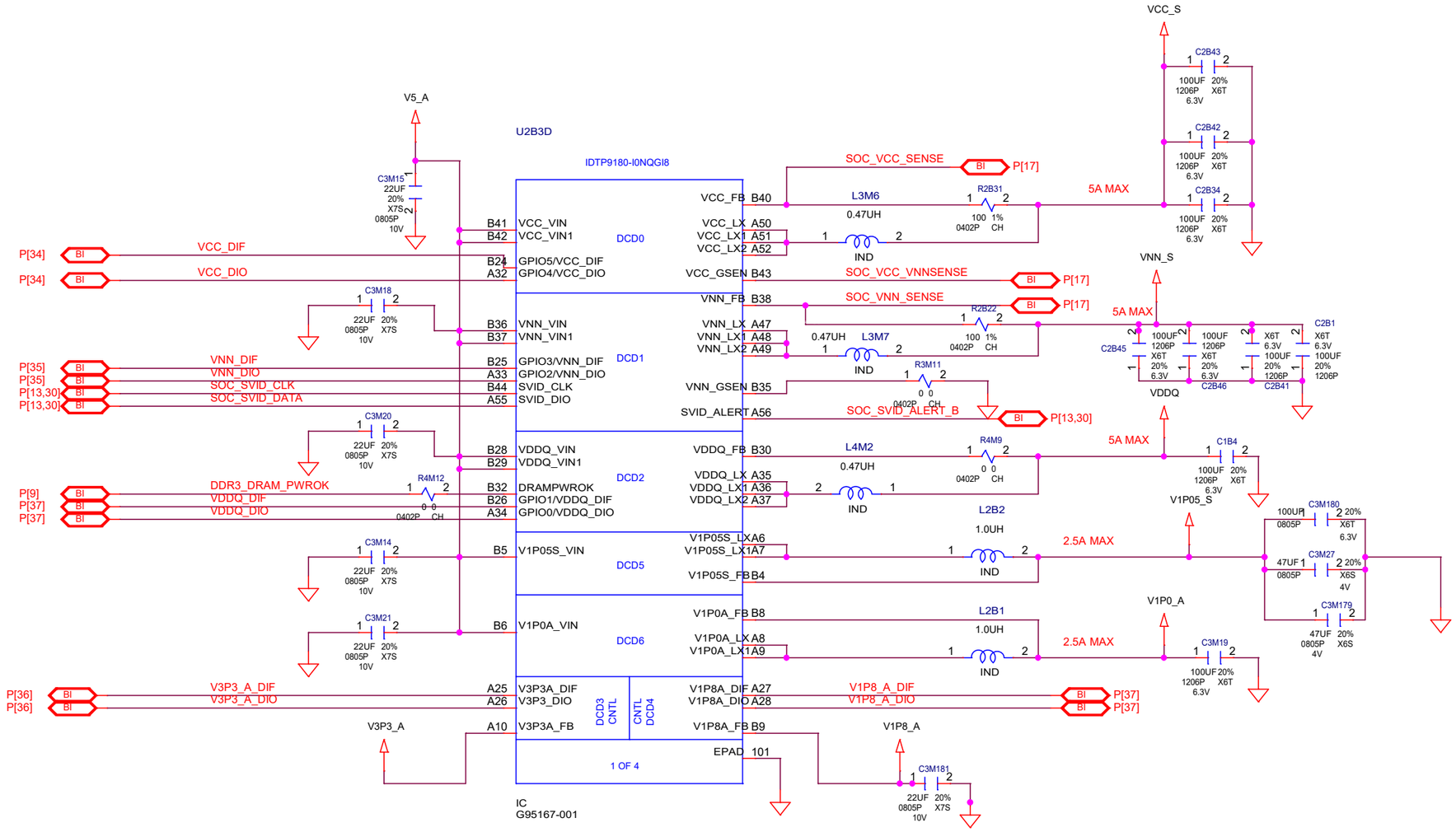
R2M73 1M NM
C2M27 10PF 50V COG
Y2M3 25.000MHZ XTAL G14398-001
C2M26 10PF 50V COG

V3P3_A — R2M47 10K — R2M49 10K — R2M51 10K — R2M52 10K — R2M54 10K — R2M56 10K
V3P3_A — R2M88 10K — R2M87 10K
SV2_SMB_3P3_DAT
SV2_SMB_3P3_CLK
LAN1_NC_SI_RXD0 BI P[28]
LAN1_NC_SI_RXD1 BI P[28]
LAN1_NC_SI_TXD0 BI P[28]
LAN1_NC_SI_TXD1 BI P[28]
LAN1_NC_SI_ARB_IN BI P[28]
LAN1_NC_SI_ARB_OUT BI P[28]

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: GBE PHY - 2	LIFE 3	SHEET 28OF 96



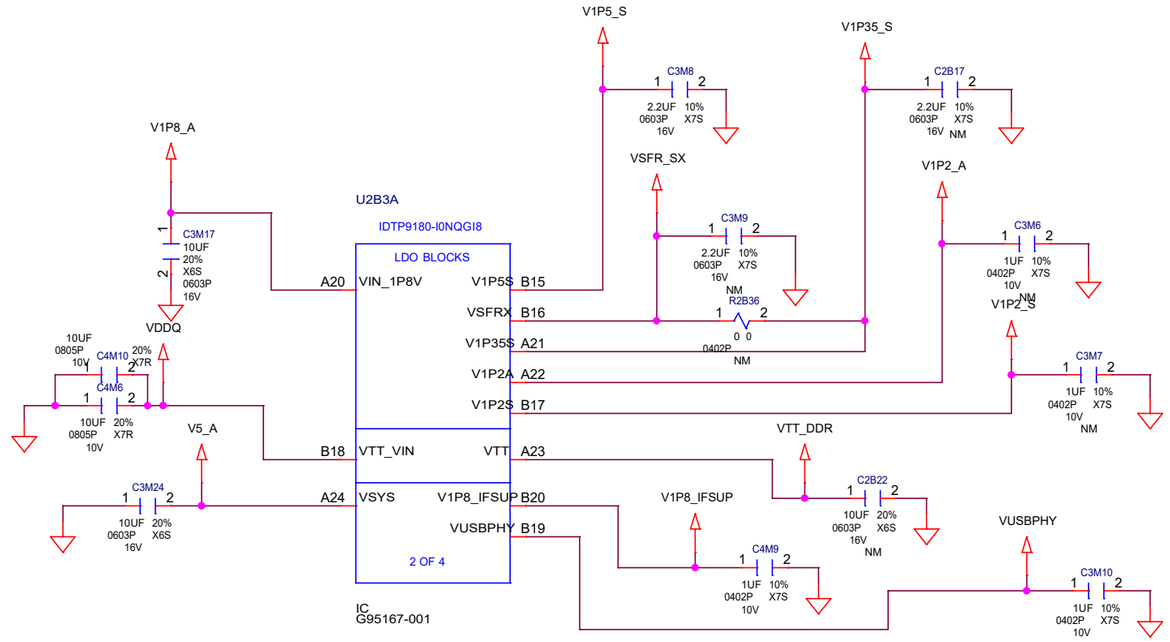
OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: ETHERNET - 2	LIFE 3	SHEET 29OF 96



IC
G95167-001

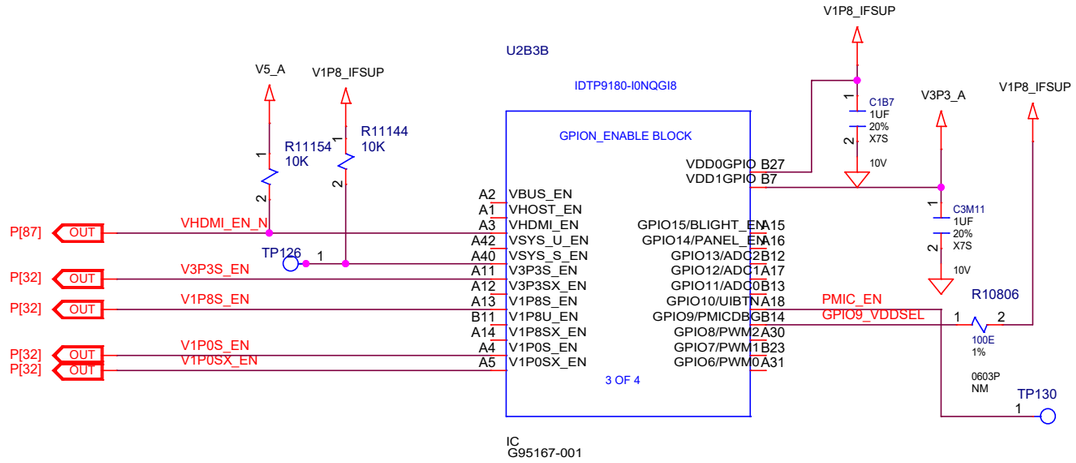
OpenCellular		DOCUMENT NUMBER:	232-000036
TITLE: PMIC		LIFE 3	SHEET 30OF 96

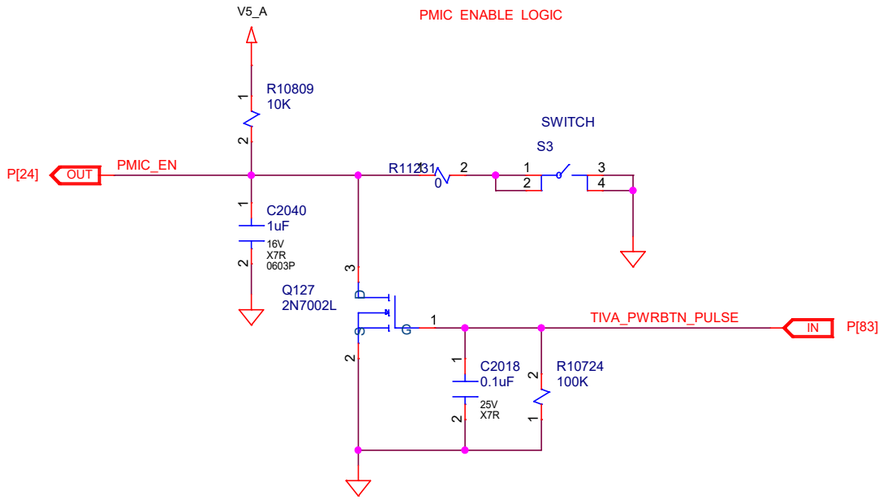
CAD NOTE:
PLACE ALL CAPS NEAR TO U2B3

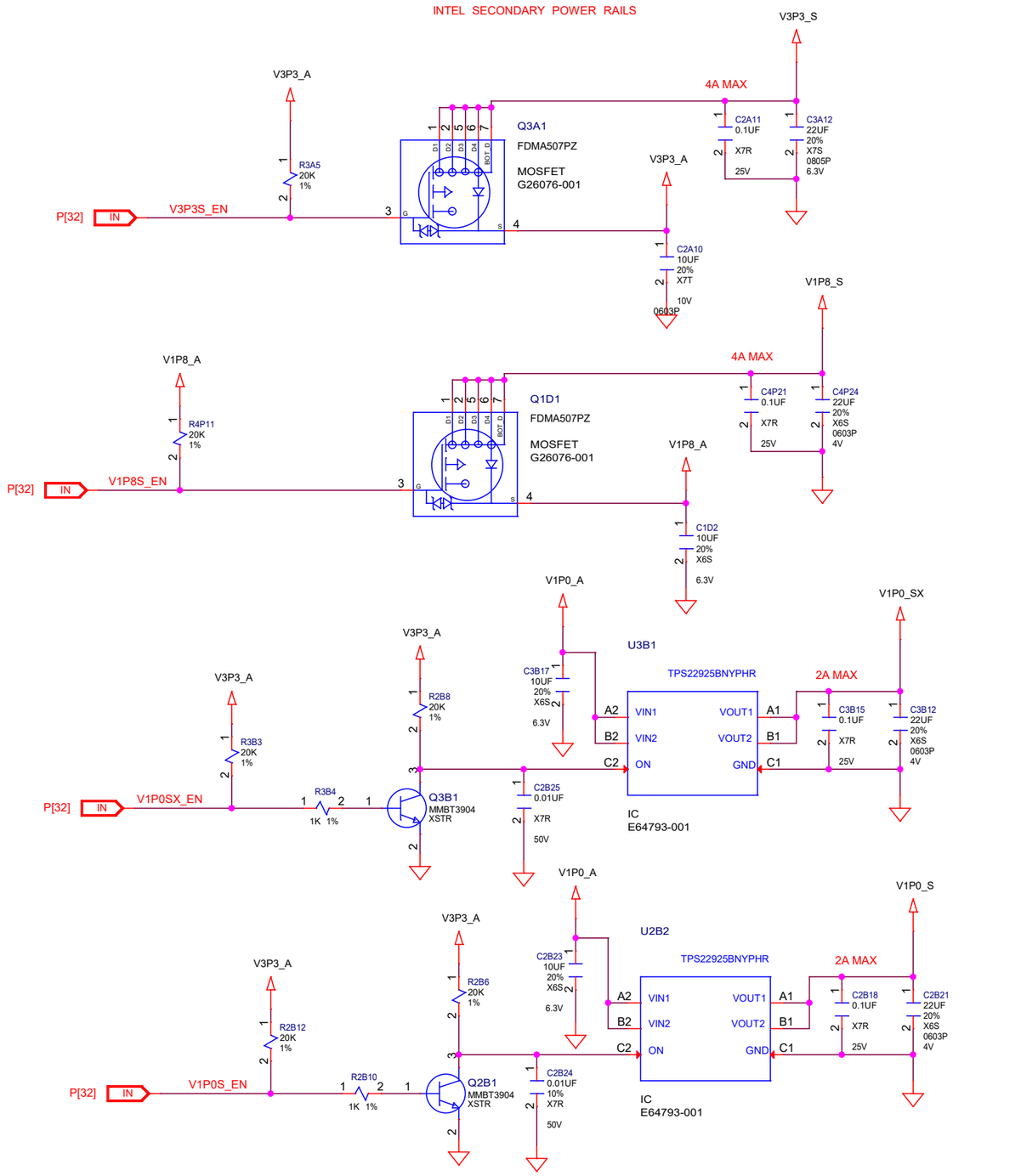


OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: PMIC	LIFE 3	SHEET 31OF 96

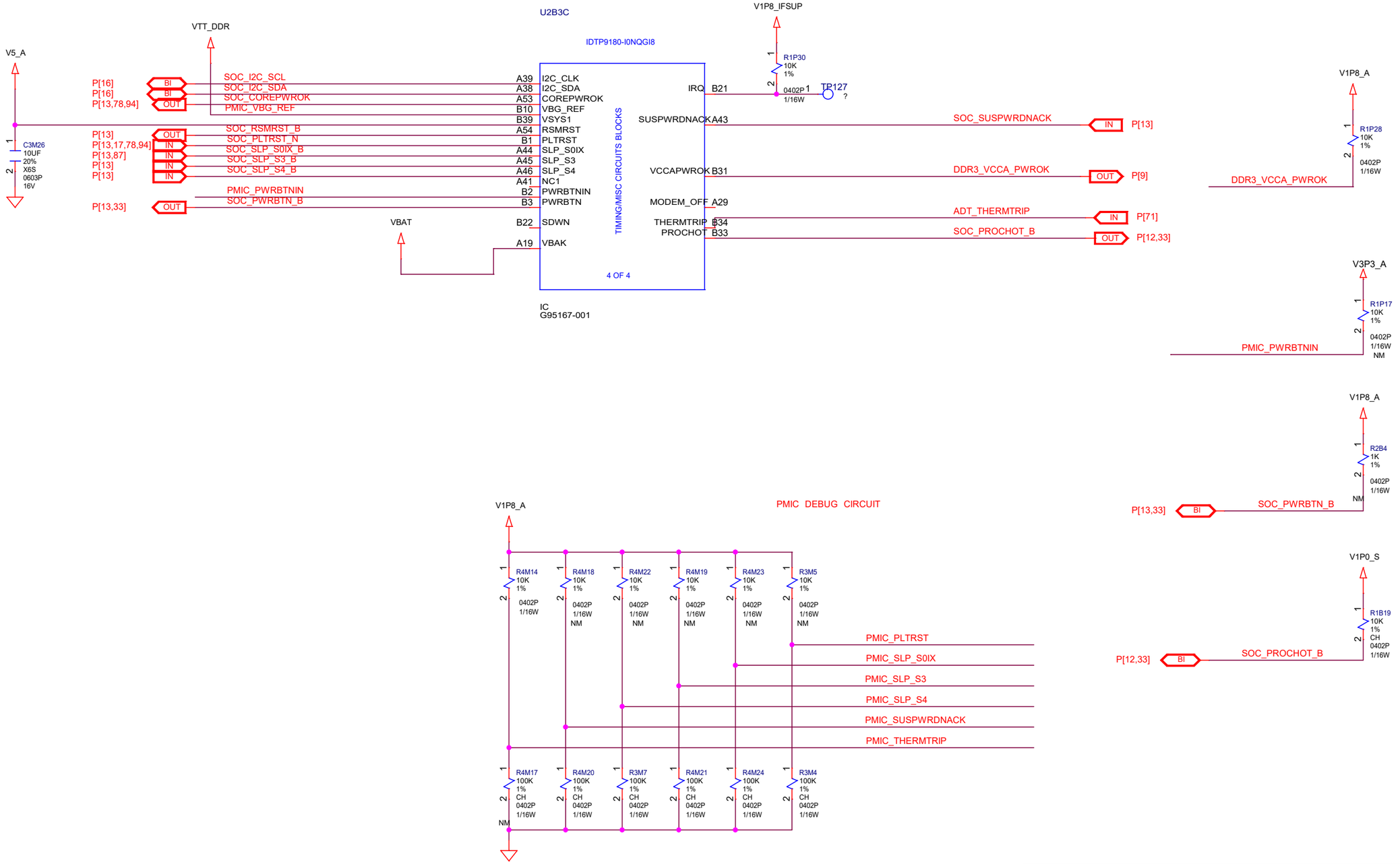
UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%



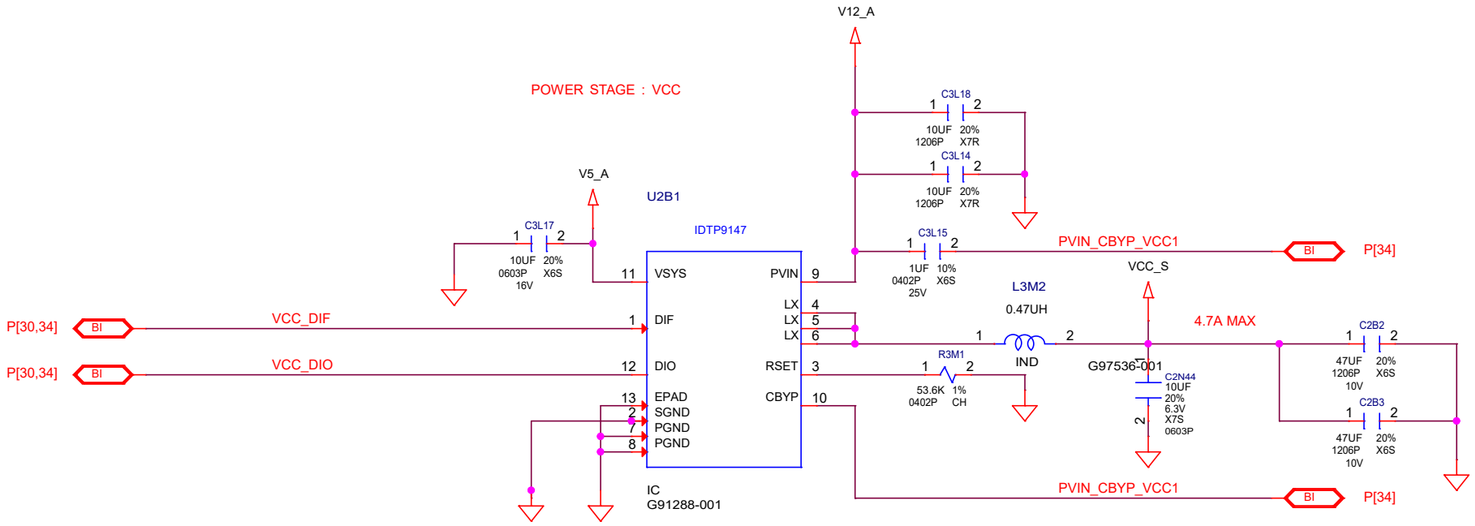


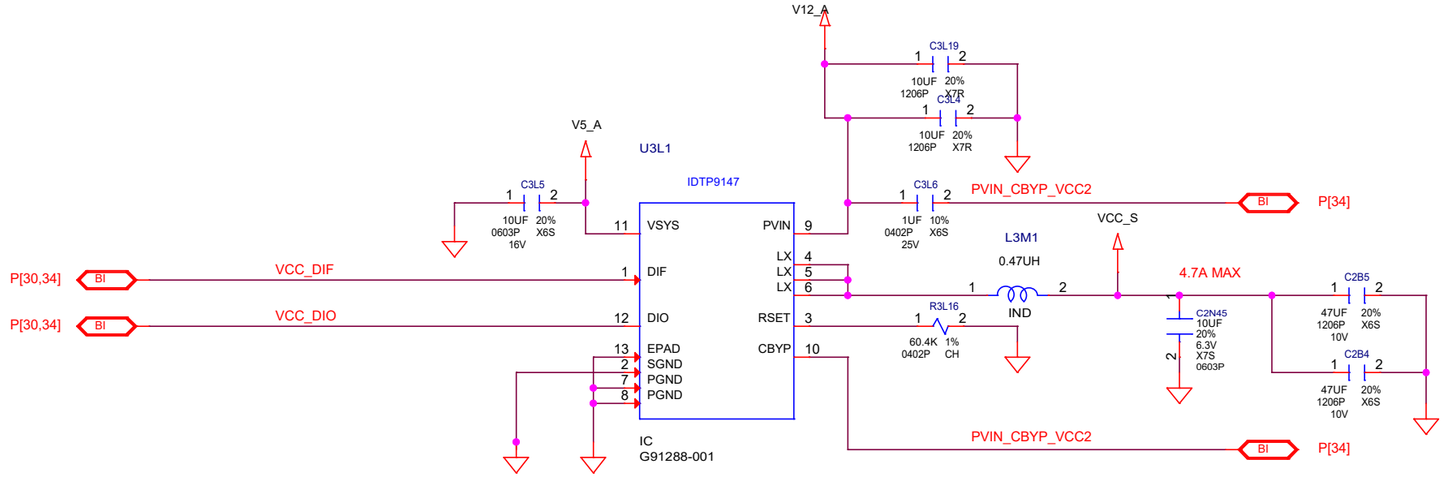


OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: PMIC	LIFE 3	SHEET 32OF 96



OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: PMIC	LIFE 3	SHEET 33OF 96





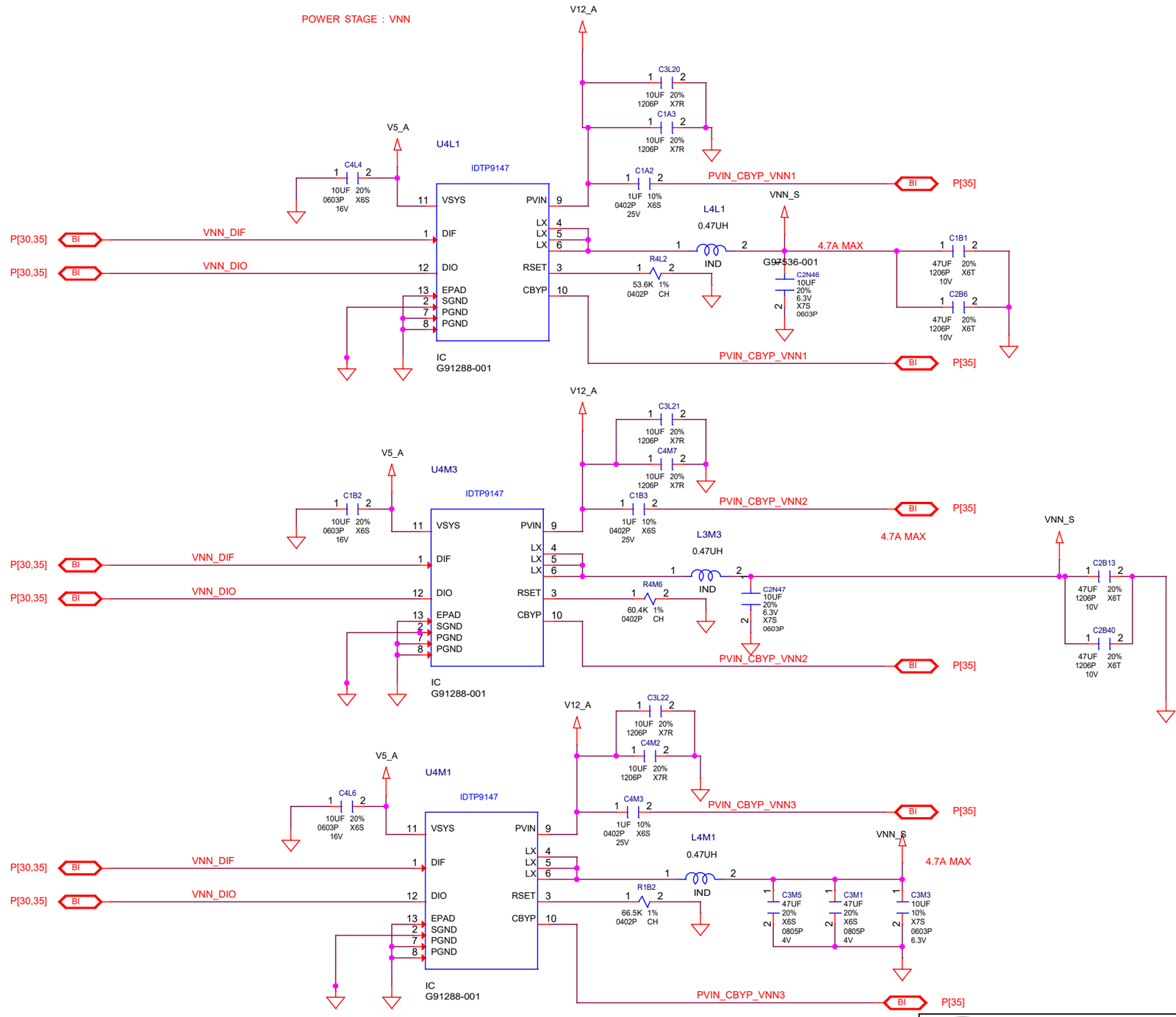
R_{SET} [kΩ]	ID
53.6	0
60.4	1
66.5	2
73.2	3

Table 8 – Recommended R_{SET} values

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: PMIC	LIFE 3	SHEET 34OF 96

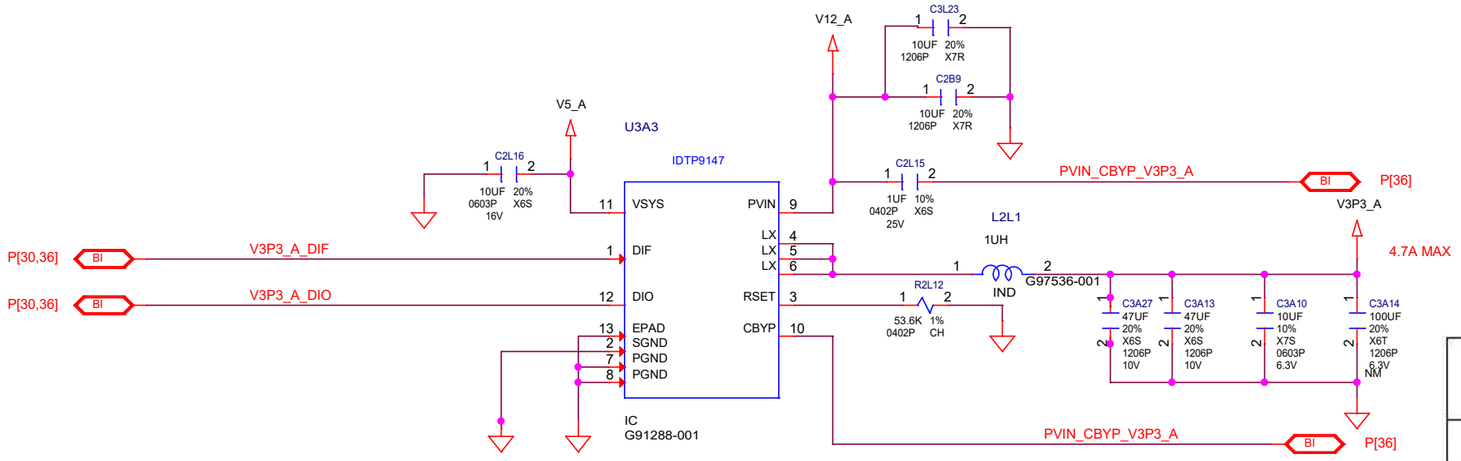
R_{SET} [kΩ]	ID
53.6	0
60.4	1
66.5	2
73.2	3

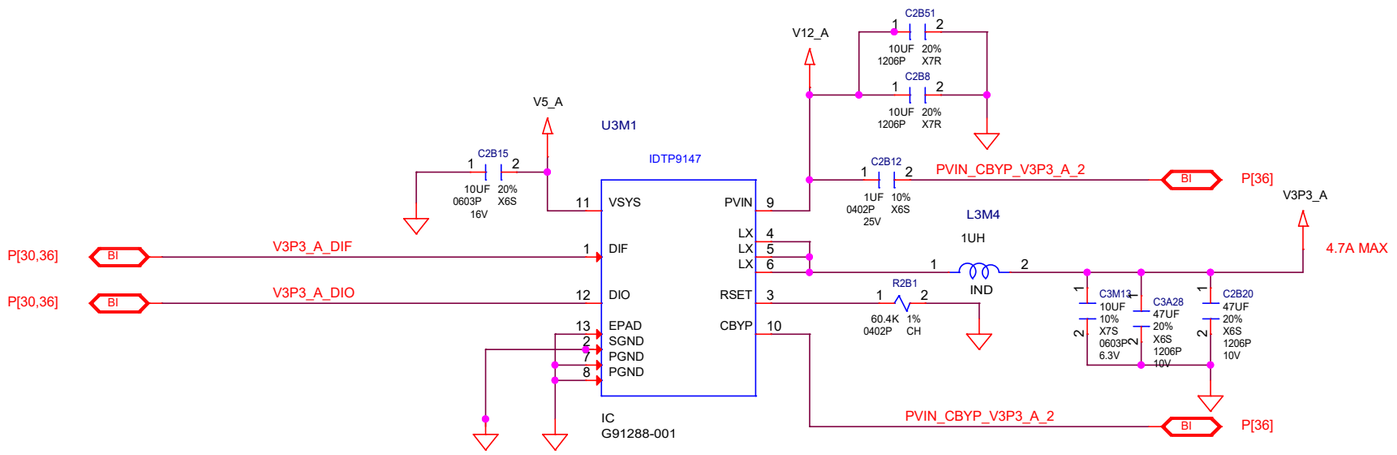
Table 8 – Recommended R_{SET} values



OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: PMIC	LIFE 3	SHEET 35OF 96

POWER STAGE : V3P3_A

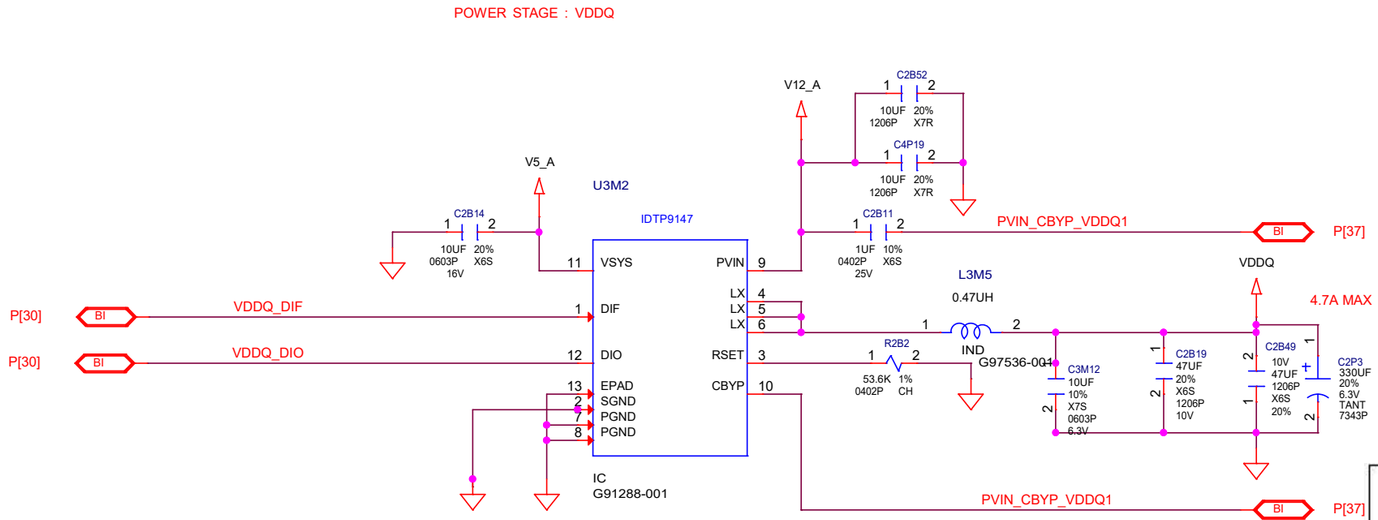




R_{SET} [kΩ]	ID
53.6	0
60.4	1
66.5	2
73.2	3

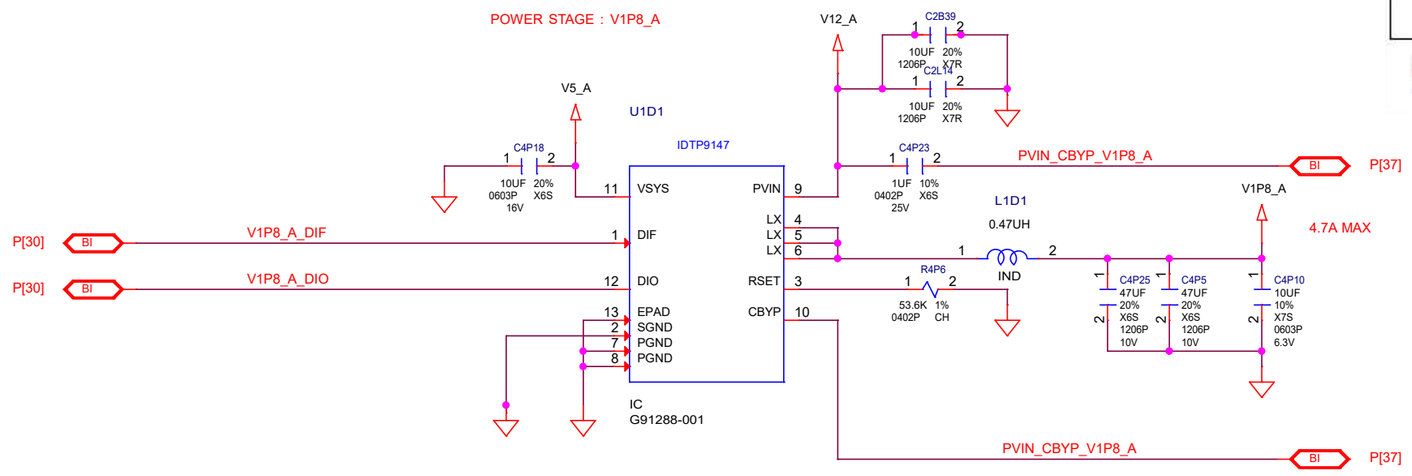
Table 8 – Recommended R_{SET} values

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: PMIC	LIFE 3	SHEET 36OF 96



R_{SET} [kΩ]	ID
53.6	0
60.4	1
66.5	2
73.2	3

Table 8 – Recommended R_{SET} values

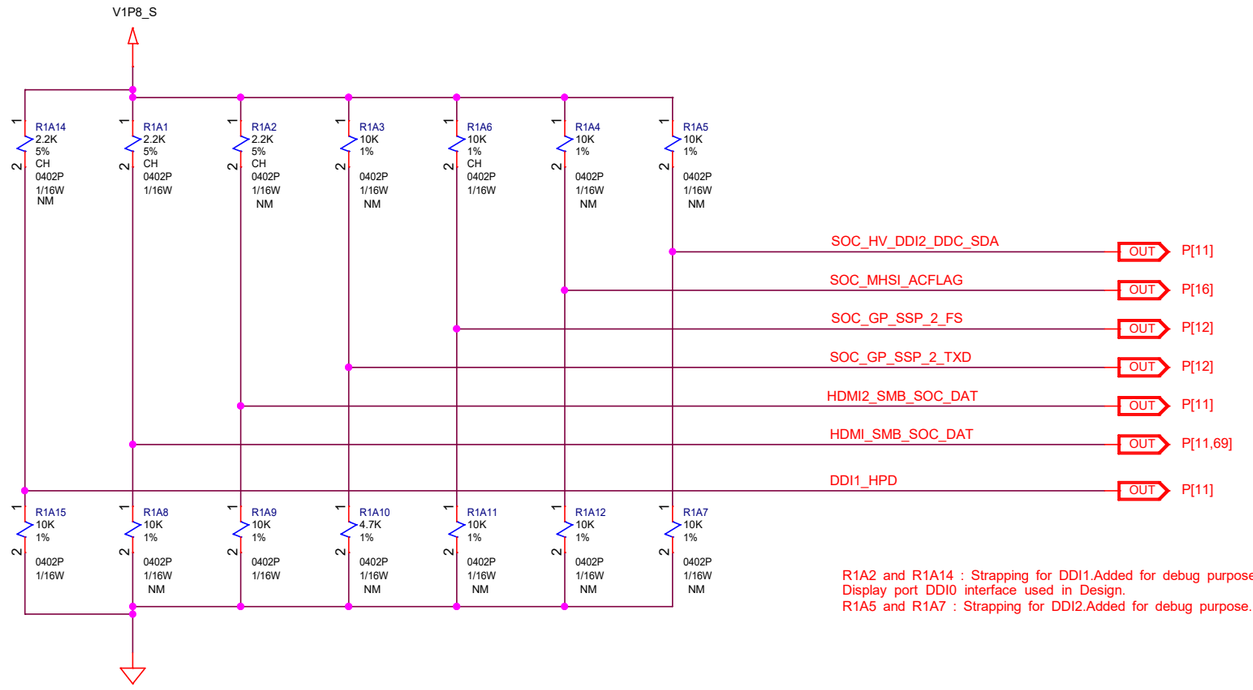


OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: PMIC	LIFE 3	SHEET 37OF 96

STRAP PINS

STRAPPING OPTION:

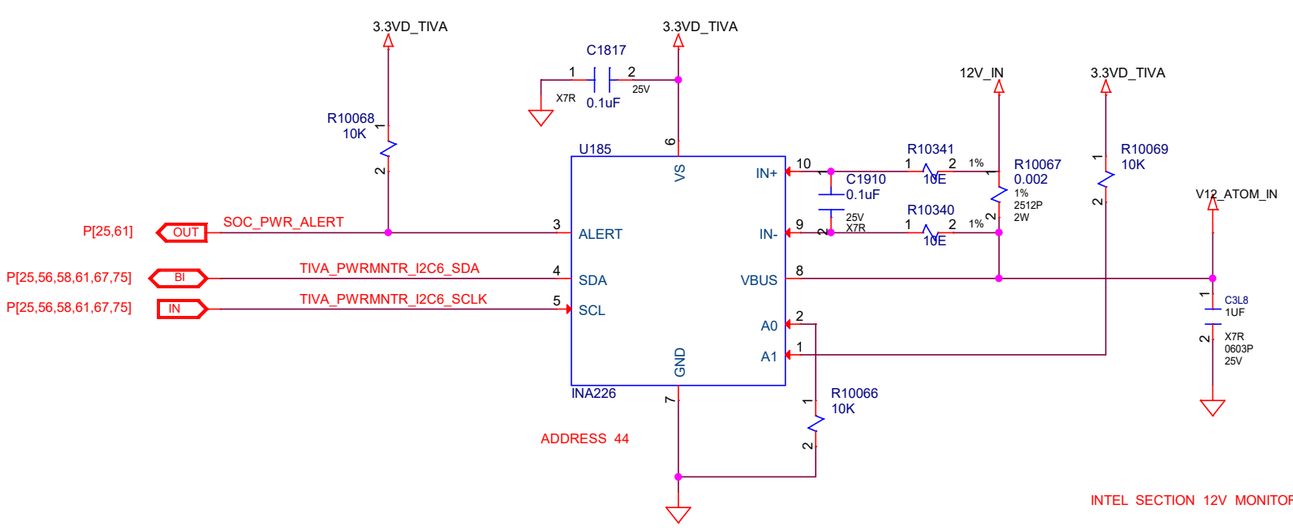
HDMI_SMB_SOC_DAT
1: ENABLE DDI0
0: DISABLE DDI0
HDMI2_SMB_SOC_DAT
1: ENABLE DDI1
0: DISABLE DDI1
SOC_GP_SSP_2_FS
1: SPI MODE
0: LPC MODE



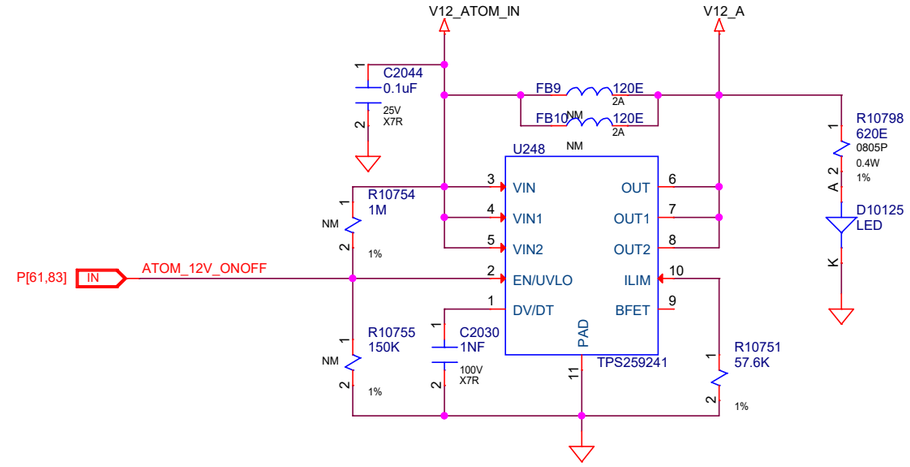
R1A2 and R1A14 : Strapping for DDI1.Added for debug purpose.
Display port DDI0 interface used in Design.
R1A5 and R1A7 : Strapping for DDI2.Added for debug purpose.

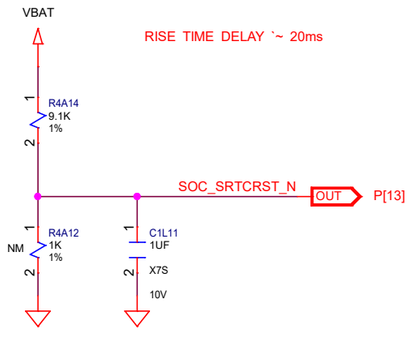
OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: STRAPING AND TEMP SENSOR	LIFE 3	SHEET 38OF 96

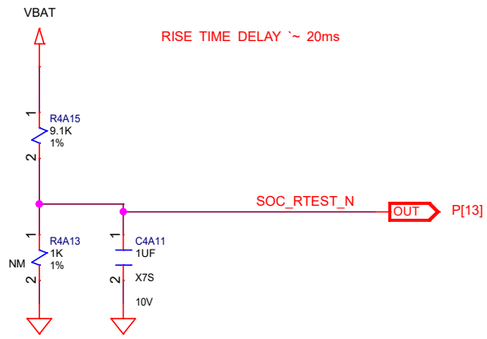
UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

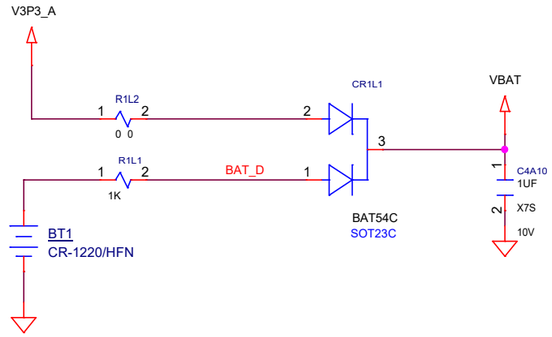


INTEL SECTION 12V MONITORING AND CONTROL





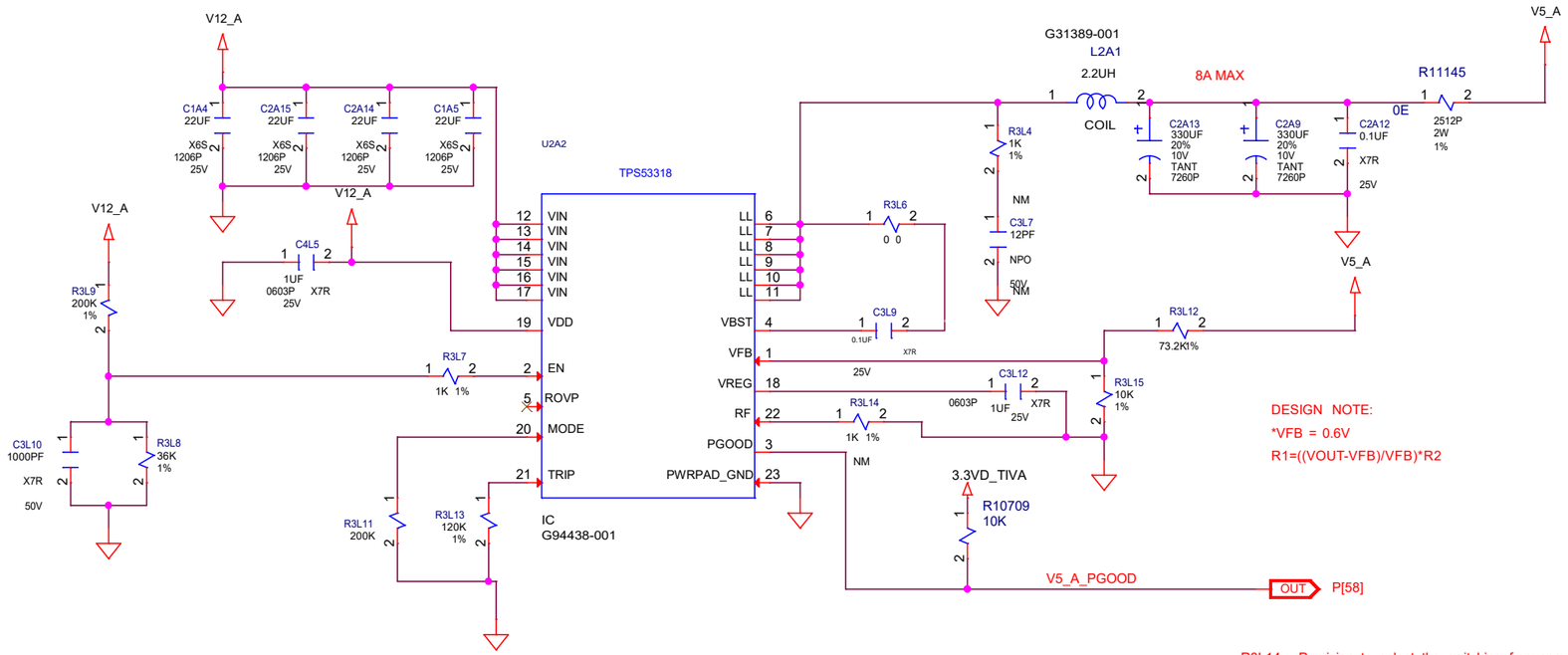




INTEL RTC

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: POWER	LIFE 3	SHEET 39OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

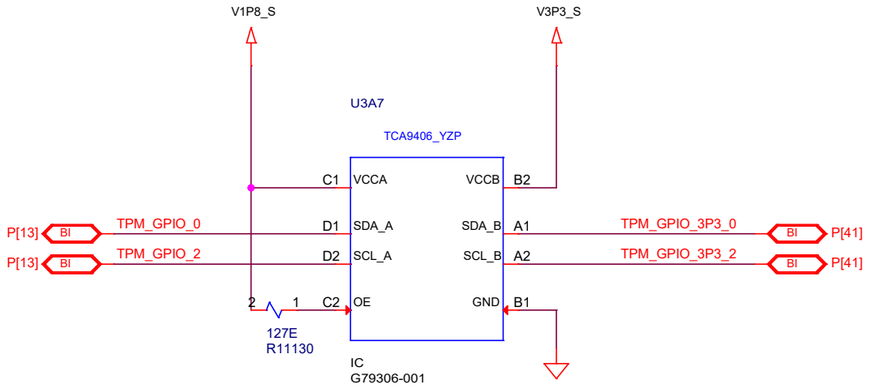


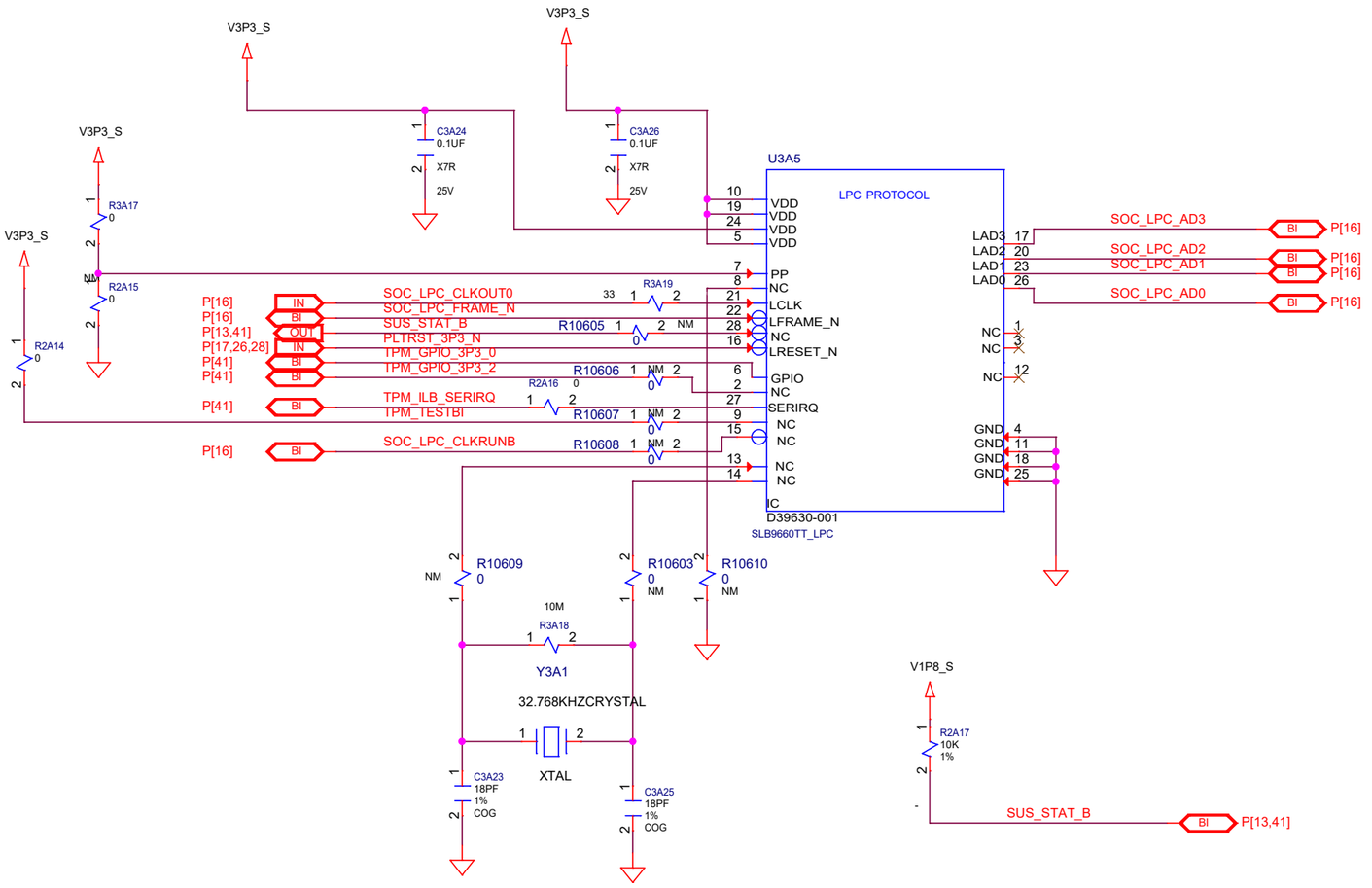
DESIGN NOTE:
*VFB = 0.6V
R1=((VOUT-VFB)/VFB)*R2

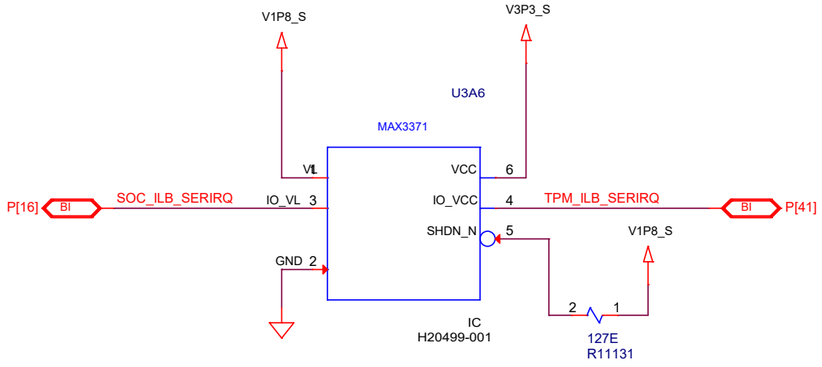
R3L14 : Provision to select the switching frequency as 500KHz.

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: POWER	LIFE 3	SHEET 40OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%







OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: TPM	LIFE 3	SHEET 41OF 96

SURGE PROTECTOR ON SOLAR/AUX POWER SUPPLY

SOLAR-->16V-22V

AUX-->24V

VPSOLAR

M59
IPB027N10N3 G

R1302
76.8k
1206P
1/4W
1%

D10035
BAV3004W

R1301

Q110
MMBT3904

R1300
470k
0603P
1/10W
1%

270k
5%
1/4W
1206P

D10036
BAV3004W

D10034
BAV3004W

D10037
BAV3004W

R10051
270K
0603P
1/10W
1%

R11213
470K
1%
1/4W
1206P

-100V REVERSE VOLTAGE PROTECTION CIRCUIT

U89

VDD
SD
TIMER
VSS
GATE
OUT
FB
BASE

LTC4366HTS8-2#TRMPBF

P[55] IN

LTC4366_RESET

C3M166
1NF
20%
X7R
0402P
100V

R1307
21K
1206P
1/4W
1%

R1303
10E
1%
1/10W
0603P

M60
IPB027N10N3 G

VSLR_OVUVOUT

C3M165
470nF
10%
X7R
0603P
25V

R1304
12.4k
1%
1/10W
0603P

R1306
270K
0603P
1/10W
1%

R9962
100E
0603P
1/10W
1%

D10038
1N4148W
S1B

C3M163
0.01uF
10%
X7R
0603P
100V

VPSOLAR

D31
5.0SMDJ26CA
26V

D10063
5.0SMDJ26CA
26V

D10062
5.0SMDJ26CA
26V

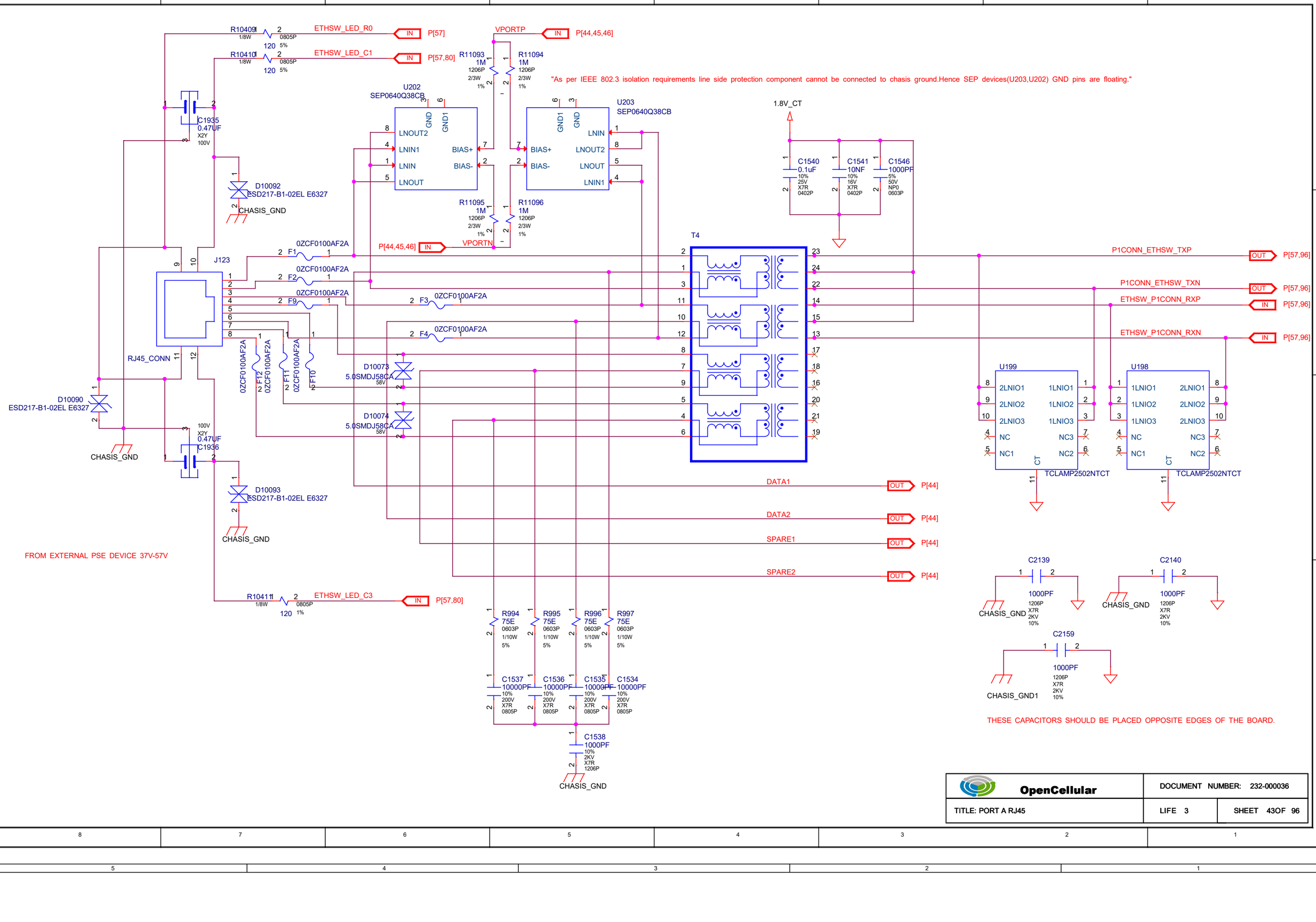
CHASIS_GND

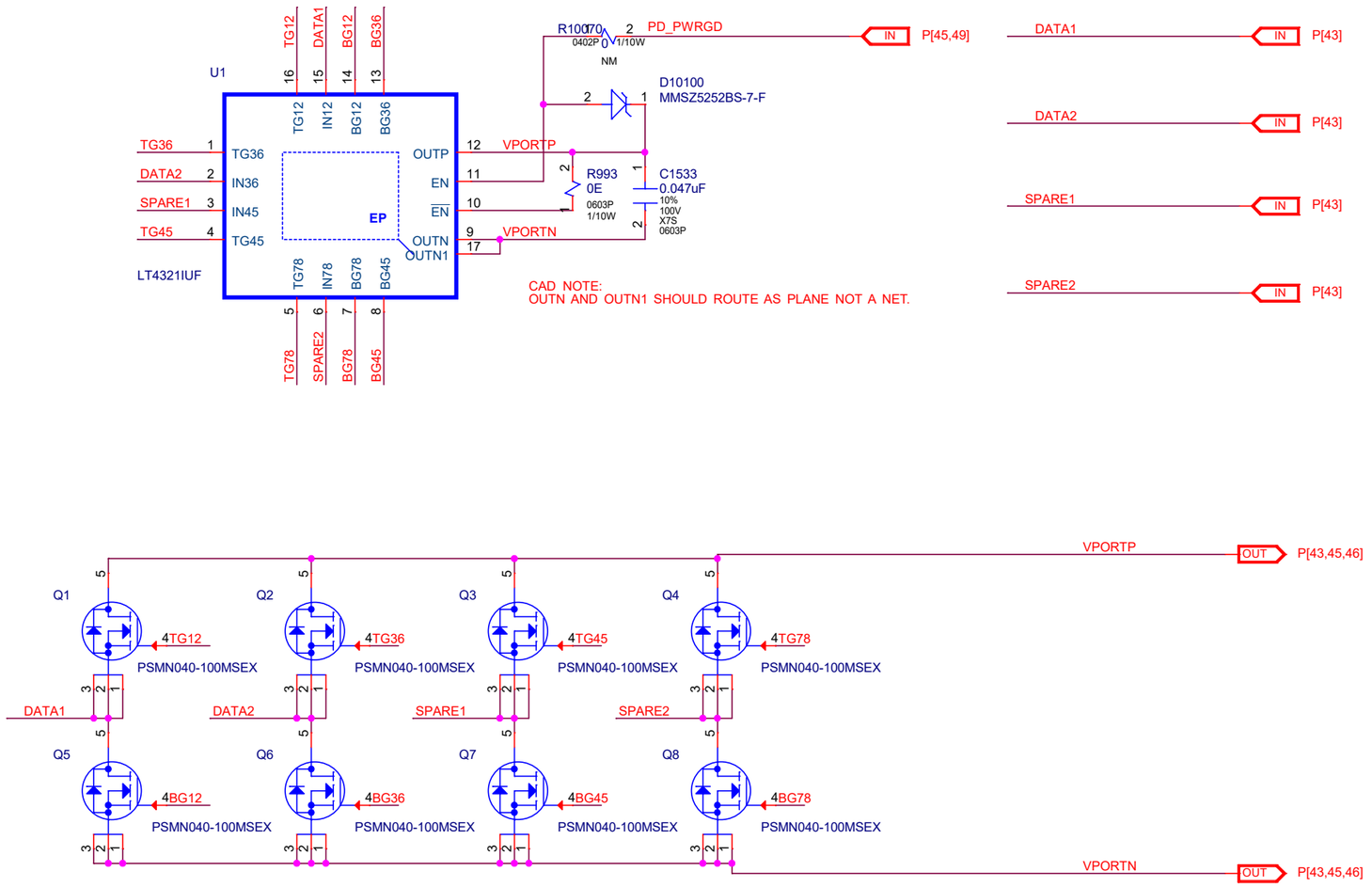
JTB10A
CONN

C1857
0.47UF
X2Y
100V

CHASIS_GND

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: SOLAR AUX	LIFE 3	SHEET 42OF 96


R10409 1/8W 120 0805P 5% ETHSW_LED_R0 IN P[57]
R10410 1/8W 120 0805P 5% ETHSW_LED_C1 IN P[57,80]
VPORTP IN P[44,45,46]
R11093 1M 1206P 2/3W 1%
R11094 1M 1206P 2/3W 1%
"As per IEEE 802.3 isolation requirements line side protection component cannot be connected to chasis ground.Hence SEP devices(U203,U202) GND pins are floating."
U202 SEP0640Q38CB
U203 SEP0640Q38CB
GND GND1 LNOUT2 LNIN1 LNIN LNOUT BIAS+ BIAS-
1.8V_CT
C1540 0.1uF 10% 25V X7R 0402P
C1541 10NF 10% 16V X7R 0402P
C1546 1000PF 5% 50V NP0 0603P
C1935 0.47UF X2Y 100V
D10092 ESD217-B1-02EL E6327
CHASIS_GND
R11095 1M 1206P 2/3W 1%
R11096 1M 1206P 2/3W 1%
P[44,45,46] IN VPORTN
T4
J123
0ZCF0100AF2A F1 F2 F3 F4 F9 F10 F11 F12
RJ45_CONN
D10073 5.0SMDJ58CA 58V
D10074 5.0SMDJ58CA 58V
D10090 ESD217-B1-02EL E6327
C1936 0.47UF X2Y 100V
D10093 ESD217-B1-02EL E6327
P1CONN_ETHSW_TXP OUT P[57,96]
P1CONN_ETHSW_TXN OUT P[57,96]
ETHSW_P1CONN_RXP IN P[57,96]
ETHSW_P1CONN_RXN IN P[57,96]
U199 U198 2LNIO1 2LNIO2 2LNIO3 1LNIO1 1LNIO2 1LNIO3 NC NC1 NC2 NC3 CT
TCLAMP2502NTCT
DATA1 OUT P[44]
DATA2 OUT P[44]
SPARE1 OUT P[44]
SPARE2 OUT P[44]
FROM EXTERNAL PSE DEVICE 37V-57V
R10411 1/8W 120 0805P 1% ETHSW_LED_C3 IN P[57,80]
R994 R995 R996 R997 75E 0603P 1/10W 5%
C1537 C1536 C1535 C1534 10000PF 10% 200V X7R 0805P
C1538 1000PF 10% 2KV X7R 1206P
C2139 C2140 1000PF 1206P X7R 2KV 10%
C2159 1000PF 1206P X7R 2KV 10%
CHASIS_GND CHASIS_GND1
THESE CAPACITORS SHOULD BE PLACED OPPOSITE EDGES OF THE BOARD.
OpenCellular
DOCUMENT NUMBER: 232-000036
TITLE: PORT A RJ45
LIFE 3
SHEET 43OF 96



OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: POE BRIDGE	LIFE 3	SHEET 44OF 96

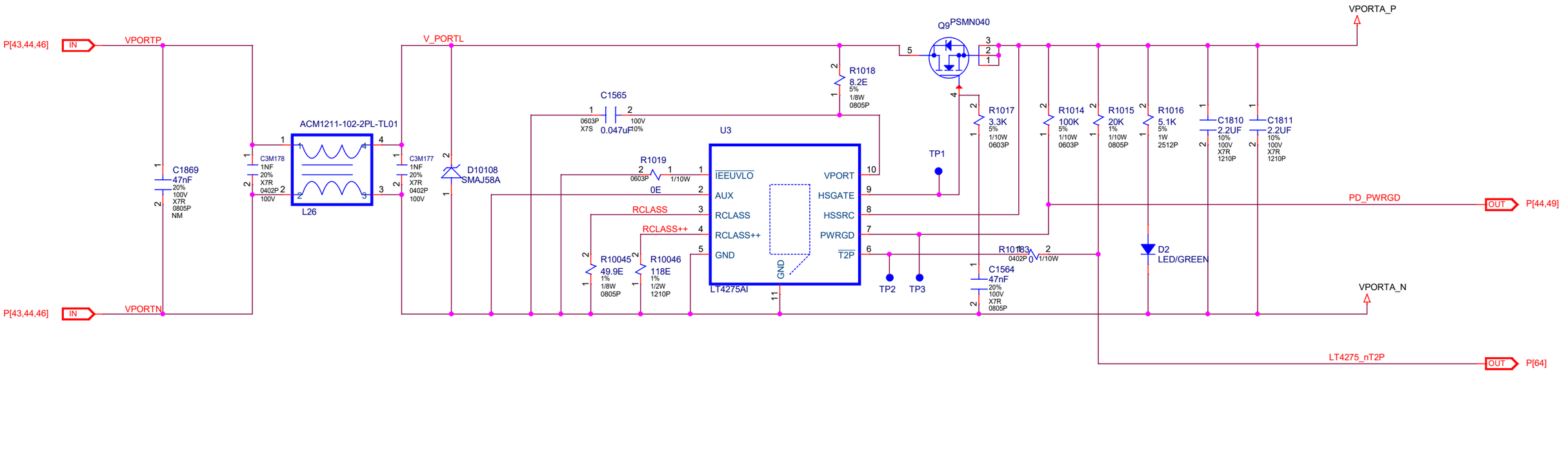


Table 1. Classification Codes, Power Levels and Resistor Selection

CLASS	PD POWER AVAILABLE	PD TYPE	NOMINAL CLASS CURRENT	LT4275 GRADE CAPABILITY			RESISTOR	
				A	B	C	R_{CLS}	R_{CLS}++
0	13W	Type 1	<0.4mA	✓	✓	✓	Open	Open
1	3.84W	Type 1	10.5mA	✓	✓	✓	140Ω	Open
2	6.49W	Type 1	18.5mA	✓	✓	✓	76.8Ω	Open
3	13W	Type 1	28mA	✓	✓	✓	49.9Ω	Open
4	25.5W	Type 2	40mA	✓	✓		34.8Ω	Open
4*	38.7W	LTPoE++	40mA	✓			Open	34.8Ω
4*	52.7W	LTPoE++	40mA	✓			140Ω	46.4Ω
4*	70W	LTPoE++	40mA	✓			76.8Ω	64.9Ω
4*	90W	LTPoE++	40mA	✓			49.9Ω	118Ω

*An LTPoE++ PD will be classified as class 4 by an IEEE 802.3 compliant PSE.

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: POE PD	LIFE 3	SHEET 45OF 96

DATA AND POWER OUT

1.8V_CT

C1547 0.1uF 10% 25V X7R 0402P

C1548 10NF 10% 16V X7R 0402P

C1549 1000PF 5% 50V NP0 0603P

T2

P[57] IN ETHSW_P2CONN_P2_TXP

P[57] IN ETHSW_P2CONN_P2_TXN

P[57] OUT P2CONN_ETHSW_P2_RXP

P[57] OUT P2CONN_ETHSW_P2_RXN

U197 TCLAMP2502NTCT

U196 TCLAMP2502NTCT

VPORTN IN P[43,44,45,46]

U194 SEP0640Q38CB

U195 SEP0640Q38CB

R11100 1M 1206P 2/3W 1%

R11097 1M 1206P 2/3W 1%

R11098 1M 1206P 2/3W 1%

R11099 1M 1206P 2/3W 1%

P[43,44,45] IN VPORTP

P[43,44,45,46] NI VPORTN

P[57] IN ETHSW_LED_R1 R10412 120 1% 1/8W 0805P

P[57] IN ETHSW_LED_C0 R10413 120 1% 1/8W 0805P

P[57] IN ETHSW_LED_C2 R10414 120 1% 1/10W 0805P

F5 0ZCF0100AF2A

F6 0ZCF0100AF2A

F7 0ZCF0100AF2A

F8 0ZCF0100AF2A

F13 0ZCF0100AF2A

F14 0ZCF0100AF2A

F15 0ZCF0100AF2A

F16 0ZCF0100AF2A

R1008 75E 1/10W 0603P

R1009 75E 1/10W 0603P

R1010 75E 1/10W 0603P

R1011 75E 1/10W 0603P

C1555 10000PF 200V 10% X7R 0805P

C1556 10000PF 200V 10% X7R 0805P

C1557 10000PF 200V 10% X7R 0805P

C1558 10000PF 200V 10% X7R 0805P

C1561 1000PF 10% 2KV X7R 1206P

C1937 0.47UF 100V X2Y

C1938 0.47UF 100V X2Y

D10094 ESD217-B1-02EL E6327

D10098 ESD217-B1-02EL E6327

D10091 ESD217-B1-02EL E6327

D10072 5.0SMDJ58CA 58V

D10071 5.0SMDJ58CA 58V

J124 RJ45_CONN

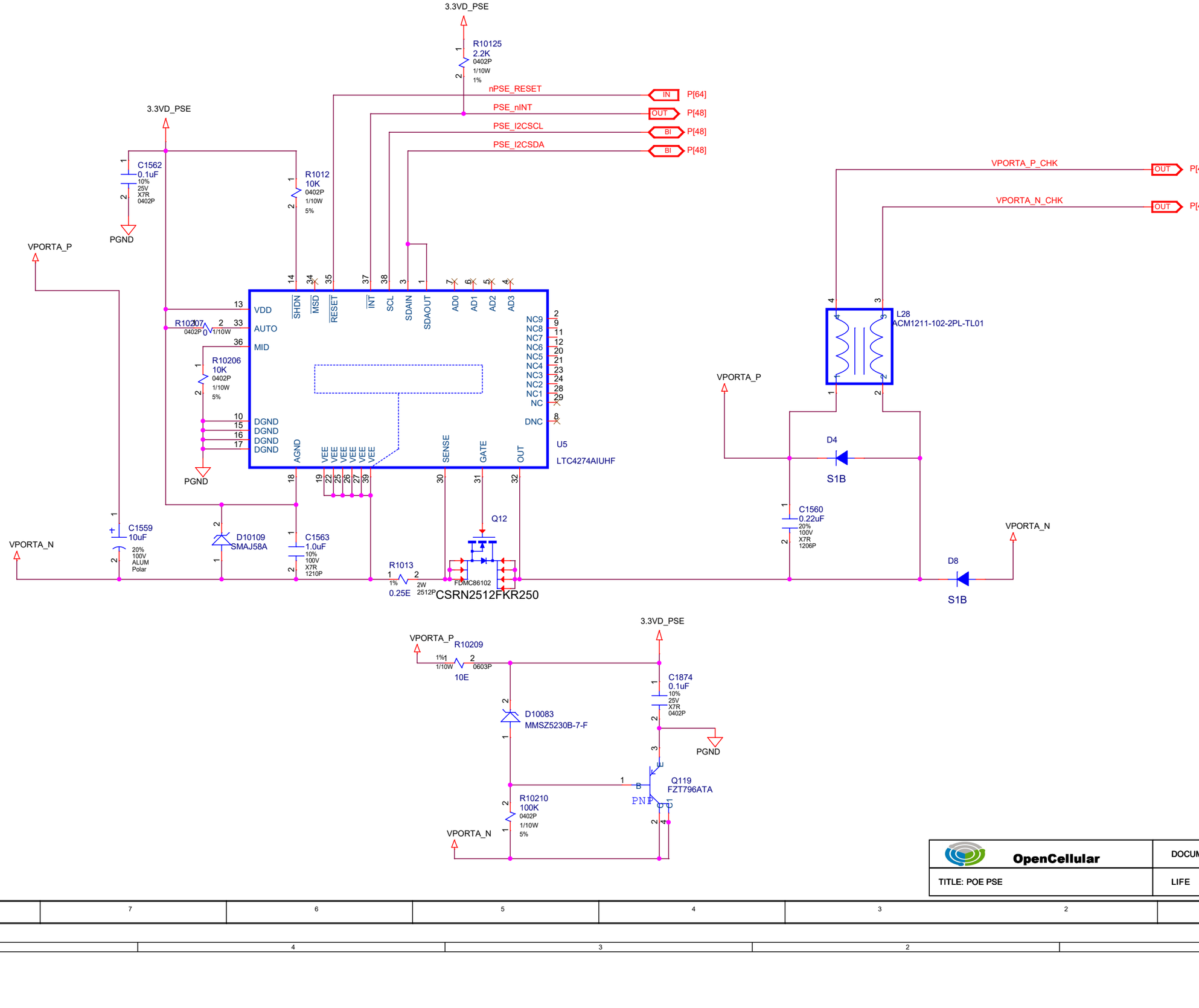
CHASIS_GND

"As per IEEE 802.3 isolation requirements line side protection component cannot be connected to chasis ground.Hence SEP devices(U203,U202) GND pins are floating."

P[47] IN VPORTA_N_CHK

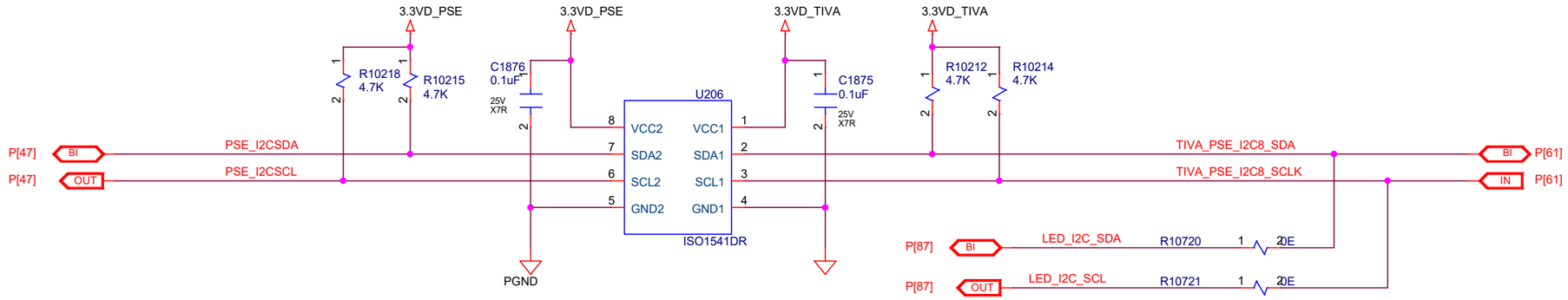
P[47] IN VPORTA_P_CHK

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: PORTB RJ45	LIFE 3	SHEET 46OF 96

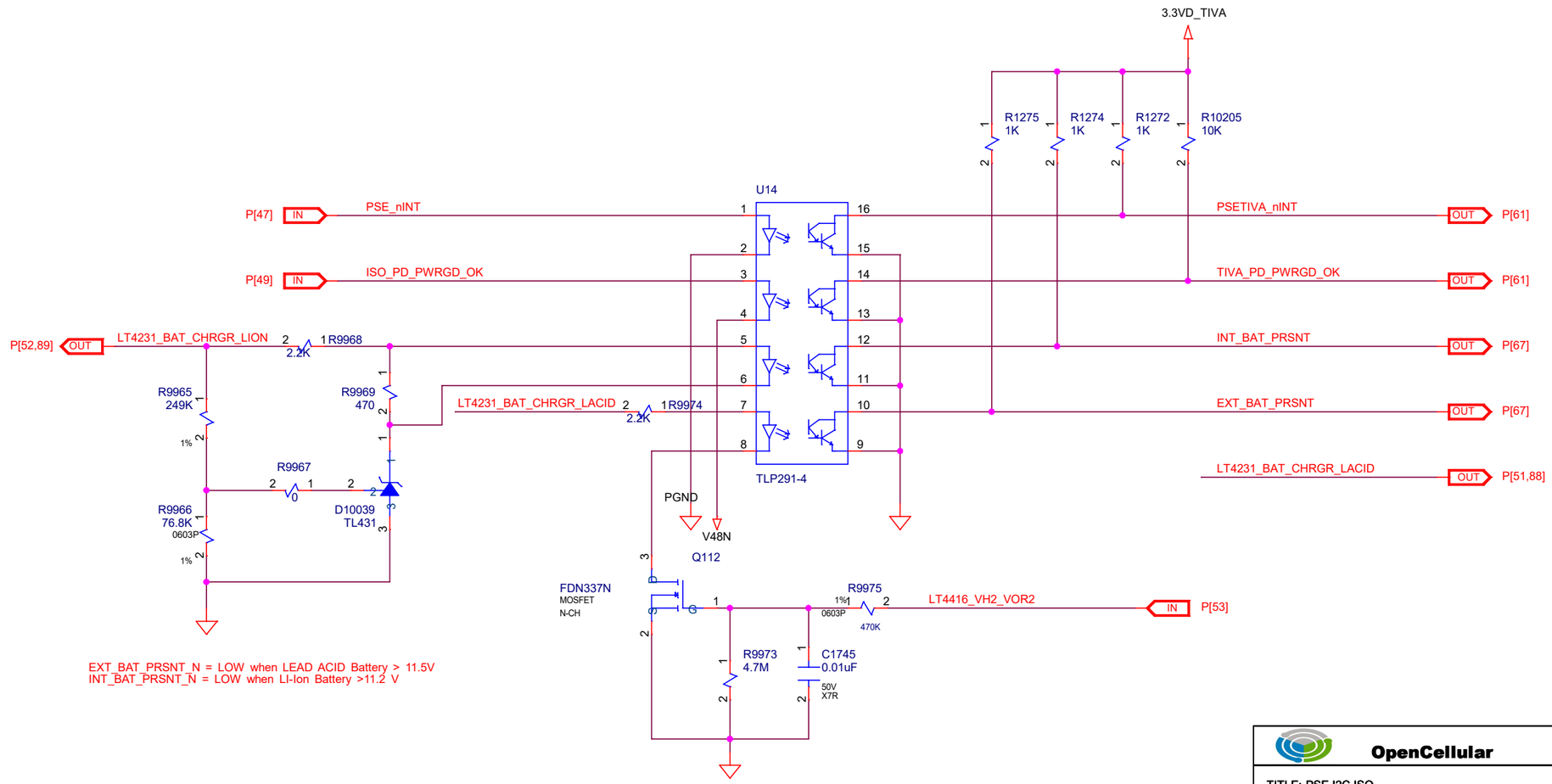


OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: POE PSE	LIFE 3	SHEET 47OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%



PSE I2C LEVEL TRANSLATOR



EXT_BAT_PRSNT_N = LOW when LEAD ACID Battery > 11.5V
INT_BAT_PRSNT_N = LOW when LI-Ion Battery >11.2 V

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: PSE I2C ISO	LIFE 3	SHEET 48OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

SNUBBER CIRCUIT

C1821 2.2uF 100V X7R 1210P
R10074 5.1K 1% 2W 2512P
C1819 0.22uF ALUM 200V 20%
D10068 ES1D
V48N

P[49] IN LT3748_EN
VPORTA_P
V48P
L31 100uH
C2005 47uF 20% 100V ALUM
C2006 47uF 20% 100V ALUM
V48N

U38 LT3748iMS
VIN
INTVCC
EN/UVLO
RFB
VC
GATE
SENSE
SS
TC
GND1
GND
RREF

C1868 10uF 50V X7R 1210P
D52 MMSZ5245B-7-F
R10178 20E 1/4W 1206P CMR1U-02M D10
C1813 0.1uF 25V X7R
V48N
R1023
R10697 2E 0805P
D10107 PMEG3010ER,115
M62 IPB027N10N3 G
R1024 33E
R1030 1.4K
R1026 12.4K 1%
C1577 470PF 50V NP0
C1576 33NF 50V X7R
C1806 470PF 50V NP0
R1025 60.4K 1%
R1029 6.04K 1%
C1574 6800PF 50V X7R
R1028 0.007 2512P
C1573 220PF 100V NPO 0603P
C1579 2.2UF 100V X7R 1210P

T3
Midcom 750311783
D10048 V12P10-M3/86A
R10050 30E 1% 3W 2512P
C1814 220PF 50V X7R
C1809 10uF 50V X7R 1210P
C1808 10uF 50V X7R 1210P
C1807 10uF 50V X7R 1210P
C3M170 270uF 20% ELE 35V
PV18POE
D10049 1SMB5932BT3G

V48N
C1870 1000PF 2KV X7R 1206P

VPORTA_N
V48N

PV18POE
MINIMUM LOAD FOR LT3748EMS
R10190 240 1% 3W 2512P
R10188 240 1% 3W 2512P

V48P
R10200 100K NM
R10199 100K
R10201 402K 1% 0603P
R10334 0 NM
D10081 ES1D
Q118 BSS123
P[44,45] IN PD_PWRGD
R10333 0
LT3748_EN OUT P[49]
D10082 BZX84C8V2LT1G
R10202 14.7K 1% 0603P
V48N
P[48] OUT ISO_PD_PWRGD_OK

OpenCellular
DOCUMENT NUMBER: 232-000036
TITLE: 48V TO 18V ISOLATED CONVERTER
LIFE 3
SHEET 49OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

VSLR_OVUVOUT
C3M102 0.1u X7R 0603P 50V
R1051 249K 1%
R9946 0E 0603P
V1 Fail at <15.7V
V1 Restore at >16.3V
R10698 0
EN2
Q125 2N7002L
P[61] IN TIVA_POE_OVERRIDE
R10700 100K
C2009 0.1uF 25V X7R
R1047 21K 1% 0603P
R1048 470K 0603P 1%
P[64] OUT LTC4416_VH2_VOR1
U77 LTC4416IMS#PBF
E1 H1 GND H2 E2 V1 V2 G1 G2 VS
Q95 IPB120P04P4L03ATMA1
Q96 IPB120P04P4L03ATMA1
Q97 IPB120P04P4L03ATMA1
Q98 IPB120P04P4L03ATMA1
VSLRPOE_VOUT
C3M171 0.1u X7R 0603P 50V
PV18POE 18V,3A
C3M103 0.1u X7R 0603P 50V

VSLRPOE_VOUT
R988 0.003 1% 2512P 2W 1W
Q89 BSC014N06NS
D32 MMSZ5245B-7-F
R1058 10E 2512P 1W 1%
VPS_VOUT
3.3VD_TIVA
R9944 120 0805P
D10124 LED
R9945 10K
D10135 PMEG3002AEB
LT4256_TIVA_PWRGD OUT P[61]
R1053 115k 0603P 1%
R1057 100E 0603P 1%
D10015 1N4148W S1B
C3M108 0.01uF X7R 0603P 100V
R1056 82K 1%
R1055 27K 0603P 1%
Q1B3 2N7002L
R10797 10K
VCC rising Threshold : 11.5V
VCC falling threshold : 10.2 V
U91 LT4256-2IS8#PBF-ND
VCC SENSE UV GATE FB TIMER PWRGD GND
P[55] IN LTC4256_RESET
C3M105 0.1uF X7R 50V
R1052 62K 0603P 1%
C3M107 4.7NF X7R 100V
R1054 39k 0603P 1%
PGOOD H-L threshold = 12.4V
PGOOD L-H threshold = 13.8V

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: POWER ORING AND PROTECTION	LIFE 3	SHEET 50OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

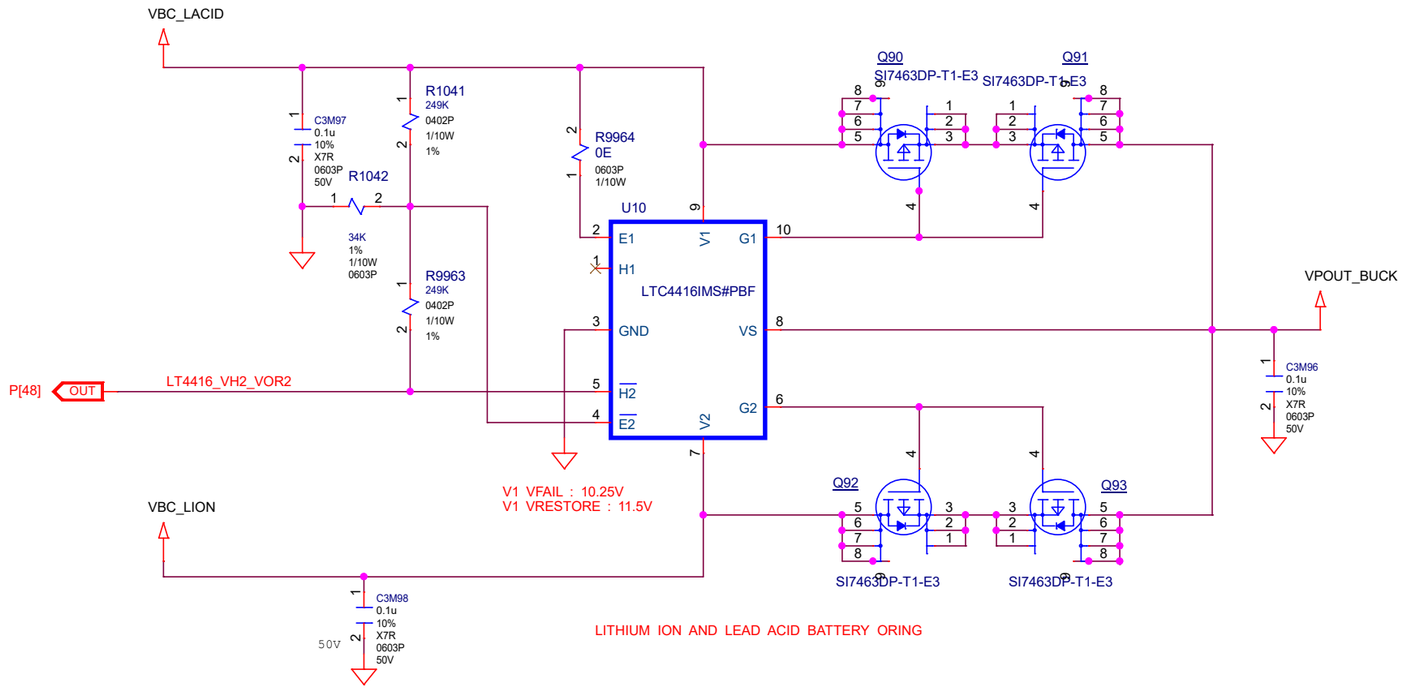
VPS_VOUT
L33 0.47UH 17.5A
C2126 10uF 50V X7R 1210P
C2125 10uF 50V X7R 1210P
C1685 10uF 50V X7R 1210P
C1684 10uF 50V X7R 1210P
C1683 10uF 50V X7R 1210P
C1682 10uF 50V X7R 1210P
C2127 150uF 20% 35V ALUM RADIAL
R9988 845K 1%
R9989 75K 0603P 1%
R9990 10K
P[52,55] IN LTC4015_RESET
R1153 10.0K 1%
C3M130 100pF X7R 50V
UVCLFB
INT_VCC_LACID
R1157 0 E 0603P
R1159 0 E 0603P
P[63] IN L_TIVA_MPPT_LACID
R9992 232K 1%
NTA7002NT1G
Q114 MOSFET N-CH
R9991 100K 1%
C1747 0.01uF 50V X7R
CELLS2
CELLS1
CELLS0
CHEM1
CHEM0
R1161 0 E 0603P
R1165 0 E 0603P
L_TIVA_MPPT_LACID
MPPT
CELLS2 = L , CELLS1 = H, CELLS0 = Z ; CHEM1 = H , CHEM0 = L
C3M128 0.1uF X7R 50V
R1168 301k 0603P 0.10%
CCREFP
CCREFM
C1829 0.1uF 25V X7R
3.3VD_TIVA
R10793 0
EQ
DVCC
SCL
SDA
SMBALERT
VC
RT
P[65] IN TIVA_LACID_I2C0_SCLK
P[65] BI TIVA_LACID_I2C0_SDA
P[63] OUT LACID_TIVA_SMBALRT
R10042 0
C3M133 0.22uF 10V X7R
C3M132 0.01uF X7R 50V
R1169 200E 1%
R1167 95.3k 1%
P[88] OUT LACID_VBAT_P
P[48,88] IN LT4231_BAT_CHRGR_LACID
SGND GND PGND
7 14 39
U82 LTC4015EUHF#PBF
VIN
INFET
CLP
CLN
SYS
SYSM5
OUTFET
INTVCC
DRVCC
BST
TG
SW
BG
CSPM5
CSP
CSN
BATSENSE
VCC2P5
NTCBIAS
NTC
M43 BSC014N06NS
R9960 0.002 1% 2512P 2W
R1171 0
R1170 0
C1673 1000PF 50V X7R
C1677 1uF 0603P X7R 16V
C1675 0.33UF 0603P X7R 50V
Db3 1N4448HLP
C1767 10uF 6.3V X7R 0805P
C3M167 0.1uF X7R 50V
C3M126 0.47uF X7R 0603P 16V
M45 CSD18540Q5BT
M42 CSD18540Q5BT
L24 3.3uH 15A
C1674 0.33UF 10V X7R 0603P
C1672 1000PF 50V X7R
R9959 0.003E 2512P 2W 1%
Rntcbias3 10k 1%
C1671 2.2uF 6.3V X7R 0603P
EXTBC_NTC
R10659 10K
NTC
C1741 10uF 50V X7R 1210P
C1742 10uF 50V X7R 1210P
CBAT
PHYSICALLY CLOSE TO OUTPUT SENSE PIN OF RSNSB
C3M127 0.1uF X7R 50V
C1686 10uF 50V X7R 1210P
C1687 10uF 50V X7R 1210P
C1688 10uF 50V X7R 1210P
C1689 10uF 50V X7R 1210P
C1678 10uF 50V X7R 1210P
C1679 10uF 50V X7R 1210P
C1680 10uF 50V X7R 1210P
C1681 10uF 50V X7R 1210P
Q100 SUM110P06
INT_VCC_LACID
VBC_LACID
LT4231_BAT_CHRGR_LACID
LACID_VBAT_P
D10110 BAS40SL
D10054 SMBJ10CA 10V
D10067 SMBJ10CA 10V
D10061 SMBJ10CA 10V
D10060 SMBJ10CA 10V
C1858 0.47UF X2Y 100V
C1859 0.47UF 100V X2Y
CHASIS_GND
JTB10B CONN

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: LEAD ACID BATTERY CHARGER	LIFE 3	SHEET 51OF 96

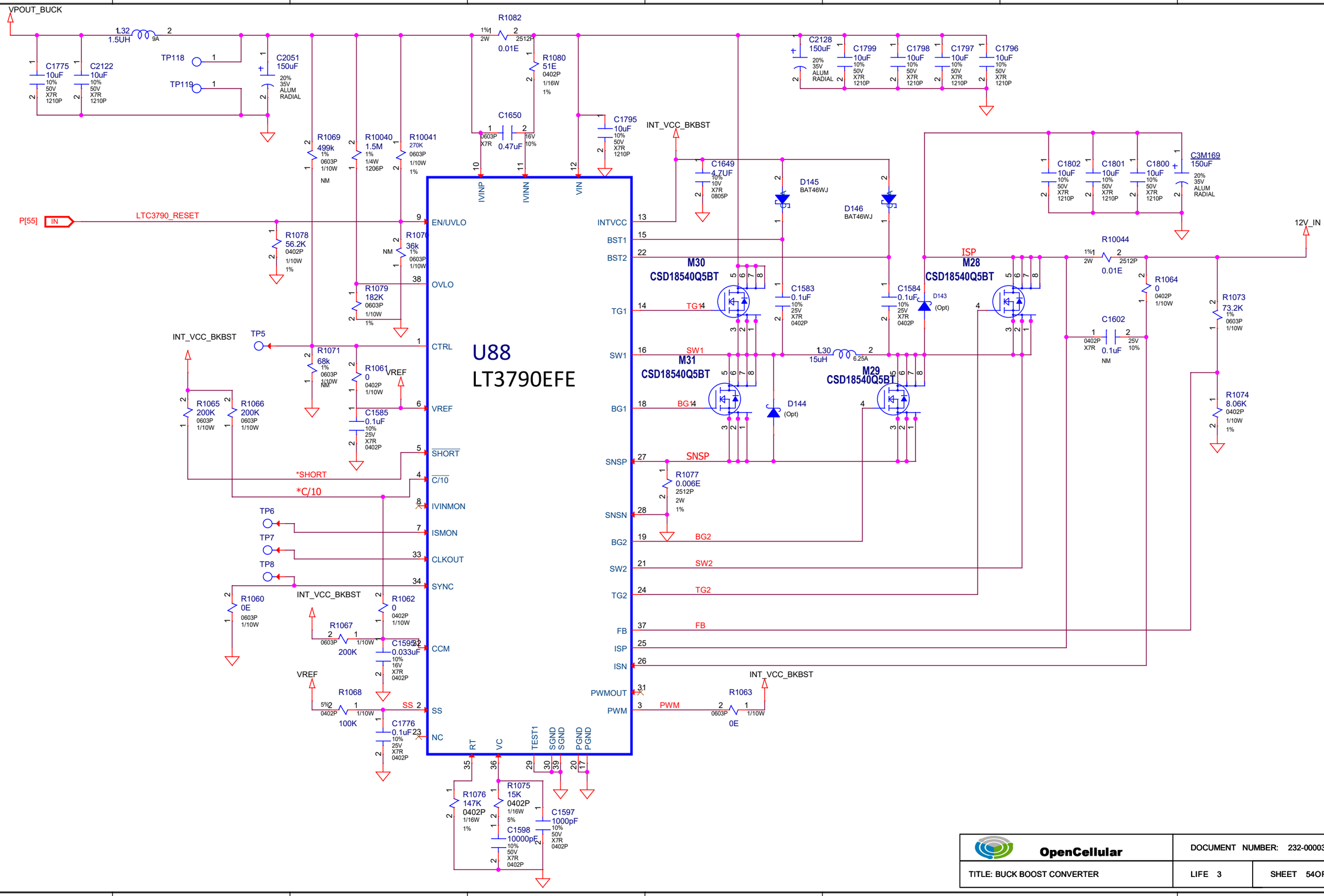
UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

VPS_VOUT
L34 1.5UH 9A
C2132 10uF 50V X7R 1210P
C2131 10uF 50V X7R 1210P
C1718 10uF 50V X7R 1210P
C1719 10uF 50V X7R 1210P
C1720 10uF 50V X7R 1210P
C1724 10uF 50V X7R 1210P
C2129 150uF 20% 35V ALUM RADIAL
R9995 845K 1%
P[51,55] IN LTC4015_RESET
R9996 75K 1%
R9997 10K
R1200 10.0K 1%
C3M151 100pF X7R 50V
UVCLFB
INT_VCC_LION
R1206 0 E 0603P
R1207 0 E 0603P
P[62] IN L_TIVA_MPPT_LION
R9994 232K 1%
NTA7002NT1G
Q115 MOSFET N-CH
C1748 0.01uF 50V X7R
R9993 100K 1%
CELLS2 CELLS1 CELLS0
CHEM1 CHEM0
R1209 0 E 0603P
R1210 0 E 0603P
R1213 0 E 0603P
CELLS2 = L , CELLS1 = H, CELLS0 = H ; CHEM1 = L , CHEM0 = L
L_TIVA_MPPT_LION
MPPT
CCREFP
C3M149 0.1uF X7R 50V
R1216 301k 0603P 0.10%
CCREFM
C1830 0.1uF 25V X7R
3.3VD_TIVA
R10792 0
EQ
P[65] IN TIVA_LION_I2C0_SCLK
P[65] BI TIVA_LION_I2C0_SDA
P[62] OUT LION_TIVA_SMBALERT
R10043 0
DVCC SCL SDA SMBALERT
C3M154 0.22uF X7R 10V
C3M153 0.01uF X7R 50V
R1215 95.3k
R1217 200E 1%
VC RT
P[89] OUT LT4231_LION_P
P[48,89] IN LT4231_BAT_CHRGR_LION
U85 LTC4015EUHF#PBF
VIN
SGND GND PGND
INFET CLP CLN SYS SYSM5 OUTFET INTVCC DRVCC BST TG SW BG CSPM5 CSP CSN BATSENSE VCC2P5 NTCBIAS NTC
M54 BSC014N06NS
R9931 0.007 1% 2512P 2W
R1219 0
R1218 0
C1724 1000PF 50V X7R
C1709 OPT 1uF 0603P X7R 50V
C3M148 0.1uF X7R 50V
C1714 C1715 C1716 C1717 10uF 50V X7R 1210P
C1710 C1711 C1712 C1713 10uF 50V X7R 1210P
C1725 0.33UF 0603P X7R 50V
Q102 SI7463DP-T1-E3
INT_VCC_LION
Db5 1N4448HLP
C1765 10uF 6.3V X7R 0805P
C3M155 0.1uF X7R 50V
C3M158 0.47uF X7R 0603P 16V
M56 CSD18540Q5BT
M52 CSD18540Q5BT
L25 15uH 6.25A
VBC_LION
LT4231_BAT_CHRGR_LION
C1726 0.33UF 10V X7R 0603P
C1723 1000PF 50V X7R
R10039 0.03 1% 2512P 2W
100V X2Y CHASIS_GND1
0.47UF C1865
JTB8 B3B-PH-SM4-TB(LF)(SN)
LT4231_LION_P
INTBC_NTC
D10111 BAS40SL
D10064 SMBJ10CA 10V
D10065 SMBJ10CA 10V
D10066 SMBJ10CA 10V
D10057 SMBJ10CA 10V
CHASIS_GND1
R10660 10K NM
10.0k Rntcbias5 1%
C1722 2.2uF 6.3V X7R 0603P
C1744 C1743 10uF 50V X7R 1210P
CBAT
PHYSICALLY CLOSE TO OUTPUT SENSE PIN OF RSNSB

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: LITHIUM ION BATTERY CHARGER	LIFE 3	SHEET 52OF 96

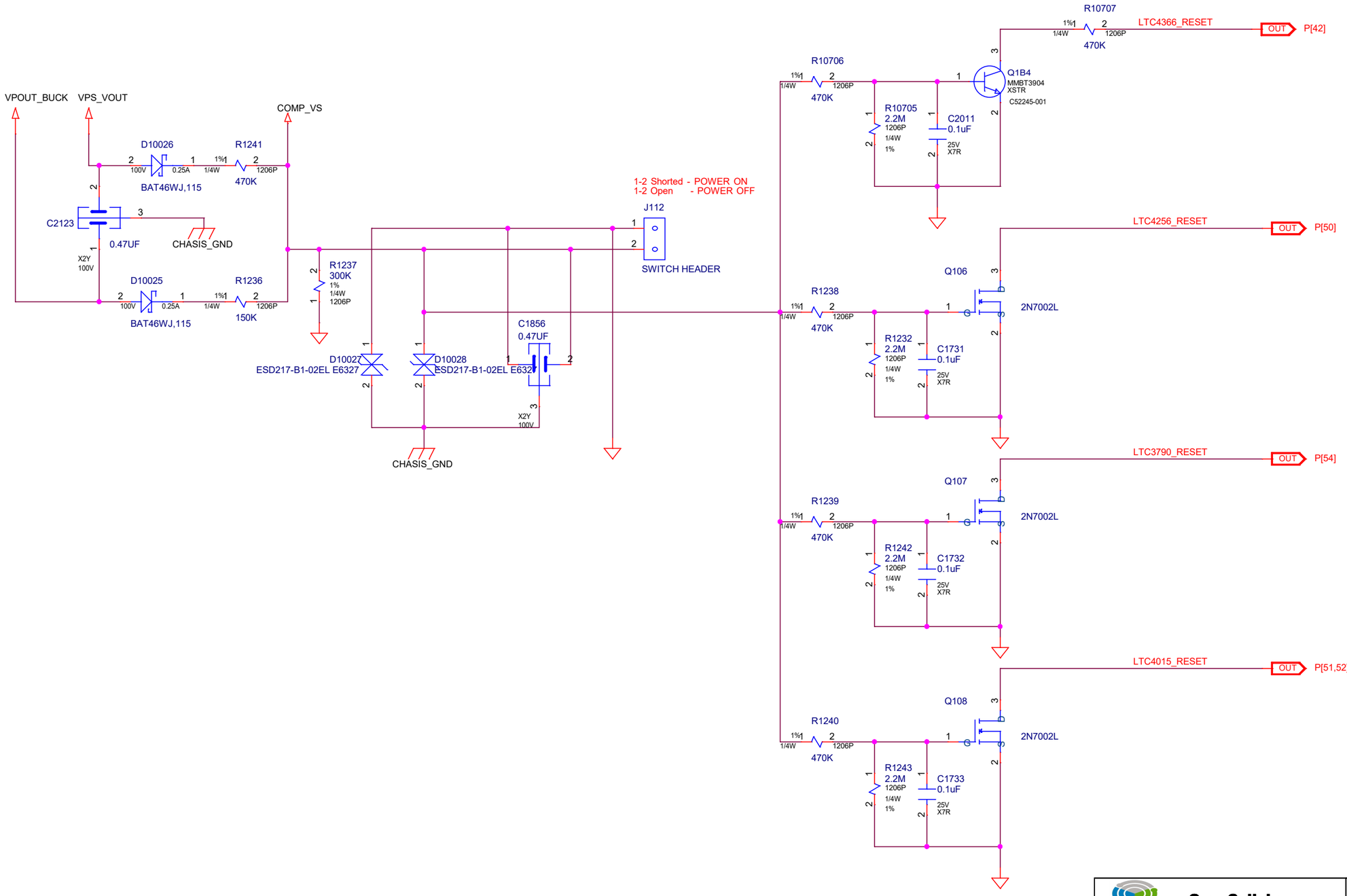


OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: POWER ORING	LIFE 3	SHEET 53OF 96



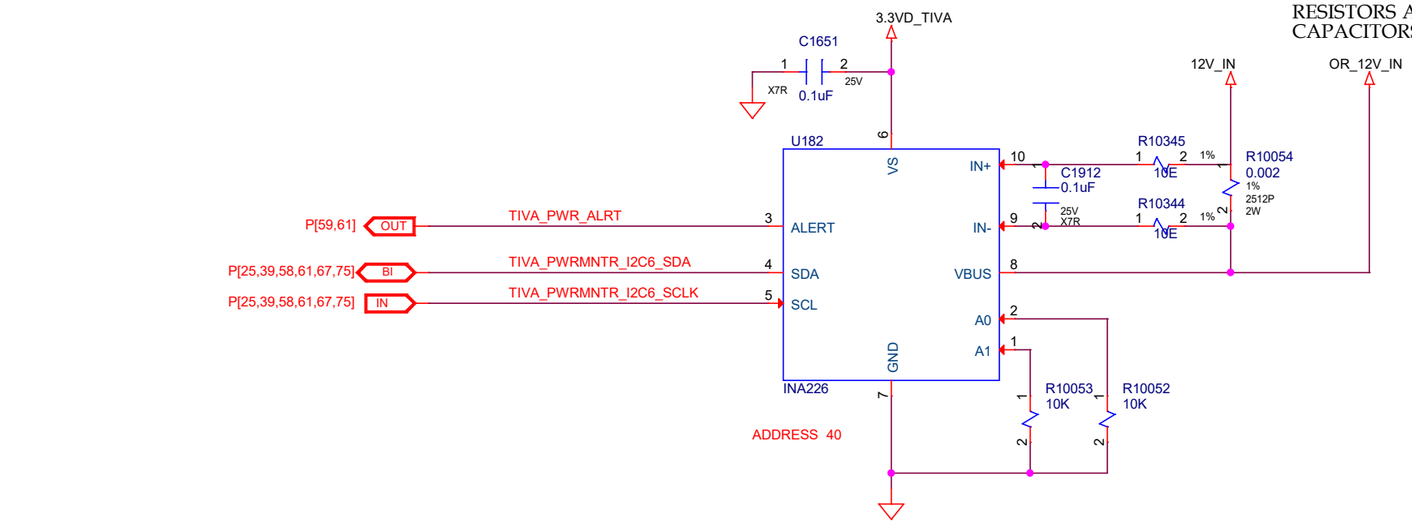
OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: BUCK BOOST CONVERTER	LIFE 3	SHEET 54OF 96

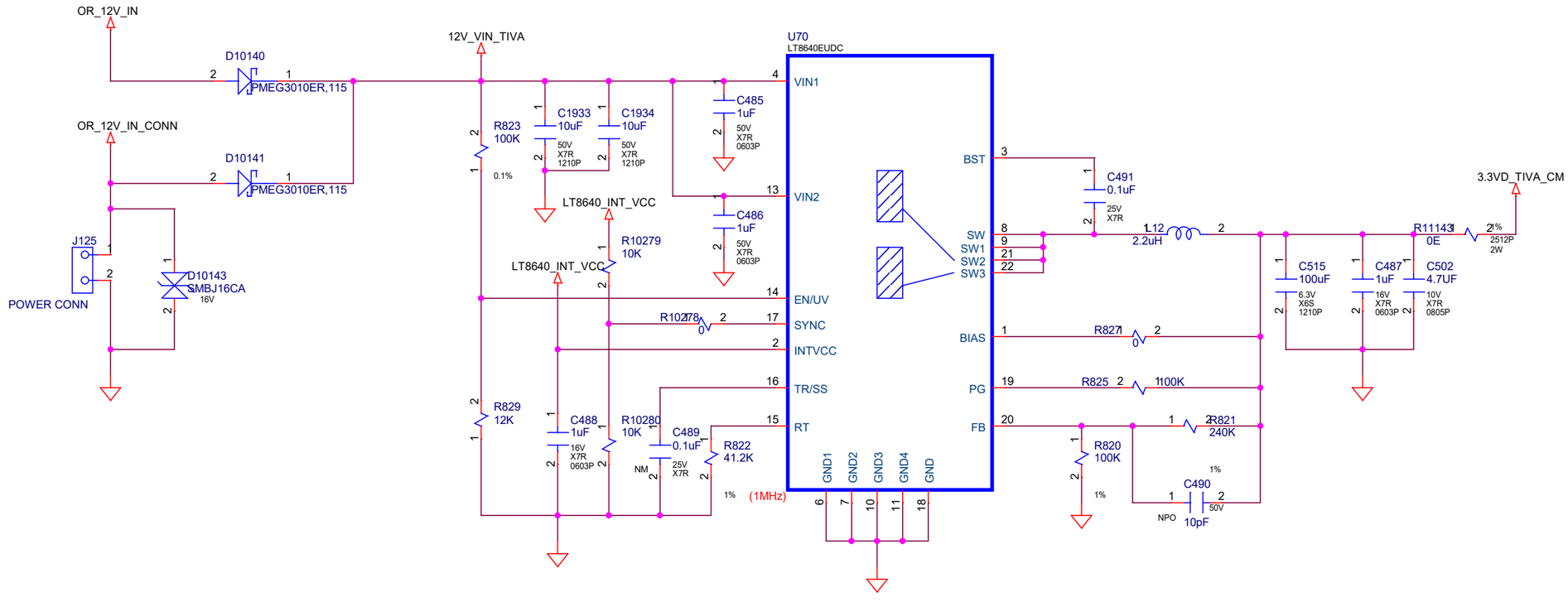
UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%



OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: POWER SWITCH	LIFE 3	SHEET 55OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%





OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: DC-DC CONVERTER	LIFE 3	SHEET 56OF 96

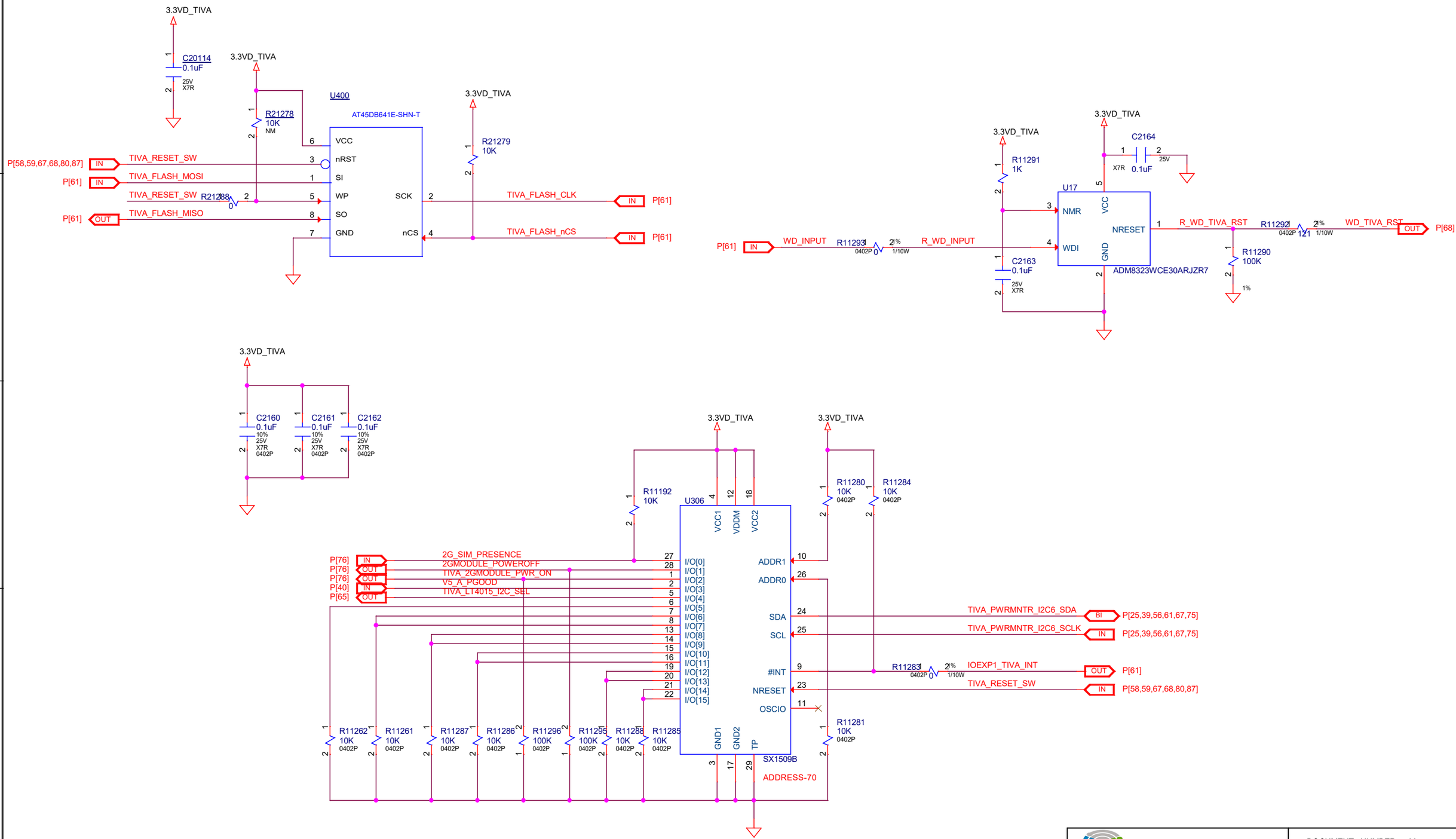
CAD NOTE : ETHERNET SIGNALS TO/FROM U55 TO BE ROUTED AS LOOSELY COUPLED DIFFERENTIAL PAIR.
TRACE WIDTH PER LINE SHOULD BE 50 OHM WITH SPACING GREATER THAN 3H.

VDD_CORE_1.2V AND 1.8V_CT ARE OUTPUT OF ETHERNET SWITCH

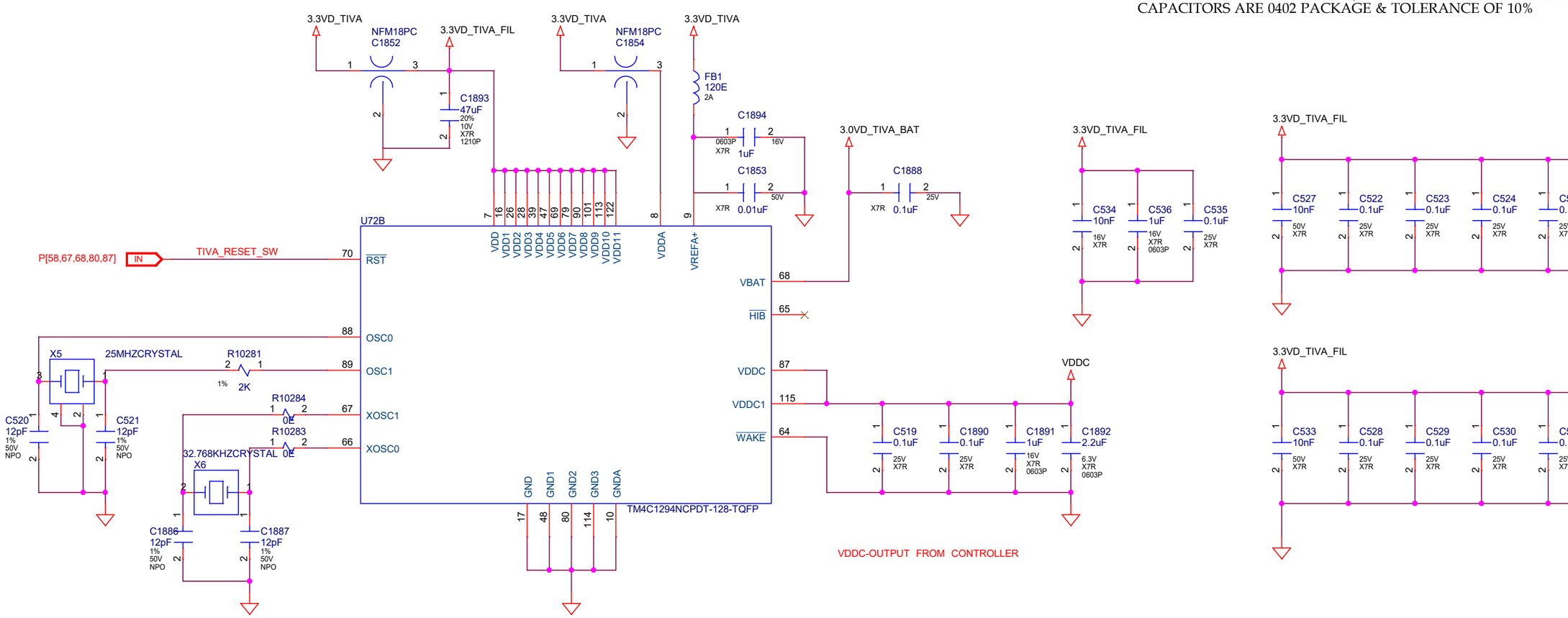
U55 — 88E6071

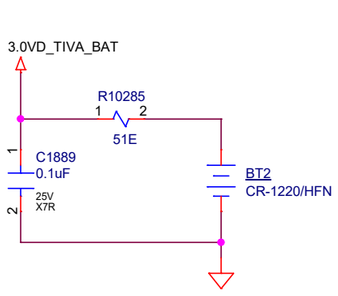
UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

OpenCellular	DOCUMENT NUMBER: 232-000036
TITLE: ETHERNET SWITCH	LIFE 3 / SHEET 57OF 96

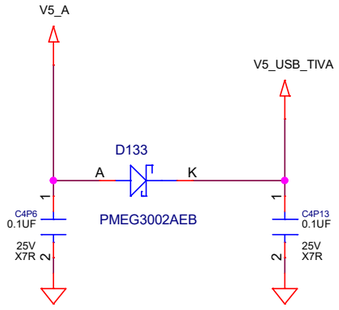

3.3VD_TIVA
C20114
0.1uF
25V
X7R
U400
AT45DB641E-SHN-T
R21278
10K
NM
R21279
10K
P[58,59,67,68,80,87]
IN
TIVA_RESET_SW
P[61]
IN
TIVA_FLASH_MOSI
TIVA_RESET_SW
R21288
0
P[61]
OUT
TIVA_FLASH_MISO
VCC
nRST
SI
WP
SCK
SO
GND
nCS
TIVA_FLASH_CLK
TIVA_FLASH_nCS
P[61]
P[61]
C2164
0.1uF
X7R
25V
U17
R11291
1K
C2163
0.1uF
25V
X7R
NMR
WDI
VCC
GND
NRESET
ADM8323WCE30ARJZR7
P[61]
IN
WD_INPUT
R11293
0
0402P
1/10W
R_WD_INPUT
R_WD_TIVA_RST
R11292
121
0402P
1/10W
WD_TIVA_RST
OUT
P[68]
R11290
100K
1%
C2160
C2161
C2162
0.1uF
10%
25V
X7R
0402P
U306
SX1509B
ADDRESS-70
R11192
10K
R11280
10K
R11284
10K
R11281
10K
R11262
R11261
R11287
R11286
R11296
R11295
R11288
R11285
100K
VCC1
VDDM
VCC2
GND1
GND2
TP
I/O[0]
I/O[1]
I/O[2]
I/O[3]
I/O[4]
I/O[5]
I/O[6]
I/O[7]
I/O[8]
I/O[9]
I/O[10]
I/O[11]
I/O[12]
I/O[13]
I/O[14]
I/O[15]
ADDR1
ADDR0
SDA
SCL
#INT
NRESET
OSCIO
P[76]
P[76]
P[76]
P[40]
P[65]
2G_SIM_PRESENCE
2GMODULE_POWEROFF
TIVA_2GMODULE_PWR_ON
V5_A_PGOOD
TIVA_LT4015_I2C_SEL
TIVA_PWRMNTR_I2C6_SDA
TIVA_PWRMNTR_I2C6_SCLK
P[25,39,56,61,67,75]
P[25,39,56,61,67,75]
R11283
0
IOEXP1_TIVA_INT
P[61]
TIVA_RESET_SW
P[58,59,67,68,80,87]
OpenCellular
DOCUMENT NUMBER: 00
TITLE: TIVA_FLASH_AND_WATCHDOG
LIFE 1.01
SHEET 58OF 85

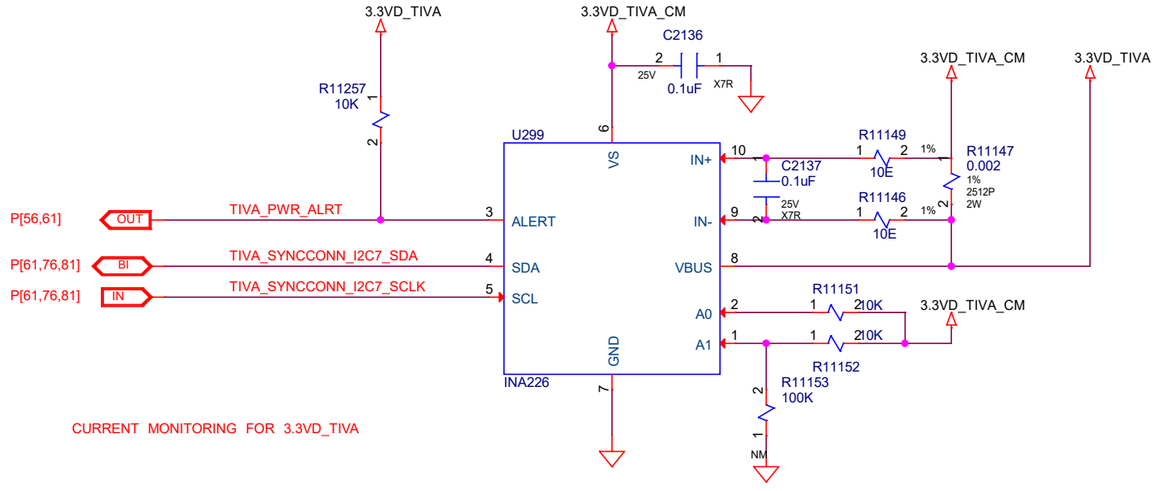
UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%





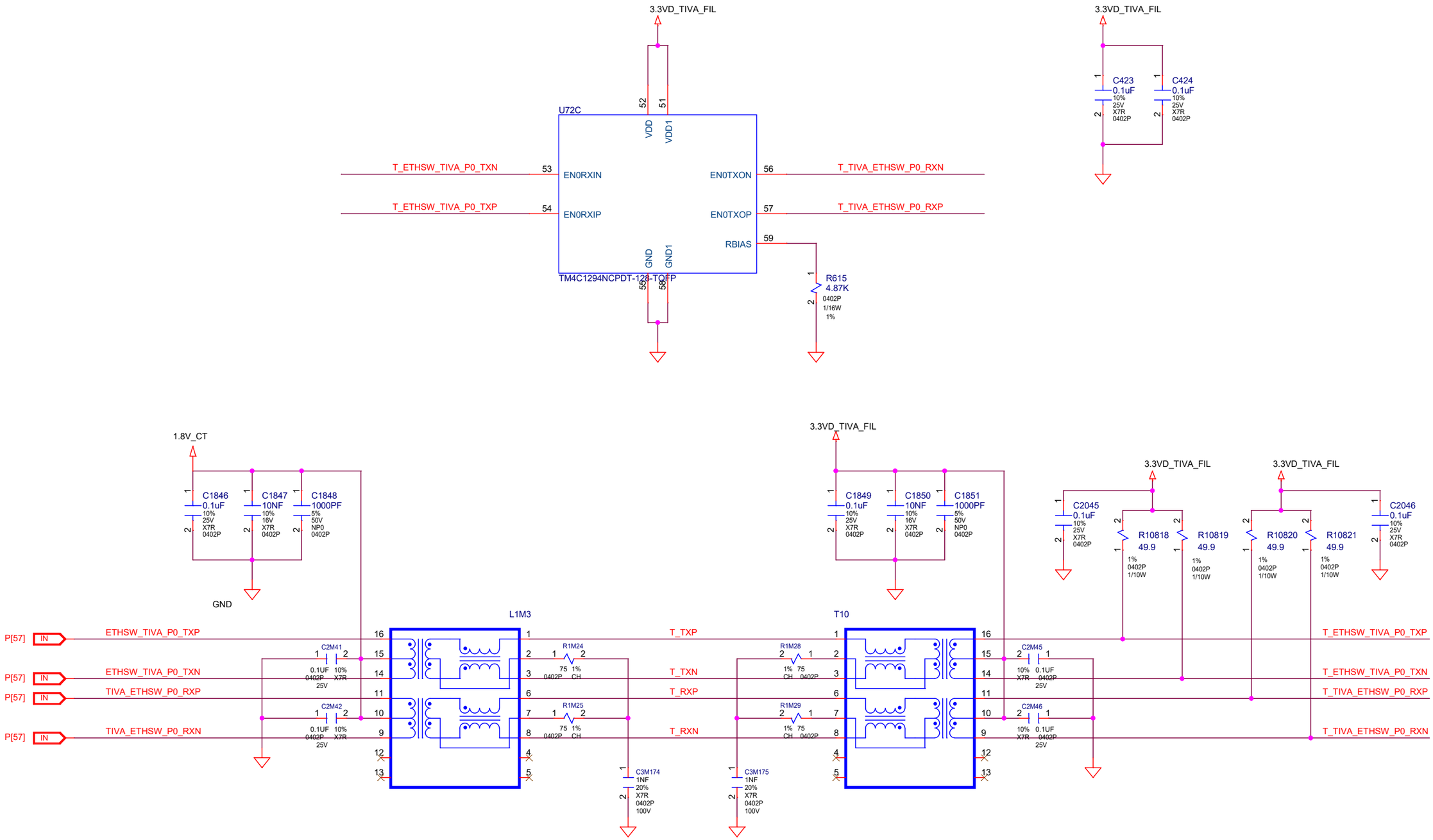
TIVA RTC





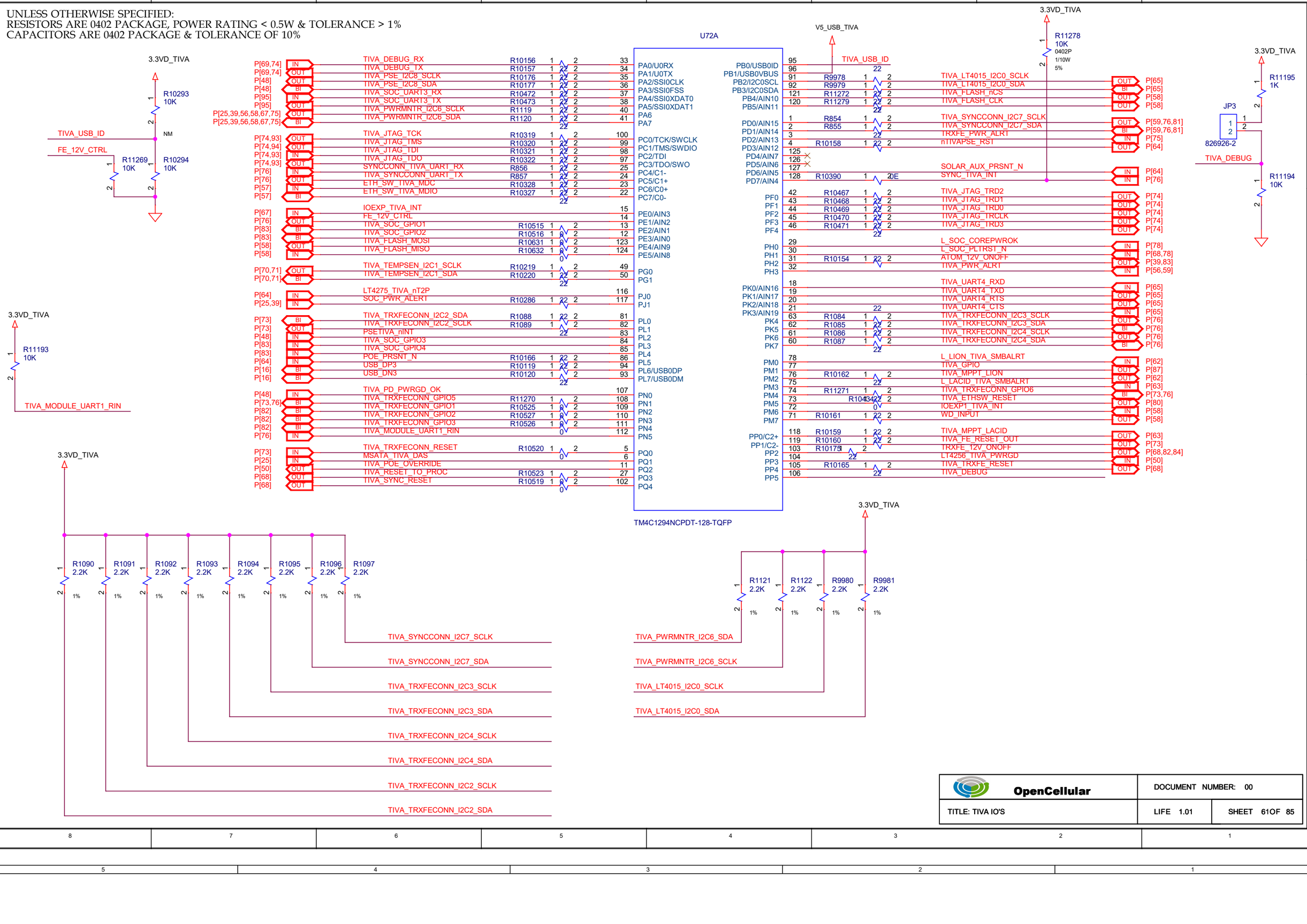
CURRENT MONITORING FOR 3.3VD_TIVA

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: TIVA POWER	LIFE 3	SHEET 59OF 96

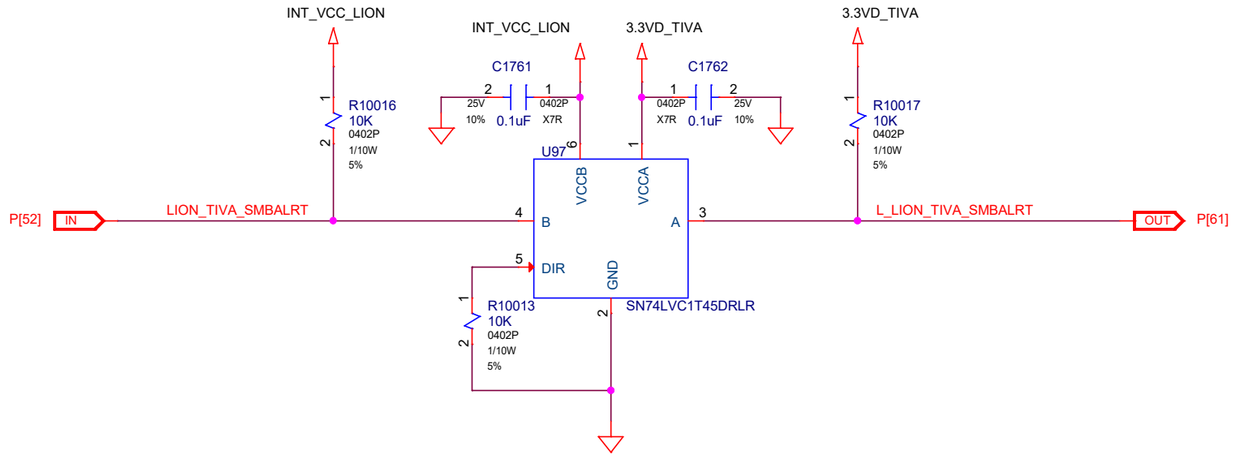


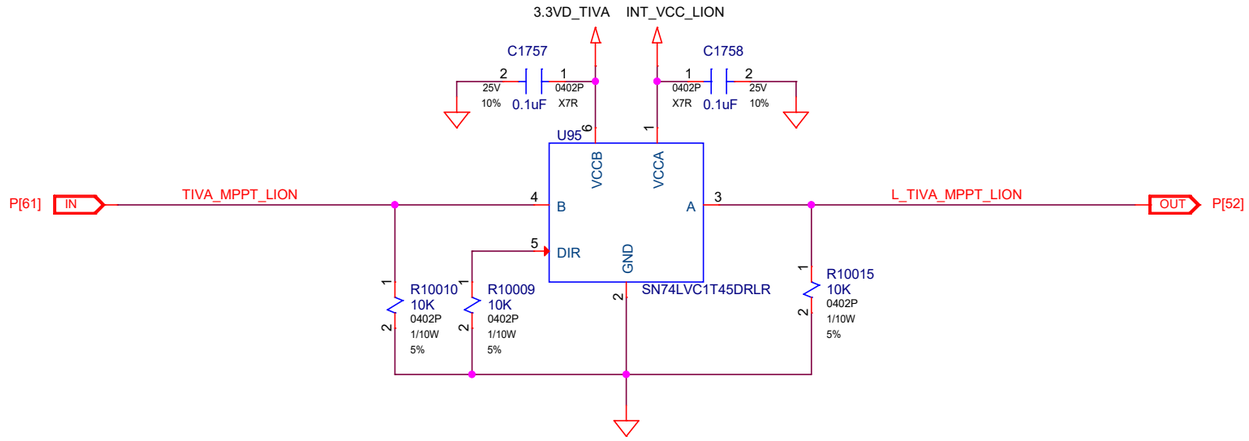
OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: TIVA ETHERNET	LIFE 3	SHEET 60OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

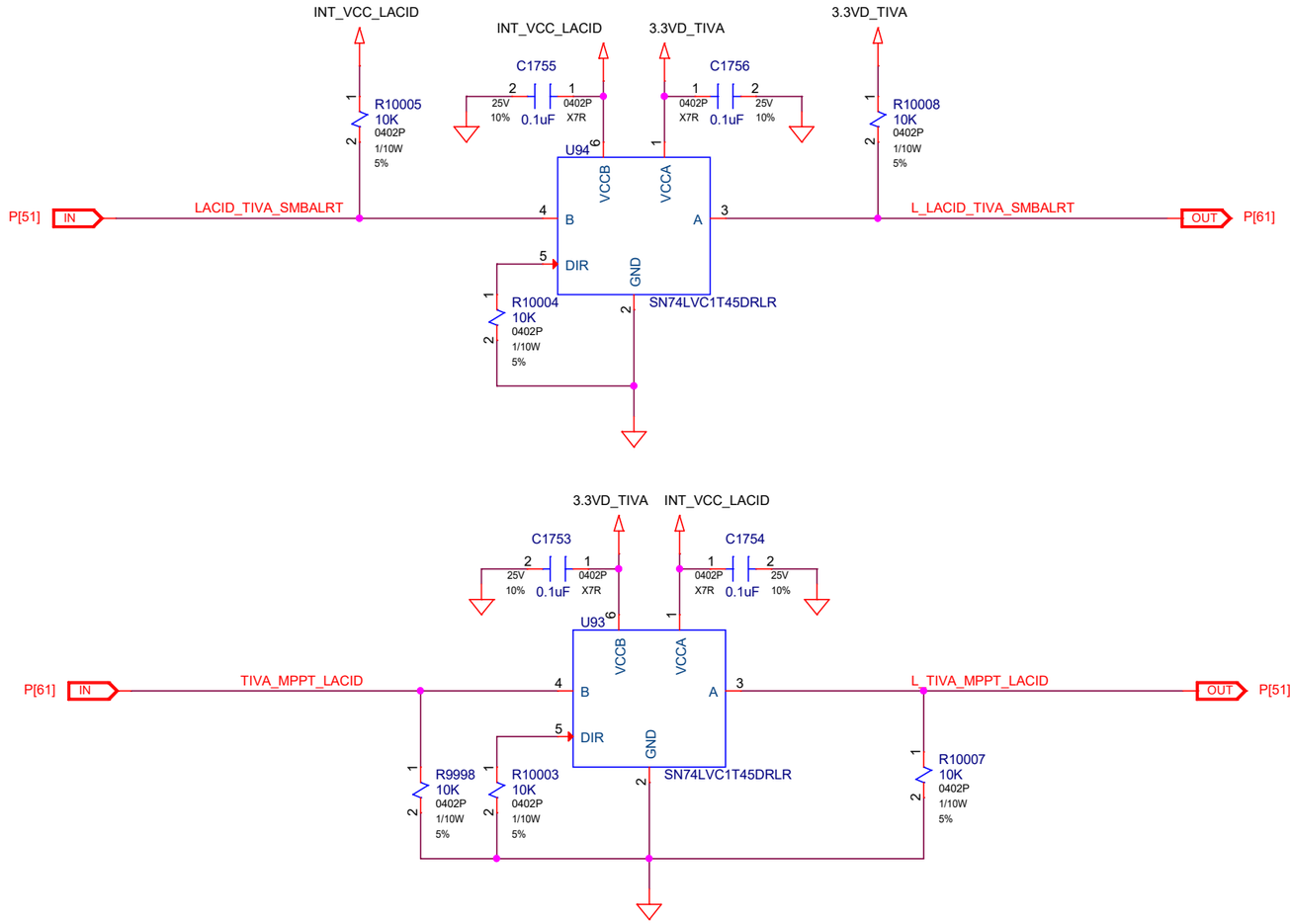


OpenCellular	DOCUMENT NUMBER: 00	
TITLE: TIVA IO'S	LIFE 1.01	SHEET 61OF 85

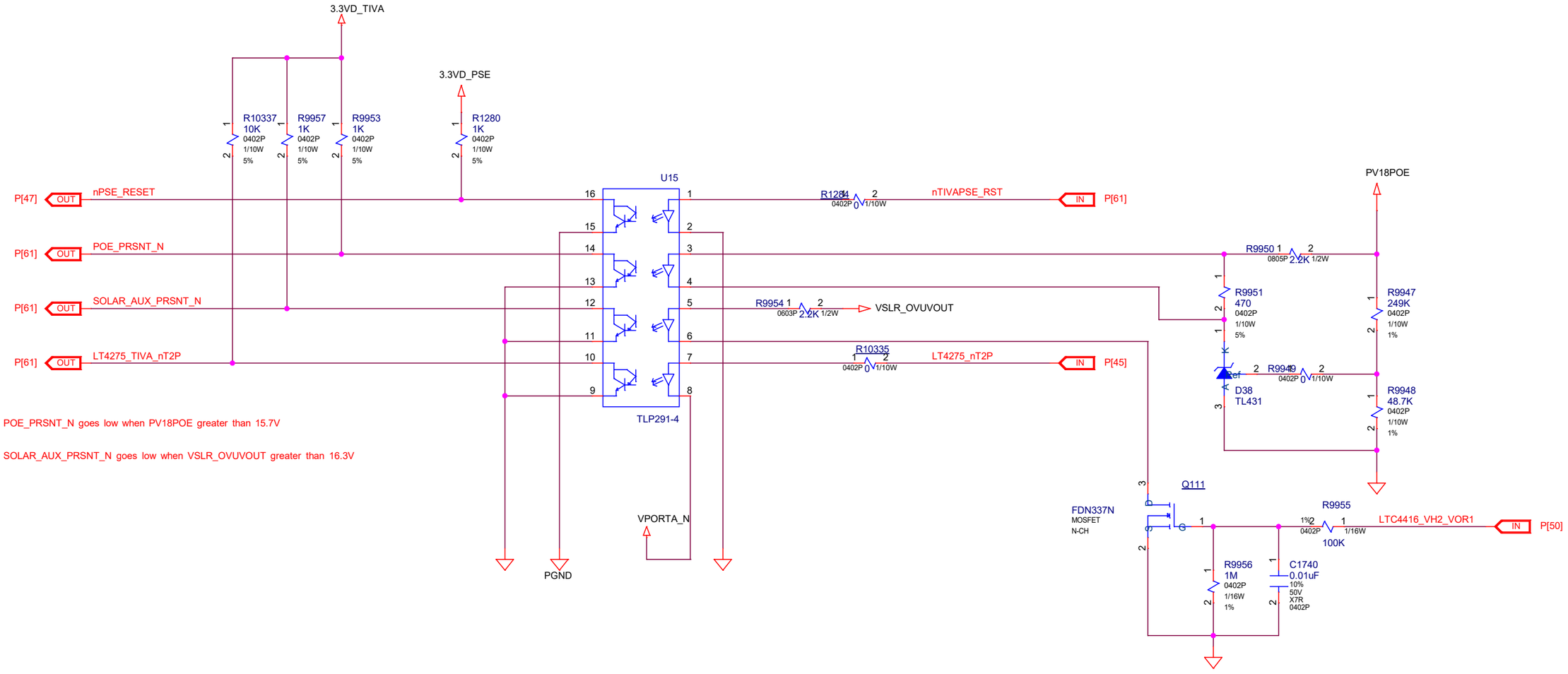




OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: TIVA GPIO	LIFE 3	SHEET 62OF 96

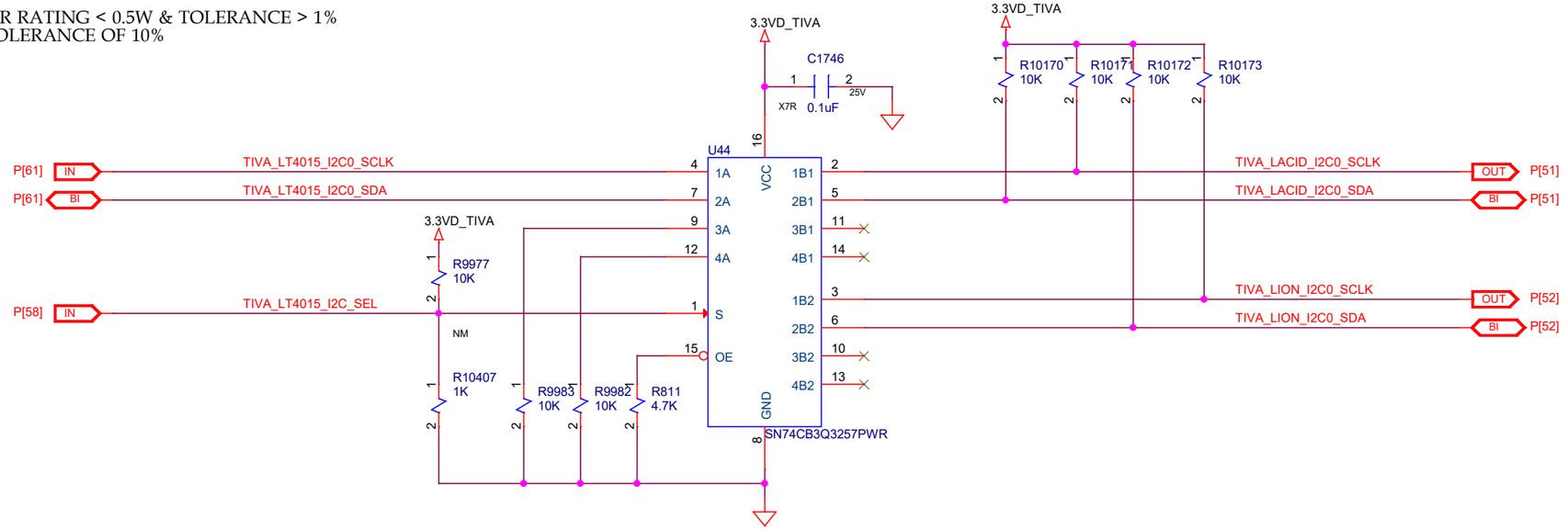


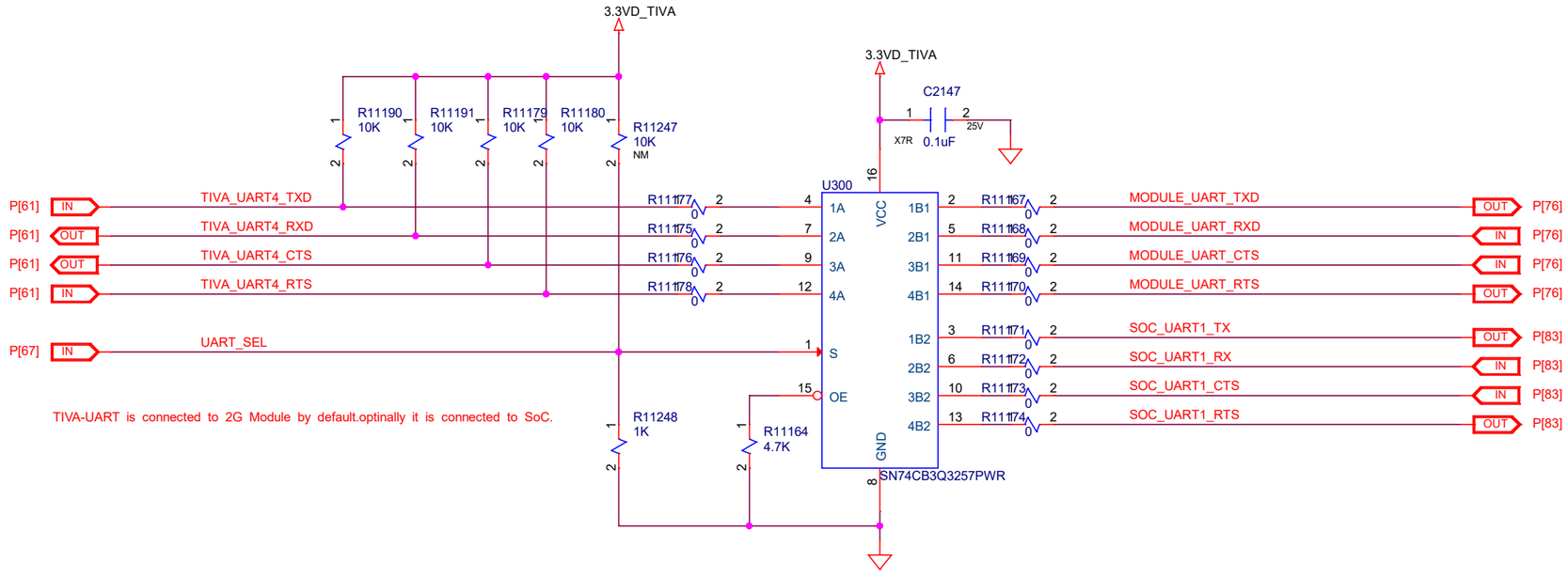
OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: TIVA GPIO1	LIFE 3	SHEET 63OF 96



OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: TIVA GPIO2	LIFE 3	SHEET 64OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%





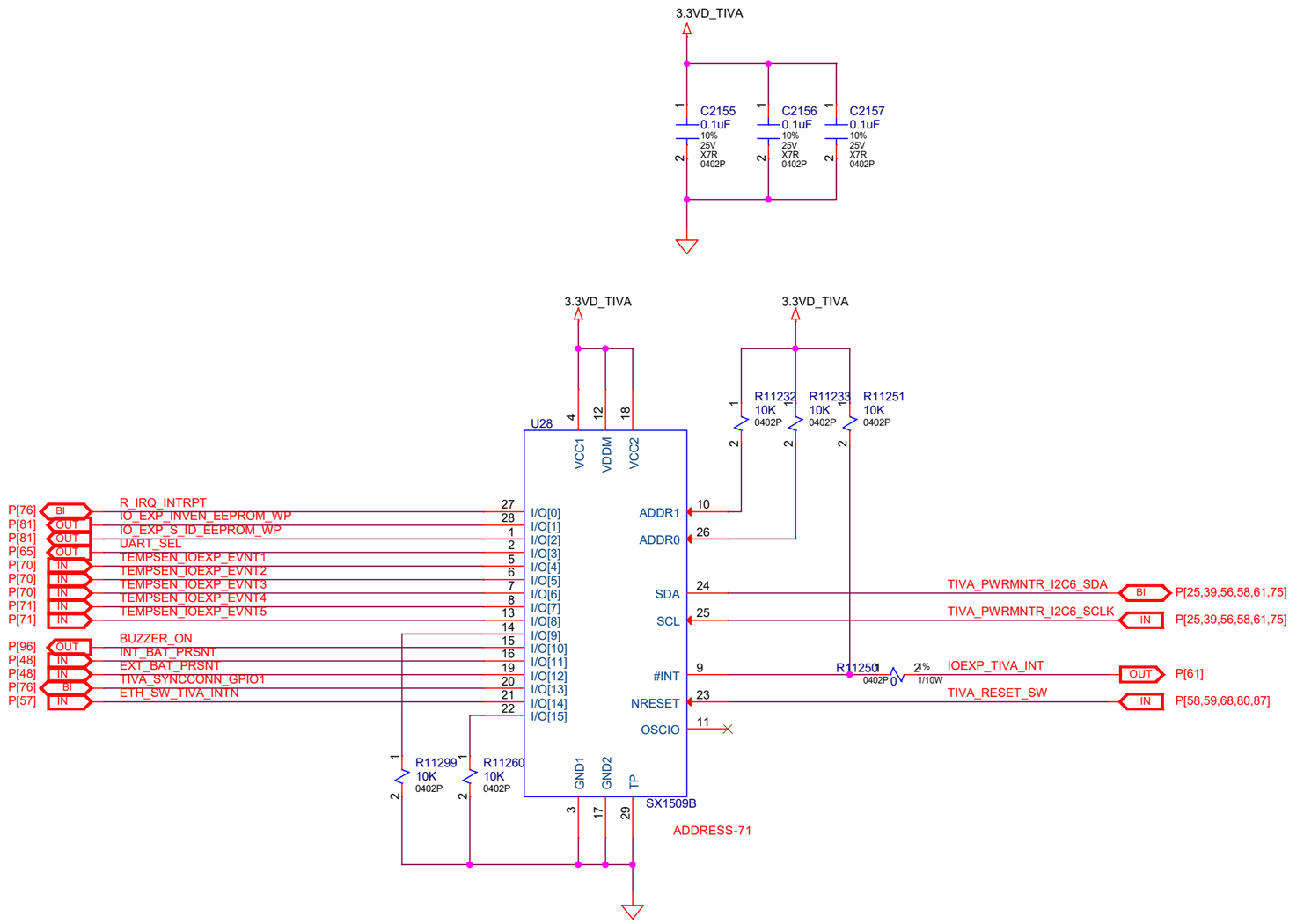
TIVA-UART is connected to 2G Module by default.optinally it is connected to SoC.

UART SEL	
LOW	A TO B1
HIGH	A TO B2

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: I2C AND UART MUX/DEMUX	LIFE 3	SHEET 65OF 96

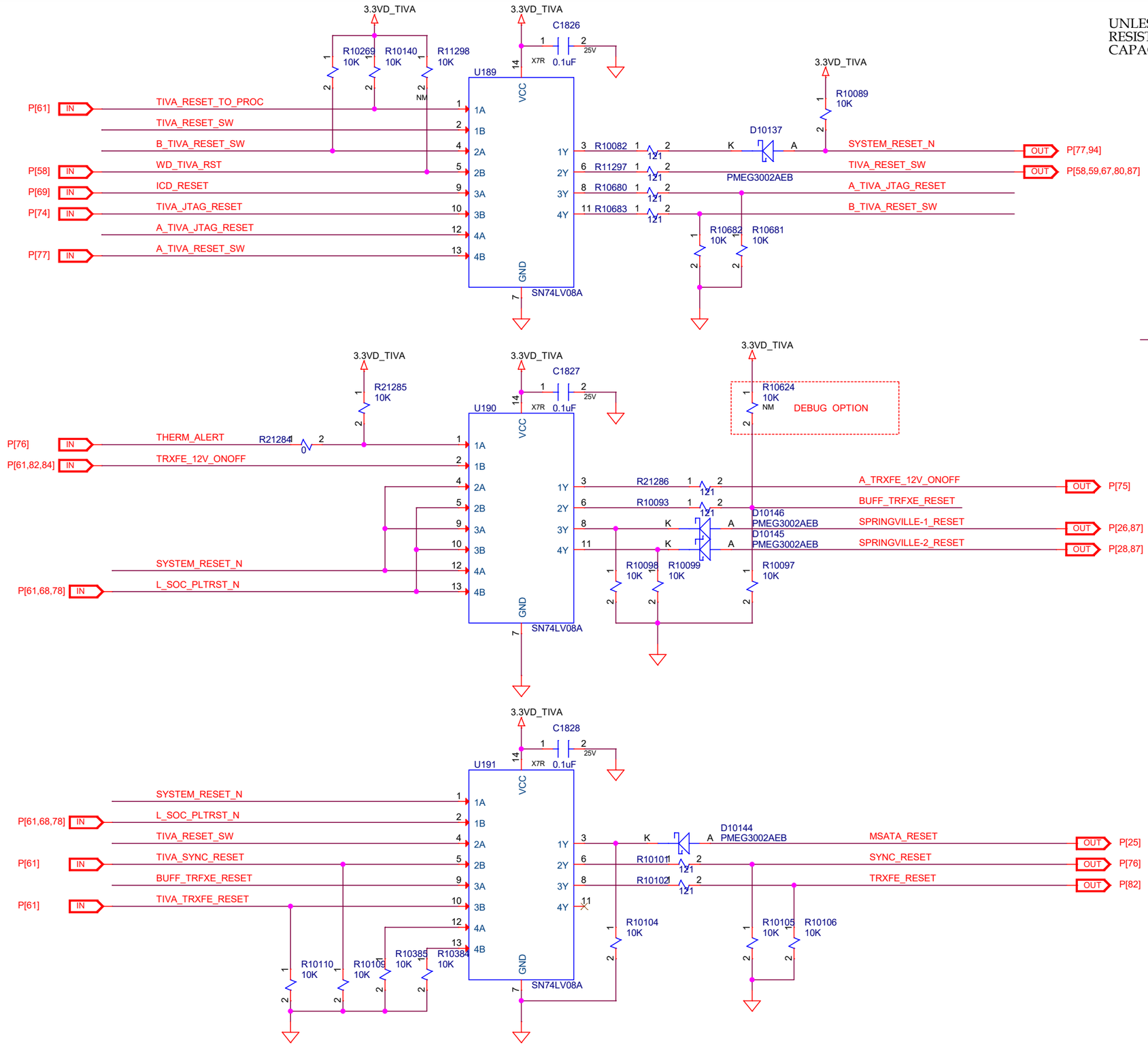
PAGE INTENTIONALLY LEFT BLANK

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: BLANK	LIFE 3	SHEET 66OF 96



OpenCellular	DOCUMENT NUMBER: 00	
TITLE: 2G MODULE1	LIFE 1.01	SHEET 67OF 85

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%



OpenCellular	DOCUMENT NUMBER: 00	
TITLE: RESET	LIFE 1.01	SHEET 68OF 85

DEBUG BOARD CONNECTOR

J38A

P[11] IN HDMI_DATA2_DP
P[11] IN HDMI_DATA2_DN
P[11] IN HDMI_DATA0_DP
P[11] IN HDMI_DATA0_DN
P[11,38] BI HDMI_SMB_SOC_DAT
P[11] BI HDMI_SMB_SOC_CLK
P[16] IN PCU_TXD
P[16] OUT PCU_RXD
P[95] OUT PCU_TXD_TIVA
P[95] IN PCU_RXD_TIVA
P[16] BI USB_DP2
P[16] BI USB_DN2
P[61,74] IN TIVA_DEBUG_TX
P[61,74] OUT TIVA_DEBUG_RX
P[85] OUT DEBUG_USB3_RX0_N
P[85] OUT DEBUG_USB3_RX0_P

SOC_HDMI_DDSP_HPD BI P[11]
HDMI_DATA1_DP IN P[11]
HDMI_DATA1_DN IN P[11]
HDMI_CLK_DP IN P[11]
HDMI_CLK_DN IN P[11]
USB_DP1 BI P[16]
USB_DN1 BI P[16]
DEBUG_USB3_TX0_N IN P[85]
DEBUG_USB3_TX0_P IN P[85]
ICD_TMS OUT P[74]
ICD_TCK OUT P[74]
ICD_TDO OUT P[74]
ICD_TDI IN P[74]
ICD_RESET OUT P[68]

R10291 1 2 0
R10292 1 2 NM 0 NM
R11104 1 2 0
R11103 1 2 0
R10309 1 2 0E
R10310 1 2 0E
R10311 1 2 0E
R10312 1 2 0E
R10313 1 2 0E
R10303 10K 0402P 1/10W 5%
R10314 1 2 0E
R10317 1 2 0E
D10086 PMEG3010ER,115

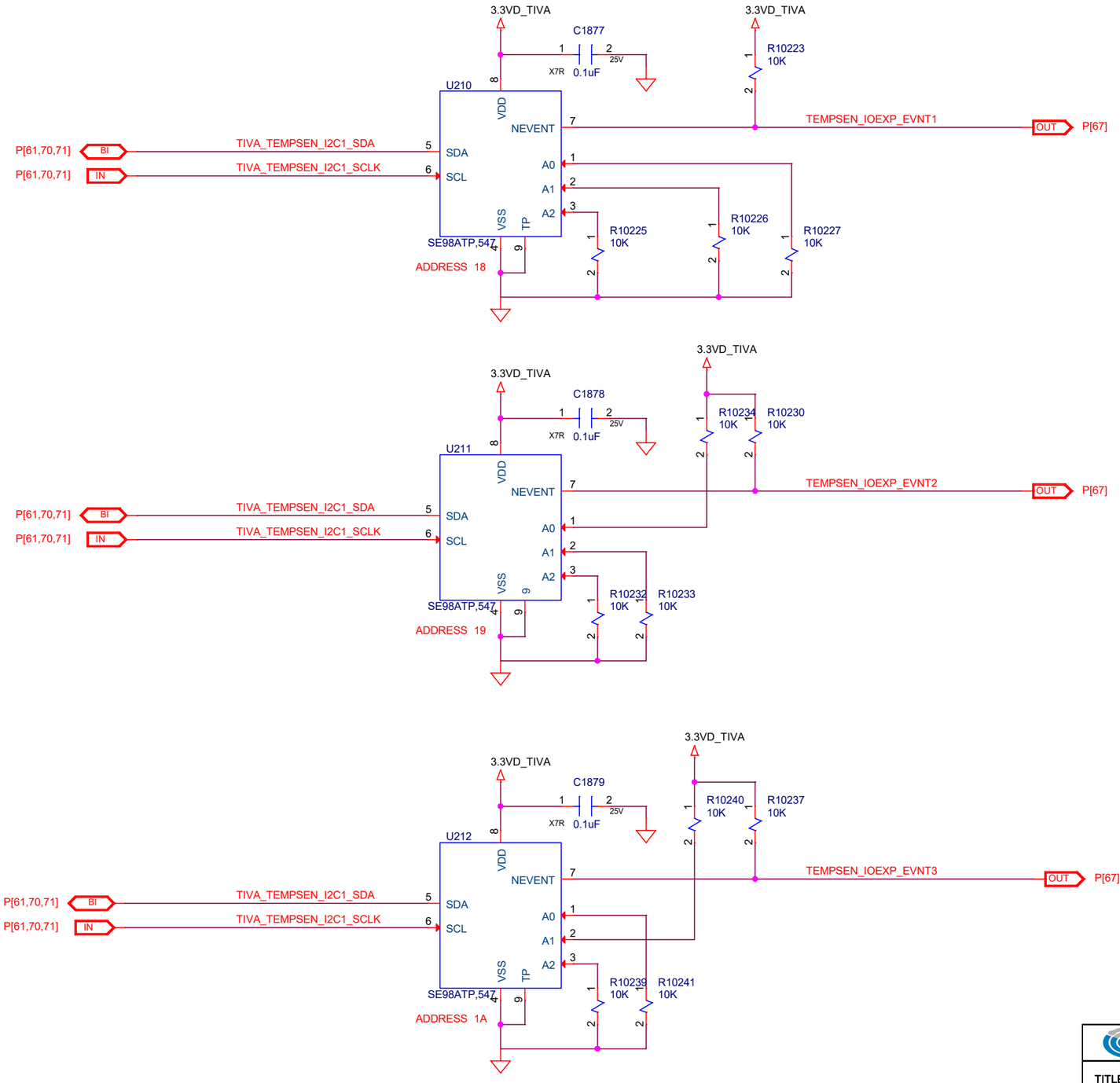
V5_A
C2138 2 1 0.1uF 0402P X7R 25V 10%
V3P3_S
3.3VD_TIVA
C1949 1 2 0402P X7R 0.1uF 25V 10%
3.3VD_TIVA
V1P8_A
V1P8_S
C1959 2 1 25V 10% 0.1uF 0402P X7R
3.3VD_TIVA
C1899 2 1 25V 10% 0.1uF 0402P X7R
V1P5_LAN_1
C2008 1 2 0402P X7R 0.1uF 25V 10%
12V_IN
C1990 2 1 25V 10% 0.1uF 0402P X7R

SH1 SH2 SH3 SH4

QSE-060-01-L-D-A-TR

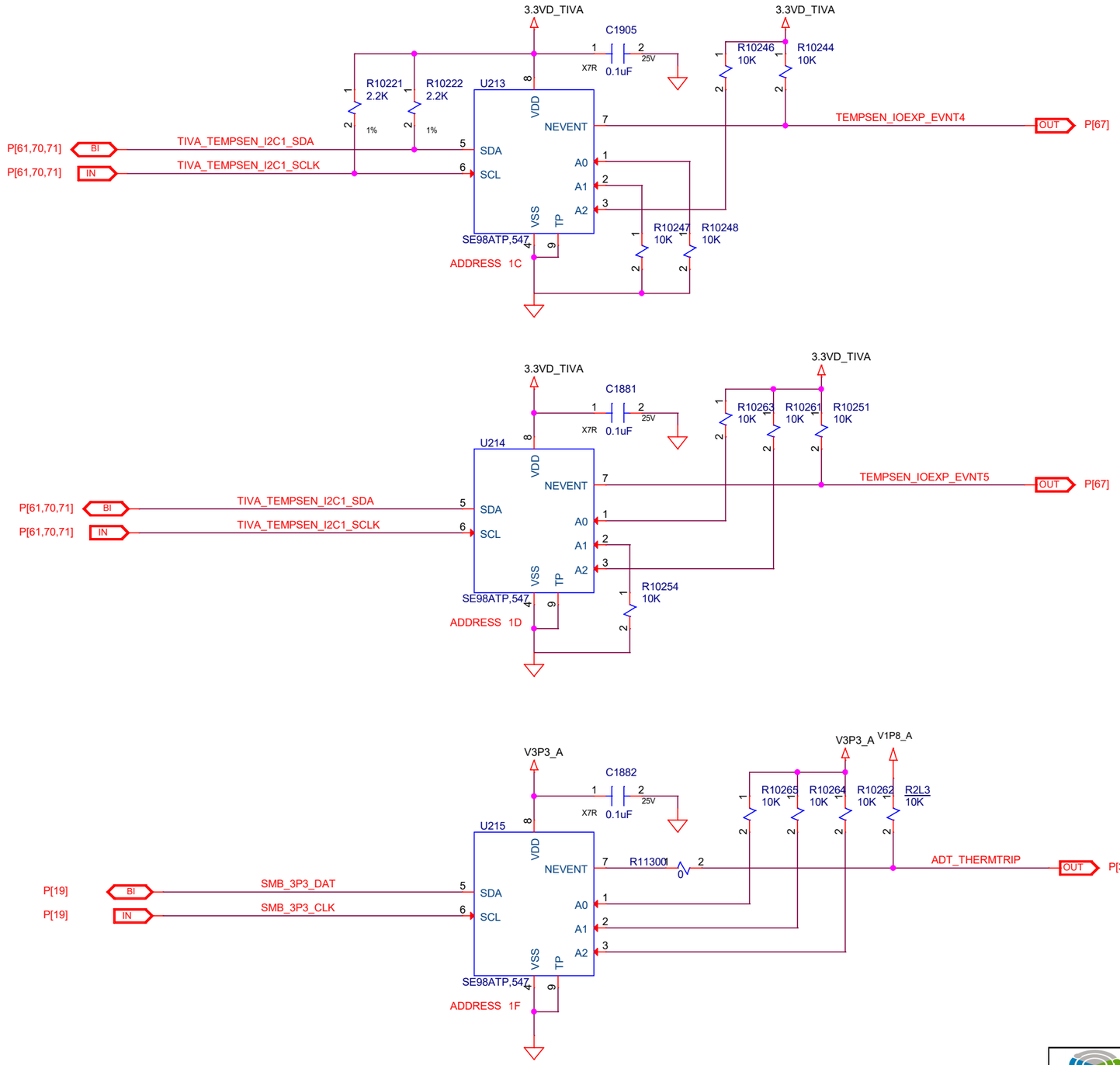
OpenCellular	DOCUMENT NUMBER: 00	
TITLE: DEBUG CONNECTOR	LIFE 1.01	SHEET 69OF 85

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%



OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: TEMP SENSORS	LIFE 3	SHEET 70OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%



OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: TEMP SENSORS1	LIFE 3	SHEET 71OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

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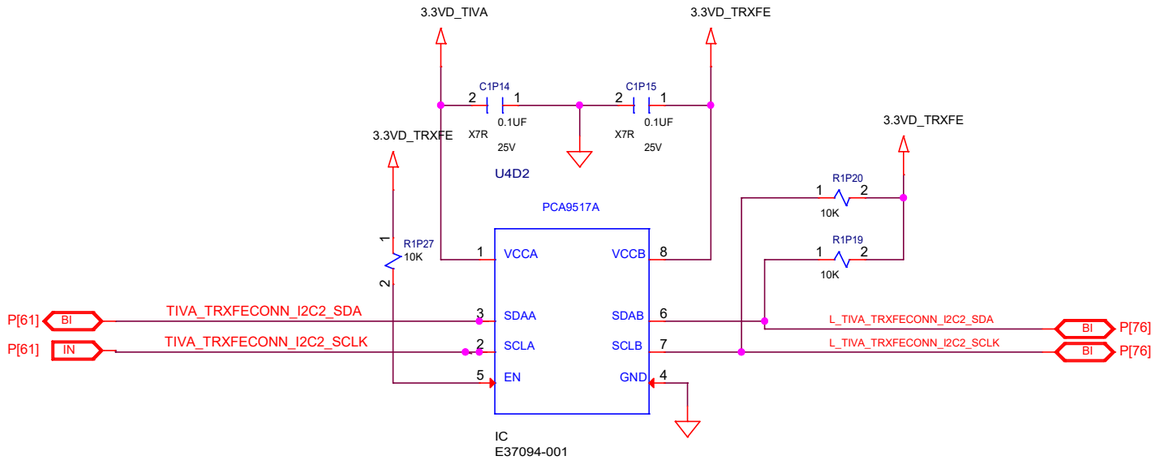
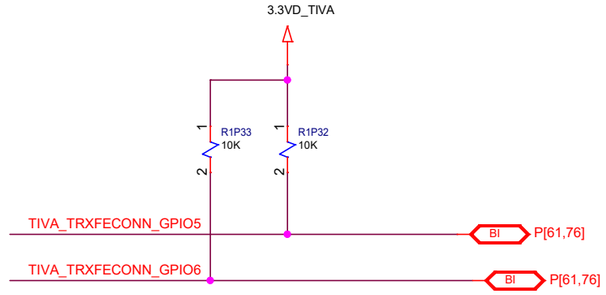
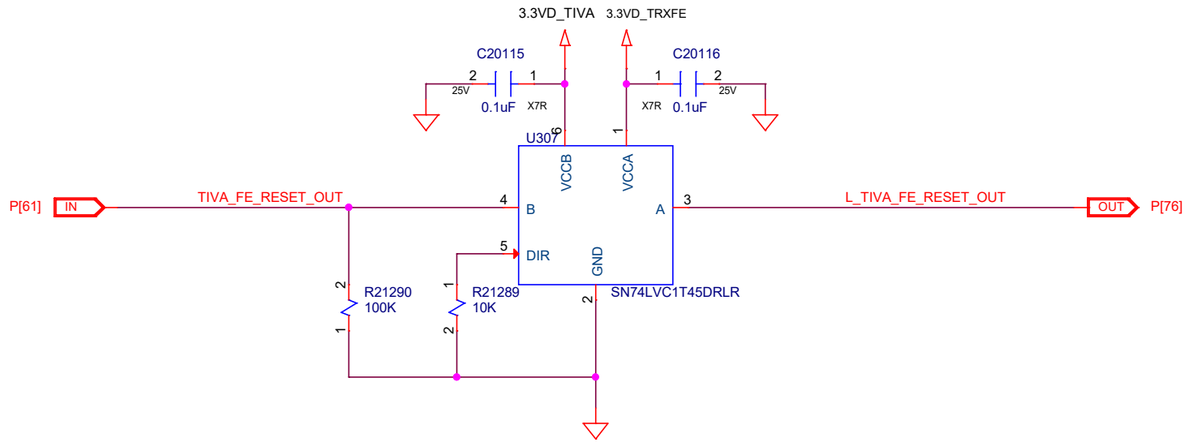
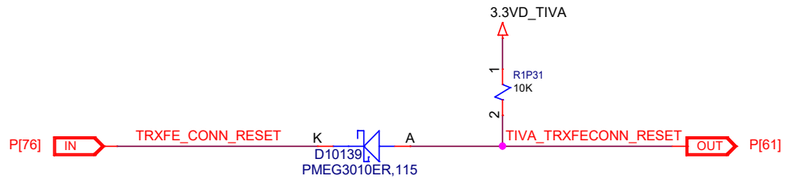
OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: BLANK	LIFE 3	SHEET 72OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%





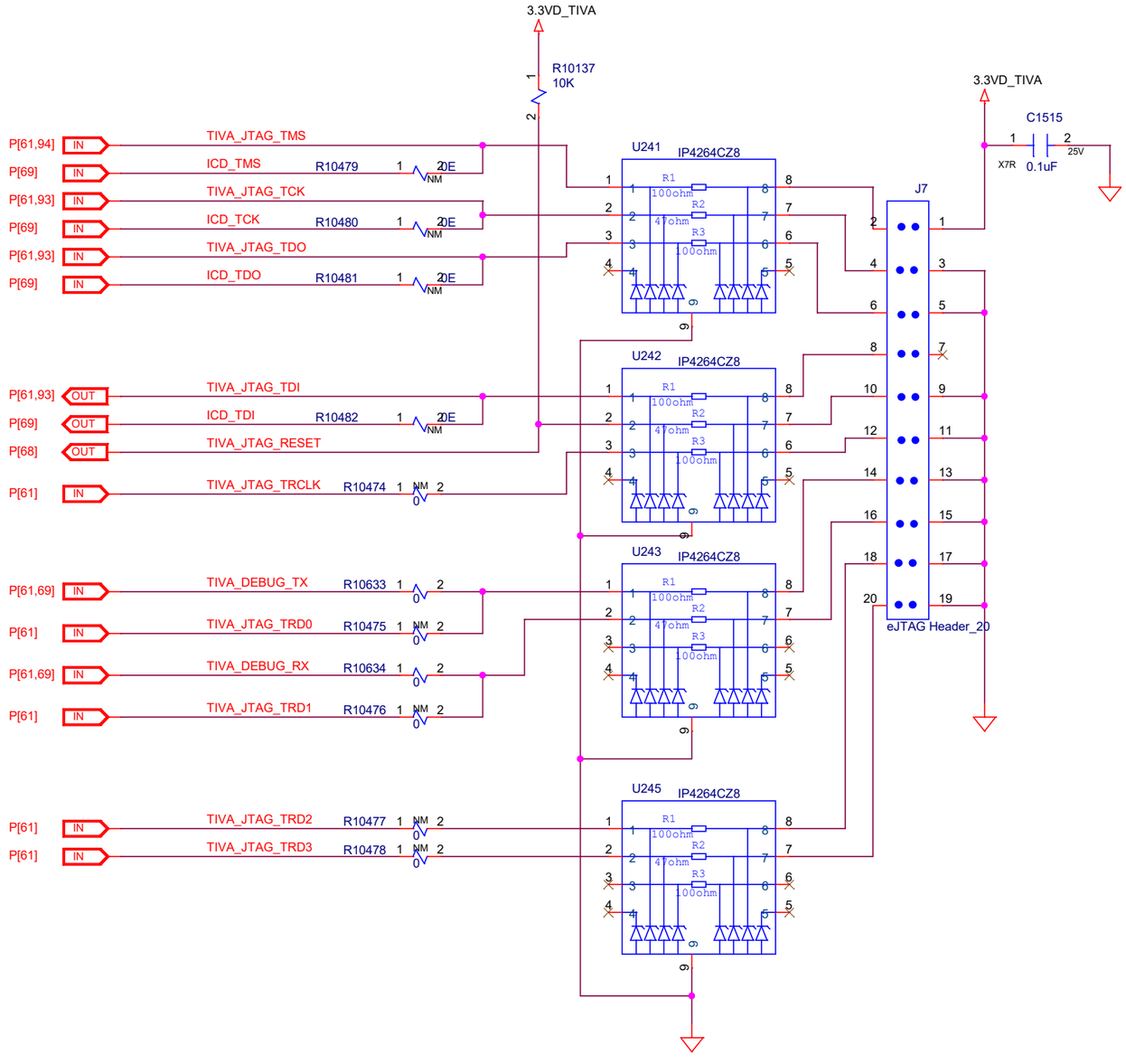




OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: RADIO_ISOLATION	LIFE 3	SHEET 73OF 96

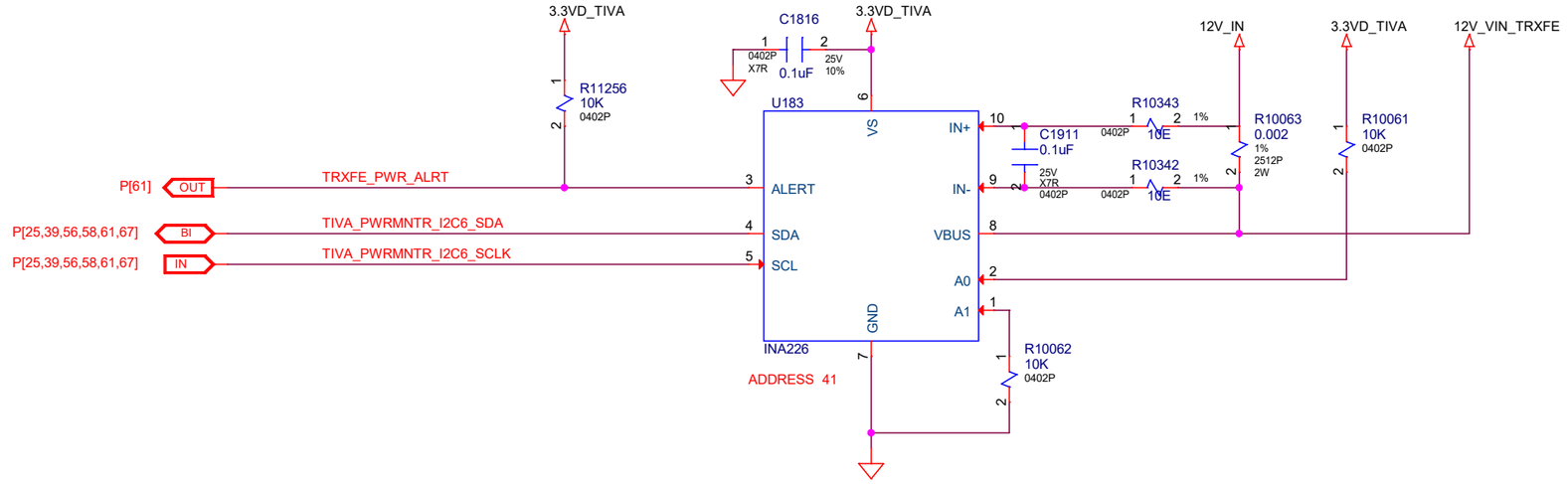
UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

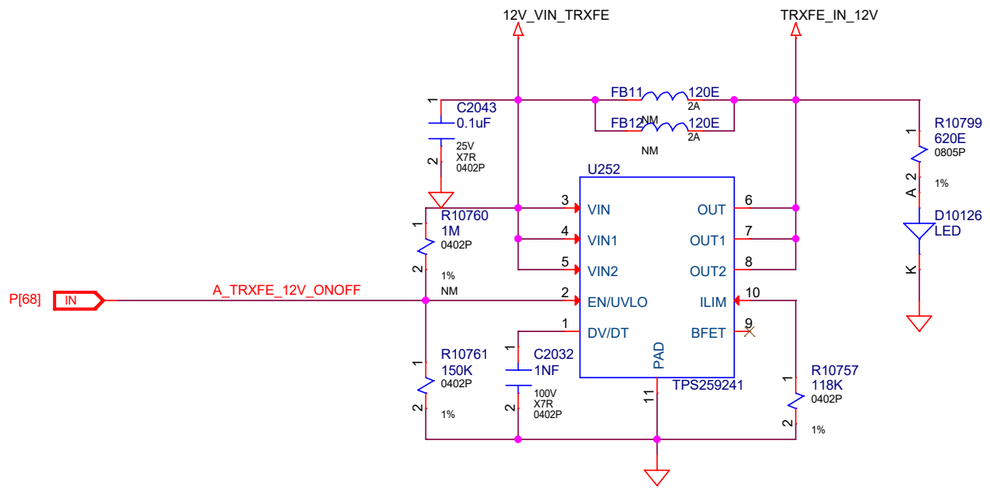
TIVA JTAG CONNECTOR



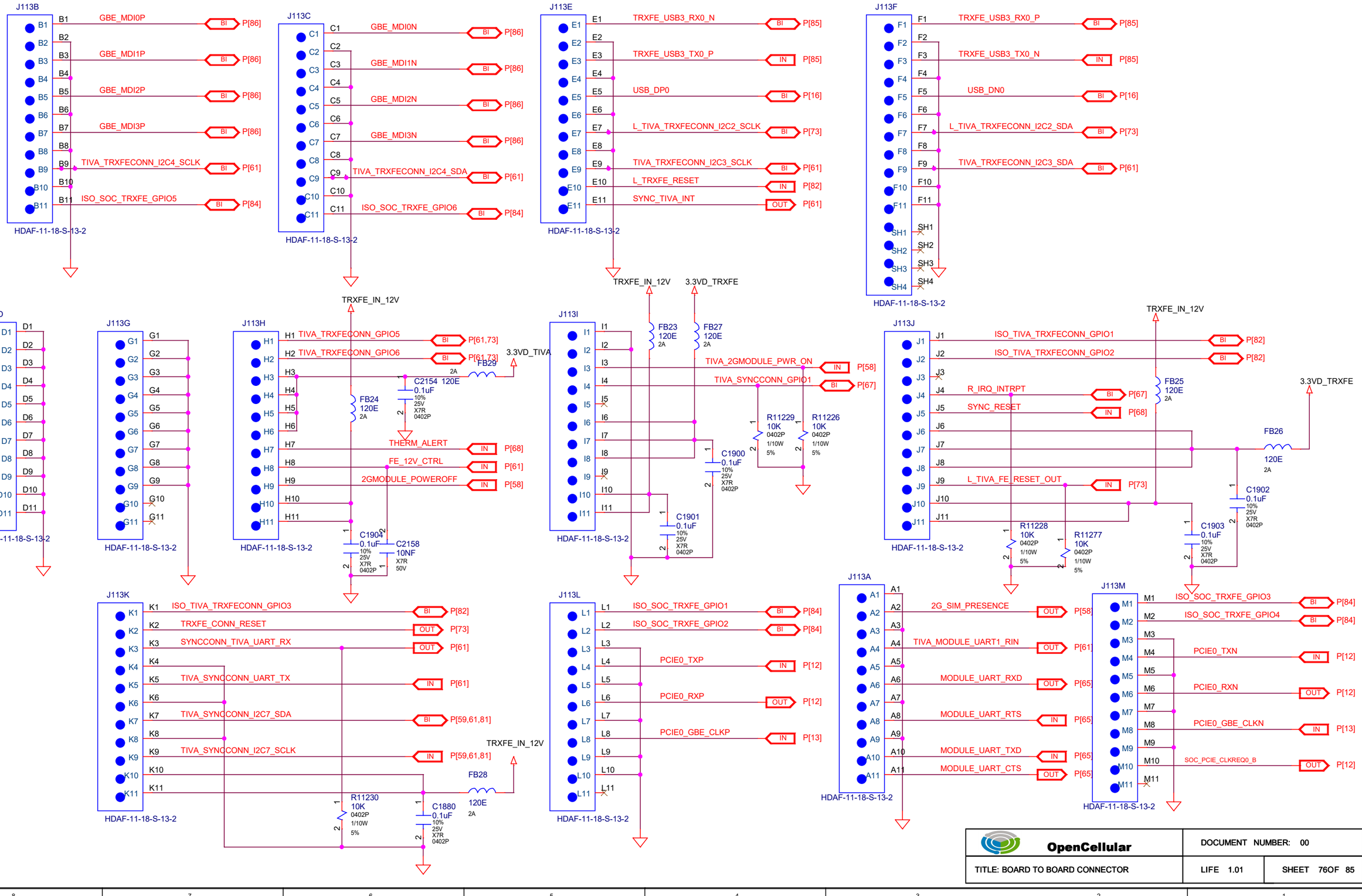
OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: TIVA JTAG CONNECTOR	LIFE 3	SHEET 74OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%



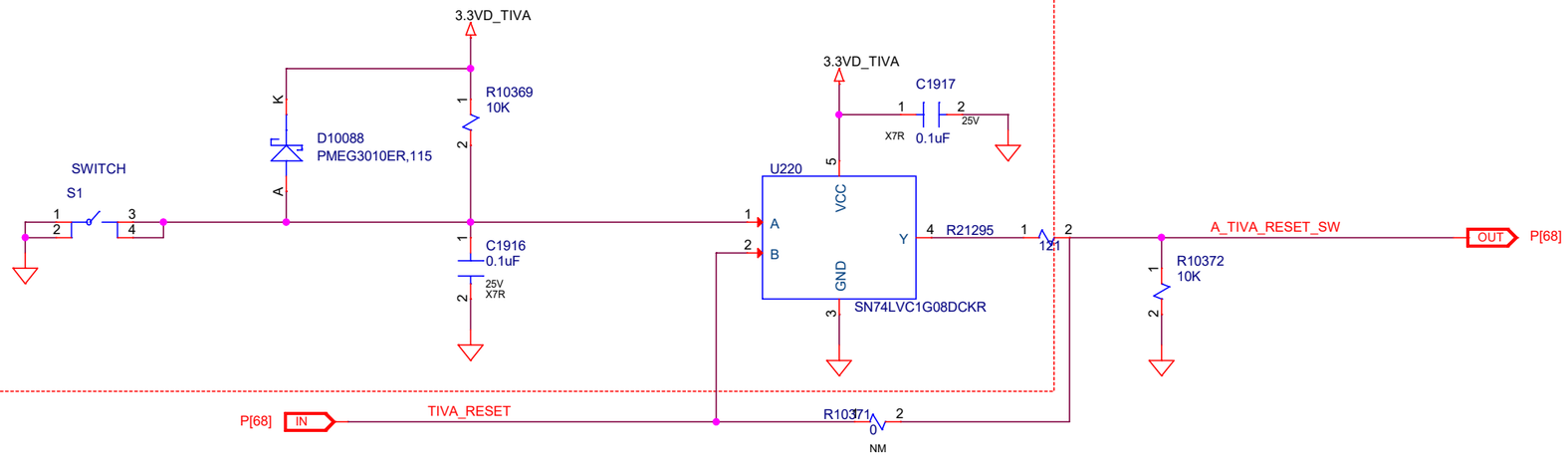


OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: SDR CARD PWR	LIFE 3	SHEET 75OF 96

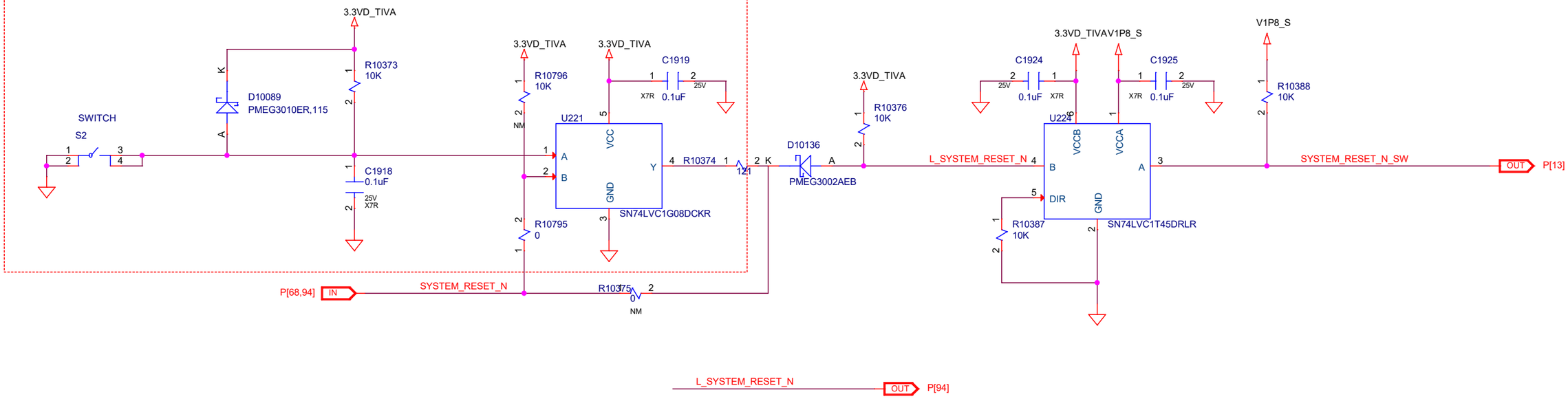

J113B
HDAF-11-18-S-13-2
B1 GBE_MDI0P BI P[86]
B2
B3 GBE_MDI1P BI P[86]
B4
B5 GBE_MDI2P BI P[86]
B6
B7 GBE_MDI3P BI P[86]
B8
B9 TIVA_TRXFECONN_I2C4_SCLK BI P[61]
B10
B11 ISO_SOC_TRXFE_GPIO5 BI P[84]
J113C
HDAF-11-18-S-13-2
C1 GBE_MDI0N BI P[86]
C2
C3 GBE_MDI1N BI P[86]
C4
C5 GBE_MDI2N BI P[86]
C6
C7 GBE_MDI3N BI P[86]
C8
C9 TIVA_TRXFECONN_I2C4_SDA BI P[61]
C10
C11 ISO_SOC_TRXFE_GPIO6 BI P[84]
J113E
HDAF-11-18-S-13-2
E1 TRXFE_USB3_RX0_N BI P[85]
E2
E3 TRXFE_USB3_TX0_P IN P[85]
E4
E5 USB_DP0 BI P[16]
E6
E7 L_TIVA_TRXFECONN_I2C2_SCLK BI P[73]
E8
E9 TIVA_TRXFECONN_I2C3_SCLK BI P[61]
E10 L_TRXFE_RESET IN P[82]
E11 SYNC_TIVA_INT OUT P[61]
J113F
HDAF-11-18-S-13-2
F1 TRXFE_USB3_RX0_P BI P[85]
F2
F3 TRXFE_USB3_TX0_N IN P[85]
F4
F5 USB_DN0 BI P[16]
F6
F7 L_TIVA_TRXFECONN_I2C2_SDA BI P[73]
F8
F9 TIVA_TRXFECONN_I2C3_SDA BI P[61]
F10
F11
SH1 SH2 SH3 SH4
J113D
HDAF-11-18-S-13-2
D1 D2 D3 D4 D5 D6 D7 D8 D9 D10 D11
J113G
HDAF-11-18-S-13-2
G1 G2 G3 G4 G5 G6 G7 G8 G9 G10 G11
J113H
HDAF-11-18-S-13-2
TRXFE_IN_12V
H1 TIVA_TRXFECONN_GPIO5 BI P[61,73]
H2 TIVA_TRXFECONN_GPIO6 BI P[61,73]
H3
H4
H5
H6
H7 THERM_ALERT IN P[68]
H8 FE_12V_CTRL IN P[61]
H9 2GMODULE_POWEROFF IN P[58]
H10
H11
3.3VD_TIVA
FB29 2A
C2154 120E 0.1uF 10% 25V X7R 0402P
FB24 120E 2A
C1904 0.1uF 10% 25V X7R 0402P
C2158 10NF X7R 50V
J113I
HDAF-11-18-S-13-2
TRXFE_IN_12V
3.3VD_TRXFE
I1 I2 I3 I4 I5 I6 I7 I8 I9 I10 I11
FB23 120E 2A
FB27 120E 2A
TIVA_2GMODULE_PWR_ON IN P[58]
TIVA_SYNCCONN_GPIO1 BI P[67]
R11229 10K 0402P 1/10W 5%
R11226 10K 0402P 1/10W 5%
C1900 0.1uF 10% 25V X7R 0402P
C1901 0.1uF 10% 25V X7R 0402P
J113J
HDAF-11-18-S-13-2
TRXFE_IN_12V
J1 ISO_TIVA_TRXFECONN_GPIO1 BI P[82]
J2 ISO_TIVA_TRXFECONN_GPIO2 BI P[82]
J3
J4 R_IRQ_INTRPT BI P[67]
J5 SYNC_RESET IN P[68]
J6
J7
J8
J9 L_TIVA_FE_RESET_OUT IN P[73]
J10
J11
FB25 120E 2A
FB26 120E 2A
3.3VD_TRXFE
C1902 0.1uF 10% 25V X7R 0402P
C1903 0.1uF 10% 25V X7R 0402P
R11228 10K 0402P 1/10W 5%
R11277 10K 0402P 1/10W 5%
J113K
HDAF-11-18-S-13-2
K1 ISO_TIVA_TRXFECONN_GPIO3 BI P[82]
K2 TRXFE_CONN_RESET OUT P[73]
K3 SYNCCONN_TIVA_UART_RX OUT P[61]
K4
K5 TIVA_SYNCCONN_UART_TX IN P[61]
K6
K7 TIVA_SYNCCONN_I2C7_SDA BI P[59,61,81]
K8
K9 TIVA_SYNCCONN_I2C7_SCLK IN P[59,61,81]
K10
K11
TRXFE_IN_12V
FB28 120E 2A
R11230 10K 0402P 1/10W 5%
C1880 0.1uF 10% 25V X7R 0402P
J113L
HDAF-11-18-S-13-2
L1 ISO_SOC_TRXFE_GPIO1 BI P[84]
L2 ISO_SOC_TRXFE_GPIO2 BI P[84]
L3
L4 PCIE0_TXP IN P[12]
L5
L6 PCIE0_RXP OUT P[12]
L7
L8 PCIE0_GBE_CLKP IN P[13]
L9
L10
L11
J113A
HDAF-11-18-S-13-2
A1 A2 2G_SIM_PRESENCE OUT P[58]
A3
A4 TIVA_MODULE_UART1_RIN OUT P[61]
A5
A6 MODULE_UART_RXD OUT P[65]
A7
A8 MODULE_UART_RTS IN P[65]
A9
A10 MODULE_UART_TXD IN P[65]
A11 MODULE_UART_CTS OUT P[65]
J113M
HDAF-11-18-S-13-2
M1 ISO_SOC_TRXFE_GPIO3 BI P[84]
M2 ISO_SOC_TRXFE_GPIO4 BI P[84]
M3
M4 PCIE0_TXN IN P[12]
M5
M6 PCIE0_RXN OUT P[12]
M7
M8 PCIE0_GBE_CLKN IN P[13]
M9
M10 SOC_PCIE_CLKREQ0_B OUT P[12]
M11
OpenCellular
DOCUMENT NUMBER: 00
TITLE: BOARD TO BOARD CONNECTOR
LIFE 1.01
SHEET 76OF 85

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

PUSH BUTTON SWITCH CIRCUIT CAN BE REMOVED FOR HIGH VOLUME PRODUCTION.IN THIS CASE R10371 SHOULD BE MOUNT.

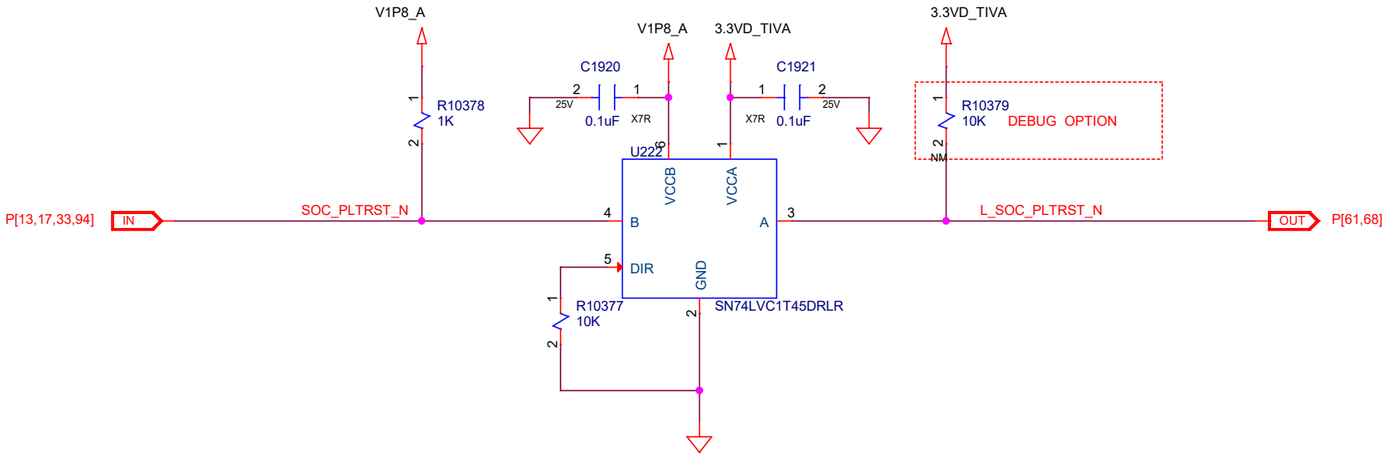


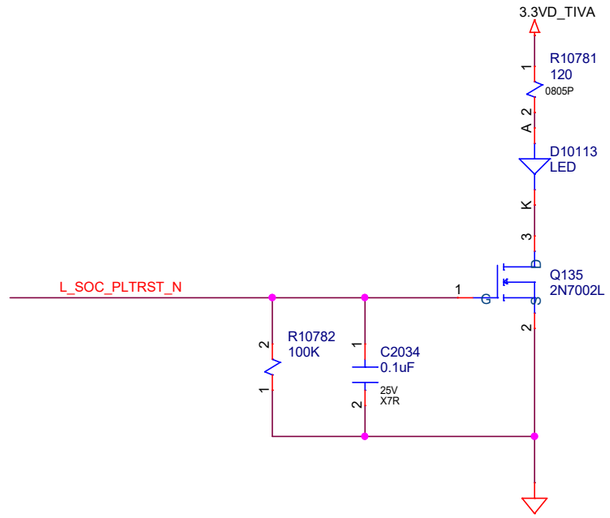
PUSH BUTTON SWITCH CIRCUIT CAN BE REMOVED FOR HIGH VOLUME PRODUCTION.IN THIS CASE R10375 SHOULD BE MOUNT.

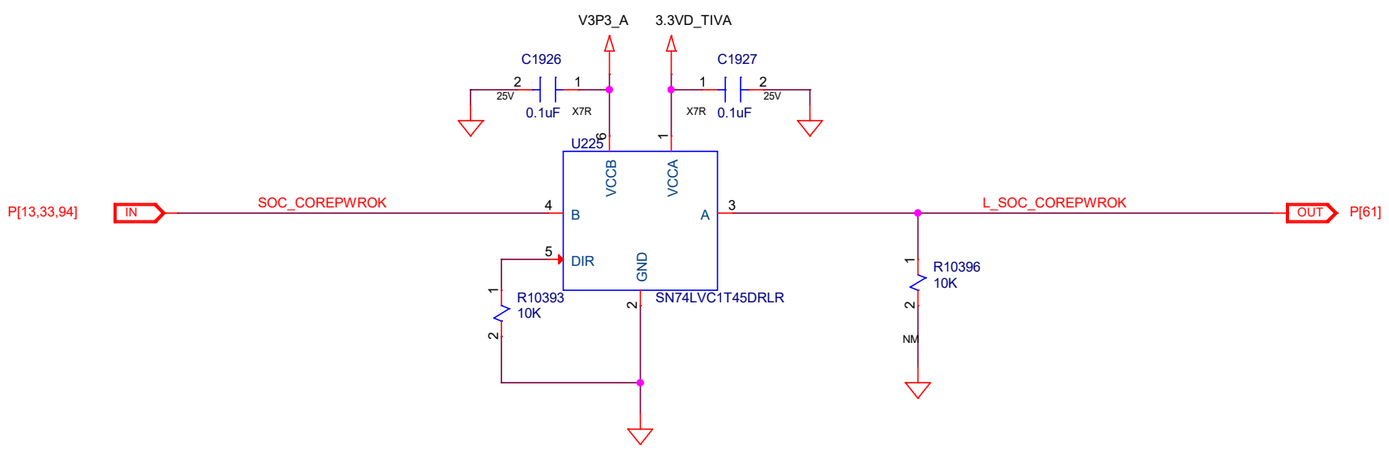


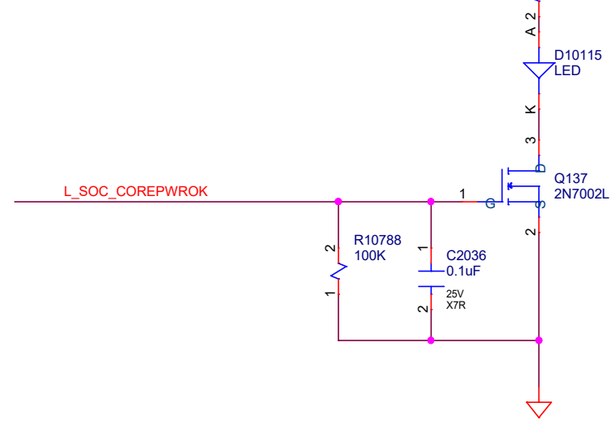
OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: RESET SWITCH	LIFE 3	SHEET 77OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

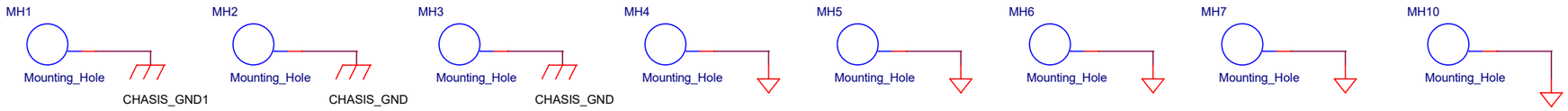


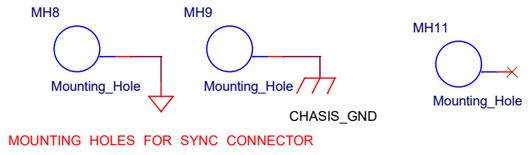






OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: SOC LEVEL TRANSLATOR	LIFE 3	SHEET 78OF 96

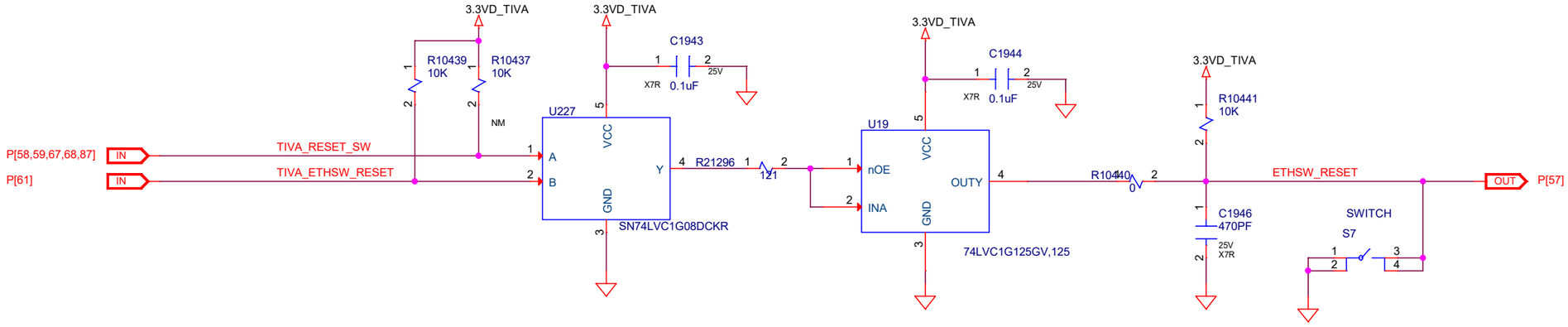


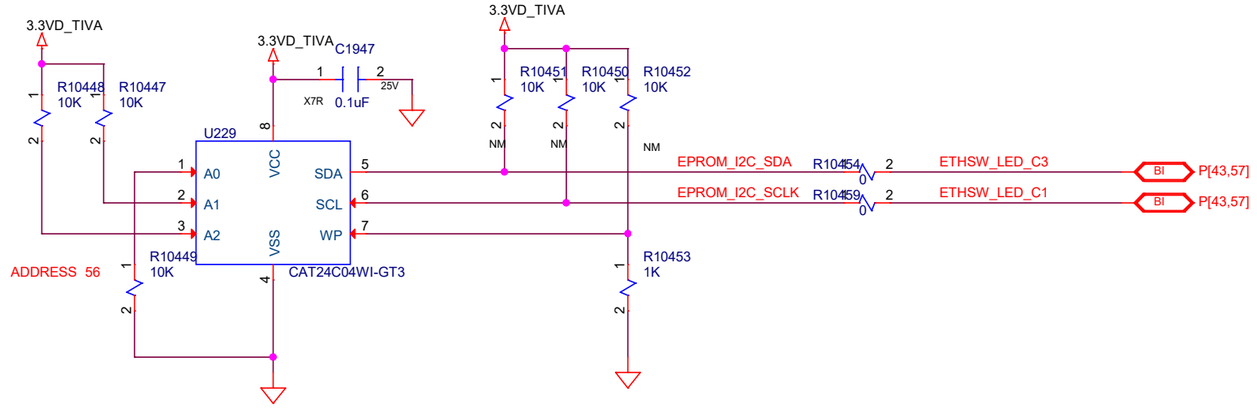


MOUNTING HOLES FOR SYNC CONNECTOR

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: MTG HOLES	LIFE 3	SHEET 79OF 96

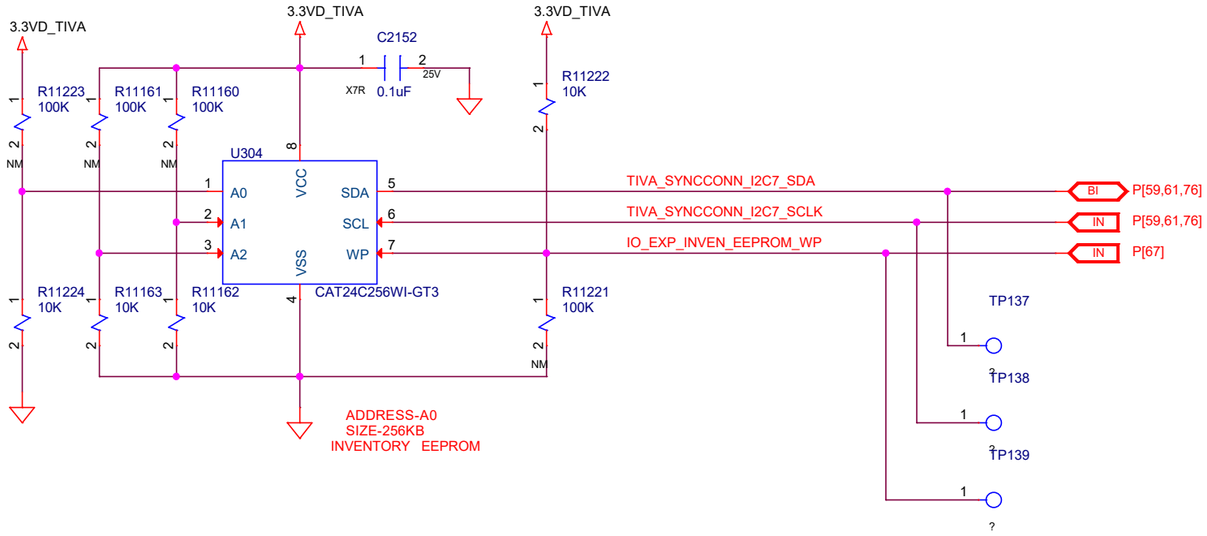
UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

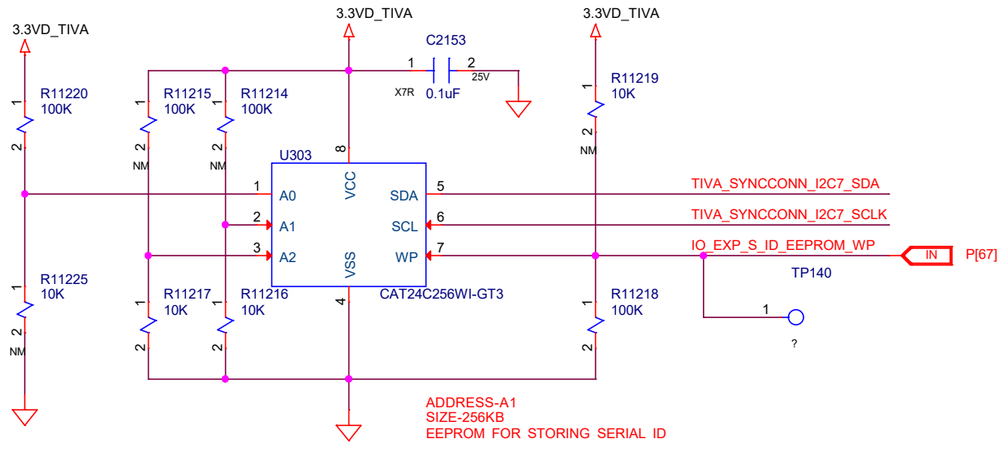




OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: ETHSW_EEPROM	LIFE 3	SHEET 80OF 96

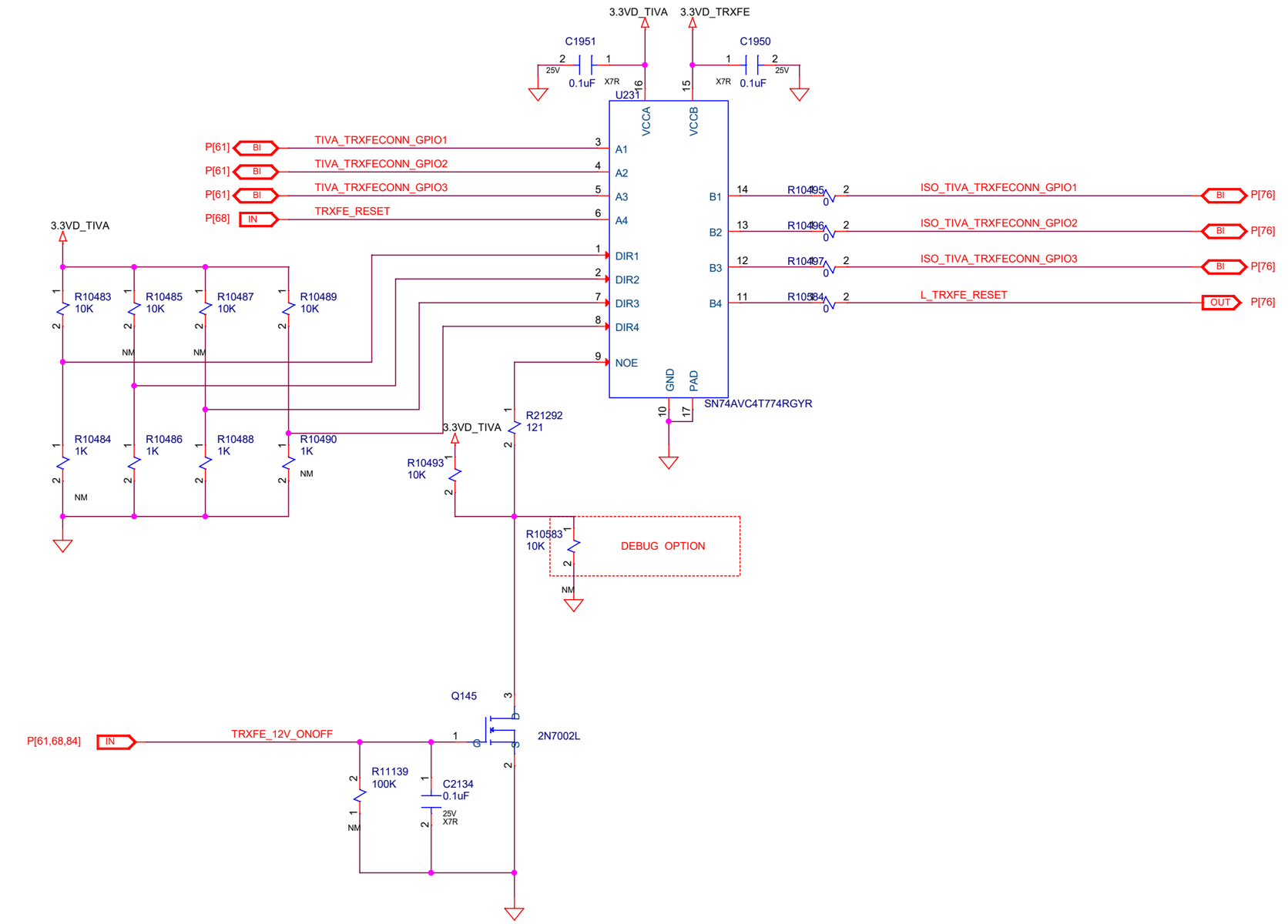
UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%





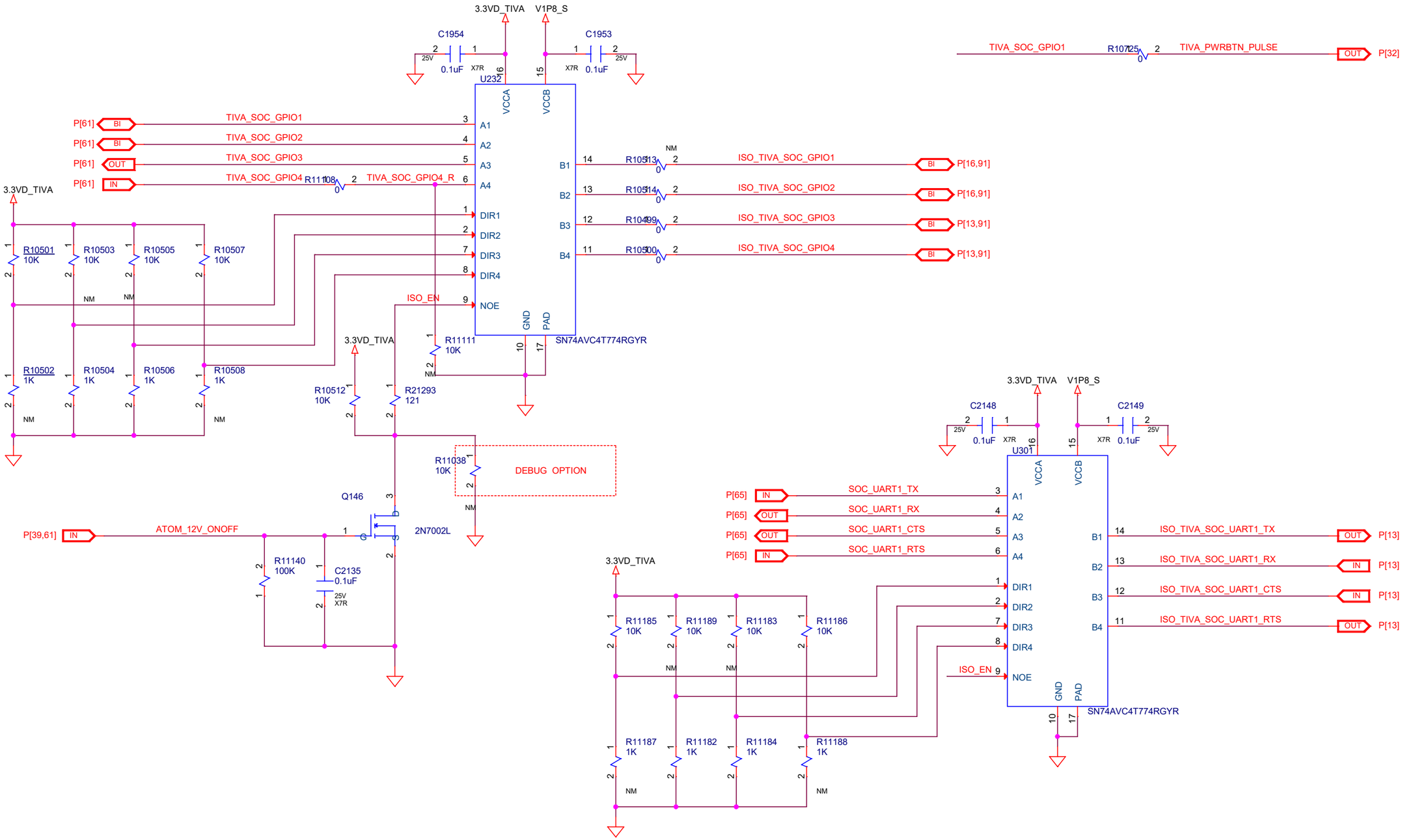
OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: EEPROM	LIFE 3	SHEET 81OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%



OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: RADIO ISOLATION	LIFE 3	SHEET 82OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%



OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: TIVA SOC ISOLATION	LIFE 3	SHEET 83OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

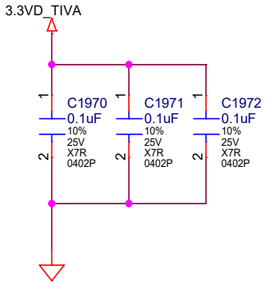
V1P8_S
3.3VD_TRXFE
C1957 2 25V 1 0.1uF X7R
C1956 1 X7R 2 25V 0.1uF
U233
16 VCCA
15 VCCB
P[13] BI SOC_TRXFE_GPIO1 3 A1
P[13] BI SOC_TRXFE_GPIO2 4 A2
P[13] BI SOC_TRXFE_GPIO3 5 A3
P[13] BI SOC_TRXFE_GPIO4 6 A4
B1 14 R10542 0 2 ISO_SOC_TRXFE_GPIO1 BI P[76]
B2 13 R10543 0 2 ISO_SOC_TRXFE_GPIO2 BI P[76]
B3 12 R10528 0 2 ISO_SOC_TRXFE_GPIO3 BI P[76]
B4 11 R10529 0 2 ISO_SOC_TRXFE_GPIO4 BI P[76]
1 DIR1
2 DIR2
7 DIR3
8 DIR4
9 NOE
10 GND
17 PAD
SN74AVC4T774RGYR
3.3VD_TIVA
R10530 10K
R10532 10K
R10534 10K
R10536 10K
R10531 1K NM
R10533 1K NM
R10535 1K NM
R10537 1K NM
TRXFE_ISO_EN
V1P8_S
R21294 121
R10541 10K
R11041 10K
DEBUG OPTION
Q144 2N7002L
P[61,68,82] IN TRXFE_12V_ONOFF
R11138 100K
C2133 0.1uF 25V X7R

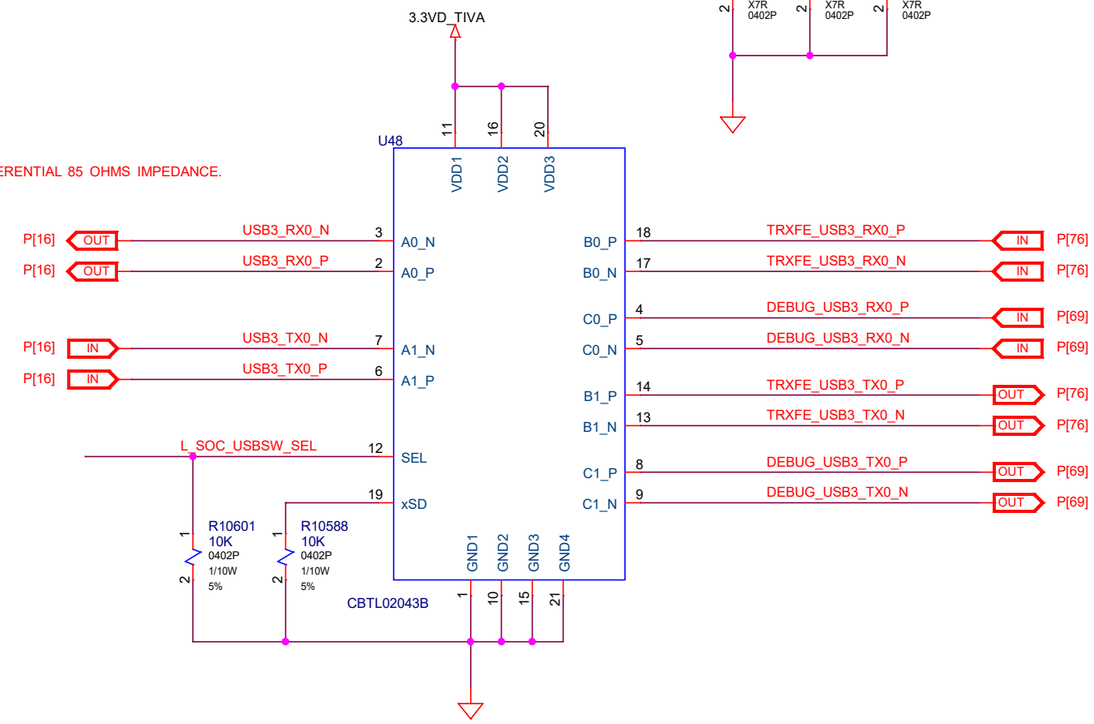
V1P8_S
3.3VD_TRXFE
C2151 2 25V 1 0.1uF X7R
C2150 1 X7R 2 25V 0.1uF
U305
16 VCCA
15 VCCB
P[16] BI SOC_TRXFE_GPIO5 R11208 0 2 3 A1
P[16] BI SOC_TRXFE_GPIO6 R11209 0 2 4 A2
5 A3
6 A4
B1 14 R11196 0 2 ISO_SOC_TRXFE_GPIO5 BI P[76]
B2 13 R11198 0 2 ISO_SOC_TRXFE_GPIO6 BI P[76]
B3 12
B4 11
1 DIR1
2 DIR2
7 DIR3
8 DIR4
9 NOE
10 GND
17 PAD
SN74AVC4T774RGYR
3.3VD_TIVA
R11203 10K
R11207 10K
R11199 10K
R11204 10K
R11205 1K NM
R11197 1K NM
R11201 1K NM
R11206 1K NM
R11211 10K
R11210 10K
TRXFE_ISO_EN

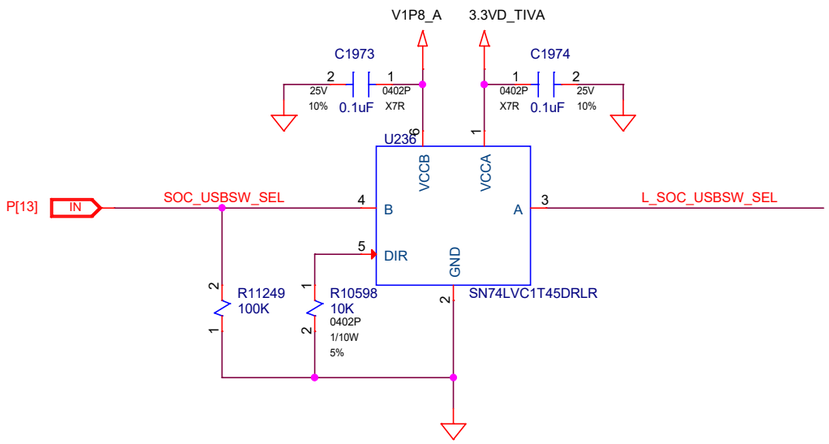
OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: SOC TRXFE ISOLATION	LIFE 3	SHEET 84OF 96

CAD NOTE : ALL USB3 TRACES TO BE ROUTED FOR DIFFERENTIAL 85 OHMS IMPEDANCE.

L_SOC_USBSW_SEL	
LOW	A TO B
HIGH	A TO C







OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: USB SWITCH	LIFE 3	SHEET 85OF 96

SEL	
LOW	An TO Bn
HIGH	An TO Cn

V3P3_A

C1997 0.1uF 10% 25V X7R 0402P
C1992 0.1uF 10% 25V X7R 0402P
C1994 0.1uF 10% 25V X7R 0402P
C1996 0.1uF 10% 25V X7R 0402P
C1991 0.1uF 10% 25V X7R 0402P
C1993 0.1uF 10% 25V X7R 0402P
C1995 0.1uF 10% 25V X7R 0402P
C1998 0.1uF 10% 25V X7R 0402P

V3P3_A

R10661 1K 0402P 1/10W 5%

JP2 826926-2

R10662 10K 0402P 1/10W 5%

U238 TS3L501ERUAR

VDD 1
VDD1 4
VDD2 8
VDD3 14
VDD4 21
VDD5 30
VDD6 39

SEL 13
PD 5
PAD 43

P[29] BI GBE_MDI0P_SW 2 A0
P[29] BI GBE_MDI0N_SW 3 A1
P[29] BI GBE_MDI1P_SW 6 A2
P[29] BI GBE_MDI1N_SW 7 A3
P[29] BI GBE_MDI2P_SW 9 A4
P[29] BI GBE_MDI2N_SW 10 A5
P[29] BI GBE_MDI3P_SW 11 A6
P[29] BI GBE_MDI3N_SW 12 A7

B3 33 GBE_MDI1N BI P[76]
B2 34 GBE_MDI1P BI P[76]
B1 37 GBE_MDI0N BI P[76]
B0 38 GBE_MDI0P BI P[76]

C3 31 GBE_MDI1N_DEBUG BI P[87]
C2 32 GBE_MDI1P_DEBUG BI P[87]
C1 35 GBE_MDI0N_DEBUG BI P[87]
C0 36 GBE_MDI0P_DEBUG BI P[87]

C7 22 GBE_MDI3N_DEBUG BI P[87]
C6 23 GBE_MDI3P_DEBUG BI P[87]
C5 26 GBE_MDI2N_DEBUG BI P[87]
C4 27 GBE_MDI2P_DEBUG BI P[87]

B7 24 GBE_MDI3N BI P[76]
B6 25 GBE_MDI3P BI P[76]
B5 28 GBE_MDI2N BI P[76]
B4 29 GBE_MDI2P BI P[76]

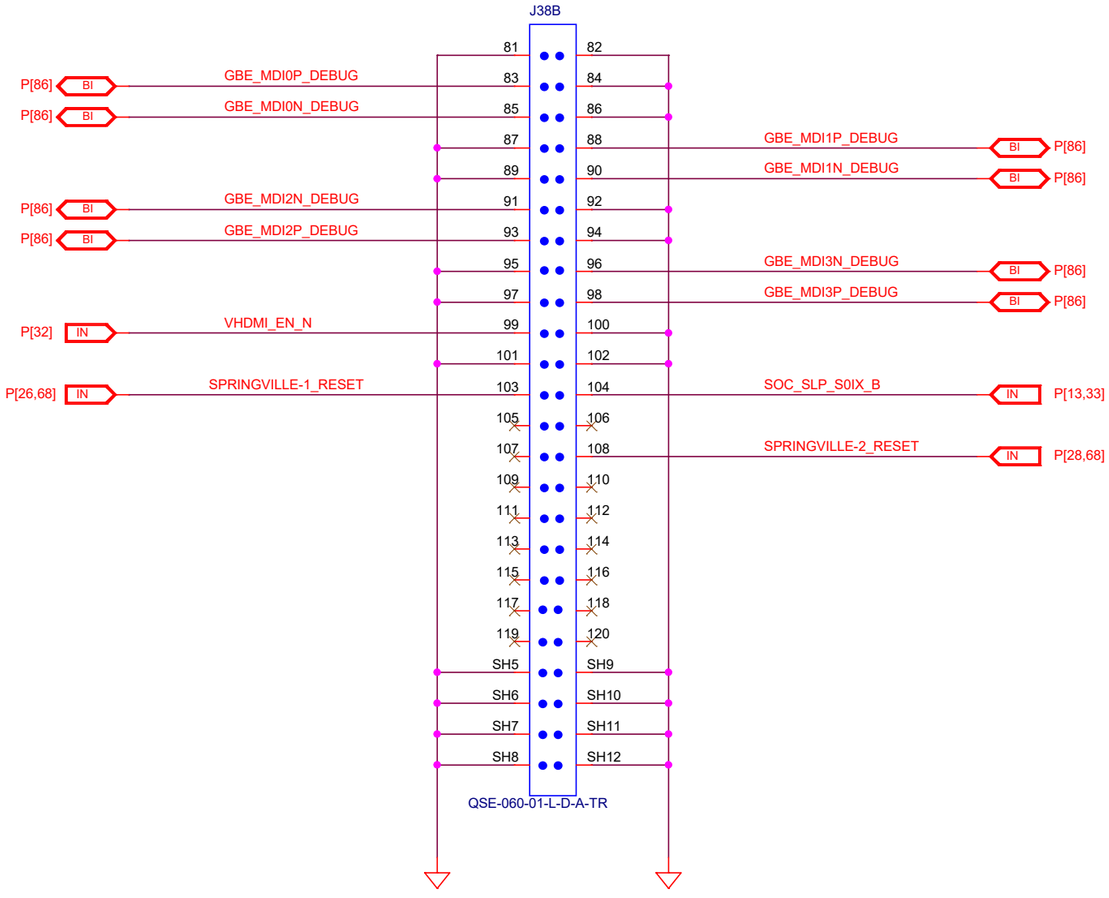
15 LED_A0
16 LED_ A1
42 LED_A2

LED_ B0 17
LED_B1 18
LED_ B2 41
LED_C0 19
LED_C1 20
LED_ C2 40

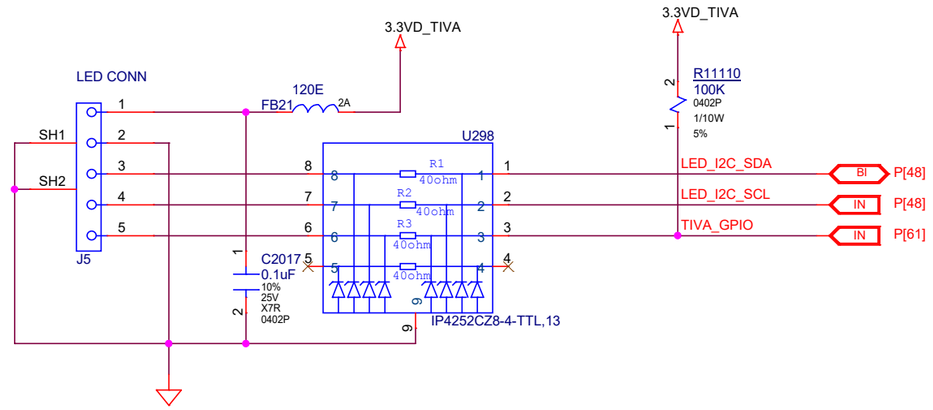
R10636 10K 0402P 1/10W 5%
R10635 10K 0402P 1/10W 5%
R10638 10K 0402P 1/10W 5%
R10637 10K 0402P 1/10W 5%

OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: SOC PCIE SWITCH	LIFE 3	SHEET 86OF 96

DEBUG BOARD CONNECTOR



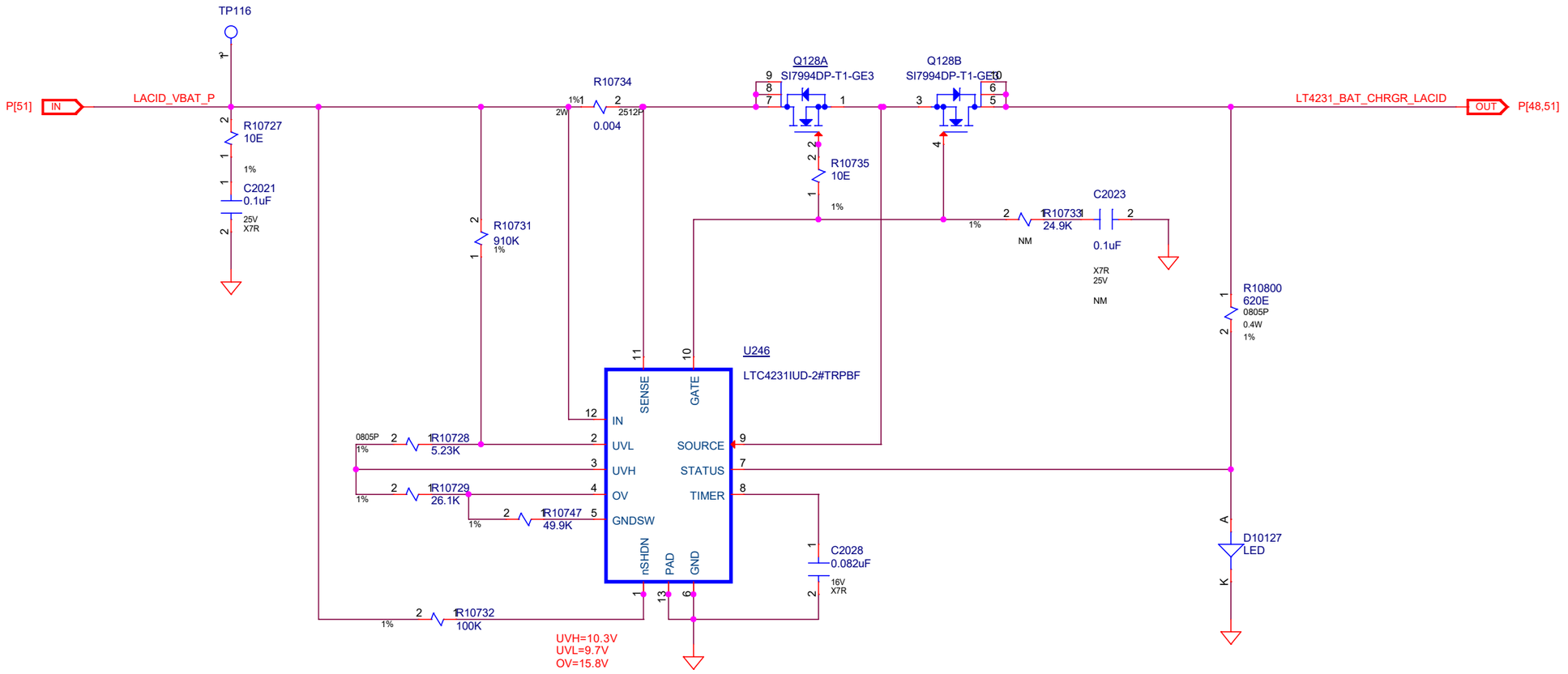
LED BOARD CONNECTOR



TIVA POWER GOOD LED

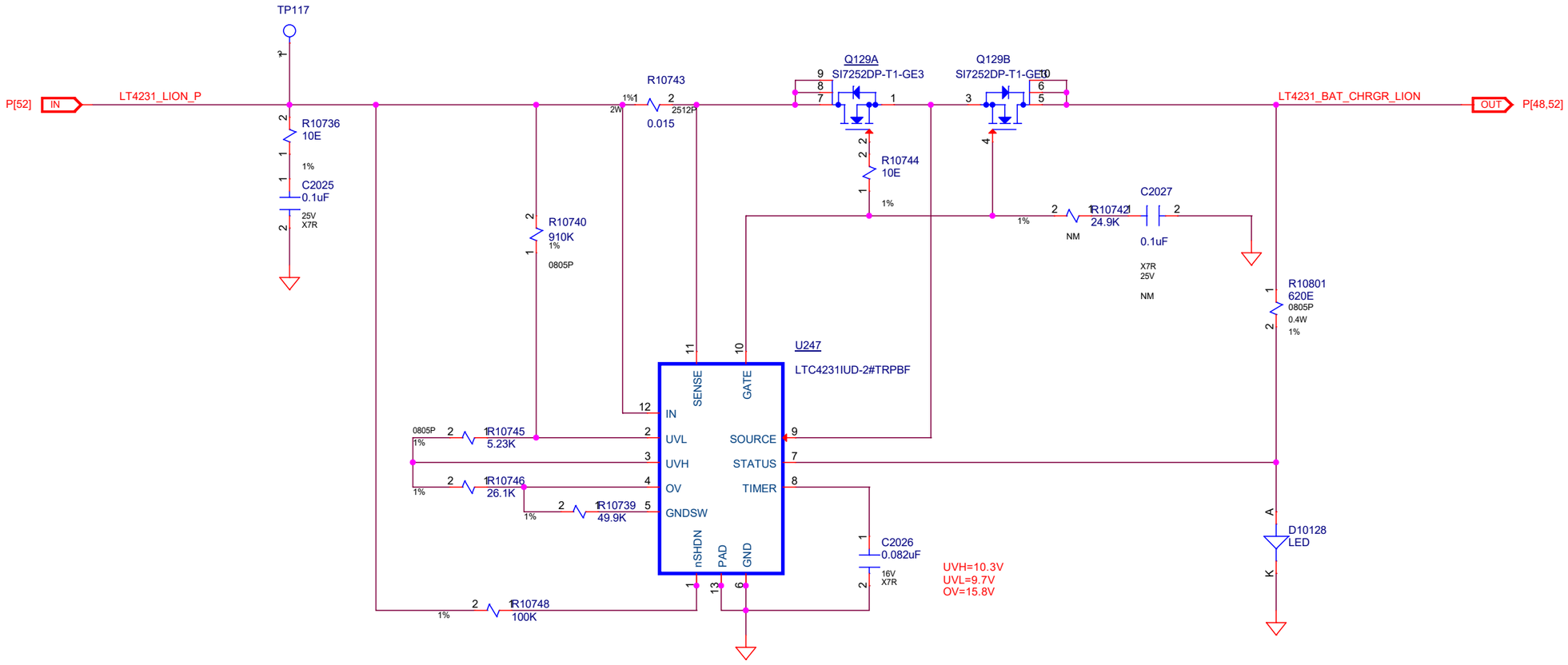
OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: DEBUG CONNECTOR1	LIFE 3	SHEET 87OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%



OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: LT4231_LACID	LIFE 3	SHEET 88OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%



OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: LT4231_LION	LIFE 3	SHEET 89OF 96

TP11 TP15 TP19 TP23 TP27 TP31

TP12 TP16 TP20 TP24 TP28

TP13 TP17 TP21 TP25 TP29

TP14 TP18 TP22 TP26 TP30 TP34

DIGITAL GROUND TEST POINTS

TP60 PGND

V1P35_S TP73

V1P5_LAN TP74

V1P5_LAN_1 TP75

PV18POE TP61

SPI_SW_PWR TP62

TRXFE_IN_12V TP63

3.3VD_TIVA TP47

3.3VD_TIVA_FIL TP48

3.3VD_TRXFE TP49

V1P5_S TP76

V1P8_A TP77

V1P8_IFSUP TP78

V1P8_S TP79

V12_A TP64

V12_ATOM_IN TP65

1.8V_CT TP35

12V_VIN_TRXFE TP39

COMP_VS TP52

INT_VCC_BKBST TP53

VTT_DDR TP110

V1P8_SPI_CONN TP81

V3P3_A TP82

V3P3_S TP83

V1P0_A TP67

V1P0_S TP68

V1P0_SX TP69

INT_VCC_LACID TP54

INT_VCC_LION TP55

LT8640_INT_VCC TP56

TP86 V48N

V48P TP87

V1P2_A TP71

V1P2_S TP72

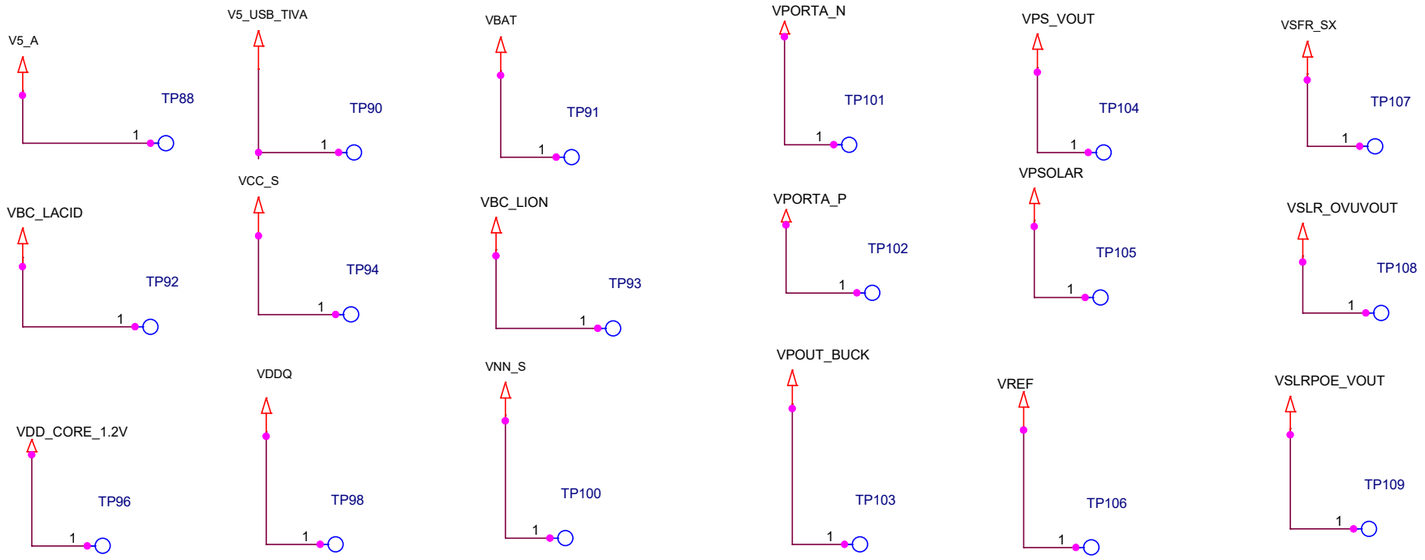
12V_VIN_TIVA TP38

12V_IN TP37

MSATA_3.3VD TP58

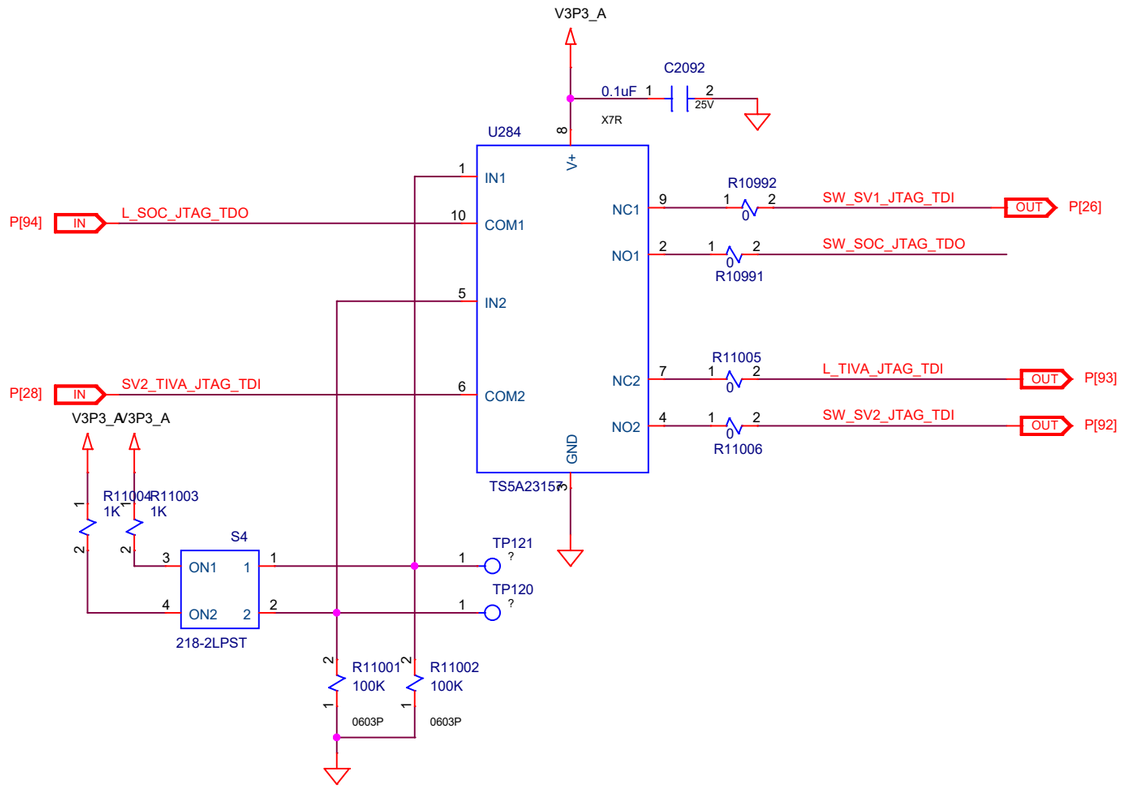
3.3VD_PSE TP46

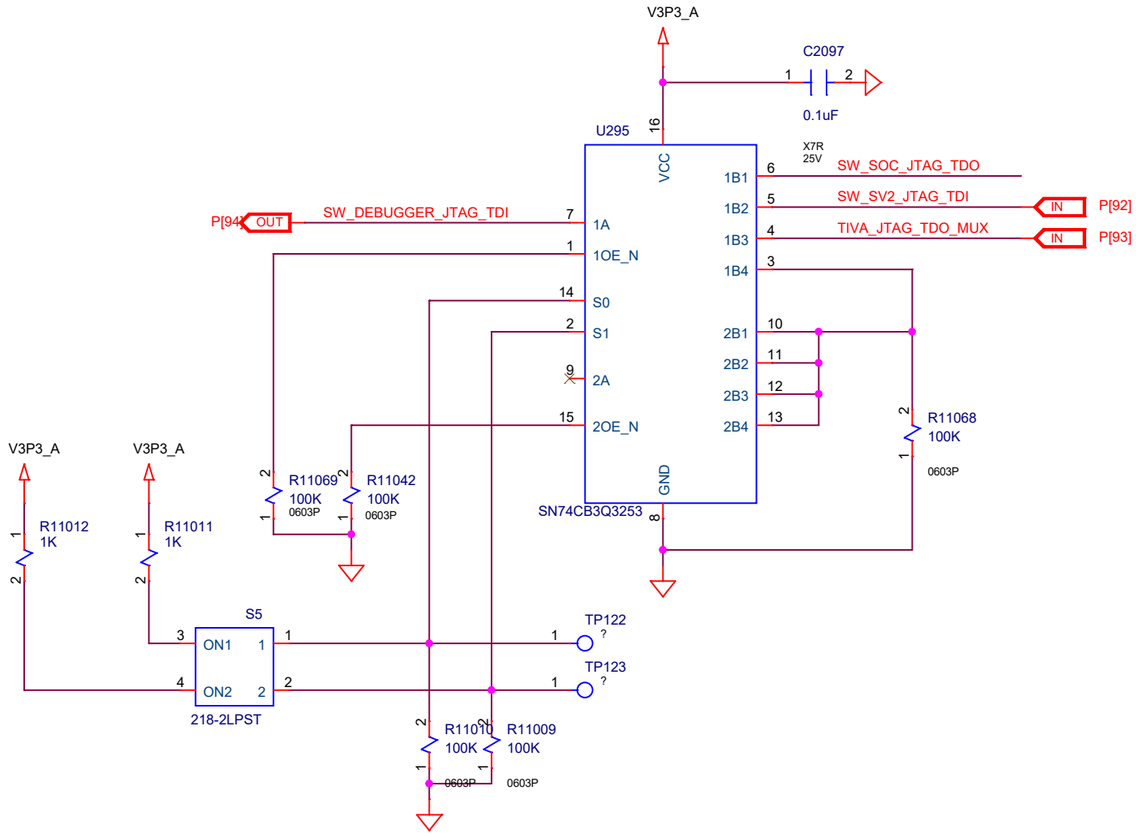
OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: TEST_POINTS	LIFE 3	SHEET 90OF 96

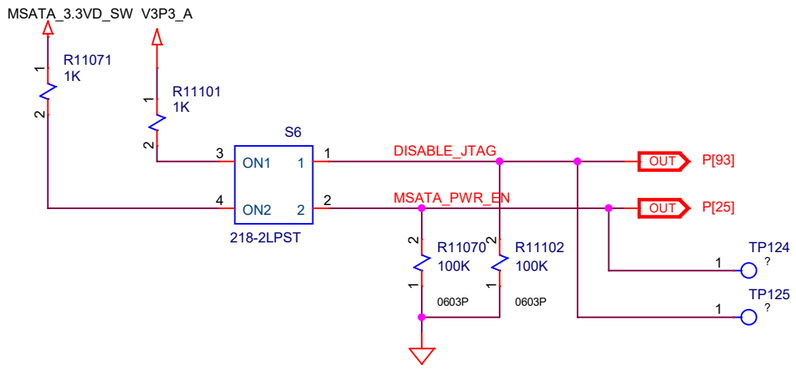


OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: TEST_POINTS	LIFE 3	SHEET 91OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%



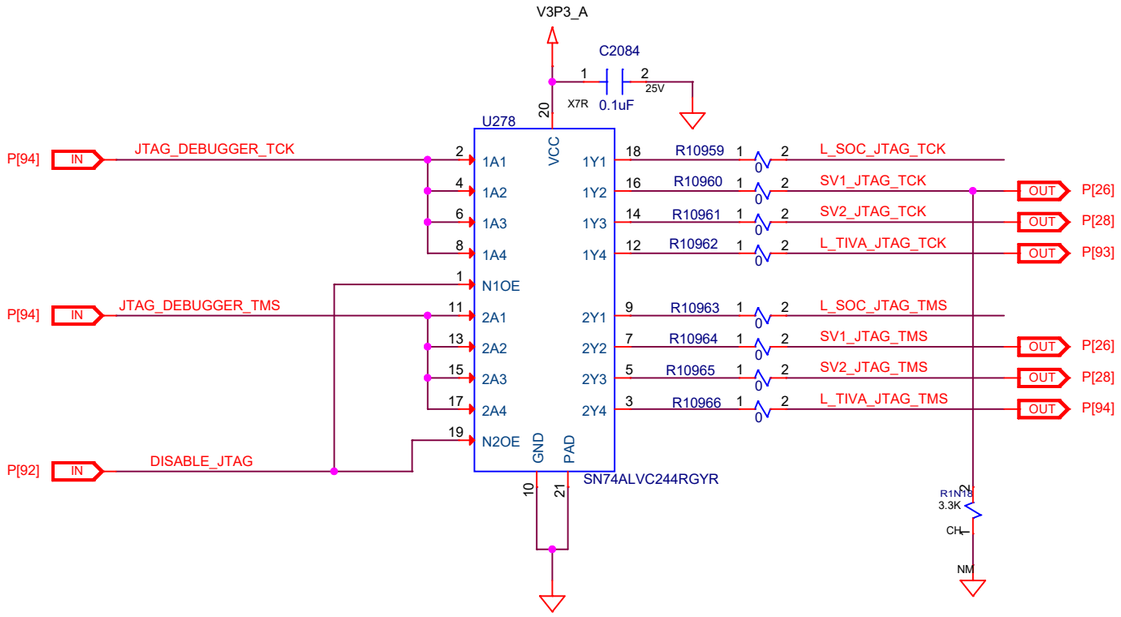


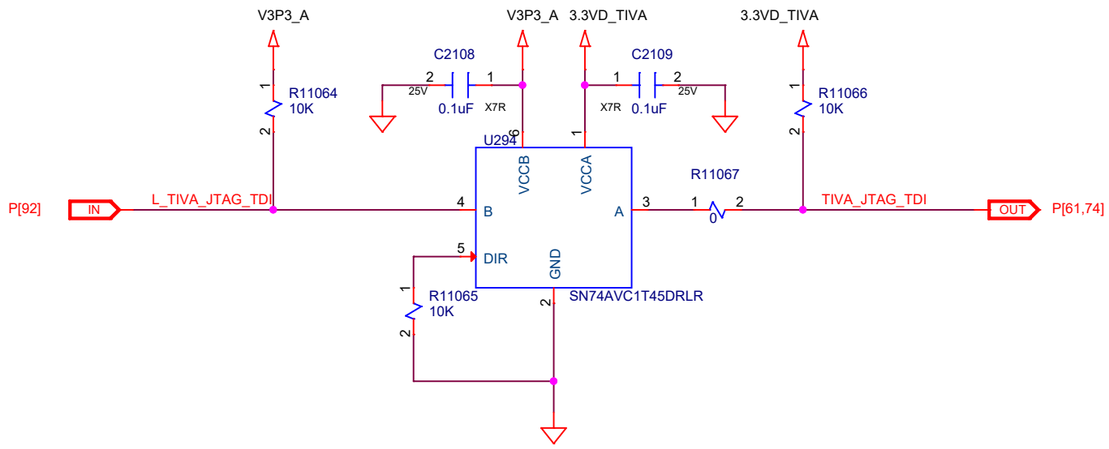


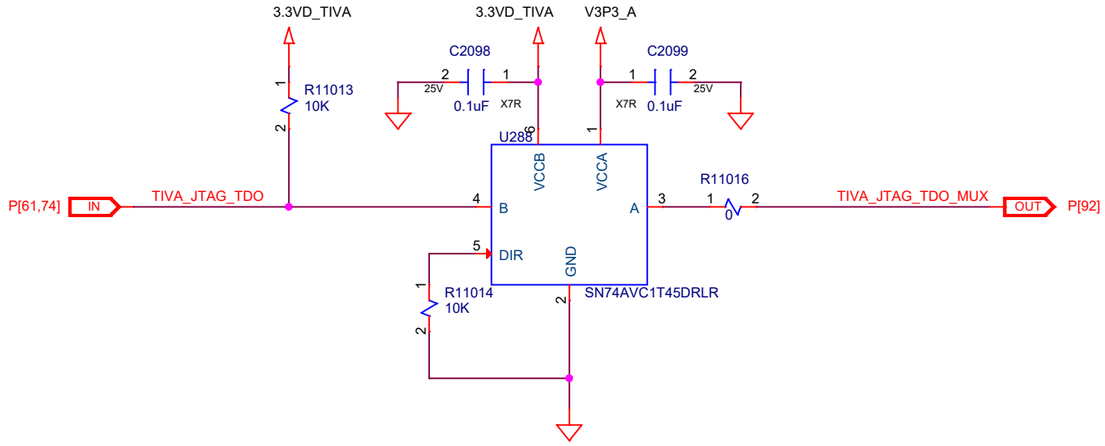
Sl No	Switch Details	Intel ONLY	Intel + Springville 1 + Springville 2	TIVA ONLY	Intel + Springville 1 + Springville 2 + TIVA	JTAG DISABLED
1	1) S4 - 1 --> X 2) S4 -2 --> X 3) S5 - 1 --> X 4) S5 - 2 --> X 5) S6 - 1 --> ON	Disabled	Disabled	Disabled	Disabled	JTAG DISABLED
2	1) S4 - 1 --> OFF 2) S4 -2 --> OFF 3) S5 - 1 --> OFF 4) S5 - 2 --> ON 5) S6 - 1 --> OFF	Disabled	Disabled	Disabled	Enabled	Disabled
3	1) S4 - 1 --> ON 2) S4 - 2 --> OFF 3) S5 -1 --> OFF 4) S5 - 2 --> OFF 5) S6 - 1 --> OFF	Enabled	Disabled	Enabled (via J7)	Disabled	Disabled
4	1) S4 - 1 --> OFF 2) S4 - 2 --> ON 3) S5 -1 --> ON 4) S5 - 2 --> OFF 5) S6 - 1 --> OFF	Disabled	Enabled	Enabled (via J7)	Disabled	Disabled

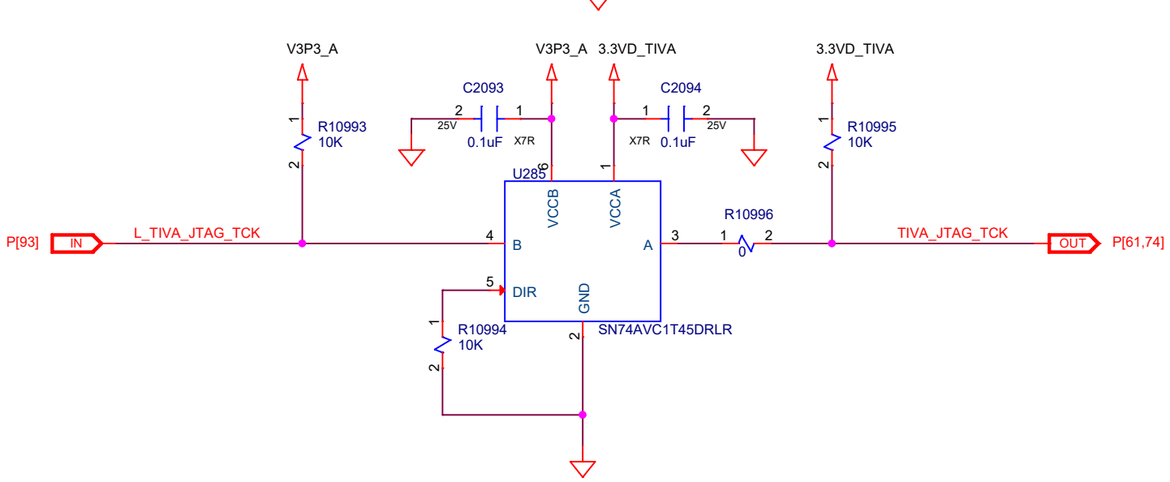
OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: JTAG INTERFACE	LIFE 3	SHEET 92OF 96

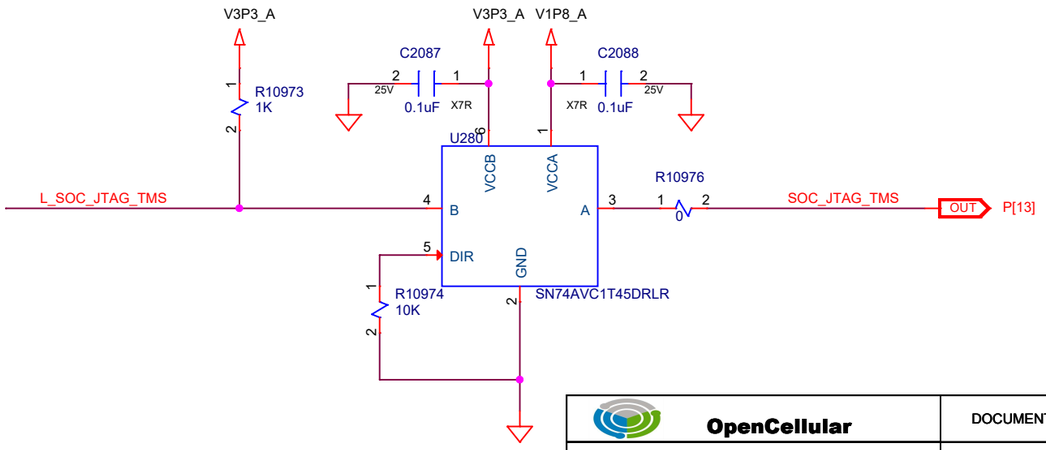
UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%





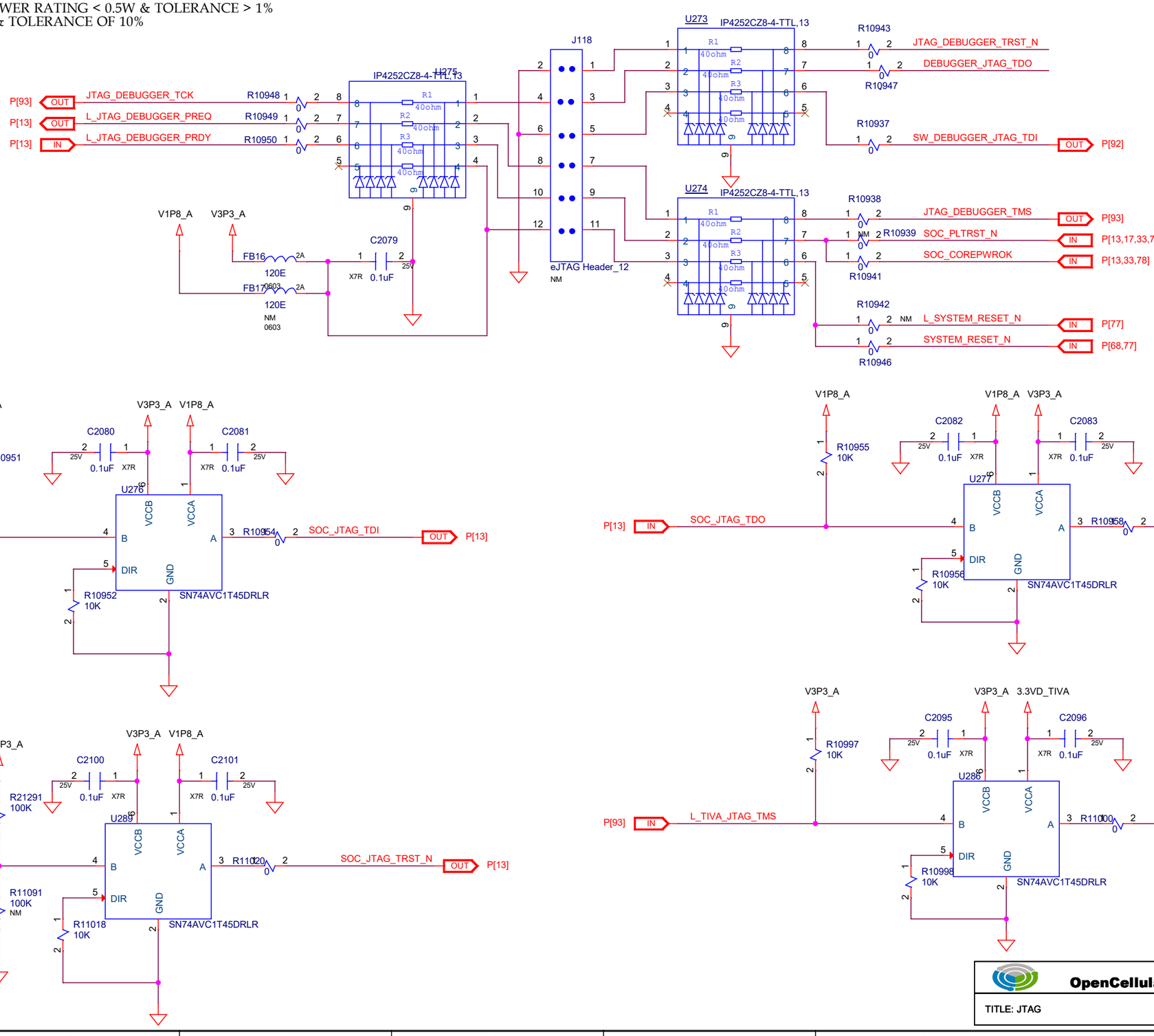






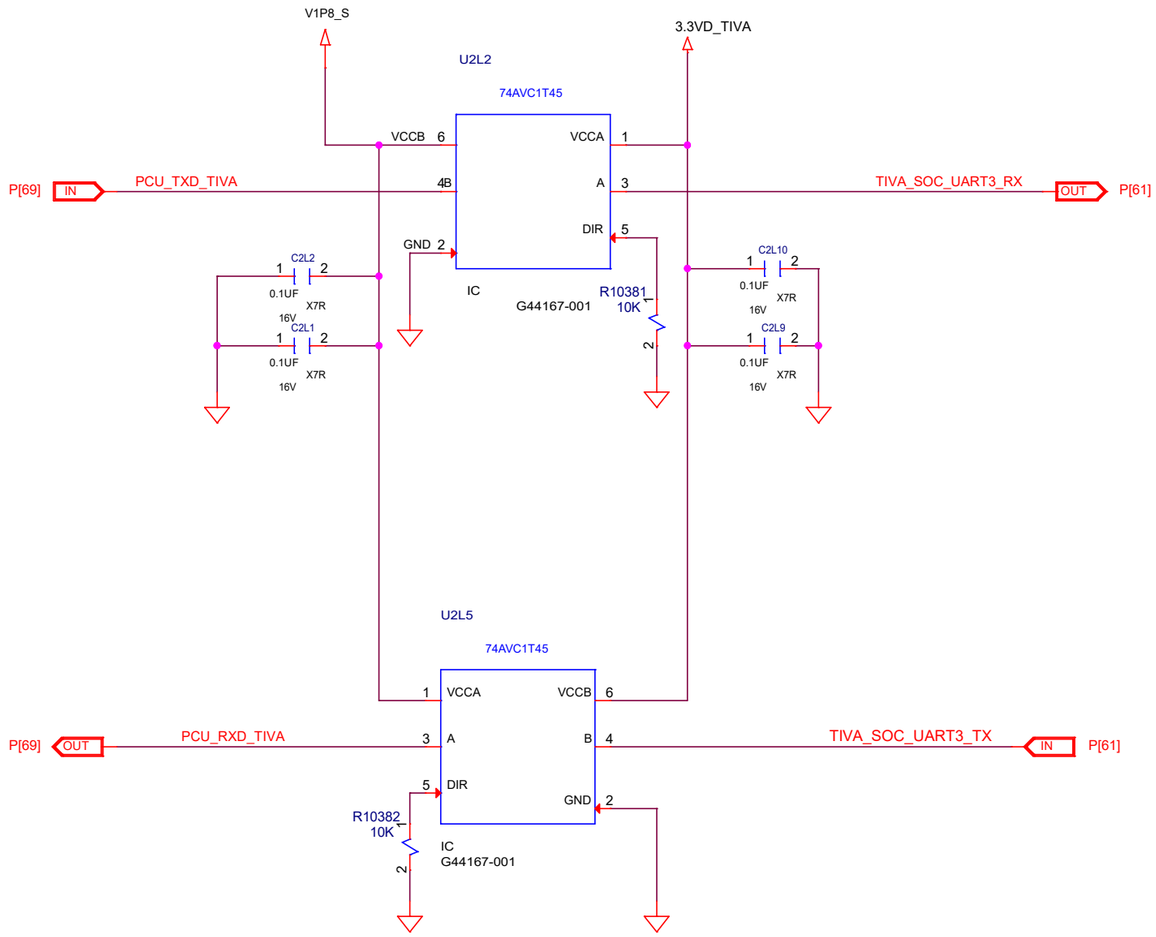
OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: TIVA_JTAG	LIFE 3	SHEET 93OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%



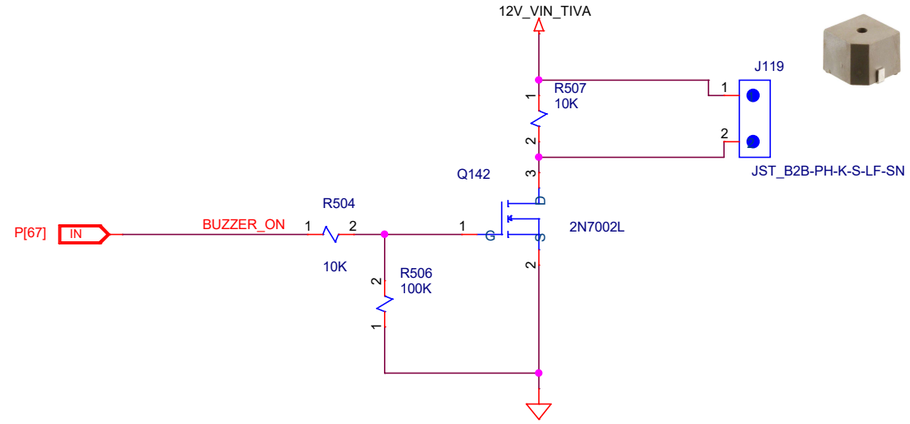
OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: JTAG	LIFE 3	SHEET 94OF 96

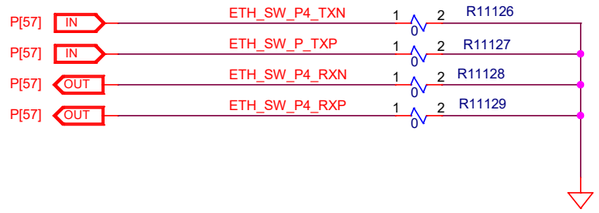
UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%

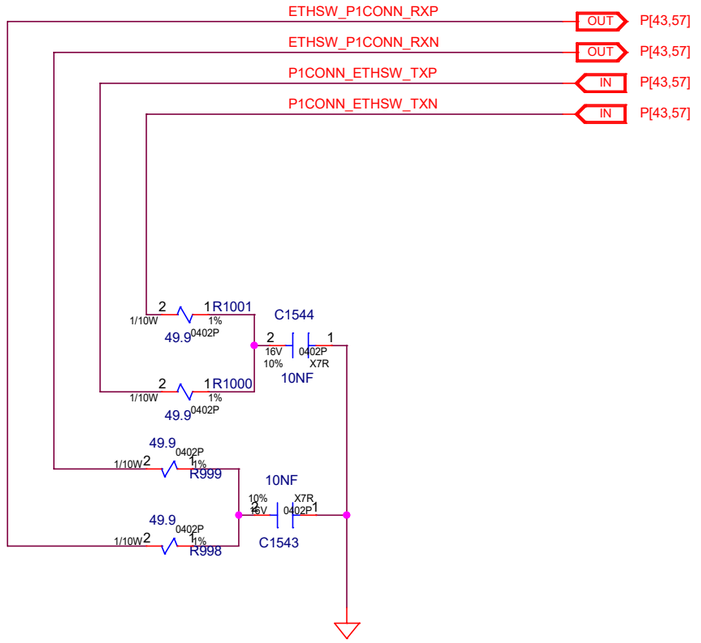


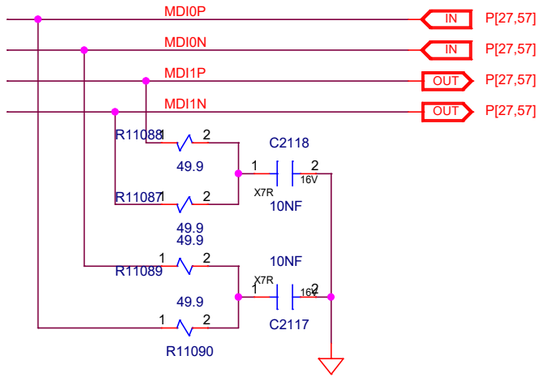
OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: JTAG_CONTD	LIFE 3	SHEET 95OF 96

UNLESS OTHERWISE SPECIFIED:
RESISTORS ARE 0402 PACKAGE, POWER RATING < 0.5W & TOLERANCE > 1%
CAPACITORS ARE 0402 PACKAGE & TOLERANCE OF 10%









OpenCellular	DOCUMENT NUMBER: 232-000036	
TITLE: BUZZER	LIFE 3	SHEET 96OF 96