REV	DATE	NOTES
A	05/07/2014	PROTOTYPES
B	06/04/2014	BETA
C1	10/24/2014	BETA - CLEANUP
D	05/27/2016	ES 2.0
E	09/19/2016	ES 2.0 - UPDATE
E1	05/03/2017	DOC UPDATE FOR RELEASE

REVISION STATUS OF SHEETS

REV										
SH										
REV										
SH										
REV										
SH										
REV										
SH										
REV										
SH										
REV										
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REV										
SH										
REV	C1	B	C1	B	B	A	E			
SH	31	32	33	34	35	36	37			
REV	E	B	A	A	A	A	A	C1	C1	C1
SH	21	22	23	24	25	26	27	28	29	30
REV	A	A	B	D	D	A	B	A	D	D
SH	11	12	13	14	15	16	17	18	19	20
REV	E1	E	B	C1	D	D	E	D	D	E1
SH	1	2	3	4	5	6	7	8	9	10

NEXT ASSY | USED ON

APPLICATION

DWN	J.A.C.	DATE 05/27/2016
CHK	T.W.K.	DATE 05/27/2016
ENGR	J.A.C.	DATE 05/27/2016
ENGR-MGR	J.A.C.	DATE 05/27/2016
QA	C.M.D.	DATE 05/27/2016
MFG	J.A.C.	DATE 05/27/2016
RLSE	J.A.C.	DATE 05/27/2016

TEXAS INSTRUMENTS INCORPORATED

Title: TDA3x/DRA78x/DM50x - 15X15 EVM

Page Contents: TITLE PAGE

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Date: Wednesday, May 03, 2017 | Sheet 1 of 37

ECN Number	517540-E004
Date Requested	8/12/2016
Requester	Tony C.
Approvals	Tony C.
Assembly Number	517540-0001
Current Assembly Rev	D
New Assembly Rev	E
Date Implemented	8/12/2016
Implentation notes	

Item#	Init Date	Priority	Status	Description
				Logic From D to E
				PWB From D to E
				ASSY From D toE
				EEPROM D.1
ER50				
				SHEET 7, ADD PULLUP TO DDR1_RST, R9500, 101370-1003R
ER51				SHEET 21, FIX POWER HOLD GLITCH AND DISCONNECT BY DEFAULT.
				U8044 FROM 102020-0009R (TPS3808G09DBVR) TO 102020-0033R(TPS3808G33DBVRG4)
				ADD R9505, R0201-NOPOP
				TIE TO POWERHOLD_CLK
				SHEET 10
				POWERHOLD_CLK : U8006 IOEXP2_p26/TP8059
ER52				SHEET 37:
				FIX LEAKAGE FROM FTDI BASED ON J6 ENTRY OBSERVATION. SAME FIX IS APPLIED TO FTDI POWER MEASUREMENT TOOL.
				ADD:
				104446-1100R C8254 0.1uF
				104446-1100R C8255 0.1uF
				101370-1003R RJ1405 10K.A
				101370-1003R RJ1406 10K.A
				101689-0125R RU8016 74CBTLV1G125CRG4
				101689-0125R RU8017 74CBTLV1G125CRG4
				101689-0125R RU8018 74CBTLV1G125CRG4
				101689-0125R RU8019 74CBTLV1G125CRG4
				101370-1004R R9501 100K
				101370-1004R R9502 100K
				101370-1004R R9503 100K
				101370-1004R R9504 100K
ER53				
				Remove PB Free,Add RoHS EXEMPT

TEXAS INSTRUMENTS INCORPORATED

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Page Contents: BLOCK DIAGRAM		
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SN74CBT16214DGGR MAPPING

FUNCTION TABLE

INPUTS			INPUT/OUTPUT A	FUNCTION
S2	S1	S0		
L	L	L	Z	Disconnect
L	L	H	B1	A port = B1 port
L	H	L	B2	A port = B2 port
L	H	H	Z	Disconnect
H	L	L	Z	Disconnect
H	L	H	B3	A port = B3 port
H	H	L	B1	A port = B1 port
H	H	H	B2	A port = B2 port

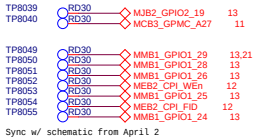
CAPACITOR SIZING FOR COMMERCIAL vs AUTOMOTIVE

CAPACITANCE Vaule	Commerical Size/X5R	Automotive Size/X7R
.1uF	0201	0402
.22uF	0201	0603
.47uF	0201	0603
1uF	0201	0603
2.2uF	0402	0603
4.7uF	0402	0805
10uF	0402	0805
22uF	0603	1206

DDR3 DEVICE OPTIONS

MT41K128M16JT-125 M:K 0-95C
MT41K128M16JT-125 IT:K -40-95C
MT41K128M16JT-125 AAT:K -40-105C

SINGLE NET NODES AVAILABLE FOR TEST POINTS



Sync w/ schematic from April 2

SVB COMPONENTS NOT POPULATED ON EVM

SH05 - SOC 2
J6116
J6117
J6118
J6107
J76
J6102
J83

SH08 - VISIBILITY
J1003
J28

SH09 - BOOT/JTAG
R9261
R9262
R9263
R9264
R9265
R9266
R9267
R9268
R9269
R9270
R9271
R9272
R9273
R9274
R9275
R9276
R9283

R9199
R9200
SW8

SH15 - MEM NONVOLATILE
J40
Xu83 (socket)

SH17 - CAN/SAFETY MCU
J6108
J6110
J6109
J6106

SH23 - POWER BENCH/MONITORS
J78
J6103
J6104
J6105

SH36 - TOOL HPC
C3200
C3201
C3204
C3205
C3206
C3207
C3208
C3209
J3200
Q2015
Q2024
R3202
R3203
R3204
R3205
R3207
R3208
R3209
R3210
R3211
R3212
R3213
R3214
R3215
R3216
R3217
R3218
R3219
R3220
R3221
R4135
R4136
R4138
R4139
R9278
R9279
R9352
R9353
R9354
U3201
U3202
U3203
U3204

TEXAS INSTRUMENTS INCORPORATED

Title: TDA3x/DRA78x/DM50x - 15X15 EVM		
Page Contents: MAPPING/NOTES		
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U5000A

TDA3x_ABF ES2.0

Package: 15X15mm, 367 BGA-FC, 0.65mm Pitch
Pinlist: ADASLow_pinlist_Rev2.0.xlsx (Oct 26, 2015)
Data Manual: TDA3x_ABF_ES2.0_DM_vA (Oct 2014)
Symbol: IC_TDA3x_ABF_367BGA_v2.1 (Jun 03, 2016)
TDA3x is pin compatible with DRA78x and DM50x devices

GPMC

(Pwr Domain = VDDSHV2)
(Opr Voltages = 1.8/3.3V)

8	H_GPMC_AD0	E8	GPMC_AD0/RGMII1_RXD2/GPIO1_14/SYSBOOT0
8	H_GPMC_AD1	A7	GPMC_AD1/RGMII1_RXD1/GPIO1_15/SYSBOOT1
8	H_GPMC_AD2	F8	GPMC_AD2/RGMII1_RXD0/GPIO1_16/SYSBOOT2
8	H_GPMC_AD3	B7	GPMC_AD3/QSPI1_RTCLK/GPIO1_17/SYSBOOT3
8	H_GPMC_AD4	A6	GPMC_AD4/CAM_STROBE/GPIO1_18/SYSBOOT4
8	H_GPMC_AD5	F7	GPMC_AD5/UART2_TXD/TIMER6/SPI3_D1/GPIO1_19/SYSBOOT5
8	H_GPMC_AD6	E7	GPMC_AD6/UART2_RXD/TIMER5/SPI3_D0/GPIO1_20/SYSBOOT6
8	H_GPMC_AD7	C6	GPMC_AD7/CAM_SHUTTER/TIMER4/SPI3_SCLK/GPIO1_21
8	H_GPMC_AD8	B6	GPMC_AD8/TIMER7/SPI3_CS0/GPIO1_22/SYSBOOT8
8	H_GPMC_AD9	A5	GPMC_AD9/eCAP1_IN_PWM1_OUT/SPI3_CS1/GPIO1_23/SYSBOOT9
8	H_GPMC_AD10	D6	GPMC_AD10/TIMER2/GPIO1_24/SYSBOOT10
8	H_GPMC_AD11	C5	GPMC_AD11/TIMER3/GPIO1_25/SYSBOOT11
8	H_GPMC_AD12	B5	GPMC_AD12/GPIO1_26/SYSBOOT12
8	H_GPMC_AD13	D7	GPMC_AD13/RGMII1_RXC/GPIO1_27/SYSBOOT13
8	H_GPMC_AD14	B4	GPMC_AD14/SPI2_CS1/GPIO1_28/SYSBOOT14
8	H_GPMC_AD15	A4	GPMC_AD15/SPI2_CS0/GPIO1_29/SYSBOOT15
8	H_GPMC_CLK	C12	GPMC_CLK/RGMII1_TXC/CLKOUT0/DMA_EVT1/GPIO1_0
8	H_GPMC_BEN0	D12	GPMC_BEN0/RGMII1_TXCTL/EHRPWM1A/DMA_EVT2/GPIO1_1
8	H_GPMC_BEN1	E12	GPMC_BEN1/RGMII1_TXD3/EHRPWM1B/DMA_EVT3/GPIO1_2
8	H_GPMC_ADVn	F12	GPMC_ADVn_ALE/RGMII1_TXD2/EHRPWM1_TRIPZONE_INPUT/CLKOUT1/DMA_EVT4/GPIO1_3
8	H_GPMC_OEn	A10	GPMC_OEn_REn/RGMII1_TXD1/EHRPWM_SYNCI/CLKOUT2/GPIO1_4
8	H_GPMC_WEn	B10	GPMC_WEn/RGMII1_TXD0/EHRPWM_SYNCO/GPIO1_5
8	H_GPMC_CS0	C10	GPMC_CS0/RGMII1_RXCTL/GPIO1_6
8	H_GPMC_CS1	E10	GPMC_CS1/QSPI1_CS0/GPIO1_7
8	H_GPMC_CS2	D10	GPMC_CS2/QSPI1_D3(I/O)/GPIO1_8
8	H_GPMC_CS3	A9	GPMC_CS3/QSPI1_D2(I/O)/GPIO1_9
8	H_GPMC_CS4	B9	GPMC_CS4/QSPI1_D0(I/O)/GPIO1_10
8	H_GPMC_CS5	F10	GPMC_CS5/QSPI1_D1(I/O)/GPIO1_11
8	H_GPMC_CS6	C8	GPMC_CS6/QSPI1_SCLK/GPIO1_12
8	H_GPMC_WAIT0	D8	GPMC_WAIT0/RGMII1_RXD3/QSPI1_RTCLK/DMA_EVT4/GPIO1_13

Connectivity

I2Cs (Pwr Domain = VDDSHV1) (Opr Voltages = 1.8/3.3V)

8	H_I2C1_SCL	L3	I2C1_SCL
8	H_I2C1_SDA	L4	I2C1_SDA
8	H_I2C2_SCL	L6	I2C2_SCL
8	H_I2C2_SDA	L5	I2C2_SDA

SPIs (Pwr Domain = VDDSHV1) (Opr Voltages = 1.8/3.3V)

8	H_SPI1_SCLK	M2	SPI1_SCLK/UART3_RXD/GPIO4_0
8	H_SPI1_D1	U6	SPI1_D1/UART3_CTSn/GPIO4_1
8	H_SPI1_D0	T5	SPI1_D0/UART3_RTSn/GPIO4_2
8	H_SPI1_CS0	R6	SPI1_CS0/UART3_TXD/GPIO4_3
8	H_SPI1_CS1	R5	SPI1_CS1/SPI3_CS1/TIMER6/EHRPWM1_TRIPZONE_INPUT/GPIO4_4
8	H_SPI2_SCLK	L1	SPI2_SCLK/UART3_RXD/EHRPWM1A/TIMER3/GPIO4_5
8	H_SPI2_D1	N4	SPI2_D1/UART3_CTSn/TIMER5/eCAP1_IN_PWM_OUT/GPIO4_6
8	H_SPI2_D0	R7	SPI2_D0/UART3_RTSn/TIMER1/GPIO4_7/SYSBOOT7
8	H_SPI2_CS0	L2	SPI2_CS0/UART3_TXD/EHRPWM1B/TIMER4/GPIO4_8

UARTs (Pwr Domain = VDDSHV3) (Opr Voltages = 1.8/3.3V)

8	H_UART1_RXD	F13	UART1_RXD/SPI4_D1/QSPI1_RTCLK/GPMC_A12/GPMC_A12/DCAN2_TX/GPIO4_13
8	H_UART1_TXD	E14	UART1_TXD/SPI4_D0/GPMC_A13/GPMC_A13/DCAN2_RX/GPIO4_14
8	H_UART1_CTSn	F14	UART1_CTSn/XREF_CLK1/UART3_RXD/GPMC_A16/SPI4_SCLK/SPI1_CS2/TIMER3/EHRPWM1_SYNCI/ CLKOUT0/VIN2A_HSYNC0/GPMC_A12/GPMC_CLK/DCAN1_TX/GPIO4_15
8	H_UART1_RTSn	C14	UART1_RTSn/UART3_TXD/GPMC_A17/SPI4_CS0/SPI1_CS3/TIMER4/EHRPWM1_SYNCO/ QSPI1_RTCLK/VIN2A_VSYNC0/GPMC_A13/DCAN1_RX/GPIO4_16
8	H_UART2_RXD	D14	UART2_RXD/SPI3_D1/QSPI1_RTCLK/TIMER1/EHRPWM1A/CLKOUT0/VIN2A_HSYNC0/GPMC_A12/GPMC_CLK/DCAN1_TX/GPIO4_17
8	H_UART2_TXD	D15	UART2_TXD/SPI3_D0/TIMER2/EHRPWM1B/GPMC_A13/DCAN1_RX/GPIO4_18
8	H_UART2_CTSn	F15	UART2_CTSn/XREF_CLK1/GPMC_A18/SPI3_SCLK/QSPI_CS1/TIMER7/VIN2A_HSYNC0/GPMC_CLK/DCAN2_TX/GPIO4_19
8	H_UART2_RTSn	F16	UART2_RTSn/eCAP1IN_PWM1_OUT/GPMC_A19/SPI3_CS0/TIMER8/QSPI1_RTCLK/VIN2A_VSYNC0/DCAN2_RX/GPIO4_20

DCAN1 & MCAN (Pwr Domain = VDDSHV1 & VDDSHV6) (Opr Voltages = 1.8/3.3V)

8	H_DCAN1_TX	N5	DCAN1_TX/GPIO4_9
8	H_DCAN1_RX	N6	DCAN1_RX/GPIO4_10
8	H_MCAN_TX	W7	MCAN_TX/VIN2A_DE0/VIN2A_HYSNC0/SPI1_CS2/UART3_RXD/QSPI1_CS1/GMPC_WAIT1/VIN1B_HSYNC1/ VIN1B_DE1/GPIO4_11
8	H_MCAN_RX	W6	MCAN_RX/CAM_nRESET/VIN2A_VSYNC0/SPI1_CS3/UART3_TXD/GPMC_CS7/VIN1B_VSYNC1/GPIO4_12

EMAC Switch (Pwr Domain = VDDSHV4) (Opr Voltages = 1.8/3.3V)

8	H_MDIO_MCLK	B19	MDIO_MCLK/SPI4_D1/GPIO3_17
4,8	H_MDIO_D	B17	MDIO_D/SPI4_D0/ESM_ERROR/GPIO3_18
8	H_RGMII0_TXC	C16	RGMII0_TXC/CAM_STROBE/SPI4_SCLK/MMC_CLK/GPIO3_19
8	H_RGMII0_TXCTL	C17	RGMII0_TXCTL/CAM_SHUTTER/SPI4_CS0/MMC_CMD/GPIO3_20
8	H_RGMII0_TXD3	E16	RGMII0_TXD3/MMC_DAT0/GPIO3_21
8	H_RGMII0_TXD2	D16	RGMII0_TXD2/eCAP1_IN_PWM1_OUT/MMC_DAT1/GPIO3_22
8	H_RGMII0_TXD1	E17	RGMII0_TXD1/MMC_DAT2/GPIO3_23
8	H_RGMII0_TXD0	F17	RGMII0_TXD0/MMC_DAT3/GPIO3_24
8	H_RGMII0_RXC	B18	RGMII0_RXC/CAM_STROBE/MMC_CLK/GPIO3_25
8	H_RGMII0_RXCTL	C18	RGMII0_RXCTL/CAM_SHUTTER/MMC_CMD/GPIO3_26
8	H_RGMII0_RXD3	A19	RGMII0_RXD3/MMC_DAT0/GPIO3_27
8	H_RGMII0_RXD2	B20	RGMII0_RXD2/MMC_DAT1/GPIO3_28
8	H_RGMII0_RXD1	C20	RGMII0_RXD1/MMC_DAT2/GPIO3_29
8	H_RGMII0_RXD0	A20	RGMII0_RXD0/MMC_DAT3/GPIO3_30

DDR

(Pwr Domains = VDDS_DDR1 & VDDS_DDR2 & VDDS_DDR3)
(Opr Voltages = 1.35/1.5/1.8V)

EMIF1

Two 2Gbit x 16bits

U4	DDR_A0	H_DDR1_A0	7
C1	DDR_A1	H_DDR1_A1	7
D3	DDR_A2	H_DDR1_A2	7
R4	DDR_A3	H_DDR1_A3	7
T4	DDR_A4	H_DDR1_A4	7
N3	DDR_A5	H_DDR1_A5	7
T2	DDR_A6	H_DDR1_A6	7
N2	DDR_A7	H_DDR1_A7	7
T1	DDR_A8	H_DDR1_A8	7
U1	DDR_A9	H_DDR1_A9	7
D1	DDR_A10	H_DDR1_A10	7
R3	DDR_A11	H_DDR1_A11	7
U2	DDR_A12	H_DDR1_A12	7
C3	DDR_A13	H_DDR1_A13	7
R2	DDR_A14	H_DDR1_A14	7
V1	DDR_A15	H_DDR1_A15	7
B3	DDR_BA0	H_DDR1_BA0	7
A3	DDR_BA1	H_DDR1_BA1	7
D2	DDR_BA2	H_DDR1_BA2	7
F2	DDR_CASn	H_DDR1_CASN	7
B2	DDR_CSn	H_DDR1_CSN0	7
P2	DDR_ODT	H_DDR1_ODT	7
F1	DDR_RASn	H_DDR1_RASN	7
N1	DDR_RST	H_DDR1_RST	7
E3	DDR_WEn	H_DDR1_WEN	7
F3	DDR_CKE	H_DDR1_CKE	7
G1	DDR_CLK_P	H_DDR1_CLK_P	7
G2	DDR_CLK_N	H_DDR1_CLK_N	7
AB8	DDR_DQM0	H_DDR1_DQM0	7
AA6	DDR_D0	H_DDR1_D0	7
AA8	DDR_D1	H_DDR1_D1	7
Y8	DDR_D2	H_DDR1_D2	7
AA7	DDR_D3	H_DDR1_D3	7
AB4	DDR_D4	H_DDR1_D4	7
Y5	DDR_D5	H_DDR1_D5	7
AA4	DDR_D6	H_DDR1_D6	7
Y6	DDR_D7	H_DDR1_D7	7
AA5	DDR_DQS0_P	H_DDR1_DQS0_P	7
AB5	DDR_DQS0_N	H_DDR1_DQS0_N	7
Y18	DDR_DQM1	H_DDR1_DQM1	7
AA18	DDR_D8	H_DDR1_D8	7
Y21	DDR_D9	H_DDR1_D9	7
AA21	DDR_D10	H_DDR1_D10	7
Y22	DDR_D11	H_DDR1_D11	7
AA19	DDR_D12	H_DDR1_D12	7
AB20	DDR_D13	H_DDR1_D13	7
Y17	DDR_D14	H_DDR1_D14	7
AB18	DDR_D15	H_DDR1_D15	7
AA20	DDR_DQS1_P	H_DDR1_DQS1_P	7
Y20	DDR_DQS1_N	H_DDR1_DQS1_N	7
AB3	DDR_DQM2	H_DDR1_DQM2	7
AA3	DDR_D16	H_DDR1_D16	7
AA2	DDR_D17	H_DDR1_D17	7
Y3	DDR_D18	H_DDR1_D18	7
V2	DDR_D19	H_DDR1_D19	7
U3	DDR_D20	H_DDR1_D20	7
V3	DDR_D21	H_DDR1_D21	7
Y2	DDR_D22	H_DDR1_D22	7
Y1	DDR_D23	H_DDR1_D23	7
W1	DDR_DQS2_P	H_DDR1_DQS2_P	7
W2	DDR_DQS2_N	H_DDR1_DQS2_N	7
W21	DDR_DQM3	H_DDR1_DQM3	7
U21	DDR_D24	H_DDR1_D24	7
T20	DDR_D25	H_DDR1_D25	7
R21	DDR_D26	H_DDR1_D26	7
U20	DDR_D27	H_DDR1_D27	7
R22	DDR_D28	H_DDR1_D28	7
V20	DDR_D29	H_DDR1_D29	7
W22	DDR_D30	H_DDR1_D30	7
U22	DDR_D31	H_DDR1_D31	7
T21	DDR_DQS3_P	H_DDR1_DQS3_P	7
T22	DDR_DQS3_N	H_DDR1_DQS3_N	7

One 1Gbit x 8bits

AB13	DDR_ECC_DQM	H_DDR1_ECC_DQM	7
Y11	DDR_ECC_D0	H_DDR1_ECC_D0	7
AA12	DDR_ECC_D1	H_DDR1_ECC_D1	7
AA11	DDR_ECC_D2	H_DDR1_ECC_D2	7
Y9	DDR_ECC_D3	H_DDR1_ECC_D3	7
AA13	DDR_ECC_D4	H_DDR1_ECC_D4	7
AB11	DDR_ECC_D5	H_DDR1_ECC_D5	7
AA9	DDR_ECC_D6	H_DDR1_ECC_D6	7
AB9	DDR_ECC_D7	H_DDR1_ECC_D7	7
AA10	DDR_ECC_DQS_P	H_DDR1_ECC_DQS_P	7
AB10	DDR_ECC_DQS_N	H_DDR1_ECC_DQS_N	7

TP8143
RD30
H_MDIO_D 4,8

ER31

TEXAS INSTRUMENTS INCORPORATED

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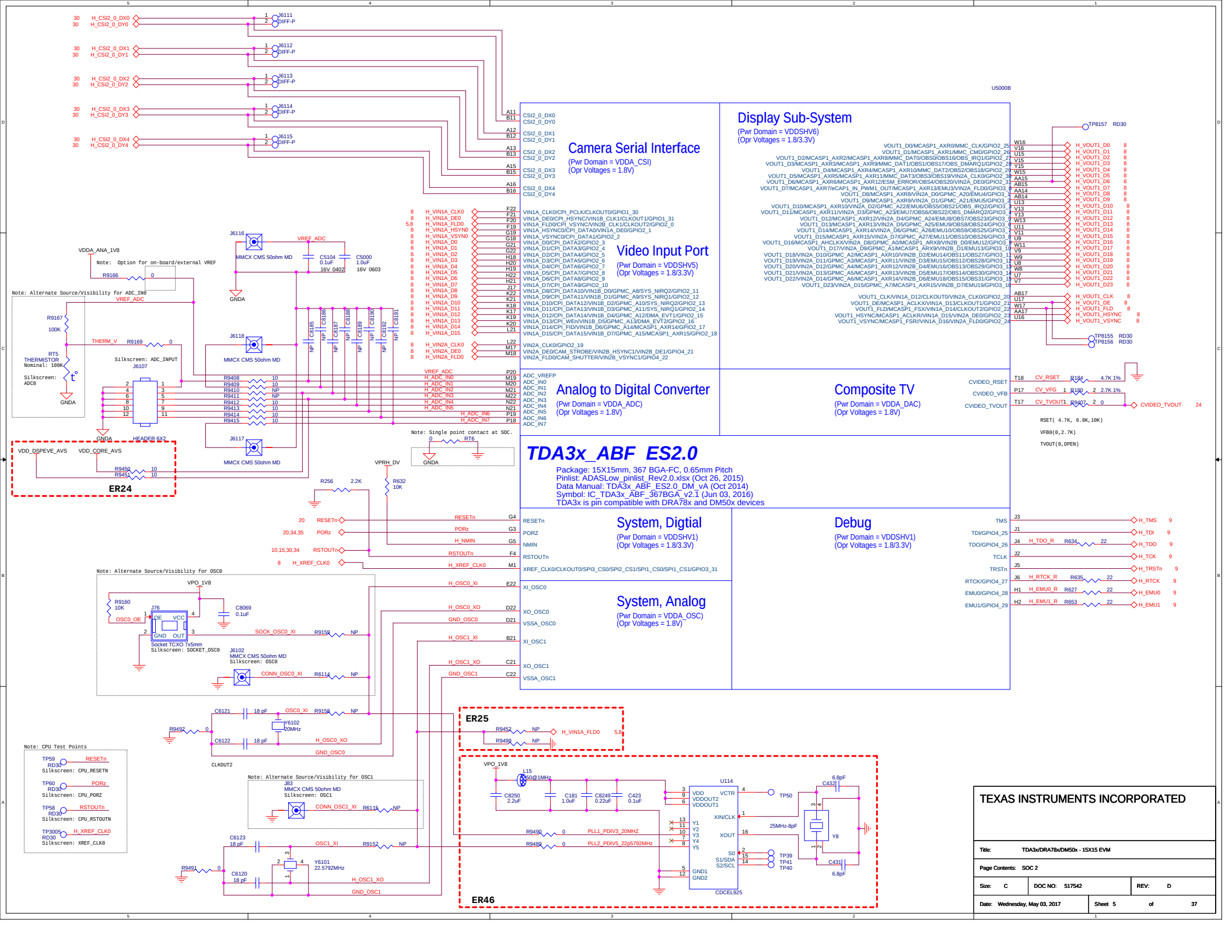
U5000B
Camera Serial Interface
(Pwr Domain = VDDA_CSI)
(Opr Voltages = 1.8V)
Video Input Port
(Pwr Domain = VDDSHV5)
(Opr Voltages = 1.8/3.3V)
Display Sub-System
(Pwr Domain = VDDSHV6)
(Opr Voltages = 1.8/3.3V)
Analog to Digital Converter
(Pwr Domain = VDDA_ADC)
(Opr Voltages = 1.8V)
Composite TV
(Pwr Domain = VDDA_DAC)
(Opr Voltages = 1.8V)
TDA3x_ABF ES2.0
Package: 15X15mm, 367 BGA-FC, 0.65mm Pitch
Pinlist: ADASLow_pinlist_Rev2.0.xlsx (Oct 26, 2015)
Data Manual: TDA3x_ABF_ES2.0_DM_vA (Oct 2014)
Symbol: IC_TDA3x_ABF_367BGA_v2.1 (Jun 03, 2016)
TDA3x is pin compatible with DRA78x and DM50x devices
System, Digtial
(Pwr Domain = VDDSHV1)
(Opr Voltages = 1.8/3.3V)
Debug
(Pwr Domain = VDDSHV1)
(Opr Voltages = 1.8/3.3V)
System, Analog
(Pwr Domain = VDDA_OSC)
(Opr Voltages = 1.8V)
ER24
ER25
ER46
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TDA3x_ABF ES2.0

Package: 15X15mm, 367 BGA-FC, 0.65mm Pitch
Pinlist: ADASLow_pinlist_Rev2.0.xlsx (Oct 26, 2015)
Data Manual: TDA3x_ABF_ES2.0_DM_vA (Oct 2014)
Symbol: IC_TDA3x_ABF_367BGA_v2.1 (Jun 03, 2016)
TDA3x is pin compatible with DRA78x and DM50x devices

Power Domains & Returns

(Pwr Domain = VDD_CORE)
(Opr Voltage = AVS)

(Pwr Domains = VDD_DSP, VDD_EVE)
(Opr Voltage = AVS)

(Pwr Domain = I/O Bias Supply)
(Opr Voltage = 1.8V)

(Pwr Domain = General I/O)
(Opr Voltage = 1.8/3.3V dual voltage supply)

(Pwr Domain = GPMC I/O)
(Opr Voltage = 1.8/3.3V dual voltage supply)

(Pwr Domain = MMC4 I/O)
(Opr Voltage = 1.8/3.3V dual voltage supply)

(Pwr Domain = RGMII I/O)
(Opr Voltage = 1.8/3.3V dual voltage supply)

(Pwr Domain = VIN1 I/O)
(Opr Voltage = 1.8/3.3V dual voltage supply)

(Pwr Domain = VOUT1 I/O)
(Opr Voltage = 1.8/3.3V dual voltage supply)

(Pwr Domain = I/O for Byte0, Byte2, ECC Byte, Addr Cmd Non-PoP)
(Opr Voltages = 1.35/1.5V)

(Pwr Domain = I/O for Addr Cmd PoP)
(Opr Voltages = 1.35/1.5V)

(Pwr Domain = I/O for Byte1, Byte3)
(Opr Voltages = 1.35/1.5V)

(Pwr Domain = Bias for Byte0, Byte2, ECC Byte, Addr Cmd Non-PoP)
(Opr Voltage = 1.8V)

(Pwr Domain = Bias for Addr Cmd PoP)
(Opr Voltage = 1.8V)

(Pwr Domain = Bias for Byte1, Byte3)
(Opr Voltage = 1.8V)

(Pwr Domain = VDDA_xxx Analog)
(Opr Voltage = 1.8V)

(Decoupling for On-Chip LDOs)
(Opr Voltage = 1.0V)

Reserved Test Signals

(Pwr Domain = Efuse Analog)
(Opr Voltage = 1.0V)

U5000C

N16	VDD_1	
J15	VDD_2	
L15	VDD_3	
P14	VDD_4	
H13	VDD_5	
H12	VDD_6	
K12	VDD_7	(Pwr Domain = VDD_CORE)
L12	VDD_8	(Opr Voltage = AVS)
N12	VDD_9	
J11	VDD_10	
J10	VDD_11	
P10	VDD_12	
H7	VDD_13	
P12	VDD_DSPEVE_1	
P11	VDD_DSPEVE_2	
M9	VDD_DSPEVE_3	(Pwr Domains = VDD_DSP, VDD_EVE)
K8	VDD_DSPEVE_4	(Opr Voltage = AVS)
L8	VDD_DSPEVE_5	
P8	VDD_DSPEVE_6	
	VDD_DSPEVE_7	
L16	VDDS18V_1	
P13	VDDS18V_2	(Pwr Domain = I/O Bias Supply)
G12	VDDS18V_3	(Opr Voltage = 1.8V)
T11	VDDS18V_4	
J7	VDDS18V_5	
K7	VDDSHV1_1	
L7	VDDSHV1_2	(Pwr Domain = General I/O)
M7	VDDSHV1_3	(Opr Voltage = 1.8/3.3V dual voltage supply)
K2	VDDSHV1_4	
G11	VDDSHV2_1	
G9	VDDSHV2_2	(Pwr Domain = GPMC I/O)
B8	VDDSHV2_3	(Opr Voltage = 1.8/3.3V dual voltage supply)
G8	VDDSHV2_4	
G14	VDDSHV3_1	(Pwr Domain = MMC4 I/O) (Opr Voltage = 1.8/3.3V dual voltage supply)
E20	VDDSHV4_1	(Pwr Domain = RGMII I/O)
A18	VDDSHV4_2	(Opr Voltage = 1.8/3.3V dual voltage supply)
J21	VDDSHV5_1	
H17	VDDSHV5_2	(Pwr Domain = VIN1 I/O)
J16	VDDSHV5_3	(Opr Voltage = 1.8/3.3V dual voltage supply)
AA16	VDDSHV6_1	
T13	VDDSHV6_2	(Pwr Domain = VOUT1 I/O)
T12	VDDSHV6_3	(Opr Voltage = 1.8/3.3V dual voltage supply)
T10	VDDSHV6_4	
T8	VDDS_DDR1_1	
T7	VDDS_DDR1_2	(Pwr Domain = I/O for Byte0, Byte2, ECC Byte, Addr Cmd Non-PoP)
AB6	VDDS_DDR1_3	(Opr Voltages = 1.35/1.5V)
R1	VDDS_DDR1_4	
AA1	VDDS_DDR1_5	
G6	VDDS_DDR2_1	(Pwr Domain = I/O for Addr Cmd PoP)
C2	VDDS_DDR2_2	(Opr Voltages = 1.35/1.5V)
E2	VDDS_DDR2_3	
AA22	VDDS_DDR3_1	(Pwr Domain = I/O for Byte1, Byte3)
AB19	VDDS_DDR3_2	(Opr Voltages = 1.35/1.5V)
T15	VDDS_DDR3_3	
T9	VDDS18V_DDR1_1	(Pwr Domain = Bias for Byte0, Byte2, ECC Byte, Addr Cmd Non-PoP)
P7	VDDS18V_DDR1_2	(Opr Voltage = 1.8V)
G7	VDDS18V_DDR2_1	(Pwr Domain = Bias for Addr Cmd PoP) (Opr Voltage = 1.8V)
V21	VDDS18V_DDR3_1	(Pwr Domain = Bias for Byte1, Byte3)
T16	VDDS18V_DDR3_2	(Opr Voltage = 1.8V)
N8	VDDA_DDR_DSP	
M8	VDDA_GMAC_CORE	(Pwr Domain = VDDA_xxx Analog)
H14	VDDA_PER	(Opr Voltage = 1.8V)
P22	VDDA_ADC	
P21	VSSA_ADC	
A14	VDDA_CSI	
B14	VSSA_CSI	
U19	VDDA_DAC	
T19	VSSA_DAC	
E21	VDDA_OSC	
N15	CAP_VDDRAM_CORE1	VCAP_VDDRAM_CORE1
M15	CAP_VDDRAM_CORE2	VCAP_VDDRAM_CORE2
M14	CAP_VDDRAM_DSPEVE	VCAP_VDDRAM_DSPEVE
F6	VPP	
A21	ATESTV	AVTEST
A2	IFORCE	IFORCE
B1	VSENSE	VSENSE

A22	VSS_1
B22	VSS_2
J22	VSS_3
V22	VSS_4
AB22	VSS_5
AB21	VSS_6
A17	VSS_7
G16	VSS_8
H16	VSS_9
K16	VSS_10
M16	VSS_11
P16	VSS_12
R16	VSS_13
AB16	VSS_14
H15	VSS_15
K15	VSS_16
P15	VSS_17
K14	VSS_18
T14	VSS_19
K13	VSS_20
M13	VSS_21
M12	VSS_22
R12	VSS_23
AB12	VSS_24
H11	VSS_25
K11	VSS_26
M11	VSS_27
G10	VSS_28
H10	VSS_29
K10	VSS_30
M10	VSS_31
N10	VSS_32
H9	VSS_33
K9	VSS_34
R9	VSS_35
A8	VSS_36
H8	VSS_37
N7	VSS_38
AB7	VSS_39
AB2	VSS_40
A1	VSS_41
E1	VSS_42
K1	VSS_43
P1	VSS_44
AB1	VSS_45

SKT1 SKT2 SKT3 SKT4 SKT5 SKT6
1 2 3 4 5 6

Note: See Data Manual/PCB Guidelines for VDD decoupling requirements.
Note: See Data Manual/PCB Guidelines for DSPEVE decoupling requirements.
Note: See Data Manual/PCB Guidelines for VDDS18V decoupling requirements.
Note: See Data Manual/PCB Guidelines for VDDSHVx decoupling requirements.
Note: EMIF Power Connections (Decoupling bottom of page)
Note: These caps feed the VDDS supplies before the resistor breakout.
Note: See Data Manual/PCB Guidelines for VCAP capacitor requirements.
Note: See Data Manual/PCB Guidelines for DDR VDDS/VDDS18V decoupling requirements.

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Q6 BSS138

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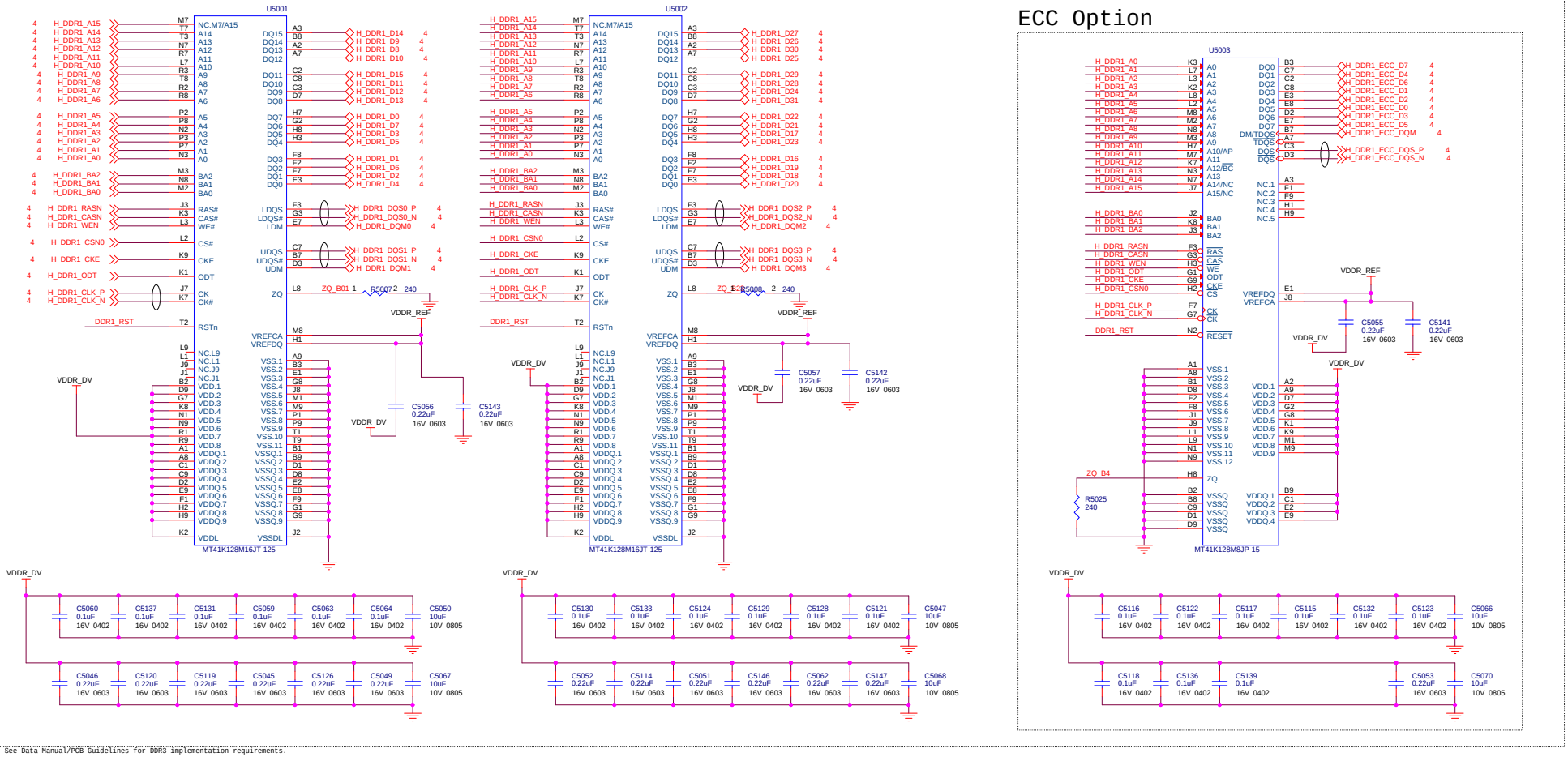
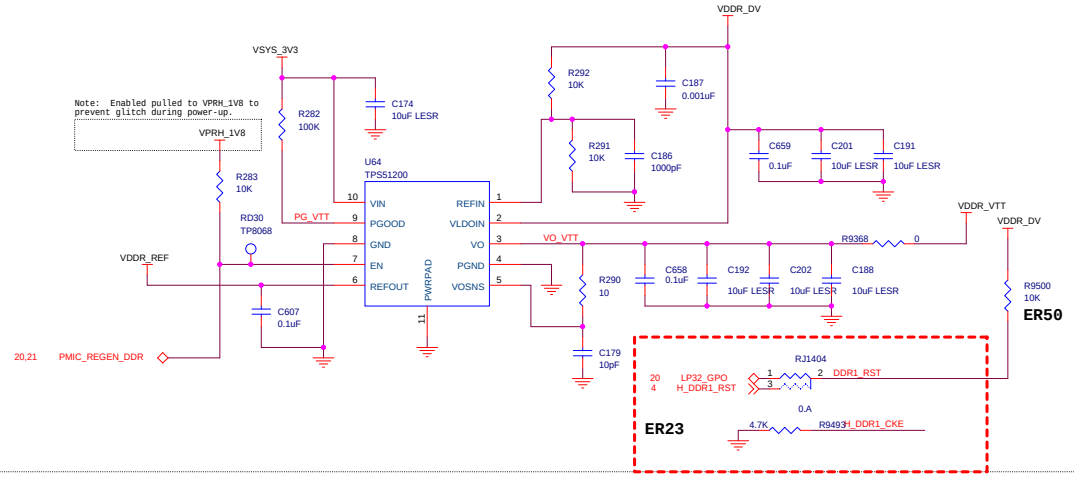
DDR3L Memory

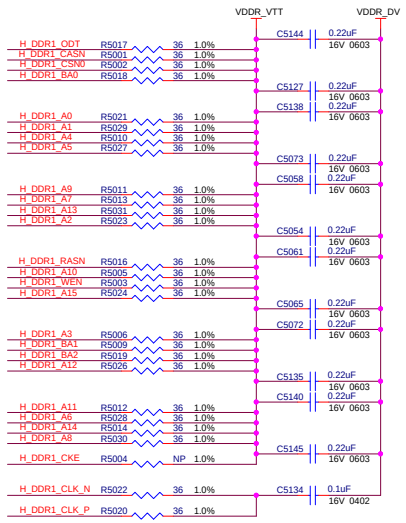


ECC Option

Note: See Data Manual/PCB Guidelines for DDR3 implementation requirements.

DDR3L Termination and Regulator





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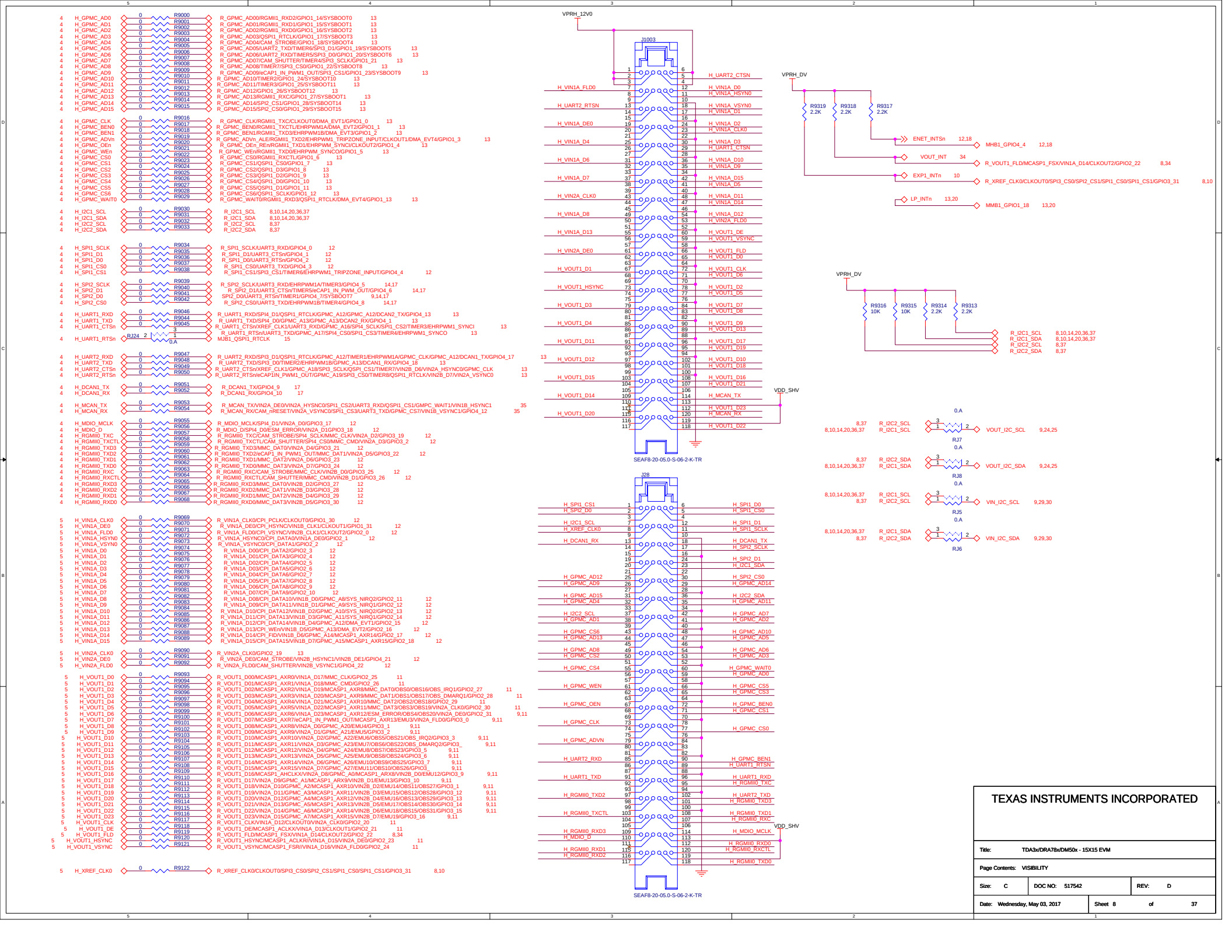
H_GPMC_AD0 R9000 R_GPMC_AD00/RGMII1_RXD2/GPIO1_14/SYSBOOT0 13
H_GPMC_AD1 R9001 R_GPMC_AD01/RGMII1_RXD1/GPIO1_15/SYSBOOT1 13
H_GPMC_AD2 R9002 R_GPMC_AD02/RGMII1_RXD0/GPIO1_16/SYSBOOT2 13
H_GPMC_AD3 R9003 R_GPMC_AD03/QSPI1_RTCLK/GPIO1_17/SYSBOOT3 13
H_GPMC_AD4 R9004 R_GPMC_AD04/CAM_STROBE/GPIO1_18/SYSBOOT4 13
H_GPMC_AD5 R9005 R_GPMC_AD05/UART2_TXD/TIMER6/SPI3_D1/GPIO1_19/SYSBOOT5 13
H_GPMC_AD6 R9006 R_GPMC_AD06/UART2_RXD/TIMER5/SPI3_D0/GPIO1_20/SYSBOOT6 13
H_GPMC_AD7 R9007 R_GPMC_AD07/CAM_SHUTTER/TIMER4/SPI3_SCLK/GPIO1_21 13
H_GPMC_AD8 R9008 R_GPMC_AD08/TIMER7/SPI3_CS0/GPIO1_22/SYSBOOT8 13
H_GPMC_AD9 R9009 R_GPMC_AD09/eCAP1_IN_PWM1_OUT/SPI3_CS1/GPIO1_23/SYSBOOT9 13
H_GPMC_AD10 R9010 R_GPMC_AD10/TIMER2/GPIO1_24/SYSBOOT10 13
H_GPMC_AD11 R9011 R_GPMC_AD11/TIMER3/GPIO1_25/SYSBOOT11 13
H_GPMC_AD12 R9012 R_GPMC_AD12/GPIO1_26/SYSBOOT12 13
H_GPMC_AD13 R9013 R_GPMC_AD13/RGMII1_RXC/GPIO1_27/SYSBOOT1 13
H_GPMC_AD14 R9014 R_GPMC_AD14/SPI2_CS1/GPIO1_28/SYSBOOT14 13
H_GPMC_AD15 R9015 R_GPMC_AD15/SPI2_CS0/GPIO1_29/SYSBOOT15 13
H_GPMC_CLK R9016 R_GPMC_CLK/RGMII1_TXC/CLKOUT0/DMA_EVT1/GPIO1_0 13
H_GPMC_BEN0 R9017 R_GPMC_BEN0/RGMII1_TXCTL/EHRPWM1A/DMA_EVT2/GPIO1_1 13
H_GPMC_BEN1 R9018 R_GPMC_BEN1/RGMII1_TXD3/EHRPWM1B/DMA_EVT3/GPIO1_2 13
H_GPMC_ADVn R9019 R_GPMC_ADVn_ALE/RGMII1_TXD2/EHRPWM1_TRIPZONE_INPUT/CLKOUT1/DMA_EVT4/GPIO1_3 13
H_GPMC_OEn R9020 R_GPMC_OEn_REn/RGMII1_TXD1/EHRPWM_SYNCI/CLKOUT2/GPIO1_4 13
H_GPMC_WEn R9021 R_GPMC_WEn/RGMII1_TXD0/EHRPWM_SYNCO/GPIO1_5 13
H_GPMC_CS0 R9022 R_GPMC_CS0/RGMII1_RXCTL/GPIO1_6 13
H_GPMC_CS1 R9023 R_GPMC_CS1/QSPI1_CS0/GPIO1_7 13
H_GPMC_CS2 R9024 R_GPMC_CS2/QSPI1_D3/GPIO1_8 13
H_GPMC_CS3 R9025 R_GPMC_CS3/QSPI1_D2/GPIO1_9 13
H_GPMC_CS4 R9026 R_GPMC_CS4/QSPI1_D0/GPIO1_10 13
H_GPMC_CS5 R9027 R_GPMC_CS5/QSPI1_D1/GPIO1_11 13
H_GPMC_CS6 R9028 R_GPMC_CS6/QSPI1_SCLK/GPIO1_12 13
H_GPMC_WAIT0 R9029 R_GPMC_WAIT0/RGMII1_RXD3/QSPI1_RTCLK/DMA_EVT4/GPIO1_13 13
H_I2C1_SCL R9030 R_I2C1_SCL 8,10,14,20,36,37
H_I2C1_SDA R9031 R_I2C1_SDA 8,10,14,20,36,37
H_I2C2_SCL R9032 R_I2C2_SCL 8,37
H_I2C2_SDA R9033 R_I2C2_SDA 8,37
H_SPI1_SCLK R9034 R_SPI1_SCLK/UART3_RXD/GPIO4_0 12
H_SPI1_D1 R9035 R_SPI1_D1/UART3_CTSn/GPIO4_1 12
H_SPI1_D0 R9036 R_SPI1_D0/UART3_RTSn/GPIO4_2 12
H_SPI1_CS0 R9037 R_SPI1_CS0/UART3_TXD/GPIO4_3 12
H_SPI1_CS1 R9038 R_SPI1_CS1/SPI3_CS1/TIMER6/EHRPWM1_TRIPZONE_INPUT/GPIO4_4 12
H_SPI2_SCLK R9039 R_SPI2_SCLK/UART3_RXD/EHRPWM1A/TIMER3/GPIO4_5 14,17
H_SPI2_D1 R9040 R_SPI2_D1/UART3_CTSn/TIMER5/eCAP1_IN_PWM_OUT/GPIO4_6 14,17
H_SPI2_D0 R9041 SPI2_D0/UART3_RTSn/TIMER1/GPIO4_7/SYSBOOT7 9,14,17
H_SPI2_CS0 R9042 R_SPI2_CS0/UART3_TXD/EHRPWM1B/TIMER4/GPIO4_8 14,17
H_UART1_RXD R9046 R_UART1_RXD/SPI4_D1/QSPI1_RTCLK/GPMC_A12/GPMC_A12/DCAN2_TX/GPIO4_13 13
H_UART1_TXD R9044 R_UART1_TXD/SPI4_D0/GPMC_A13/GPMC_A13/DCAN2_RX/GPIO4_1 13
H_UART1_CTSn R9045 R_UART1_CTSn/XREF_CLK1/UART3_RXD/GPMC_A16/SPI4_SCLK/SPI1_CS2/TIMER3/EHRPWM1_SYNCI 13
H_UART1_RTSn RJ24 R_UART1_RTSn/UART3_TXD/GPMC_A17/SPI4_CS0/SPI1_CS3/TIMER4/EHRPWM1_SYNCO 13
MJB1_QSPI1_RTCLK 15
H_UART2_RXD R9047 R_UART2_RXD/SPI3_D1/QSPI1_RTCLK/GPMC_A12/TIMER1/EHRPWM1A/GPMC_CLK/GPMC_A12/DCAN1_TX/GPIO4_17
H_UART2_TXD R9048 R_UART2_TXD/SPI3_D0/TIMER2/EHRPWM1B/GPMC_A13/DCAN1_RX/GPIO4_18 13
H_UART2_CTSn R9049 R_UART2_CTSn/XREF_CLK1/GPMC_A18/SPI3_SCLK/QSPI_CS1/TIMER7/VIN2B_D6/VIN2A_HSYNC0/GPMC_CLK 13
H_UART2_RTSn R9050 R_UART2_RTSn/eCAP1IN_PWM1_OUT/GPMC_A19/SPI3_CS0/TIMER8/QSPI1_RTCLK/VIN2B_D7/VIN2A_VSYNC0 13
H_DCAN1_TX R9051 R_DCAN1_TX/GPIO4_9 17
H_DCAN1_RX R9052 R_DCAN1_RX/GPIO4_10 17
H_MCAN_TX R9053 R_MCAN_TX/VIN2A_DE0/VIN2A_HSYNC0/SPI1_CS2/UART3_RXD/QSPI1_CS1/GMPC_WAIT1/VIN1B_HSYNC1 35
H_MCAN_RX R9054 R_MCAN_RX/CAM_nRESET/VIN2A_VSYNC0/SPI1_CS3/UART3_TXD/GPMC_CS7/VIN1B_VSYNC1/GPIO4_12 35
H_MDIO_MCLK R9055 R_MDIO_MCLK/SPI4_D1/VIN2A_D0/GPIO3_17 12
H_MDIO_D R9056 R_MDIO_D/SPI4_D0/ESM_ERROR/VIN2A_D1GPIO3_18 12
H_RGMII0_TXC R9057 R_RGMII0_TXC/CAM_STROBE/SPI4_SCLK/MMC_CLK/VIN2A_D2/GPIO3_19 12
H_RGMII0_TXCTL R9058 R_RGMII0_TXCTL/CAM_SHUTTER/SPI4_CS0/MMC_CMD/VIN2A_D3/GPIO3_2 12
H_RGMII0_TXD3 R9059 R_RGMII0_TXD3/MMC_DAT0/VIN2A_D4/GPIO3_21 12
H_RGMII0_TXD2 R9060 R_RGMII0_TXD2/eCAP1_IN_PWM1_OUT/MMC_DAT1/VIN2A_D5/GPIO3_22 12
H_RGMII0_TXD1 R9061 R_RGMII0_TXD1/MMC_DAT2/VIN2A_D6/GPIO3_23 12
H_RGMII0_TXD0 R9062 R_RGMII0_TXD0/MMC_DAT3/VIN2A_D7/GPIO3_24 12
H_RGMII0_RXC R9063 R_RGMII0_RXC/CAM_STROBE/MMC_CLK/VIN2B_D0/GPIO3_25 12
H_RGMII0_RXCTL R9064 R_RGMII0_RXCTL/CAM_SHUTTER/MMC_CMD/VIN2B_D1/GPIO3_26 12
H_RGMII0_RXD3 R9065 R_RGMII0_RXD3/MMC_DAT0/VIN2B_D2/GPIO3_27 12
H_RGMII0_RXD2 R9066 R_RGMII0_RXD2/MMC_DAT1/VIN2B_D3/GPIO3_28 12
H_RGMII0_RXD1 R9067 R_RGMII0_RXD1/MMC_DAT2/VIN2B_D4/GPIO3_29 12
H_RGMII0_RXD0 R9068 R_RGMII0_RXD0/MMC_DAT3/VIN2B_D5/GPIO3_30 12
H_VIN1A_CLK0 R9069 R_VIN1A_CLK0/CPI_PCLK/CLKOUT0/GPIO1_30 12
H_VIN1A_DE0 R9070 R_VIN1A_DE0/CPI_HSYNC/VIN1B_CLK1/CLKOUT1/GPIO1_31 12
H_VIN1A_FLD0 R9071 R_VIN1A_FLD0/CPI_VSYNC/VIN2B_CLK1/CLKOUT2/GPIO2_0 12
H_VIN1A_HSYN0 R9072 R_VIN1A_HSYNC0/CPI_DATA0/VIN1A_DE0/GPIO2_1 12
H_VIN1A_VSYN0 R9073 R_VIN1A_VSYNC0/CPI_DATA1/GPIO2_2 12
H_VIN1A_D0 R9074 R_VIN1A_D00/CPI_DATA2/GPIO2_3 12
H_VIN1A_D1 R9075 R_VIN1A_D01/CPI_DATA3/GPIO2_4 12
H_VIN1A_D2 R9076 R_VIN1A_D02/CPI_DATA4/GPIO2_5 12
H_VIN1A_D3 R9077 R_VIN1A_D03/CPI_DATA5/GPIO2_6 12
H_VIN1A_D4 R9078 R_VIN1A_D04/CPI_DATA6/GPIO2_7 12
H_VIN1A_D5 R9079 R_VIN1A_D05/CPI_DATA7/GPIO2_8 12
H_VIN1A_D6 R9080 R_VIN1A_D06/CPI_DATA8/GPIO2_9 12
H_VIN1A_D7 R9081 R_VIN1A_D07/CPI_DATA9/GPIO2_10 12
H_VIN1A_D8 R9082 R_VIN1A_D08/CPI_DATA10/VIN1B_D0/GPMC_A8/SYS_NIRQ2/GPIO2_11 12
H_VIN1A_D9 R9083 R_VIN1A_D09/CPI_DATA11/VIN1B_D1/GPMC_A9/SYS_NIRQ1/GPIO2_12 12
H_VIN1A_D10 R9084 R_VIN1A_D10/CPI_DATA12/VIN1B_D2/GPMC_A10/SYS_NIRQ2/GPIO2_13 12
H_VIN1A_D11 R9085 R_VIN1A_D11/CPI_DATA13/VIN1B_D3/GPMC_A11/SYS_NIRQ1/GPIO2_14 12
H_VIN1A_D12 R9086 R_VIN1A_D12/CPI_DATA14/VIN1B_D4/GPMC_A12/DMA_EVT1/GPIO2_15 12
H_VIN1A_D13 R9087 R_VIN1A_D13/CPI_WEn/VIN1B_D5/GPMC_A13/DMA_EVT2/GPIO2_16 12
H_VIN1A_D14 R9088 R_VIN1A_D14/CPI_FID/VIN1B_D6/GPMC_A14/MCASP1_AXR14/GPIO2_17 12
H_VIN1A_D15 R9089 R_VIN1A_D15/CPI_DATA15/VIN1B_D7/GPMC_A15/MCASP1_AXR15/GPIO2_18 12
H_VIN2A_CLK0 R9090 R_VIN2A_CLK0/GPIO2_19 13
H_VIN2A_DE0 R9091 R_VIN2A_DE0/CAM_STROBE/VIN2B_HSYNC1/VIN2B_DE1/GPIO4_21 12
H_VIN2A_FLD0 R9092 R_VIN2A_FLD0/CAM_SHUTTER/VIN2B_VSYNC1/GPIO4_22 12
H_VOUT1_D0 R9093 R_VOUT1_D00/MCASP1_AXR0/VIN1A_D17/MMC_CLK/GPIO2_25 11
H_VOUT1_D1 R9094 R_VOUT1_D01/MCASP1_AXR1/VIN1A_D18/MMC_CMD/GPIO2_26 11
H_VOUT1_D2 R9095 R_VOUT1_D02/MCASP1_AXR2/VIN1A_D19/MCASP1_AXR8/MMC_DAT0/OBS0/OBS16/OBS_IRQ1/GPIO2_27 11
H_VOUT1_D3 R9096 R_VOUT1_D03/MCASP1_AXR3/VIN1A_D20/MCASP1_AXR9/MMC_DAT1/OBS1/OBS17/OBS_DMARQ1/GPIO2_28 11
H_VOUT1_D4 R9097 R_VOUT1_D04/MCASP1_AXR4/VIN1A_D21/MCASP1_AXR10/MMC_DAT2/OBS2/OBS18/GPIO2_29 11
H_VOUT1_D5 R9098 R_VOUT1_D05/MCASP1_AXR5/VIN1A_D22/MCASP1_AXR11/MMC_DAT3/OBS3/OBS19/VIN2A_CLK0/GPIO2_30 11
H_VOUT1_D6 R9099 R_VOUT1_D06/MCASP1_AXR6/VIN1A_D23/MCASP1_AXR12/ESM_ERROR/OBS4/OBS20/VIN2A_DE0/GPIO2_31 9,11
H_VOUT1_D7 R9100 R_VOUT1_D07/MCASP1_AXR7/eCAP1_IN_PWM1_OUT/MCASP1_AXR13/EMU3/VIN2A_FLD0/GPIO3_0 9,11
H_VOUT1_D8 R9101 R_VOUT1_D08/MCASP1_AXR8/VIN2A_D0/GPMC_A20/EMU4/GPIO3_1 9,11
H_VOUT1_D9 R9102 R_VOUT1_D09/MCASP1_AXR9/VIN2A_D1/GPMC_A21/EMU5/GPIO3_2 9,11
H_VOUT1_D10 R9103 R_VOUT1_D10/MCASP1_AXR10/VIN2A_D2/GPMC_A22/EMU6/OBSS/OBS21/OBS_IRQ2/GPIO3_3 9,11
H_VOUT1_D11 R9104 R_VOUT1_D11/MCASP1_AXR11/VIN2A_D3/GPMC_A23/EMU7/OBS6/OBS22/OBS_DMARQ2/GPIO3_ 9,11
H_VOUT1_D12 R9105 R_VOUT1_D12/MCASP1_AXR12/VIN2A_D4/GPMC_A24/EMU8/OBS7/OBS23/GPIO3_5 9,11
H_VOUT1_D13 R9106 R_VOUT1_D13/MCASP1_AXR13/VIN2A_D5/GPMC_A25/EMU9/OBS8/OBS24/GPIO3_6 9,11
H_VOUT1_D14 R9107 R_VOUT1_D14/MCASP1_AXR14/VIN2A_D6/GPMC_A26/EMU10/OBS9/OBS25/GPIO3_7 9,11
H_VOUT1_D15 R9108 R_VOUT1_D15/MCASP1_AXR15/VIN2A_D7/GPMC_A27/EMU11/OBS10/OBS26/GPIO3_ 9,11
H_VOUT1_D16 R9109 R_VOUT1_D16/MCASP1_AHCLKX/VIN2A_D8/GPMC_A0/MCASP1_ARX8/VIN2B_D0/EMU12/GPIO3_9 9,11
H_VOUT1_D17 R9110 R_VOUT1_D17/VIN2A_D9/GPMC_A1/MCASP1_ARX9/VIN2B_D1/EMU13/GPIO3_10 9,11
H_VOUT1_D18 R9111 R_VOUT1_D18/VIN2A_D10/GPMC_A2/MCASP1_AXR10/VIN2B_D2/EMU14/OBS11/OBS27/GPIO3_1 9,11
H_VOUT1_D19 R9112 R_VOUT1_D19/VIN2A_D11/GPMC_A3/MCASP1_AXR11/VIN2B_D3/EMU15/OBS12/OBS28/GPIO3_12 9,11
H_VOUT1_D20 R9113 R_VOUT1_D20/VIN2A_D12/GPMC_A4/MCASP1_AXR12/VIN2B_D4/EMU16/OBS13/OBS29/GPIO3_13 9,11
H_VOUT1_D21 R9114 R_VOUT1_D21/VIN2A_D13/GPMC_A5/MCASP1_AXR13/VIN2B_D5/EMU17/OBS14/OBS30/GPIO3_14 9,11
H_VOUT1_D22 R9115 R_VOUT1_D22/VIN2A_D14/GPMC_A6/MCASP1_AXR14/VIN2B_D6/EMU18/OBS15/OBS31/GPIO3_15 9,11
H_VOUT1_D23 R9116 R_VOUT1_D23/VIN2A_D15/GPMC_A7/MCASP1_AXR15/VIN2B_D7/EMU19/GPIO3_16 9,11
H_VOUT1_CLK R9117 R_VOUT1_CLK/VIN1A_D12/CLKOUT0/VIN2A_CLK0/GPIO2_20 11
H_VOUT1_DE R9118 R_VOUT1_DE/MCASP1_ACLKX/VIN1A_D13/CLKOUT1/GPIO2_21 11
H_VOUT1_FLD R9119 R_VOUT1_FLD/MCASP1_FSX/VIN1A_D14/CLKOUT2/GPIO2_22 8,34
H_VOUT1_HSYNC R9120 R_VOUT1_HSYNC/MCASP1_ACLKR/VIN1A_D15/VIN2A_DE0/GPIO2_23 11
H_VOUT1_VSYNC R9121 R_VOUT1_VSYNC/MCASP1_FSR//VIN1A_D16/VIN2A_FLD0/GPIO2_24 11
H_XREF_CLK0 R9122 R_XREF_CLK0/CLKOUT0/SPI3_CS0/SPI2_CS1/SPI1_CS0/SPI1_CS1/GPIO3_31 8,10
RJ24 0.0A
VPRH_12V0
J1003
SEAF8-20-05.0-S-06-2-K-TR
H_VIN1A_FLD0
H_UART2_RTSN
H_VIN1A_DE0
H_VIN1A_D4
H_VIN1A_D6
H_VIN1A_D7
H_VIN2A_CLK0
H_VIN1A_D8
H_VIN1A_D13
H_VIN2A_DE0
H_VOUT1_D1
H_VOUT1_HSYNC
H_VOUT1_D3
H_VOUT1_D4
H_VOUT1_D11
H_VOUT1_D12
H_VOUT1_D15
H_VOUT1_D14
H_VOUT1_D20
H_UART2_CTSN
H_VIN1A_D0
H_VIN1A_HSYN0
H_VIN1A_VSYN0
H_VIN1A_D1
H_VIN1A_D2
H_VIN1A_CLK0
H_VIN1A_D3
H_UART1_CTSN
H_VIN1A_D10
H_VIN1A_D9
H_VIN1A_D15
H_VIN1A_D5
H_VIN1A_D11
H_VIN1A_D14
H_VIN2A_FLD0
H_VOUT1_DE
H_VOUT1_VSYNC
H_VOUT1_FLD
H_VOUT1_D0
H_VOUT1_CLK
H_VOUT1_D6
H_VOUT1_D2
H_VOUT1_D5
H_VOUT1_D7
H_VOUT1_D8
H_VOUT1_D9
H_VOUT1_D13
H_VOUT1_D10
H_VOUT1_D18
H_MCAN_TX
H_MCAN_RX
H_VOUT1_D23
H_VOUT1_D17
H_VOUT1_D19
H_VOUT1_D16
H_VOUT1_D21
H_VOUT1_D22
VDD_SHV
VPRH_DV
R9319 2.2K
R9318 2.2K
R9317 2.2K
ENET_INTSn 12,18
MHB1_GPIO4_4 12,18
VOUT_INT 34
R_VOUT1_FLD/MCASP1_FSX/VIN1A_D14/CLKOUT2/GPIO2_22 8,34
EXP1_INTn 10
R_XREF_CLK0/CLKOUT0/SPI3_CS0/SPI2_CS1/SPI1_CS0/SPI1_CS1/GPIO3_31 8,10
LP_INTn 13,20
MMB1_GPIO1_18 13,20
VPRH_DV
R9316 10K
R9315 10K
R9314 2.2K
R9313 2.2K
R_I2C1_SCL 8,10,14,20,36,37
R_I2C1_SDA 8,10,14,20,36,37
R_I2C2_SCL 8,37
R_I2C2_SDA 8,37
J28
SEAF8-20-05.0-S-06-2-K-TR
H_SPI1_CS1
H_SPI2_D0
H_I2C1_SCL
H_XREF_CLK0
H_DCAN1_RX
H_GPMC_AD12
H_GPMC_AD9
H_GPMC_AD15
H_GPMC_AD4
H_I2C2_SCL
H_GPMC_AD1
H_GPMC_CS6
H_GPMC_AD13
H_GPMC_AD8
H_GPMC_CS2
H_GPMC_CS4
H_GPMC_WEN
H_GPMC_OEN
H_GPMC_CLK
H_GPMC_ADVN
H_UART2_RXD
H_UART1_TXD
H_RGMII0_TXD2
H_RGMII0_TXCTL
H_RGMII0_RXD3
H_MDIO_D
H_RGMII0_RXD1
H_RGMII0_RXD2
H_SPI1_D0
H_SPI1_CS0
H_SPI1_D1
H_SPI1_SCLK
H_DCAN1_TX
H_SPI2_SCLK
H_SPI2_D1
H_I2C1_SDA
H_SPI2_CS0
H_GPMC_AD14
H_I2C2_SDA
H_GPMC_AD11
H_GPMC_AD7
H_GPMC_AD2
H_GPMC_AD10
H_GPMC_AD5
H_GPMC_AD6
H_GPMC_AD3
H_GPMC_WAIT0
H_GPMC_AD0
H_GPMC_CS5
H_GPMC_CS3
H_GPMC_BEN0
H_GPMC_CS1
H_GPMC_CS0
H_GPMC_BEN1
H_UART1_RTSN
H_UART1_RXD
H_RGMII0_TXC
H_UART2_TXD
H_RGMII0_TXD3
H_RGMII0_TXD1
H_RGMII0_RXC
H_RGMII0_RXCTL
H_RGMII0_TXD0
H_MDIO_MCLK
H_RGMII0_RXD0
H_RGMII0_RXCTL
H_RGMII0_TXD0
VDD_SHV
8,37 R_I2C2_SCL
8,10,14,20,36,37 R_I2C1_SCL
VOUT_I2C_SCL 9,24,25
RJ7 0.0A
8,37 R_I2C2_SDA
8,10,14,20,36,37 R_I2C1_SDA
VOUT_I2C_SDA 9,24,25
RJ8 0.0A
8,10,14,20,36,37 R_I2C1_SCL
8,37 R_I2C2_SCL
VIN_I2C_SCL 9,29,30
RJ5 0.0A
8,10,14,20,36,37 R_I2C1_SDA
8,37 R_I2C2_SDA
VIN_I2C_SDA 9,29,30
RJ6
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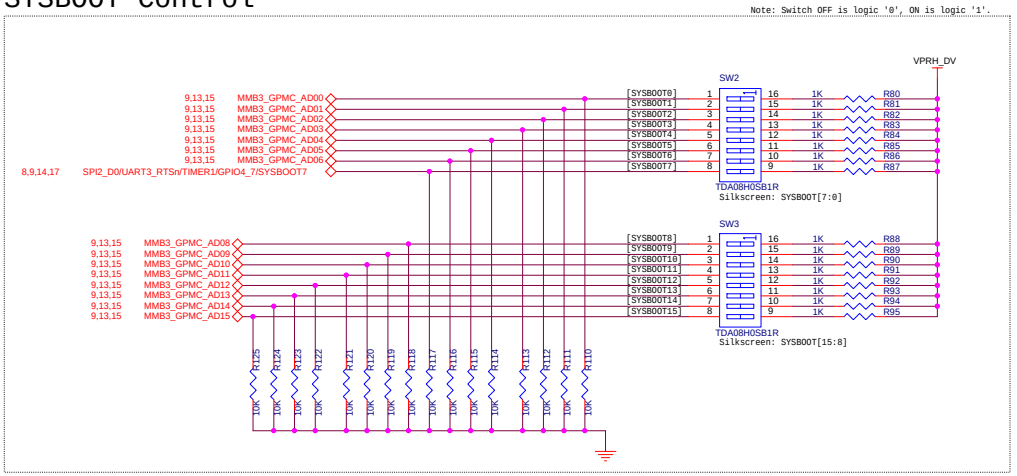
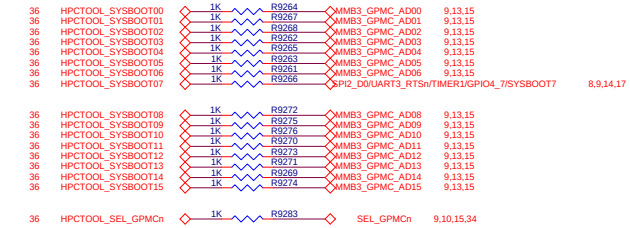
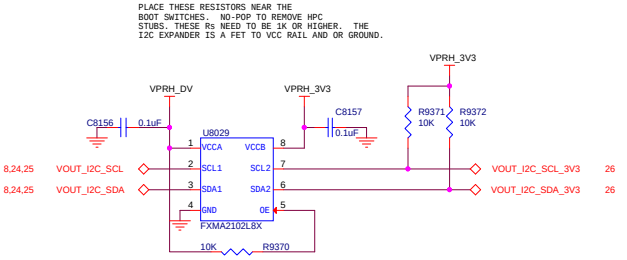
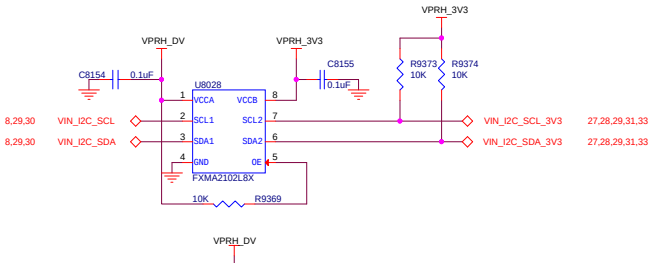
SYSBOOT Control

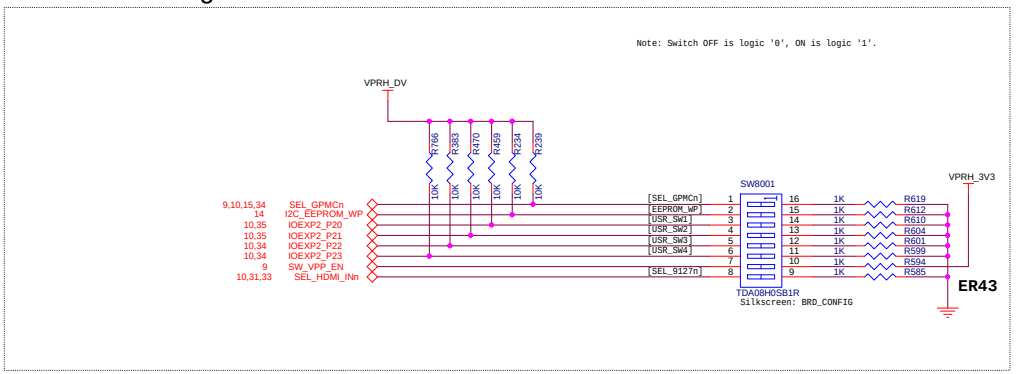


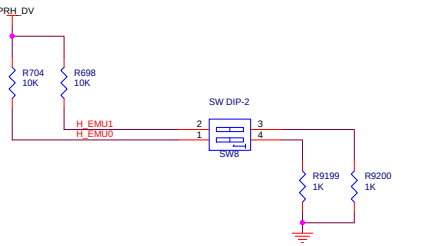




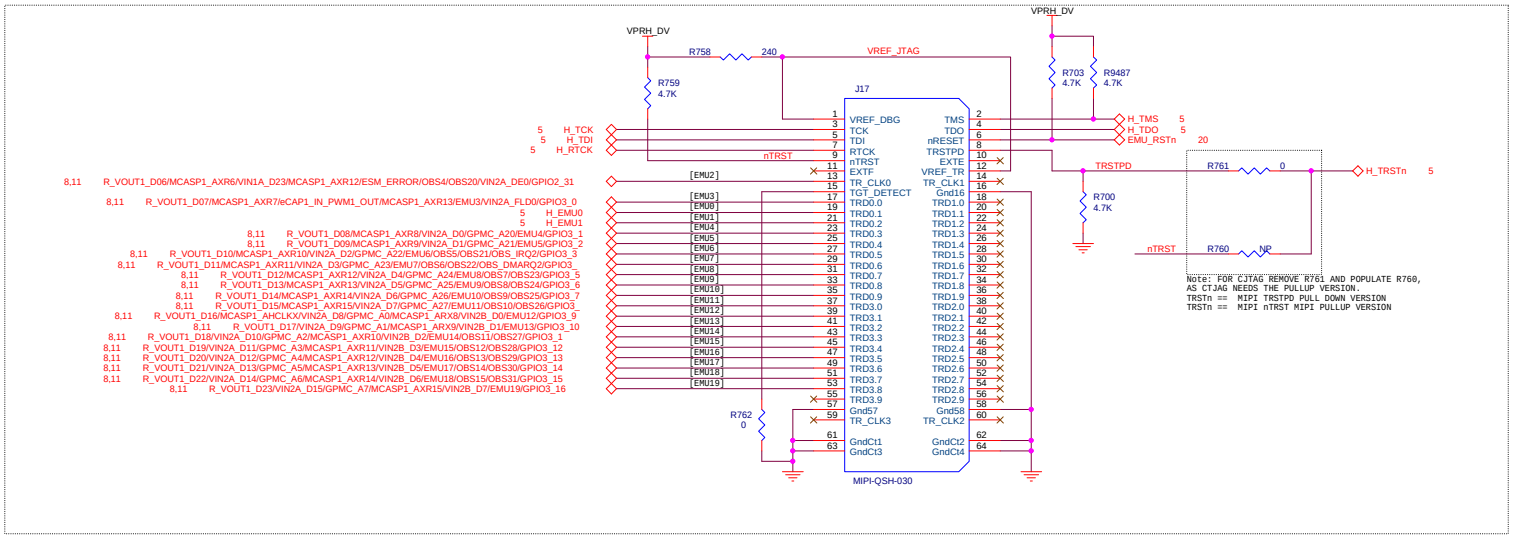


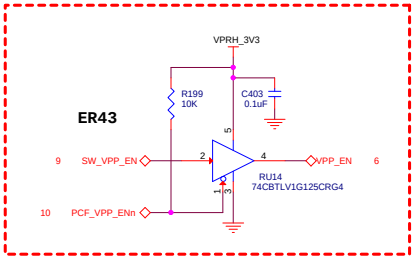
Board Configuration





MIPI-60 JTAG/Emulation Interface





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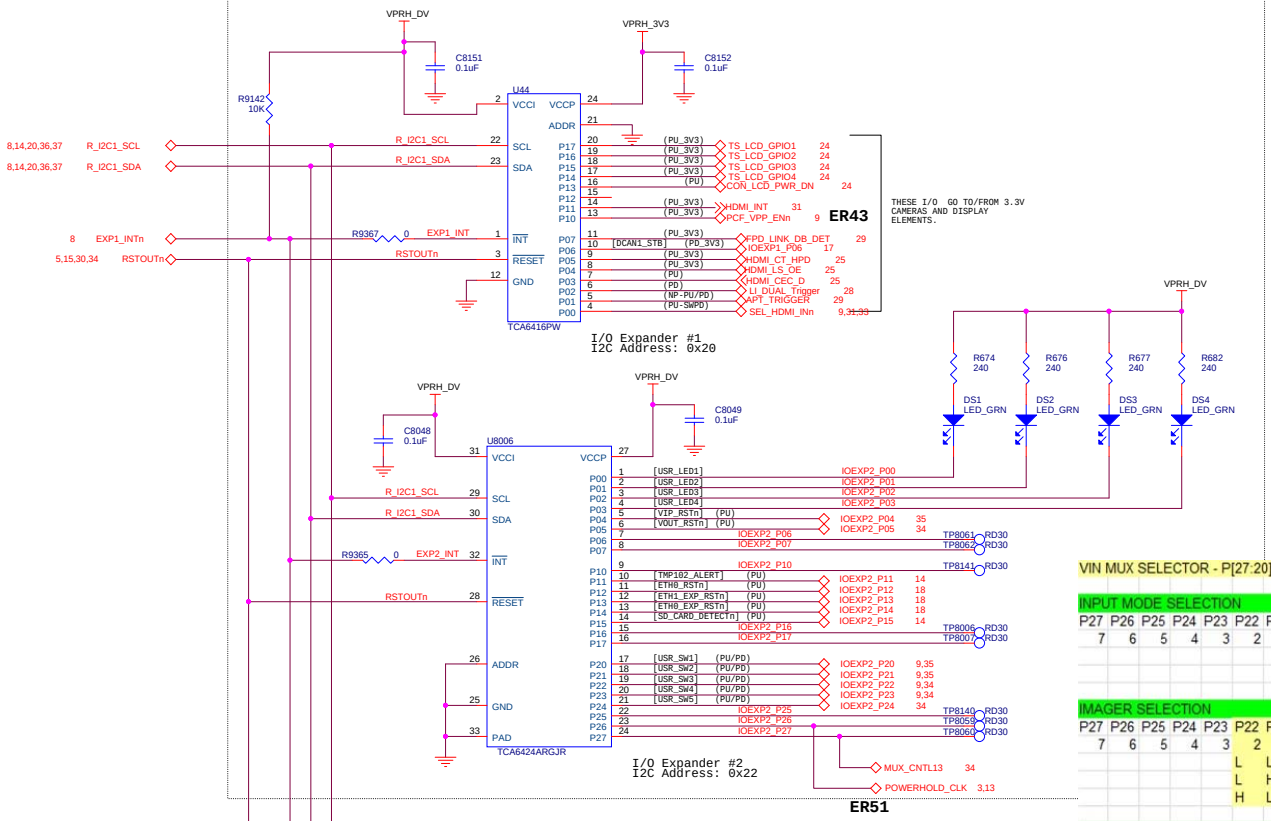
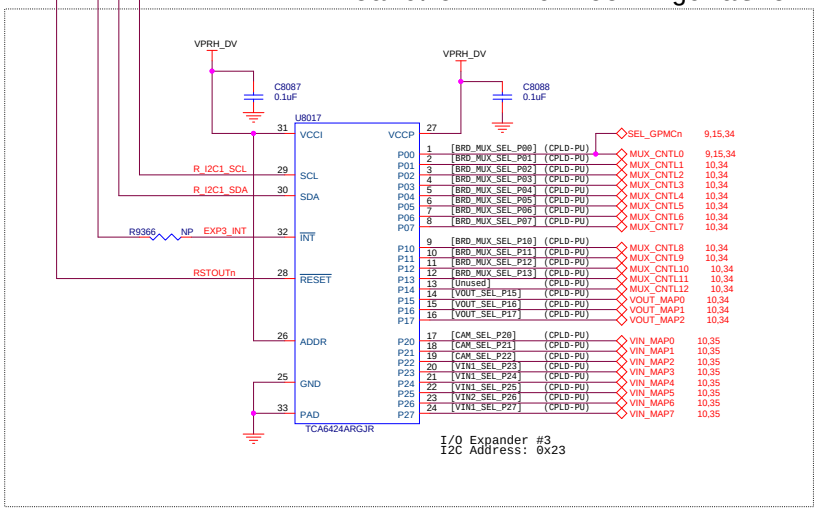
Peripheral I/O Control



Board/CPLD Mux Configuration



VIN MUX SELECTOR - P[27:20]

INPUT MODE SELECTION

P27	P26	P25	P24	P23	P22	P21	P20	
7	6	5	4	3	2	1	0	
							L	Straight
							H	8bit

IMAGER SELECTION

P27	P26	P25	P24	P23	P22	P21	P20		
7	6	5	4	3	2	1	0		
					L	L	H/L		Leopard
					L	H	H/L		Aptina
					H	L	H/L		Omni

VIN1 SELECTION

P27	P26	P25	P24	P23	P22	P21	P20		
7	6	5	4	3	2	1	0		
		L	L	L					Imager
		L	L	H					FPD Link
		L	H	L					HDMI
		L	H	H				H/L	Expansion - Camera1
		H	L	L				H/L	Expansion - Camera2
		H	L	H				H/L	Expansion - Camer2:1
		H	H	L					FPD Radar

VIN2 SELECTION

P27	P26	P25	P24	P23	P22	P21	P20		
7	6	5	4	3	2	1	0		
L	L								Imager
L	H							H/L	Expansion Camera 3
H	L							H/L	Expansion Camera 4
H	H							H/L	Expansion Camera 4:3

VOUT MUX SELECTOR - P[17:15]

VOUT MODE SELECTION

P17	P16	P15	
15	14	13	
L	L	L	FPD LINK
L	L	H	FPD LINK TDM
L	H	L	HDMI
L	H	H	HDMI TDM
H	L	L	HDMI BT656
H	L	H	HDMI BT1120
H	H	L	EXPANDER (Default)
H	H	H	EXPANDER TDM

ADAS MUX SELECTION P0[7:0] P1[13:10]

MUX A

SEL_GPMCn, AFFECTS MULTIPLE MUXES. IF LOW THE BOOT PATH IS SELECTED. IF RSTOUTn LOW FORCES GPMC PATH FOR BOOTING AND RELEASE ON RESETn HIGH.

11	10	9	8	7	6	5	4	3	2	1	0	
												MUX_CNTL[11:0]
								L	H		B1	VOUT1
								H	H		B2	VIN1
								H	L		B3	NA
								L	L		ZZ	Z Needed for emu2-19 isolation (Default)

MUX C

11	10	9	8	7	6	5	4	3	2	1	0	
						L	H			H	B1	VOUT1
						H	H			H	B2	VIN2A
						H	L			L	B3	GPMC/BOOT
						L	L			L	ZZ	Z Needed for emu2-19 isolation (Default)

MUX D/E

11	10	9	8	7	6	5	4	3	2	1	0	
						L				H	B1	VIN1A/2A/2B (Default)
						H				H	B2	CPI
						H				L	B3	GPMC/BOOT
						L				L	B1	

MUX F

11	10	9	8	7	6	5	4	3	2	1	0	
			L	H						B1		EMAC0PHY (Default)
			H	H						B2		EMAC0-EXPANSION
			H	L						B3		MMC1
			L	L						ZZ		

MUX H

11	10	9	8	7	6	5	4	3	2	1	0	
		L								B1		UART3 (Default)
		H								B2		SPI1

MUX J

11	10	9	8	7	6	5	4	3	2	1	0	
		L							H	B1		DCAN2/VIN2A/QSPI (Default)
		H							H	B2		UART1/SPI4
		H							L	B3		GPMC/BOOT
		L							L	B1		

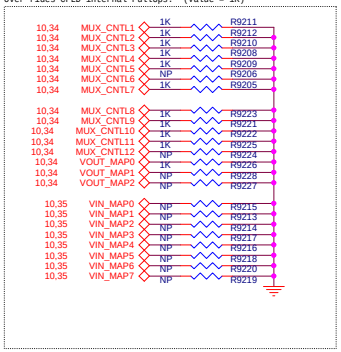
MUX K

11	10	9	8	7	6	5	4	3	2	1	0	
	L									B1		UART1 (Default)
	H									B2		SPI4

MUX M

11	10	9	8	7	6	5	4	3	2	1	0	
L									H	B1		EMAC1/GPIO/SPI3 (Default)
H									H	B1		NA
H									L	B3		GPMC/BOOT
L									L	B1		

Note: Mux selection population options for default select. Over-rides CPLD internal Pullups. (Value = 1K)



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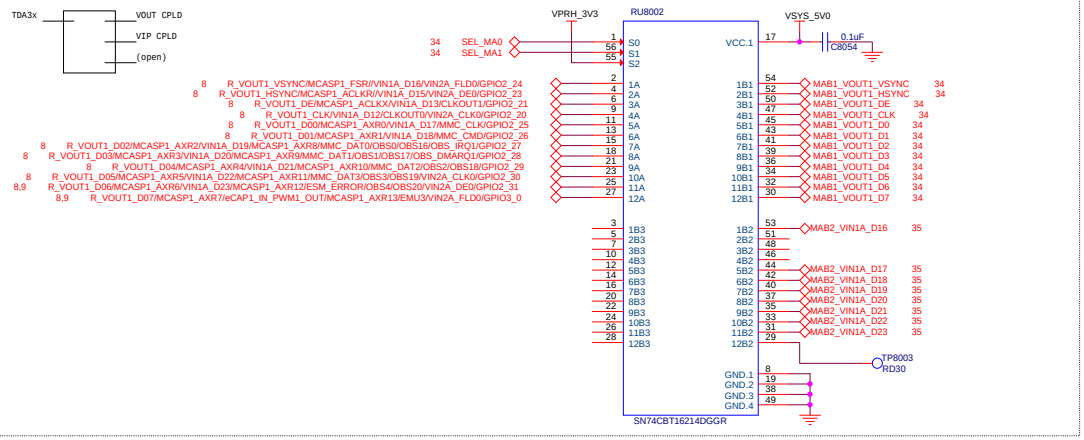
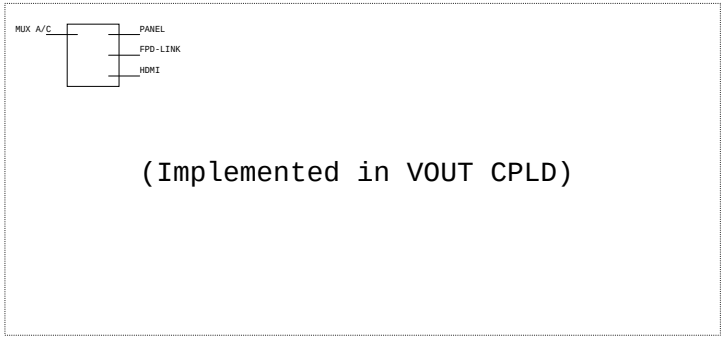
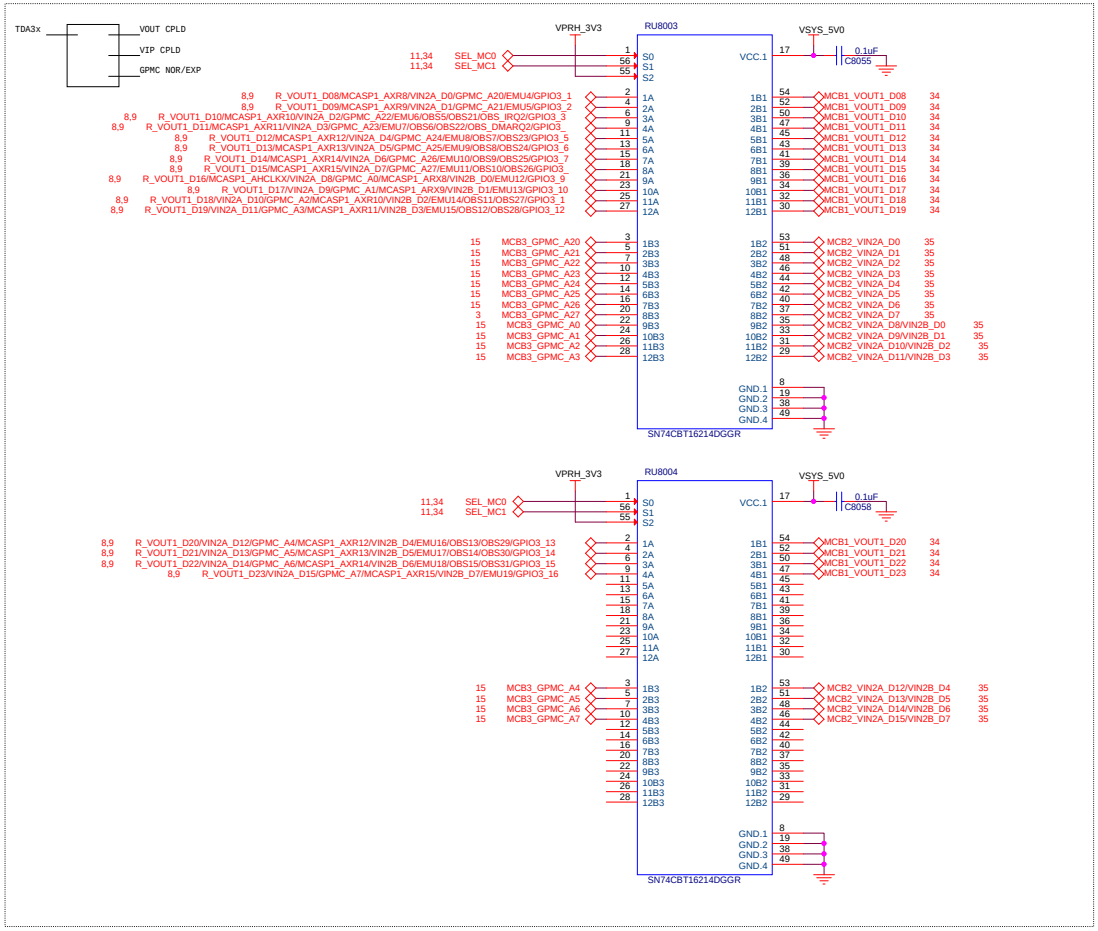
Board Mux A



Board Mux B



Board Mux C



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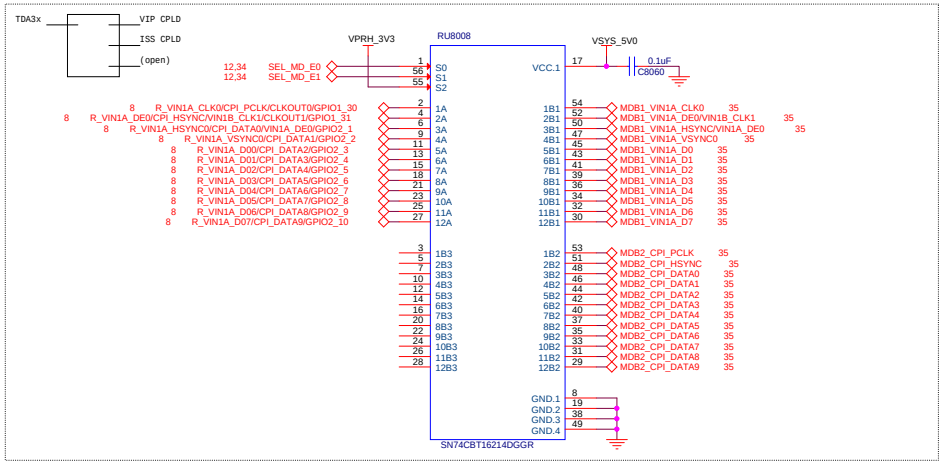
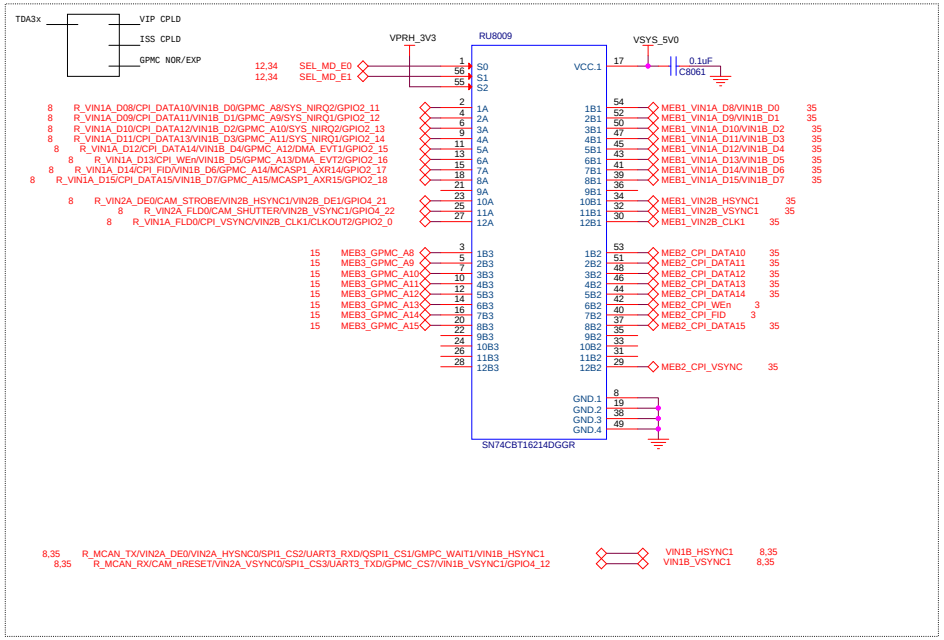
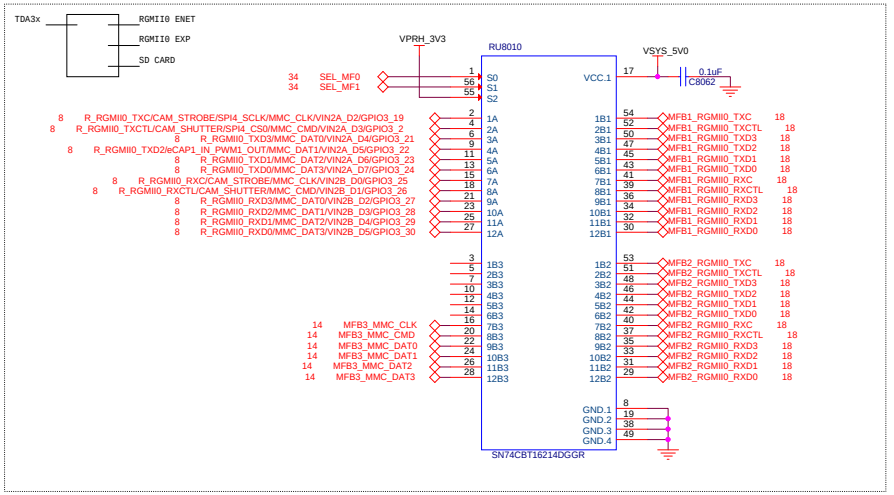
Board Mux D



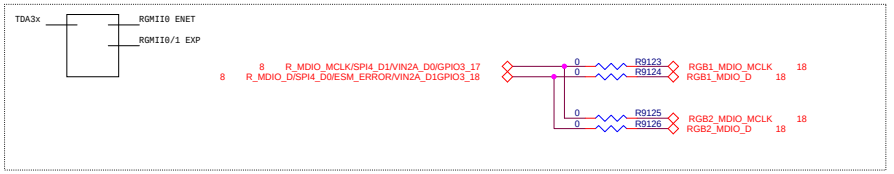
Board Mux E



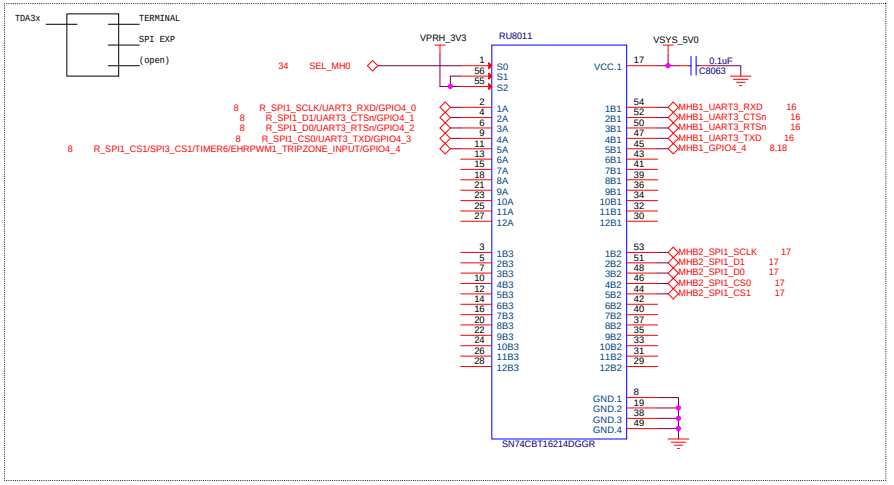
Board Mux F



Board Mux G



Board Mux H



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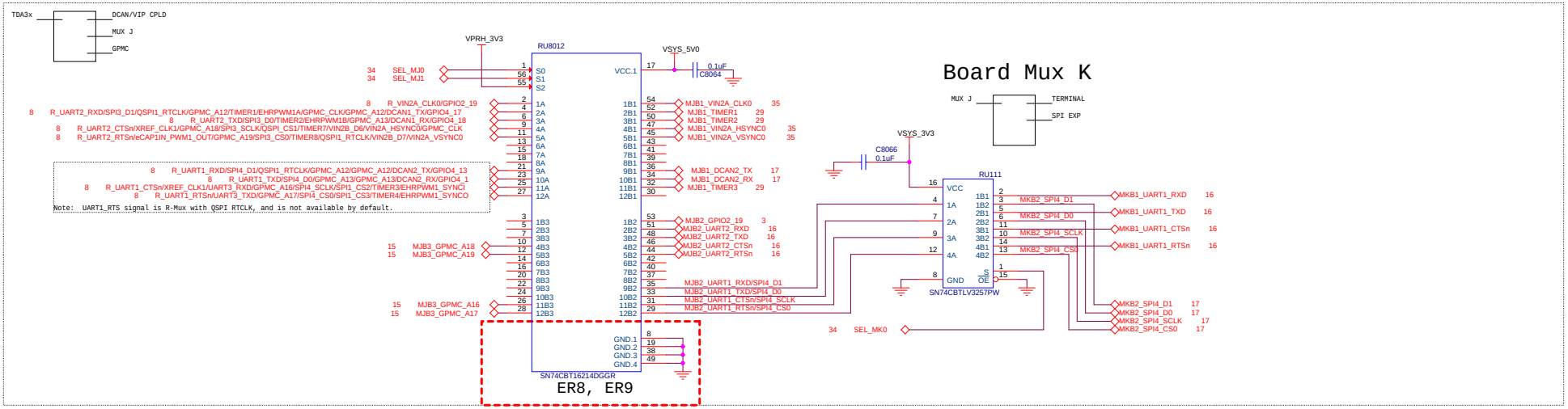
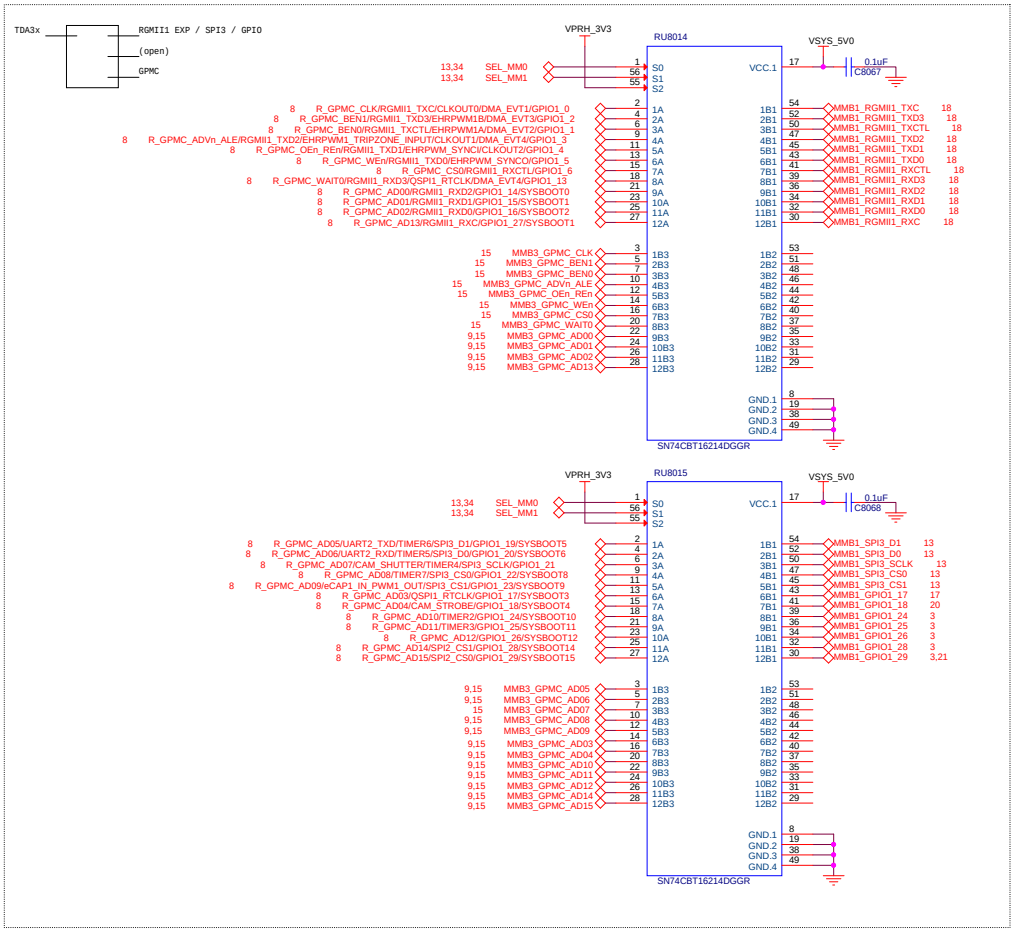
Board Mux J

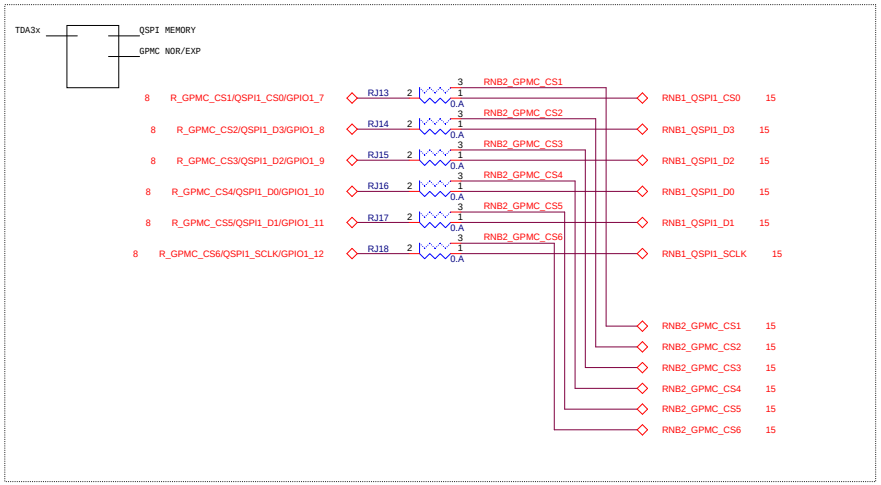


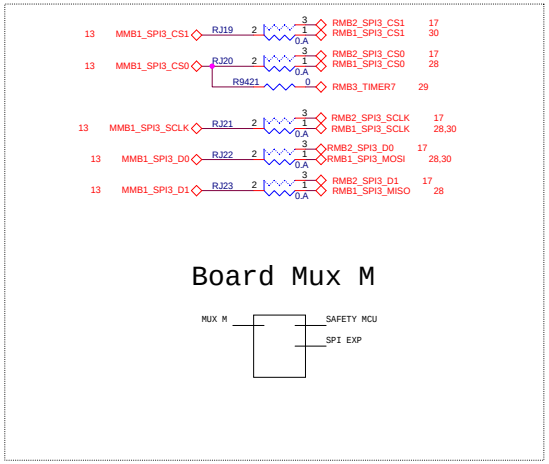
Board Mux K

Board Mux M



Board Mux N





Board Mux M

TEXAS INSTRUMENTS INCORPORATED

Title:	TDA3x/DRA78x/DM50x - 15X15 EVM		
Page Contents:	MUX H/J/K/M/N		
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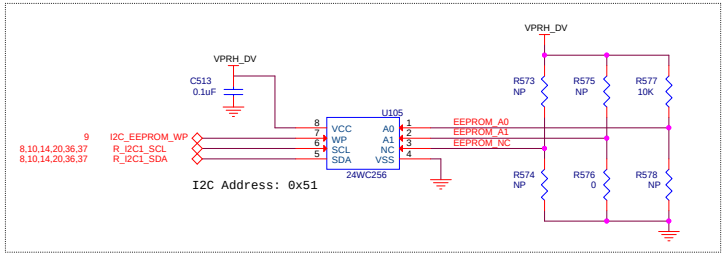
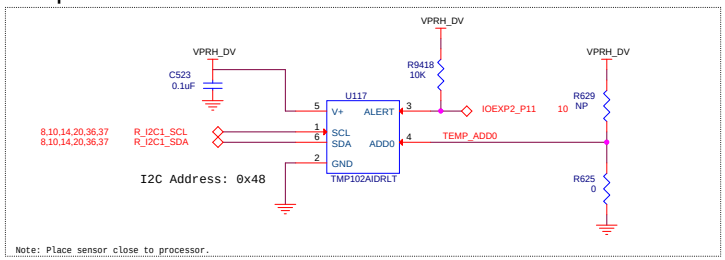
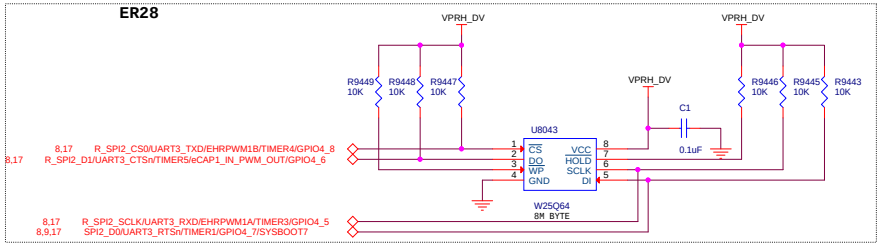
Board EEPROM



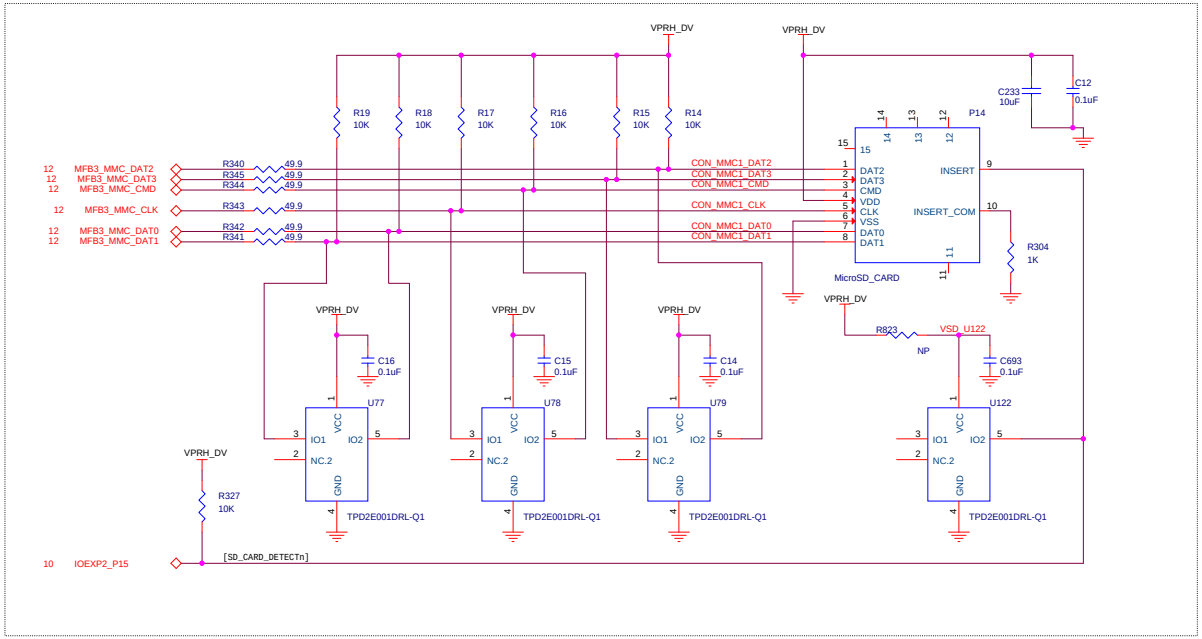
Temperature Sensor



SPI MEMORY 8M BYTE

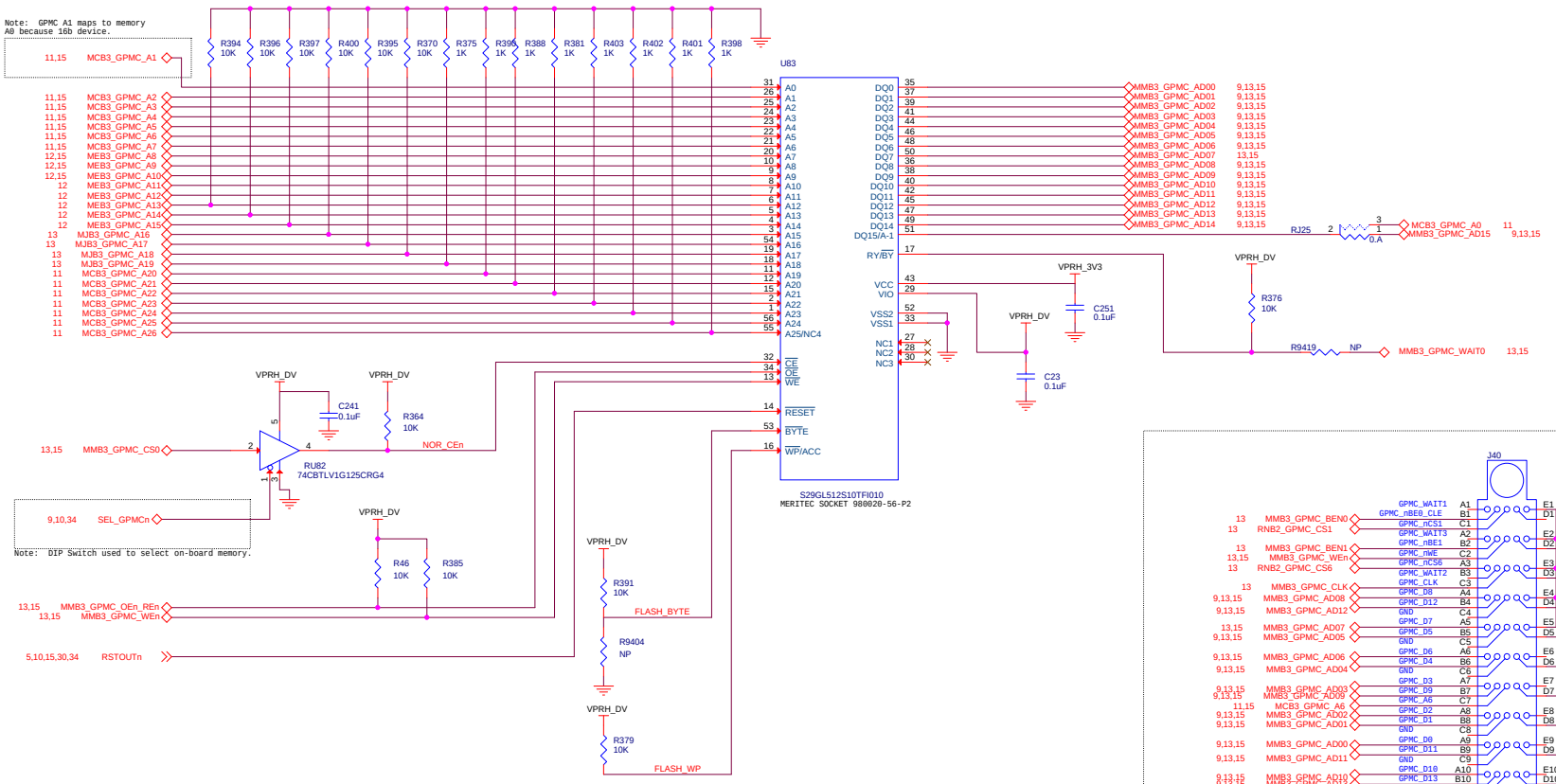


SD CARD

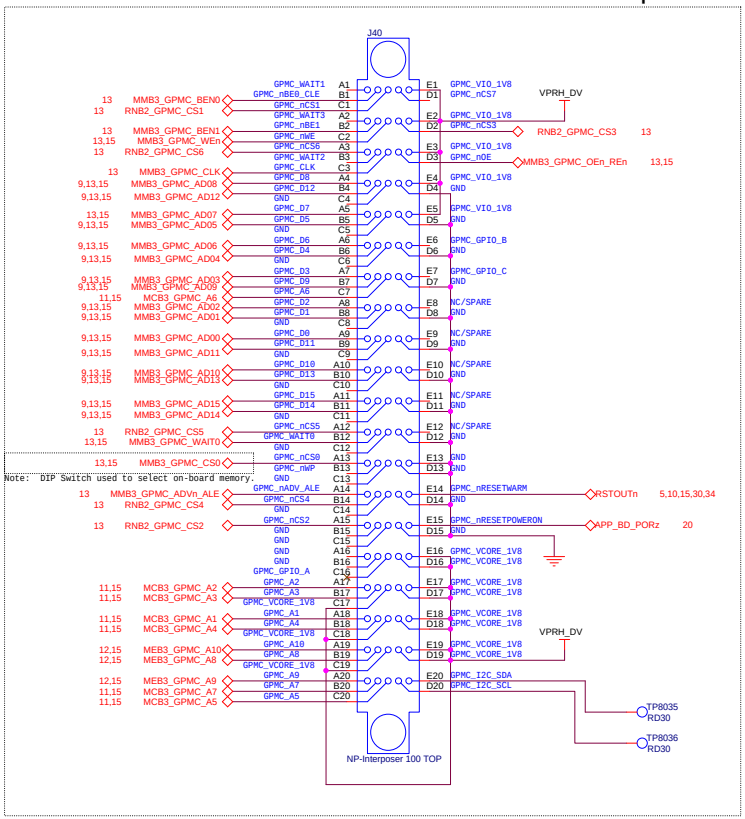


TEXAS INSTRUMENTS INCORPORATED

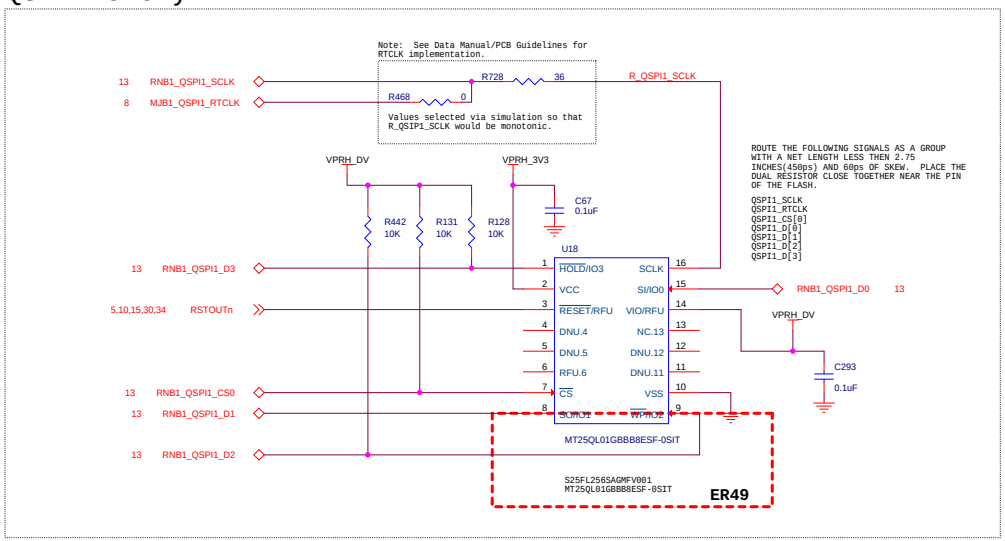
Title: TDA3x/DRA78x/DM50x - 15X15 EVM		
Page Contents: SD CARD/EEPROM/TMP		
Size: C	DOC NO: 517542	REV: D
Date: Wednesday, May 03, 2017	Sheet 14 of 37	



GPMC Expansion



QSPI Memory



TEXAS INSTRUMENTS INCORPORATED

Title: TDA3x/DRA78x/DM50x - 15X15 EVM			
Page Contents: MEM NONVOLATILE			
Size: C	DOC NO: 517542		REV: D
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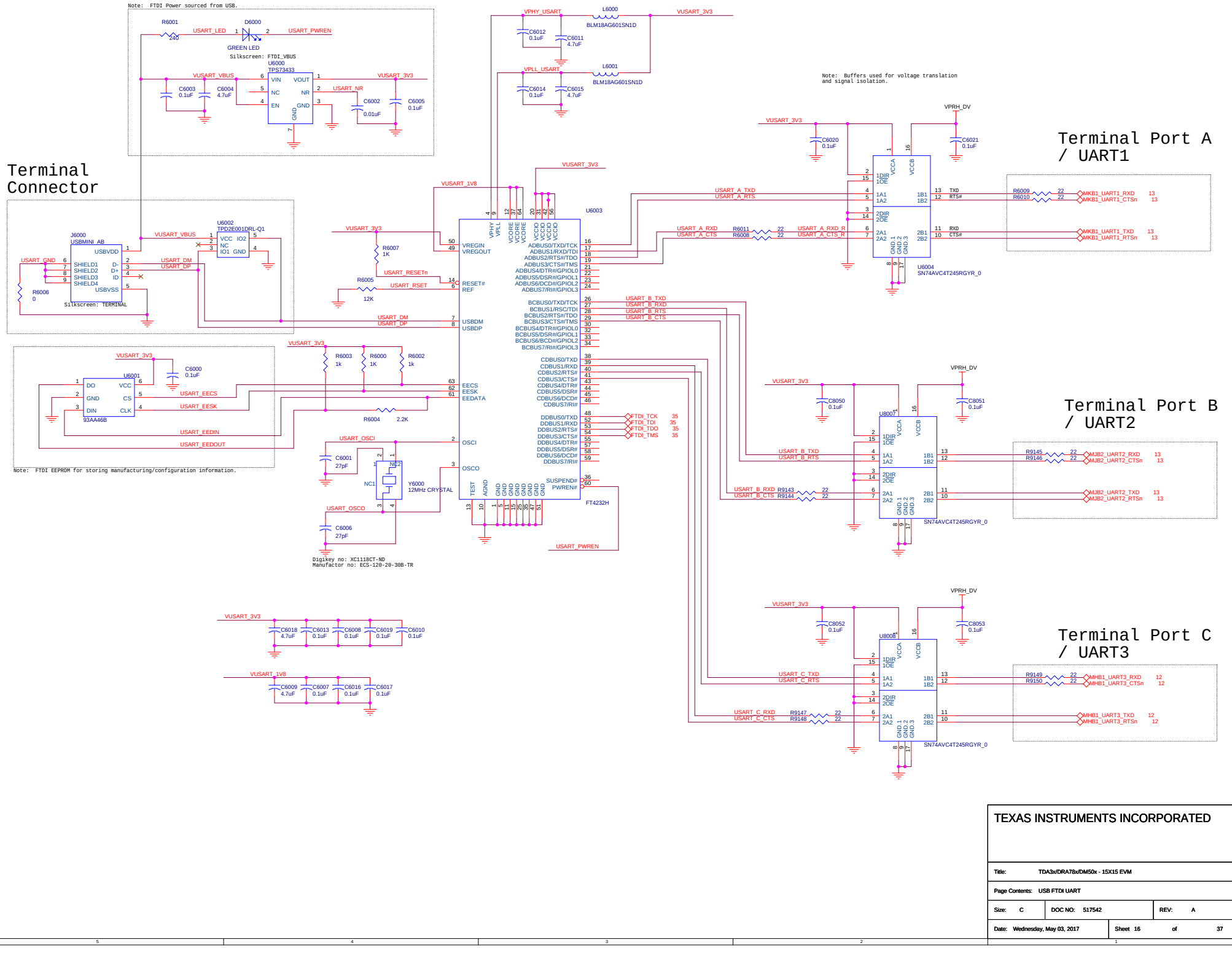
Terminal Connector
Terminal Port A / UART1
Terminal Port B / UART2
Terminal Port C / UART3
Note: FTDI Power sourced from USB.
Note: Buffers used for voltage translation and signal isolation.
Note: FTDI EEPROM for storing manufacturing/configuration information.
Digikey no: XC1118CT-ND
Manufactor no: ECS-120-20-30B-TR
TEXAS INSTRUMENTS INCORPORATED
Title: TDA3x/DRA78x/DM50x - 15X15 EVM
Page Contents: USB FTDI UART
Size: C
DOC NO: 517542
REV: A
Date: Wednesday, May 03, 2017
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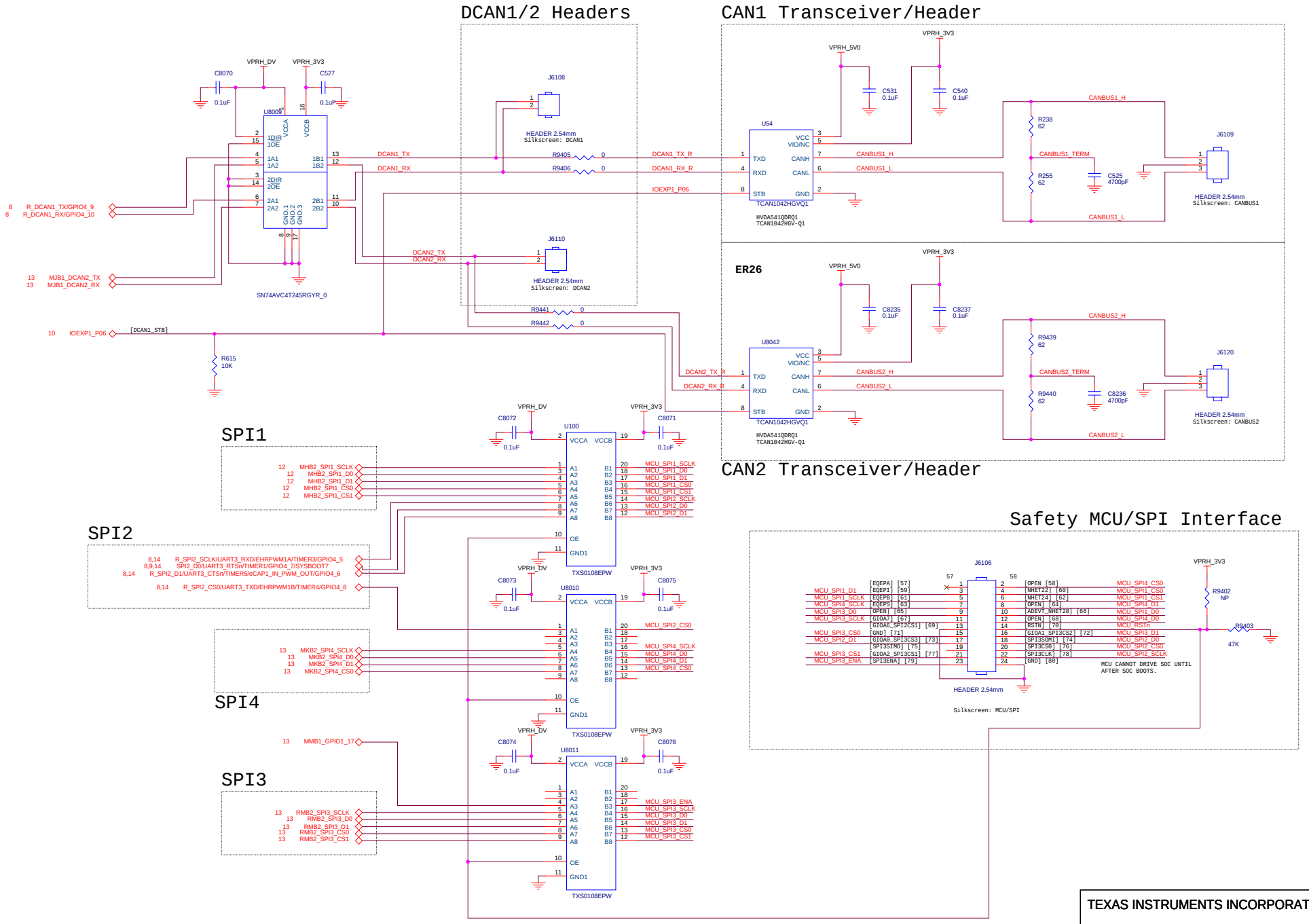
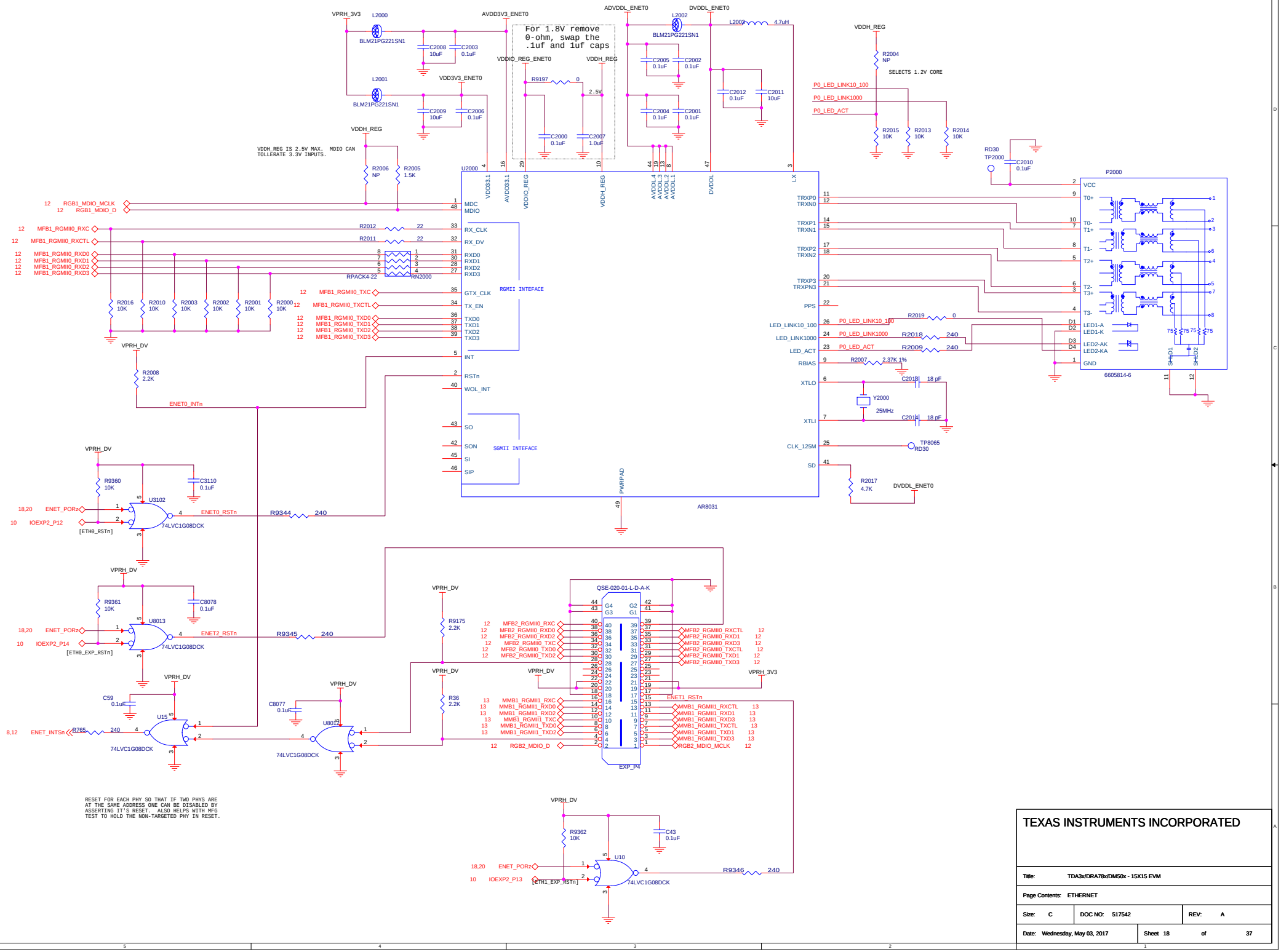
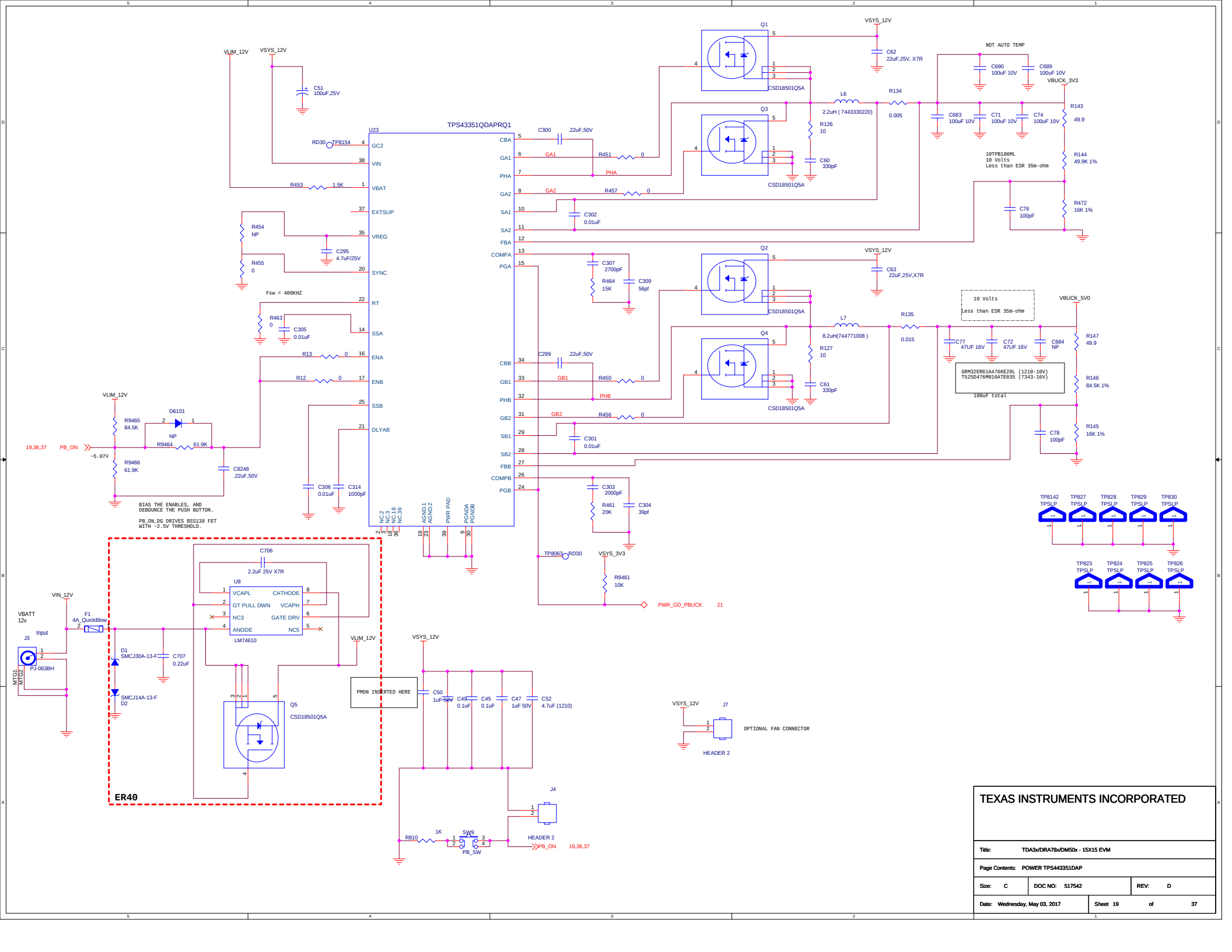


TEXAS INSTRUMENTS INCORPORATED

Title:	TDA3x/DRA78x/DM50x - 15X15 EVM		
Page Contents:	CAN/SAFETY MCU		
Size: C	DOC NO: 517542	REV: D	
Date: Wednesday, May 03, 2017	Sheet 17 of 37		

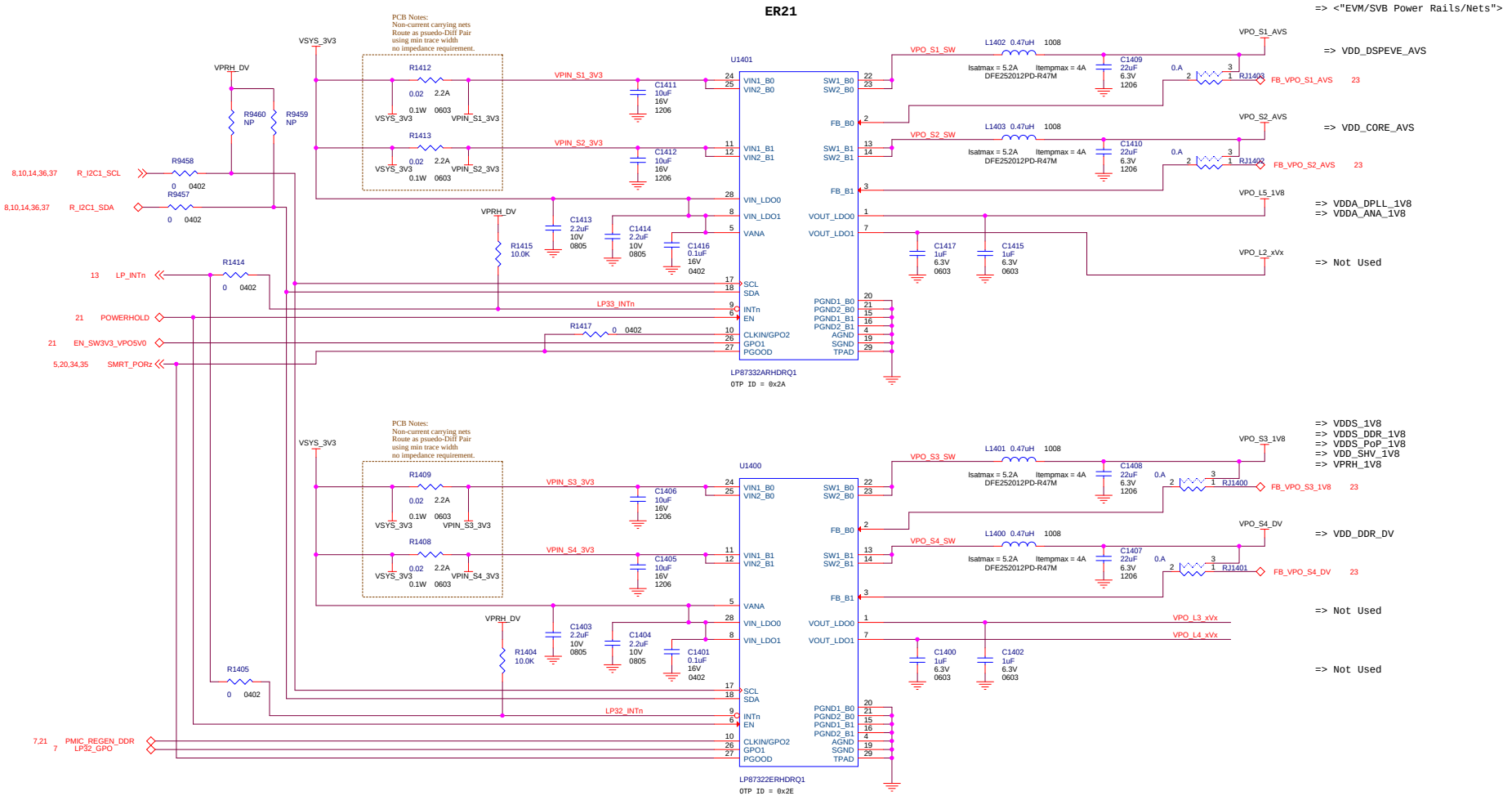

For 1.8V remove 0-ohm, swap the .1uf and 1uf caps
VDDH_REG IS 2.5V MAX. MDIO CAN TOLLERATE 3.3V INPUTS.
U2000
AR8031
RGMII INTEFACE
SGMII INTEFACE
PWRPAD
P2000
6605814-6
QSE-020-01-L-D-A-K
EXP_P4
RESET FOR EACH PHY SO THAT IF TWO PHYS ARE AT THE SAME ADDRESS ONE CAN BE DISABLED BY ASSERTING IT'S RESET. ALSO HELPS WITH MFG TEST TO HOLD THE NON-TARGETED PHY IN RESET.
TEXAS INSTRUMENTS INCORPORATED
Title: TDA3x/DRA78x/DM50x - 15X15 EVM
Page Contents: ETHERNET
Size: C
DOC NO: 517542
REV: A
Date: Wednesday, May 03, 2017
Sheet 18 of 37

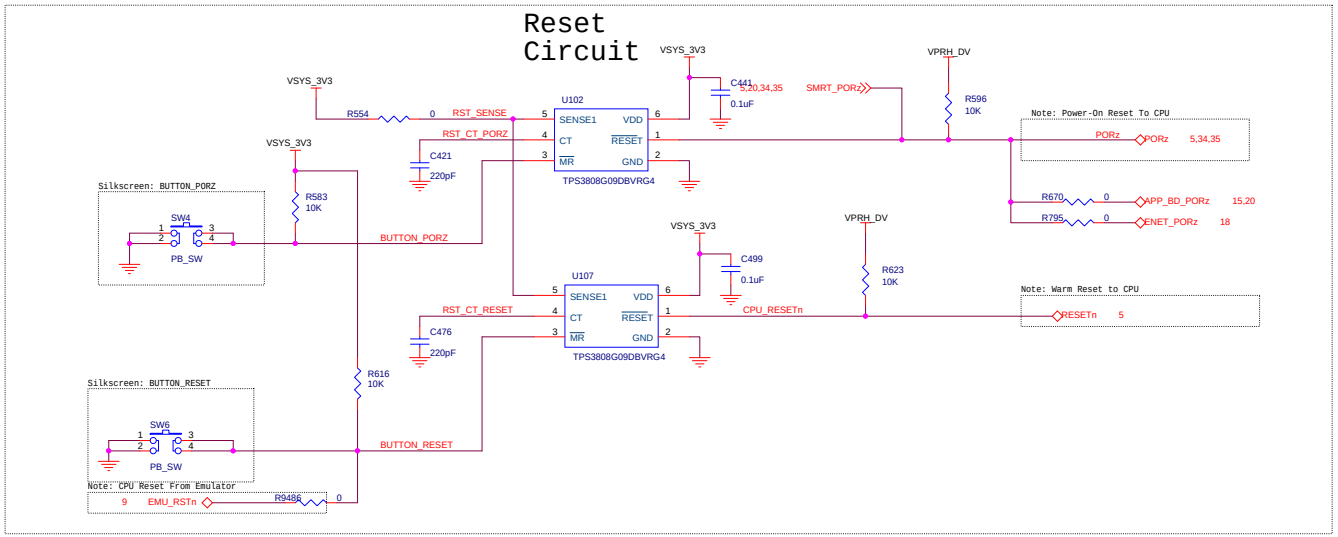


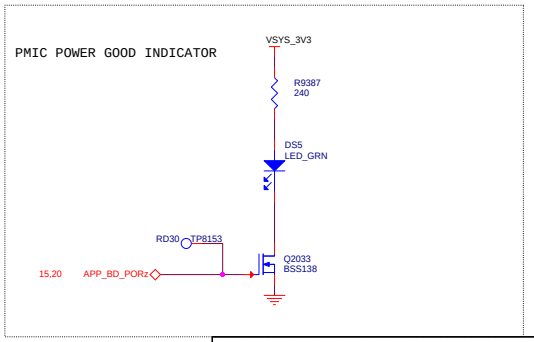
TEXAS INSTRUMENTS INCORPORATED

Title: TDA3x/DRA78x/DM50x - 15X15 EVM		
Page Contents: POWER TPS443351DAP		
Size: C	DOC NO: 517542	REV: D
Date: Wednesday, May 03, 2017	Sheet 19 of 37	

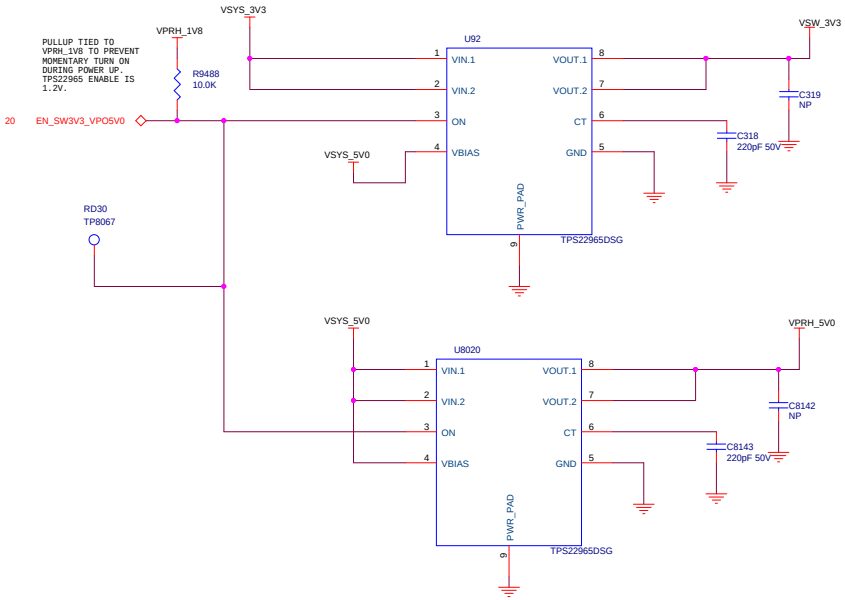
ER21

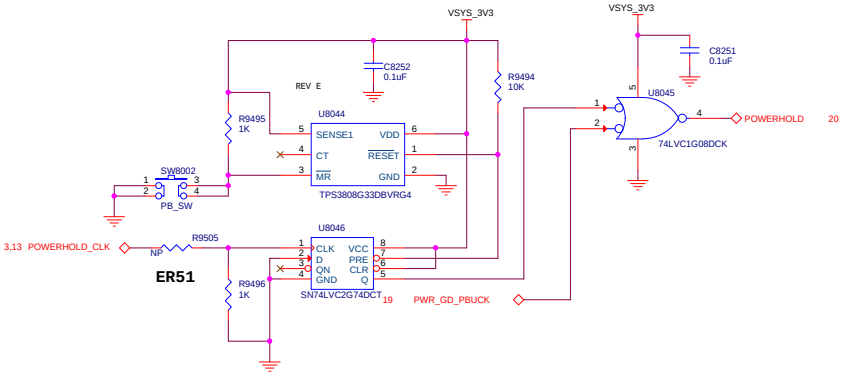


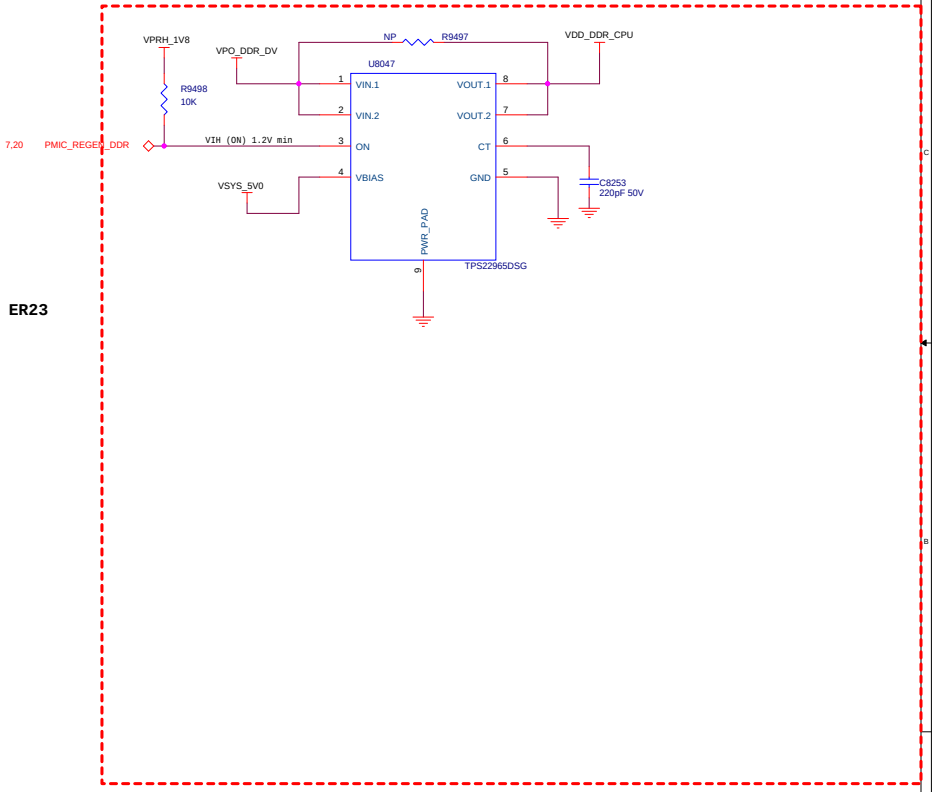




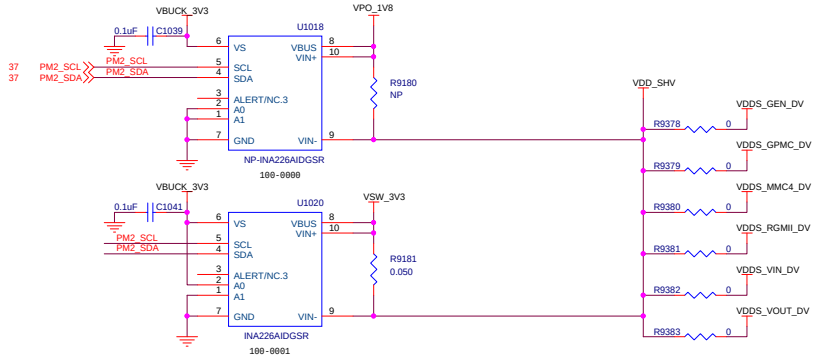
TEXAS INSTRUMENTS INCORPORATED			
Title: TDA3x/DRA78x/DM50x - 15X15 EVM			
Page Contents: POWER PMIC			
Size: C	DOC NO: 517542		REV: D
Date: Wednesday, May 03, 2017		Sheet 20 of 37	

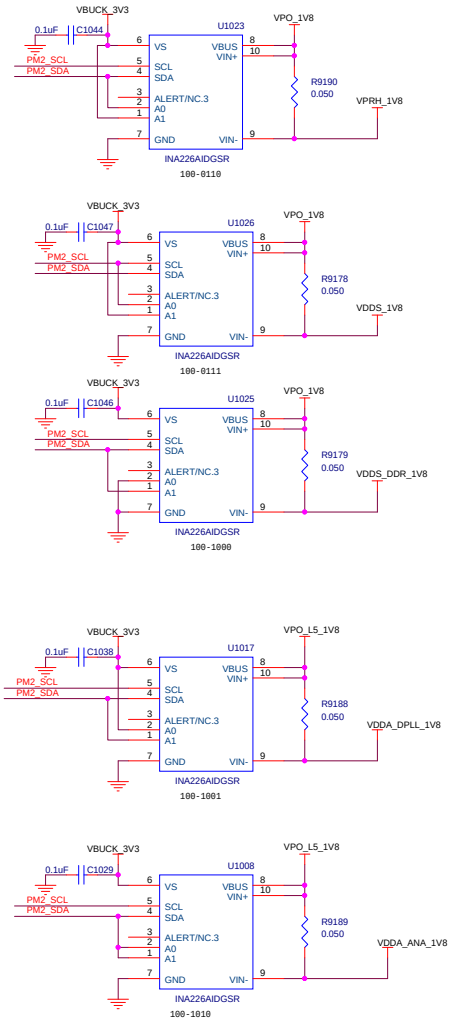




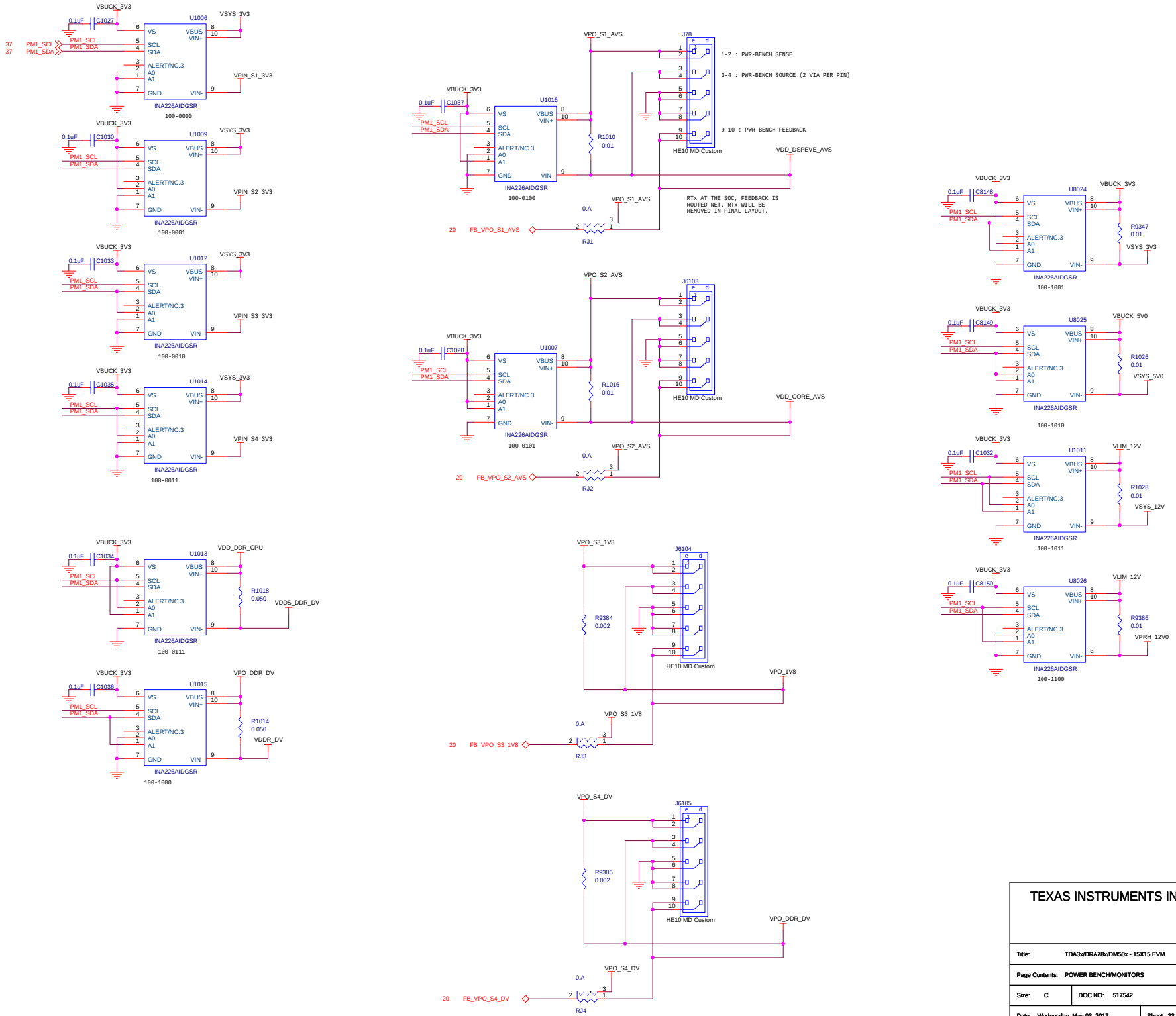


TEXAS INSTRUMENTS INCORPORATED		
Title: TDA3x/DRA78x/DM50x - 15X15 EVM		
Page Contents: MISC POWER SWITCHES		
Size: C	DOC NO: 517542	REV: E
Date: Wednesday, May 03, 2017	Sheet 21 of 37	

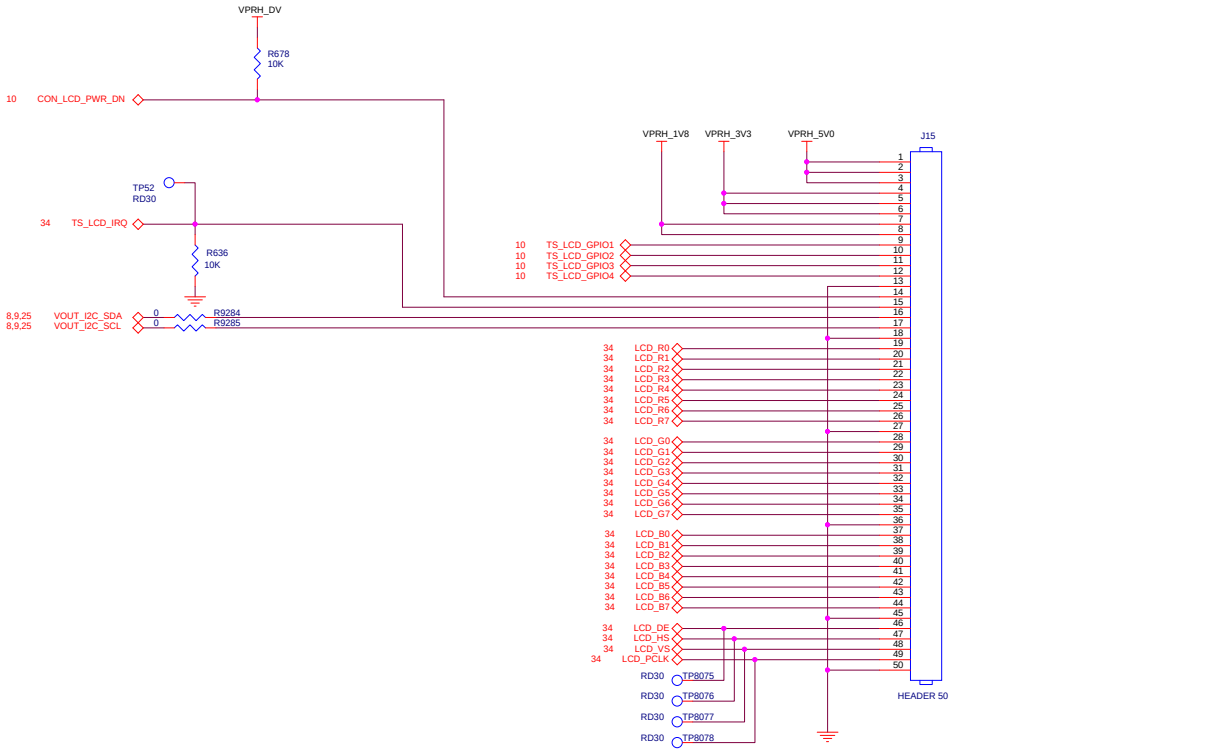


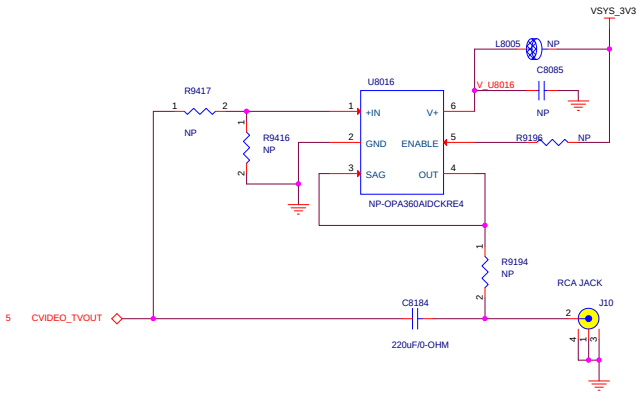


TEXAS INSTRUMENTS INCORPORATED		
Title: TDA3x/DRA78x/DM50x - 15X15 EVM		
Page Contents: POWER MONITORS		
Size: C	DOC NO: 517542	REV: B
Date: Wednesday, May 03, 2017	Sheet 22 of 37	

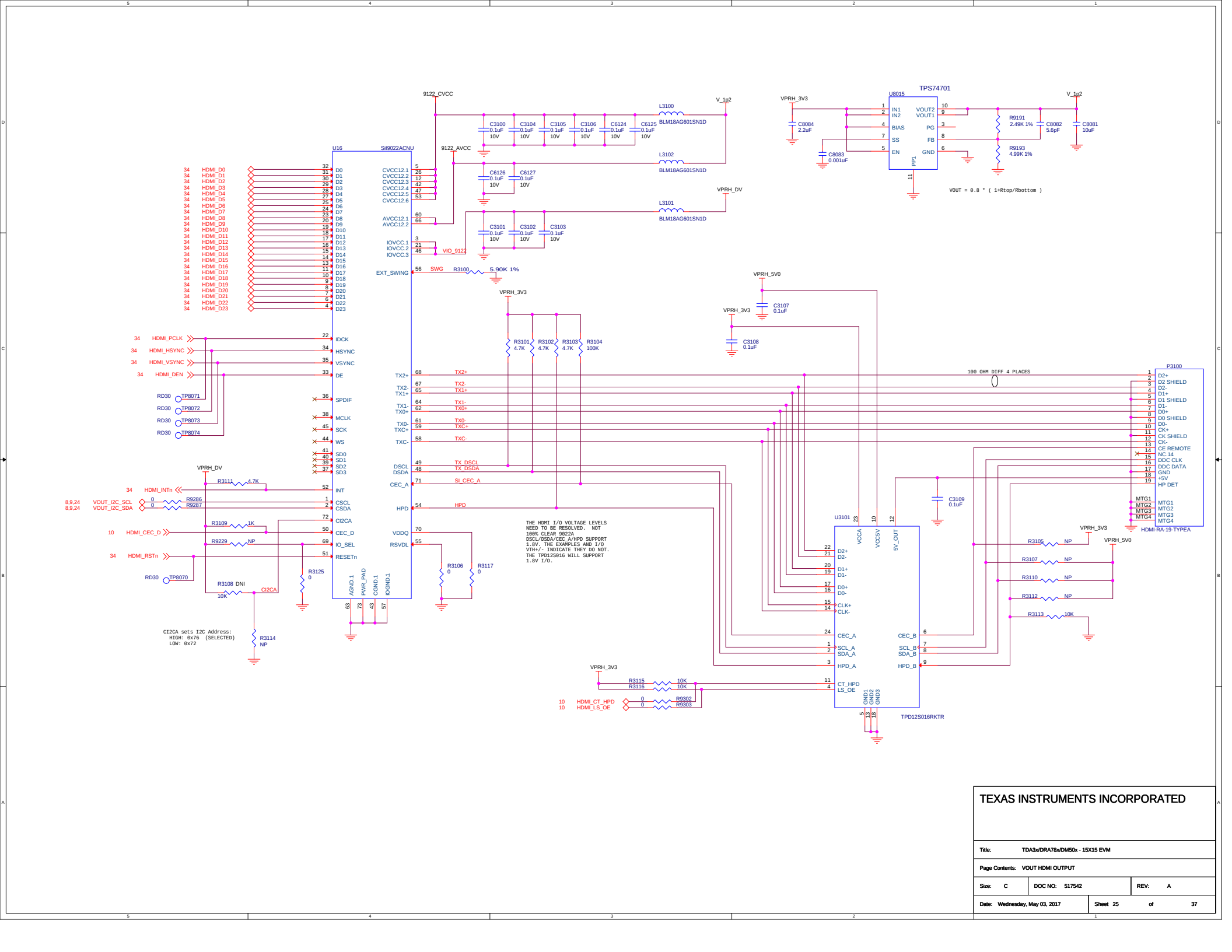


TEXAS INSTRUMENTS INCORPORATED			
Title:	TDA3x/DRA78x/DM50x - 15X15 EVM		
Page Contents:	POWER BENCH/MONITORS		
Size: C	**DOC NO:** 517542		**REV:** A
Date: Wednesday, May 03, 2017		**Sheet** 23 of 37	



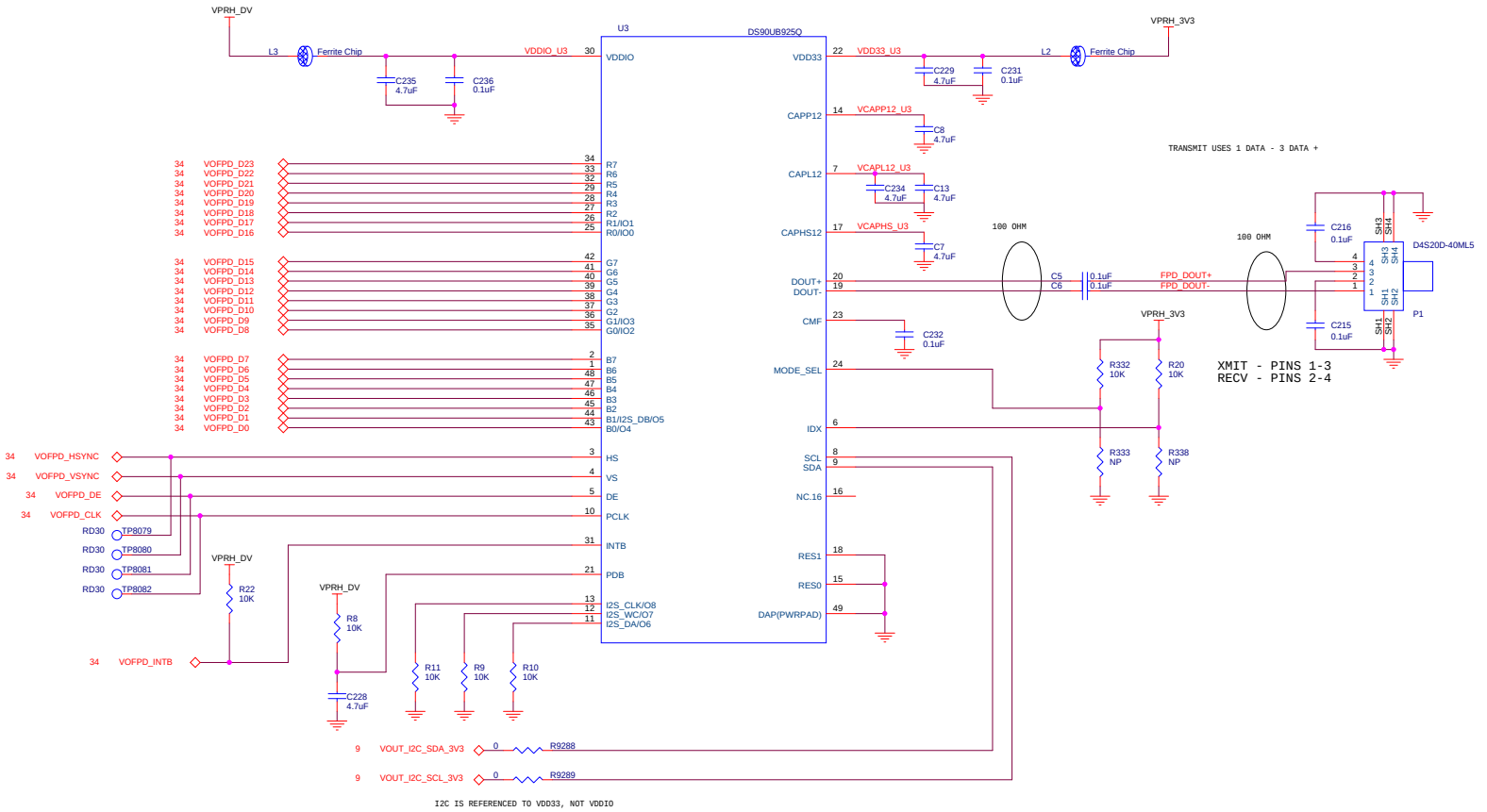


TEXAS INSTRUMENTS INCORPORATED			
Title:	TDA3x/DRA78x/DM50x - 15X15 EVM		
Page Contents:	VOUT LCD CONNECTOR		
Size: C	DOC NO: 517542	REV: A	
Date: Wednesday, May 03, 2017	Sheet 24 of 37		



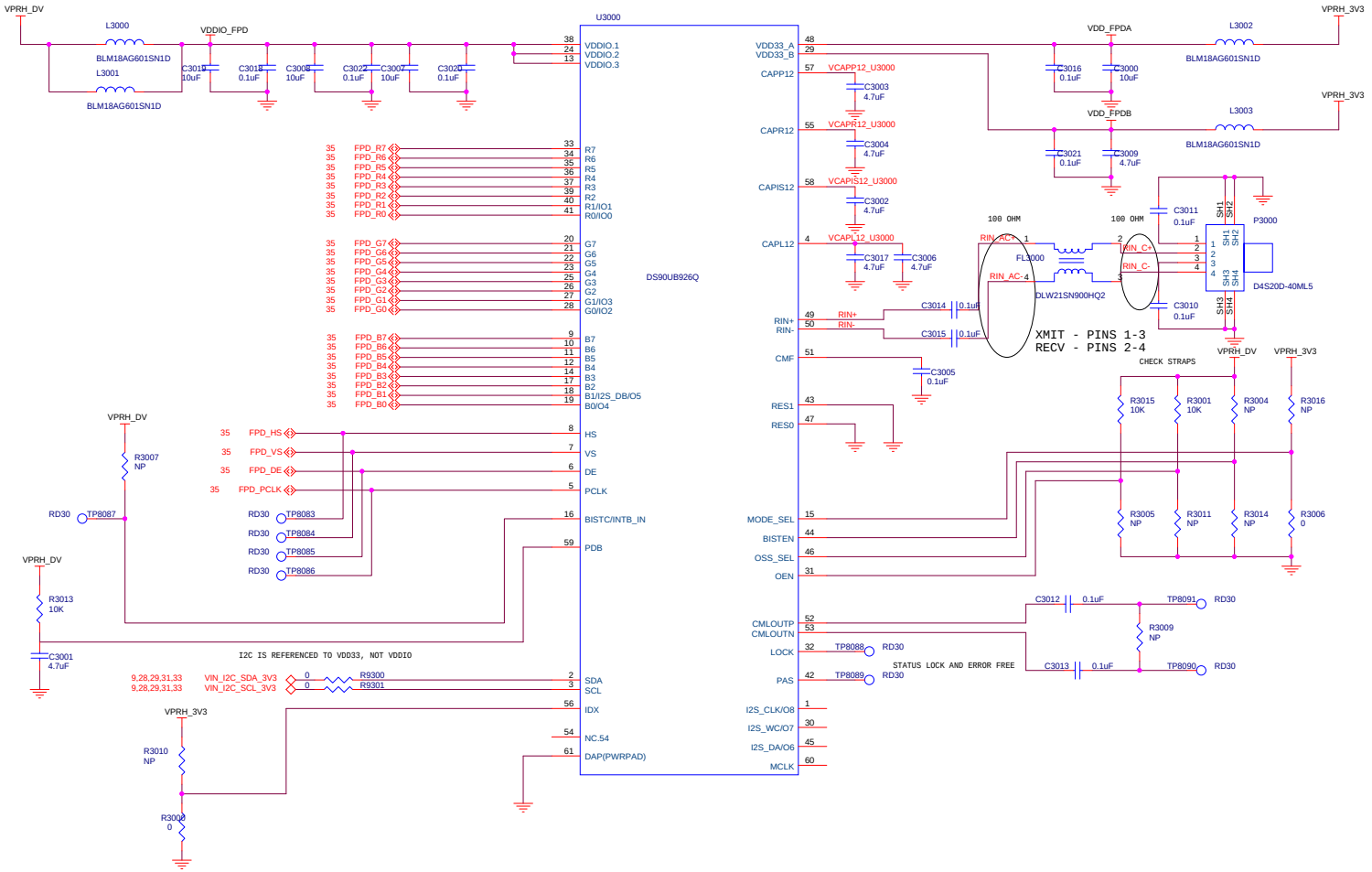
TEXAS INSTRUMENTS INCORPORATED

Title: TDA3x/DRA78x/DM50x - 15X15 EVM		
Page Contents: VOUT HDMI OUTPUT		
Size: C	DOC NO: 517542	REV: A
Date: Wednesday, May 03, 2017	Sheet 25 of 37	

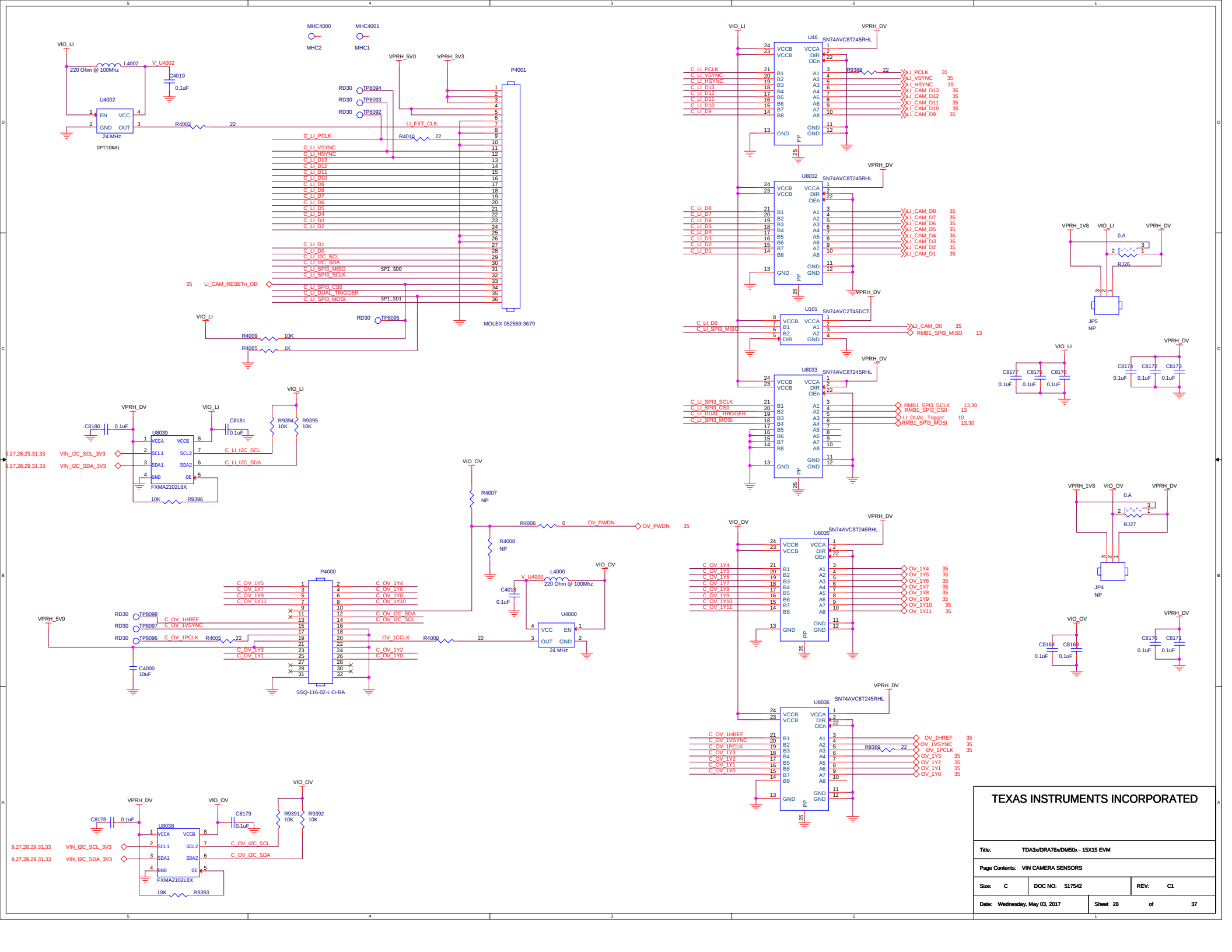


TEXAS INSTRUMENTS INCORPORATED

Title:	TDA3x/DRA78x/DM50x - 15X15 EVM		
Page Contents:	VOUT FPD LINK		
Size: C	DOC NO: 517542	REV: A	
Date: Wednesday, May 03, 2017	Sheet 26 of 37		



TEXAS INSTRUMENTS INCORPORATED			
Title: TDA3x/DRA78x/DM50x - 15X15 EVM			
Page Contents: VIN DS90UH926Q			
Size: C	DOC NO: 517542		REV: A
Date: Wednesday, May 03, 2017		Sheet 27 of	37


MHC4000
MHC2
MHC4001
MHC1
VIO_LI
L4002
220 Ohm @ 100Mhz
V_U4002
C4019
0.1uF
U4002
EN
VCC
GND
OUT
24 MHz
OPTIONAL
R4003
22
VPRH_5V0
VPRH_3V3
P4001
RD30
TP8094
TP8093
TP8092
LI_EXT_CLK
R4010
C_LI_PCLK
C_LI_VSYNC
C_LI_HSYNC
C_LI_D13
C_LI_D12
C_LI_D11
C_LI_D10
C_LI_D9
C_LI_D8
C_LI_D7
C_LI_D6
C_LI_D5
C_LI_D4
C_LI_D3
C_LI_D2
C_LI_D1
C_LI_D0
C_LI_I2C_SCL
C_LI_I2C_SDA
C_LI_SPI3_MISO
C_LI_SPI3_SCLK
SPI_SD0
LI_CAM_RESETn_OD
C_LI_SPI3_CS0
C_LI_DUAL_TRIGGER
C_LI_SPI3_MOSI
SPI_SD1
TP8095
R4009
10K
R4065
1K
MOLEX 052559-3679
U46
SN74AVC8T245RHL
VCCB
VCCA
DIR
OEn
B1
B2
B3
B4
B5
B6
B7
B8
A1
A2
A3
A4
A5
A6
A7
A8
GND
PP
R9388
22
LI_PCLK
LI_VSYNC
LI_HSYNC
LI_CAM_D13
LI_CAM_D12
LI_CAM_D11
LI_CAM_D10
LI_CAM_D9
U8032
LI_CAM_D8
LI_CAM_D7
LI_CAM_D6
LI_CAM_D5
LI_CAM_D4
LI_CAM_D3
LI_CAM_D2
LI_CAM_D1
U101
SN74AVC2T45DCT
DIR
LI_CAM_D0
RMB1_SPI3_MISO
U8033
RMB1_SPI3_SCLK
RMB1_SPI3_CS0
LI_DUAL_Trigger
RMB1_SPI3_MOSI
VPRH_1V8
0.A
RJ26
JP5
NP
C8177
C8175
C8176
C8174
C8172
C8173
C8180
C8181
U8039
VCCA
VCCB
SCL1
SCL2
SDA1
SDA2
GND
OE
FXMA2102L8X
R9394
R9395
9,27,28,29,31,33
VIN_I2C_SCL_3V3
VIN_I2C_SDA_3V3
R9396
VIO_OV
R4007
NP
R4006
0
OV_PWDN
R4008
C4018
L4000
V_U4000
U4000
24 MHz
P4000
SSQ-116-02-L-D-RA
C_OV_1Y5
C_OV_1Y7
C_OV_1Y9
C_OV_1Y11
C_OV_1Y4
C_OV_1Y6
C_OV_1Y8
C_OV_1Y10
C_OV_I2C_SDA
C_OV_I2C_SCL
C_OV_1HREF
C_OV_1VSYNC
C_OV_1PCLK
C_OV_1Y3
C_OV_1Y1
C_OV_1Y2
C_OV_1Y0
OV_1CCLK
C4000
10uF
U8035
OV_1Y4
OV_1Y5
OV_1Y6
OV_1Y7
OV_1Y8
OV_1Y9
OV_1Y10
OV_1Y11
JP4
C8178
C8179
U8038
R9391
R9392
R9393
U8036
R9389
OV_1HREF
OV_1VSYNC
OV_1PCLK
OV_1Y3
OV_1Y2
OV_1Y1
OV_1Y0
C8168
C8169
C8170
C8171
TEXAS INSTRUMENTS INCORPORATED
Title: TDA3x/DRA78x/DM50x - 15X15 EVM
Page Contents: VIN CAMERA SENSORS
Size: C
DOC NO: 517542
REV: C1
Date: Wednesday, May 03, 2017
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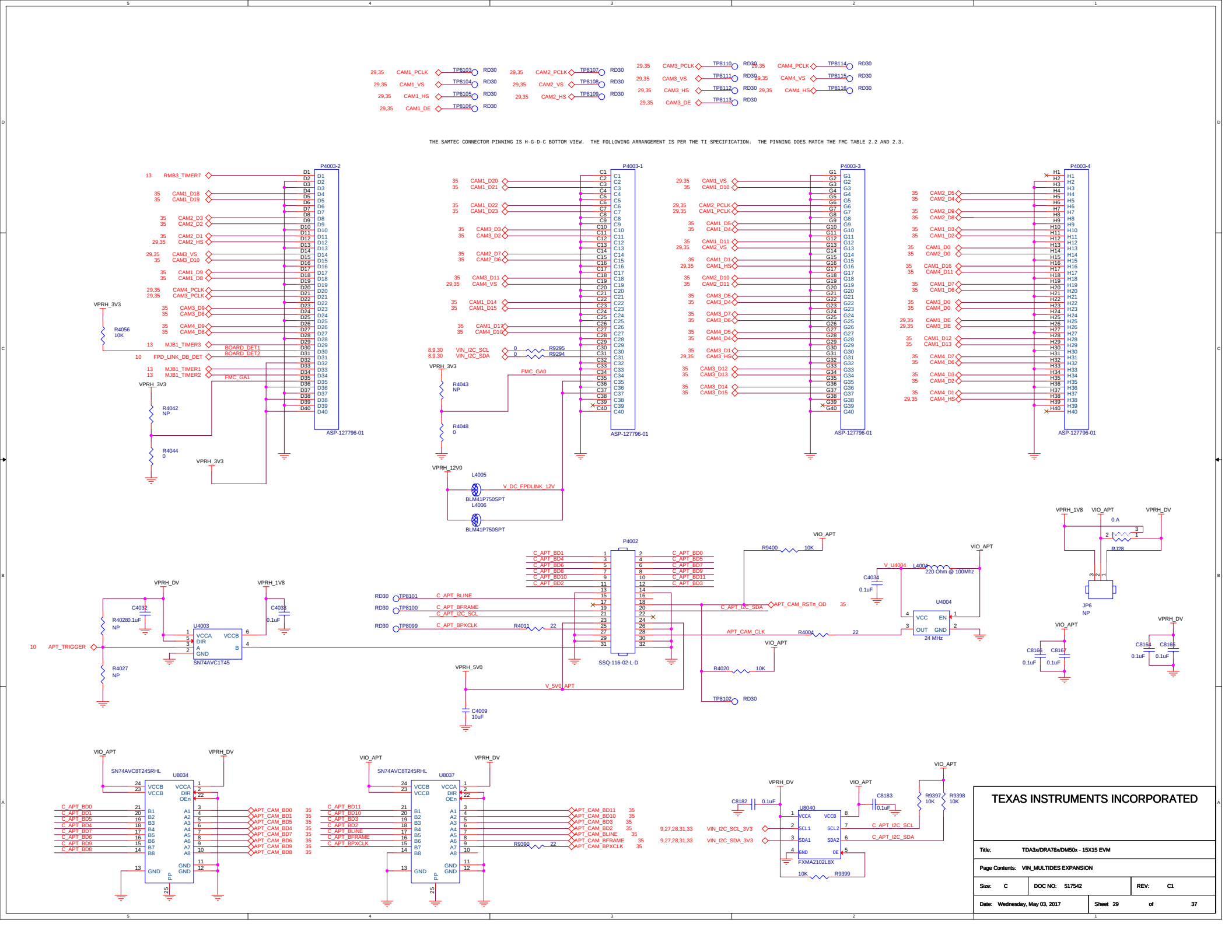
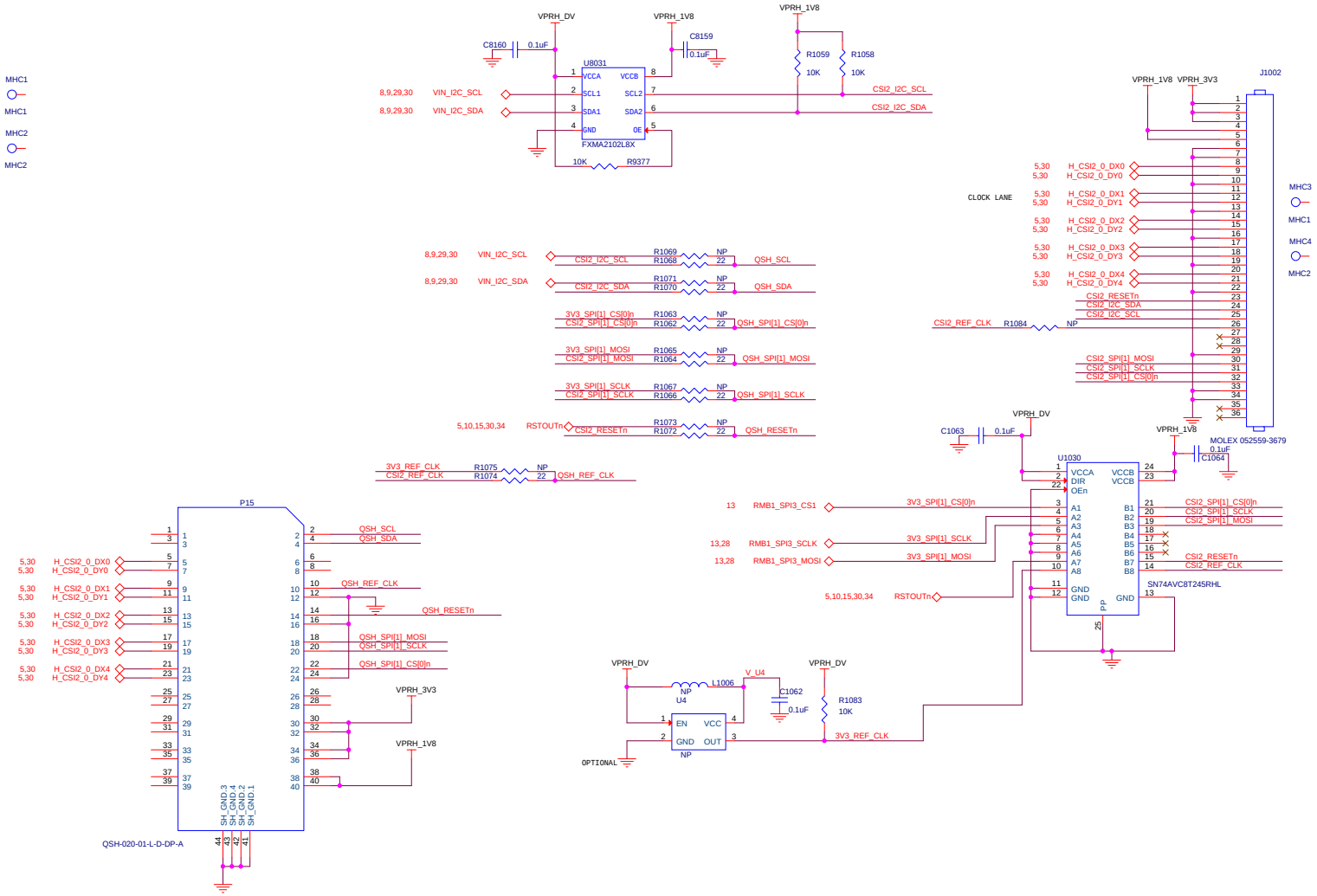
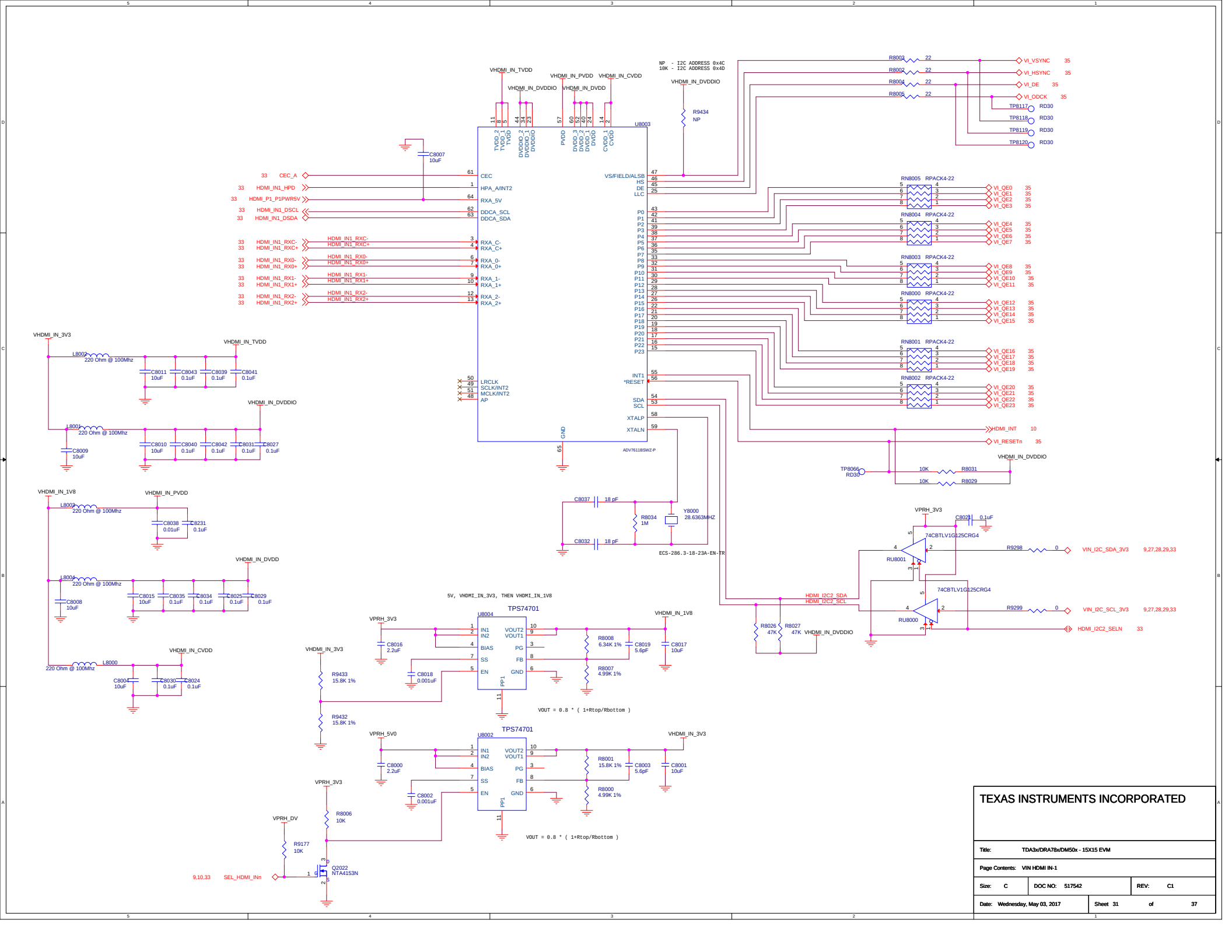

CAM1_PCLK TP8103 RD30
CAM1_VS TP8104 RD30
CAM1_HS TP8105 RD30
CAM1_DE TP8106 RD30
CAM2_PCLK TP8107 RD30
CAM2_VS TP8108 RD30
CAM2_HS TP8109 RD30
CAM3_PCLK TP8110 RD30
CAM3_VS TP8111 RD30
CAM3_HS TP8112 RD30
CAM3_DE TP8113 RD30
CAM4_PCLK TP8114 RD30
CAM4_VS TP8115 RD30
CAM4_HS TP8116 RD30
THE SAMTEC CONNECTOR PINNING IS H-G-D-C BOTTOM VIEW. THE FOLLOWING ARRANGEMENT IS PER THE TI SPECIFICATION. THE PINNING DOES MATCH THE FMC TABLE 2.2 AND 2.3.
P4003-2
P4003-1
P4003-3
P4003-4
ASP-127796-01
VPRH_3V3
VPRH_12V0
L4005
L4006
BLM41P750SPT
V_DC_FPDLINK_12V
FMC_GA0
FMC_GA1
BOARD_DET1
BOARD_DET2
VIN_I2C_SCL
VIN_I2C_SDA
P4002
SSQ-116-02-L-D
VPRH_1V8
VPRH_DV
VPRH_5V0
VIO_APT
U4003
SN74AVC1T45
U4004
24 MHz
U8034
U8037
SN74AVC8T245RHL
U8040
FXMA2102L8X
JP6
APT_TRIGGER
APT_CAM_CLK
APT_CAM_RSTn_OD
C_APT_I2C_SDA
C_APT_I2C_SCL
C_APT_BLINE
C_APT_BFRAME
C_APT_BPXCLK
V_5V0_APT
TEXAS INSTRUMENTS INCORPORATED
Title: TDA3x/DRA78x/DM50x - 15X15 EVM
Page Contents: VIN_MULTIDES EXPANSION
Size: C
DOC NO: 517542
REV: C1
Date: Wednesday, May 03, 2017
Sheet 29 of 37



TEXAS INSTRUMENTS INCORPORATED			
Title: TDA3x/DRA78x/DM50x - 15X15 EVM			
Page Contents: VIN CSI2			
Size: C	DOC NO: 517542		REV: C1
Date: Wednesday, May 03, 2017		Sheet 30 of 37	



TEXAS INSTRUMENTS INCORPORATED			
Title:	TDA3x/DRA78x/DM50x - 15X15 EVM		
Page Contents:	VIN HDMI IN-1		
Size: C	DOC NO: 517542	REV: C1	
Date: Wednesday, May 03, 2017	Sheet 31 of 37		

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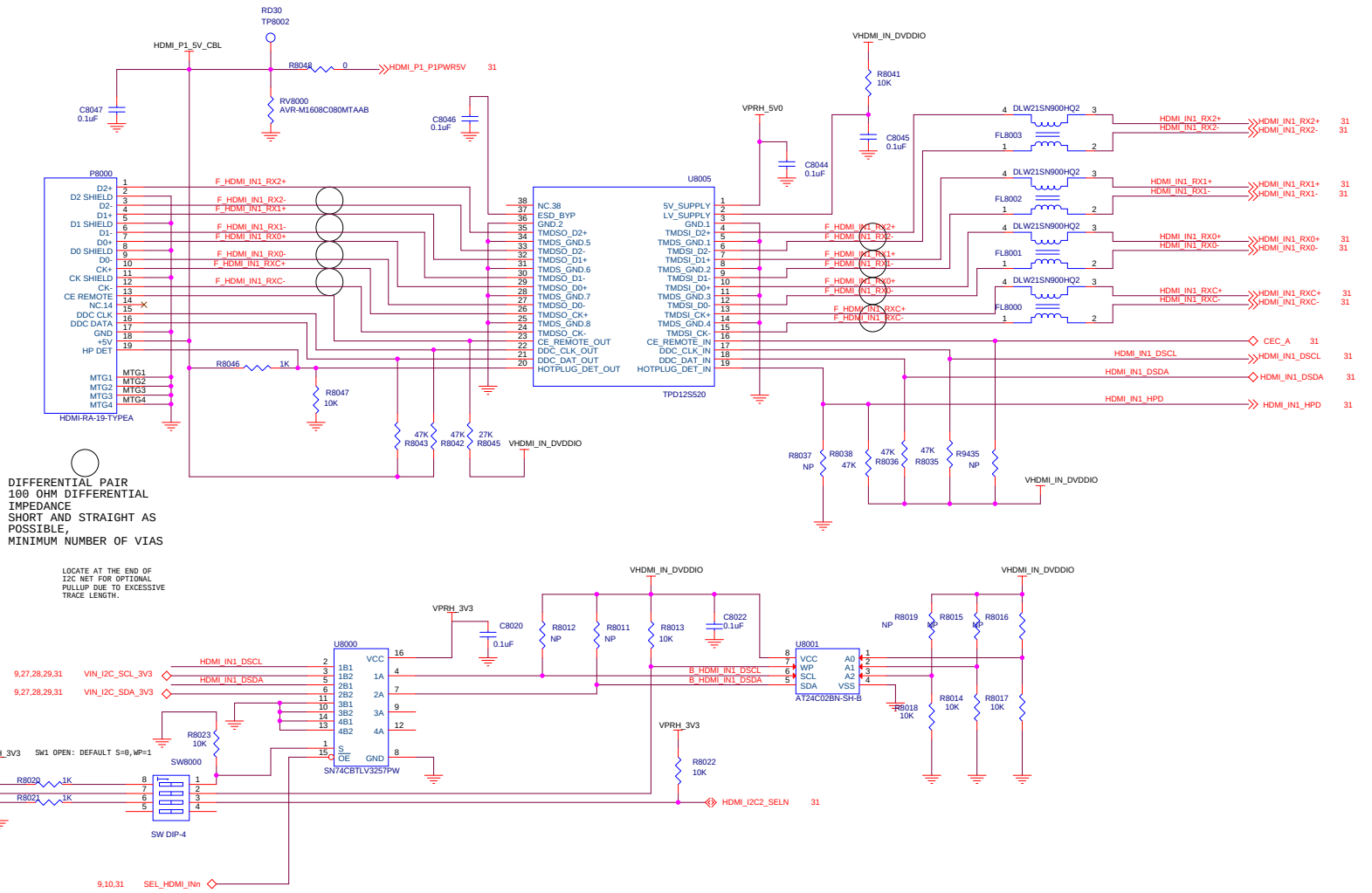
TEXAS INSTRUMENTS INCORPORATED

Title: TDA3x/DRA78x/DM50x - 15X15 EVM		
Page Contents: VIN HDMI IN-2		
Size: C	DOC NO: 517542	REV: B
Date: Wednesday, May 03, 2017	Sheet 32 of 37	



TEXAS INSTRUMENTS INCORPORATED			
Title: TDA3x/DRA78x/DM50x - 15X15 EVM			
Page Contents: VIN HDMI IN-3			
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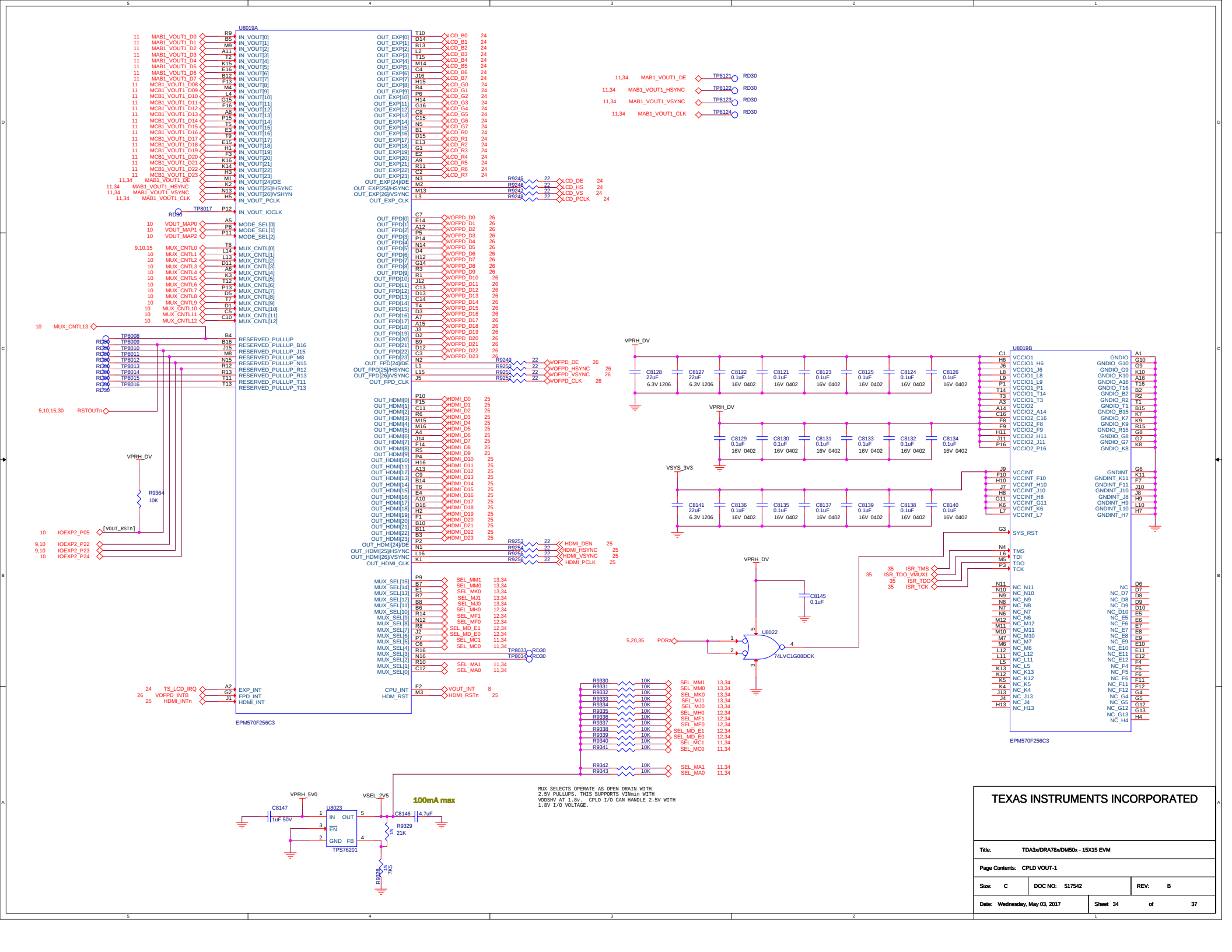

TEXAS INSTRUMENTS INCORPORATED	
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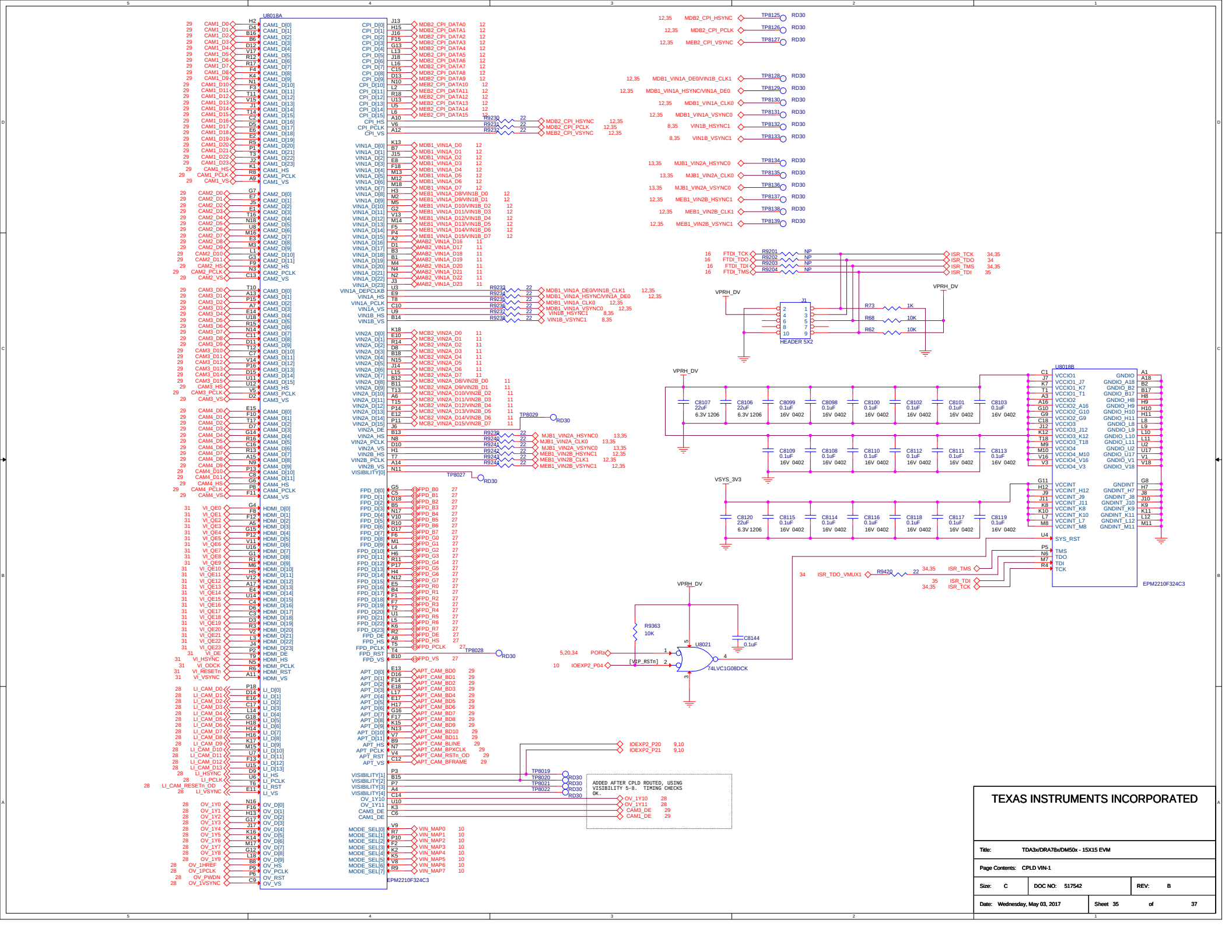
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MDB2_CPI_DATA4
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MDB2_CPI_DATA9
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MDB1_VIN1A_D4
MDB1_VIN1A_D5
MDB1_VIN1A_D6
MDB1_VIN1A_D7
MDB1_VIN1A_D8/VIN1B_D0
MDB1_VIN1A_D9/VIN1B_D1
MEB1_VIN1A_D10/VIN1B_D2
MEB1_VIN1A_D11/VIN1B_D3
MEB1_VIN1A_D12/VIN1B_D4
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TP8138
TP8139
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FTDI_TDO
FTDI_TDI
FTDI_TMS
ISR_TCK
ISR_TDO
ISR_TMS
ISR_TDI
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R9202
R9203
R9204
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J1
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R68
R62
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VCCIO1_T1
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VCCIO2_G10
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VCCIO3
VCCIO3_J12
VCCIO3_K12
VCCIO3_T18
VCCIO4
VCCIO4_M10
VCCIO4_V16
VCCIO4_V3
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VCCINT_J9
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VCCINT_K10
VCCINT_L7
VCCINT_M8
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GNDIO_B2
GNDIO_B17
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GNDIO_H9
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GNDIO_U2
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GNDIO_V18
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TDO
TDI
TCK
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ISR_TMS
ISR_TDI
ISR_TCK
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U8021
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IOEXP2_P20
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TEXAS INSTRUMENTS INCORPORATED
Title: TDA3x/DRA78x/DM50x - 15X15 EVM
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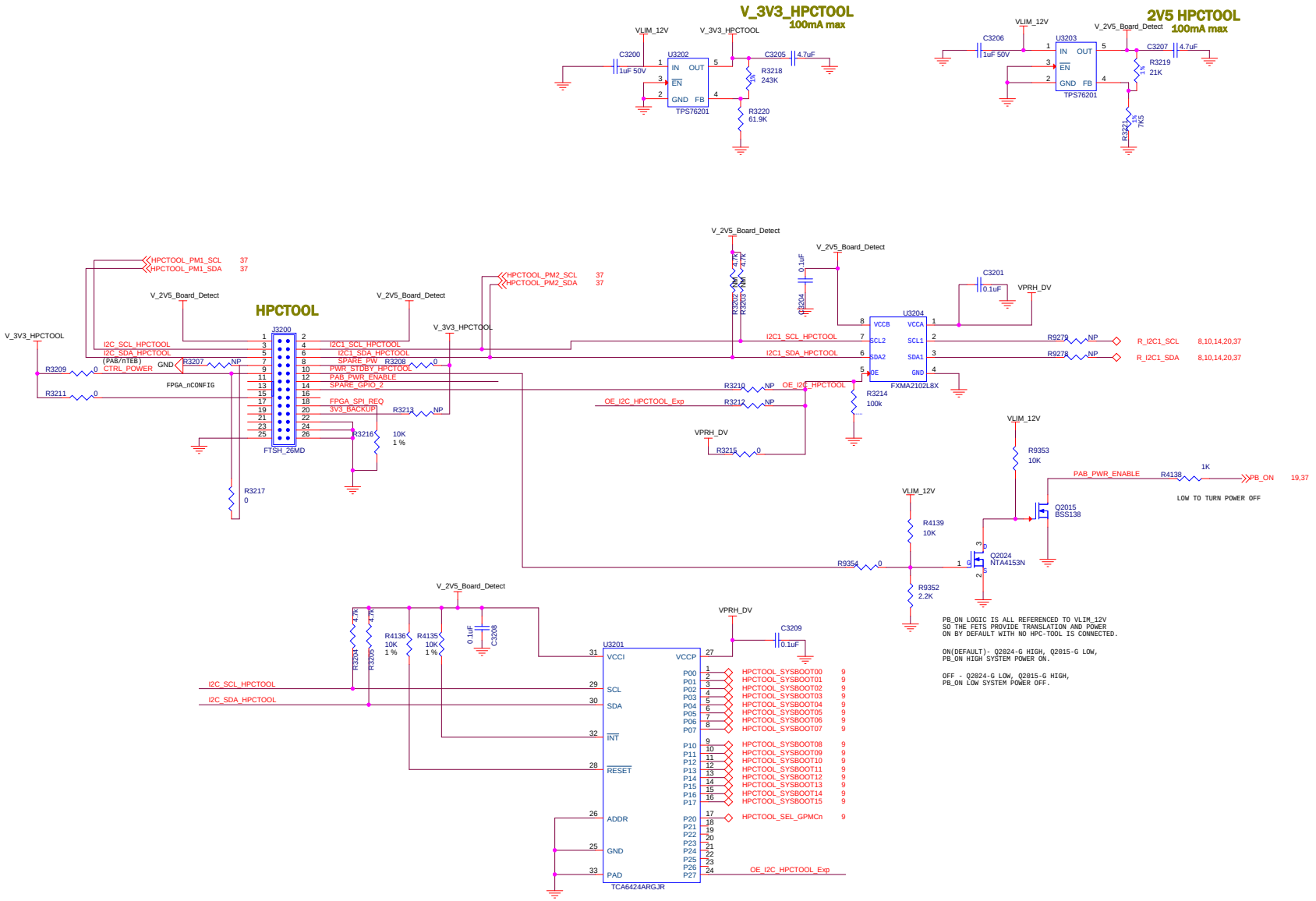

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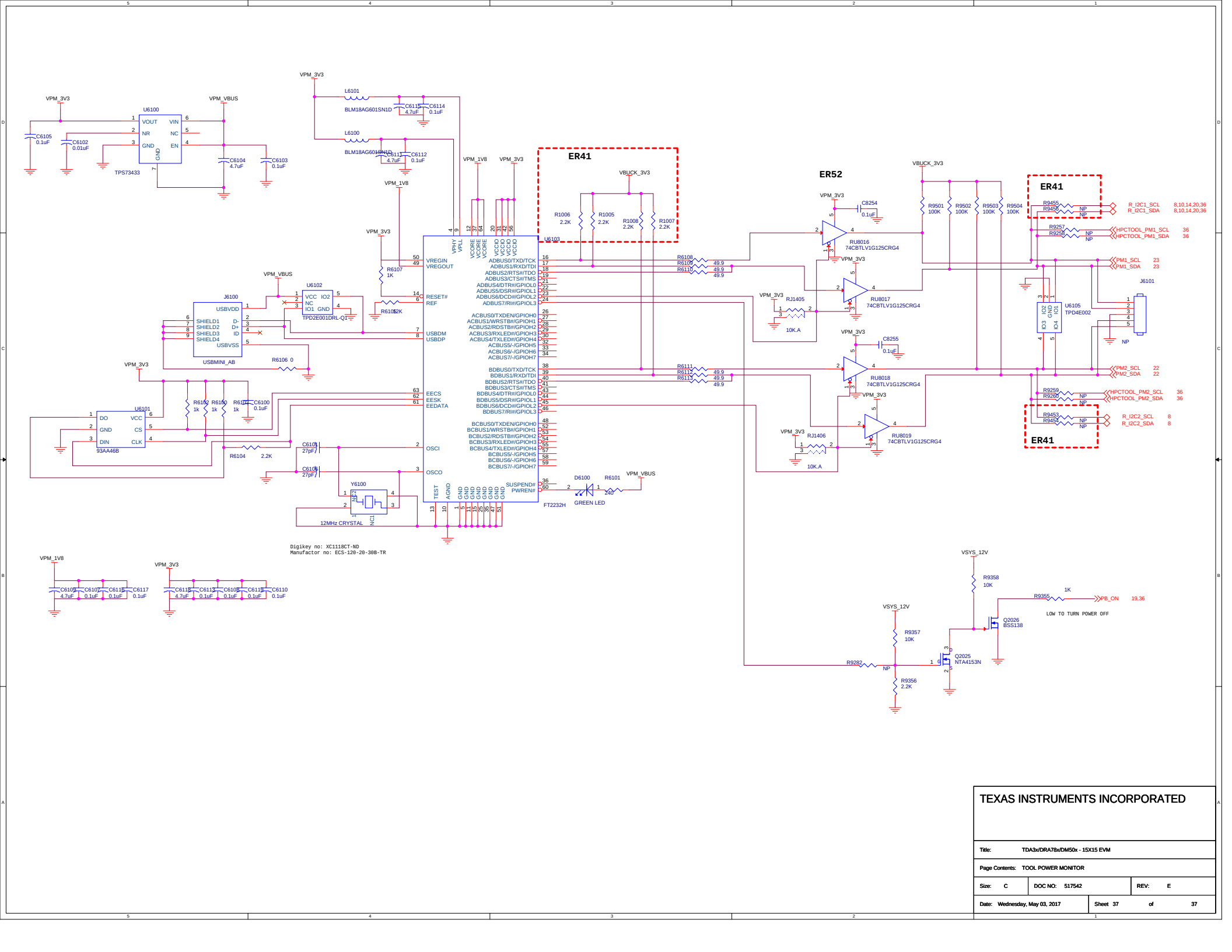
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C6103 0.1uF
L6101
BLM18AG601SN1D
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L6100
BLM18AG601SN1D
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C6112 0.1uF
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ER41
VBUCK_3V3
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R1005 2.2K
R1008 2.2K
R1007 2.2K
U6103
VPHY
VPLL
VCORE
VCCIO
R6107 1K
R6105 2K
RESET#
REF
VREGIN
VREGOUT
USBDM
USBDP
EECS
EESK
EEDATA
OSCI
OSCO
TEST
AGND
SUSPEND#
PWREN#
ADBUS0/TXD/TCK
ADBUS1/RXD/TDI
ADBUS2/RTS#/TDO
ADBUS3/CTS#/TMS
ADBUS4/DTR#/GPIOL0
ADBUS5/DSR#/GPIOL1
ADBUS6/DCD#/GPIOL2
ADBUS7/RI#/GPIOL3
ACBUS0/TXDEN/GPIOH0
ACBUS1/WRSTB#/GPIOH1
ACBUS2/RDSTB#/GPIOH2
ACBUS3/RXLED#/GPIOH3
ACBUS4/TXLED#/GPIOH4
ACBUS5/-/GPIOH5
ACBUS6/-/GPIOH6
ACBUS7/-/GPIOH7
BDBUS0/TXD/TCK
BDBUS1/RXD/TDI
BDBUS2/RTS#/TDO
BDBUS3/CTS#/TMS
BDBUS4/DTR#/GPIOL0
BDBUS5/DSR#/GPIOL1
BDBUS6/DCD#/GPIOL2
BDBUS7/RI#/GPIOL3
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BCBUS2/RDSTB#/GPIOH2
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BCBUS7/-/GPIOH7
FT2232H
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R6113 49.9
D6100
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GREEN LED
VPM_VBUS
J6100
USBVDD
SHIELD1
SHIELD2
SHIELD3
SHIELD4
USBVSS
D-
D+
ID
USBMINI_AB
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IO2
NC
IO1
GND
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R6105 1k
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Y6100
NC1
NC2
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Digikey no: XC1118CT-ND
Manufactor no: ECS-120-20-30B-TR
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R9502 100K
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R9504 100K
R9455
R9456
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R9259
R9260
R9453
R9454
NP
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R_I2C1_SDA 8,10,14,20,36
HPCTOOL_PM1_SCL 36
HPCTOOL_PM1_SDA 36
PM1_SCL 23
PM1_SDA 23
PM2_SCL 22
PM2_SDA 22
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HPCTOOL_PM2_SDA 36
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R_I2C2_SDA 8
J6101
U6105 TPD4E002
VSYS_12V
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R9355 1K
PB_ON 19,36
LOW TO TURN POWER OFF
Q2026 BSS138
R9357 10K
R9282
Q2025 NTA4153N
R9356 2.2K
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C6107 0.1uF
C6116 0.1uF
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TEXAS INSTRUMENTS INCORPORATED
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