Buttons, Switches, LEDs
SHEET 2

DDR III
SHEET 3

FMC CONN
SHEET 4

ARRIA High Speed Bank
SHEETS 5

ARRIA V I/O
SHEETS 6-12

FPGA Configuration
SHEETS 13

ARRIA V POWER
SHEETS 14

ARRIA V GROUND
SHEETS 15

FPGA Decoupling
SHEET 16

USB
SHEET 17

Supply Voltage Supervisors
SHEET 18

POWER SUPPLIES
LMZ30604
LMZ30602
TPS7A4700
TPS73001
TPS51200
TPS7A8101

SHEET 19 - 21

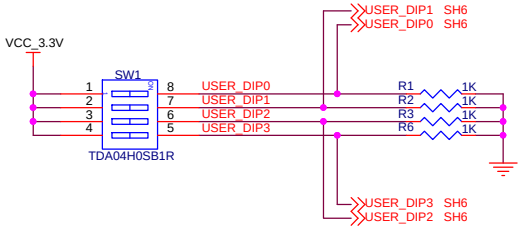
NOTE: DNI = DO NOT INSTALL COMPONENT.

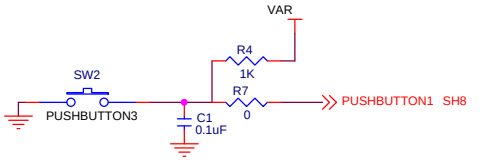
TEXAS INSTRUMENTS

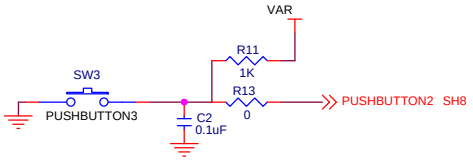
Title: TSW14J50

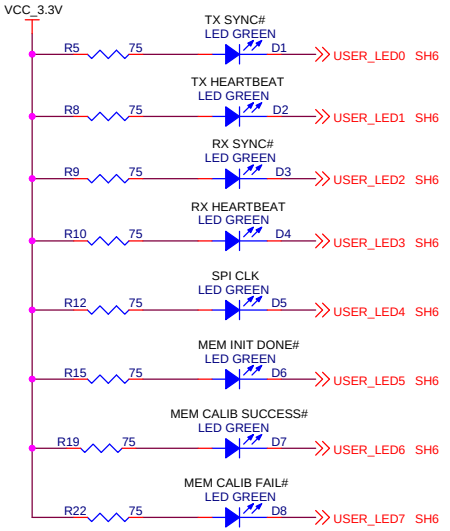
Drawn: L. NGUYEN	Size: B	Document Number	Rev: B
Engineer: J. SETON / E. DWOBENG	Date: Tuesday, March 25, 2014	Sheet 1 of 21	

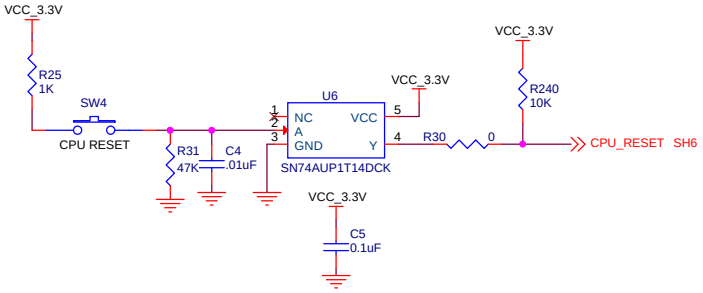
Buttons, Switches, LEDs



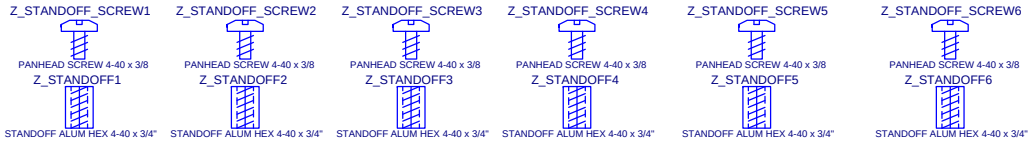








MECHANICAL PARTS



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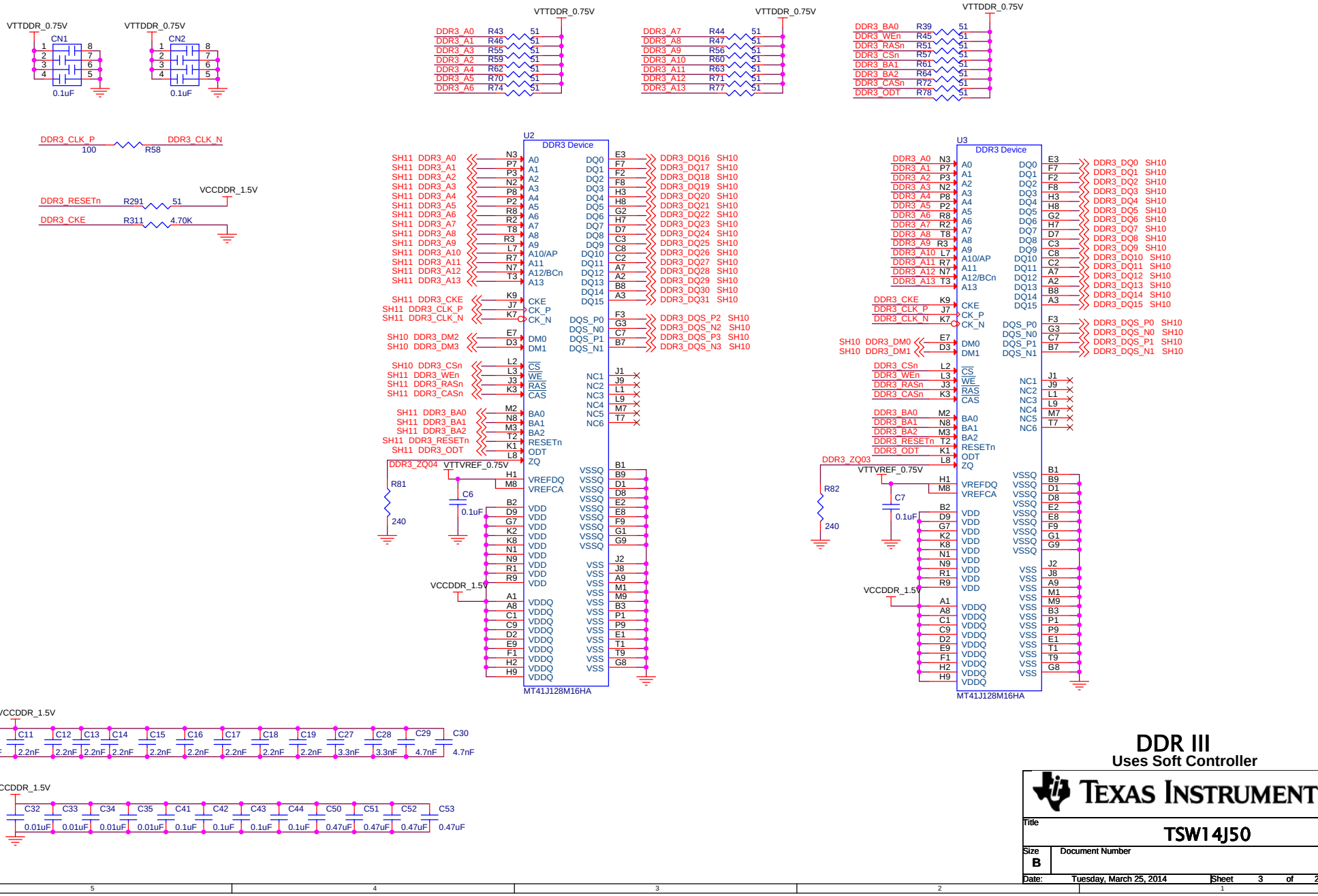
Size: B	Document Number	Rev: B
Date: Tuesday, March 25, 2014	Sheet 2 of 21	



DDR III
Uses Soft Controller

TEXAS INSTRUMENTS

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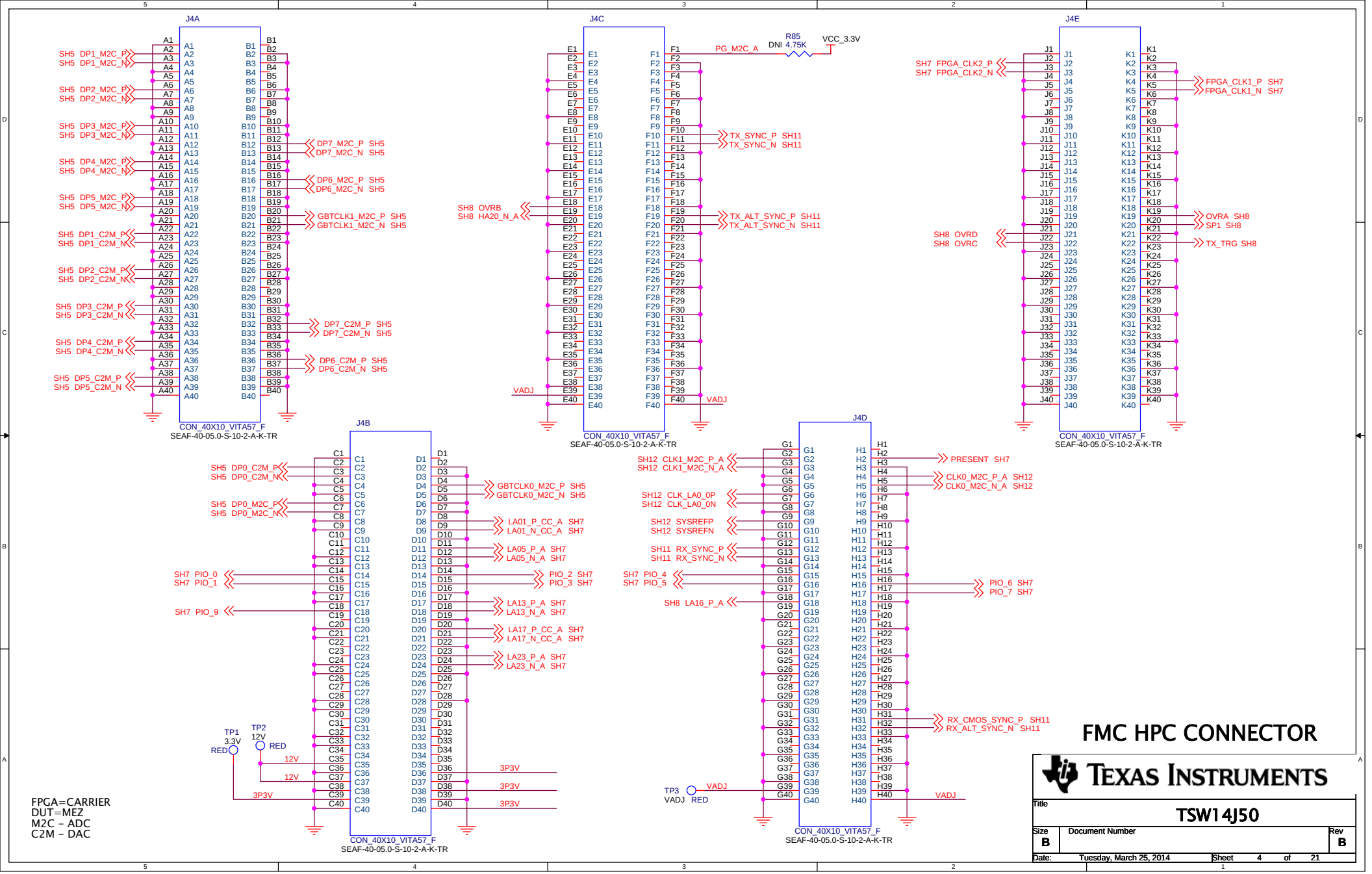
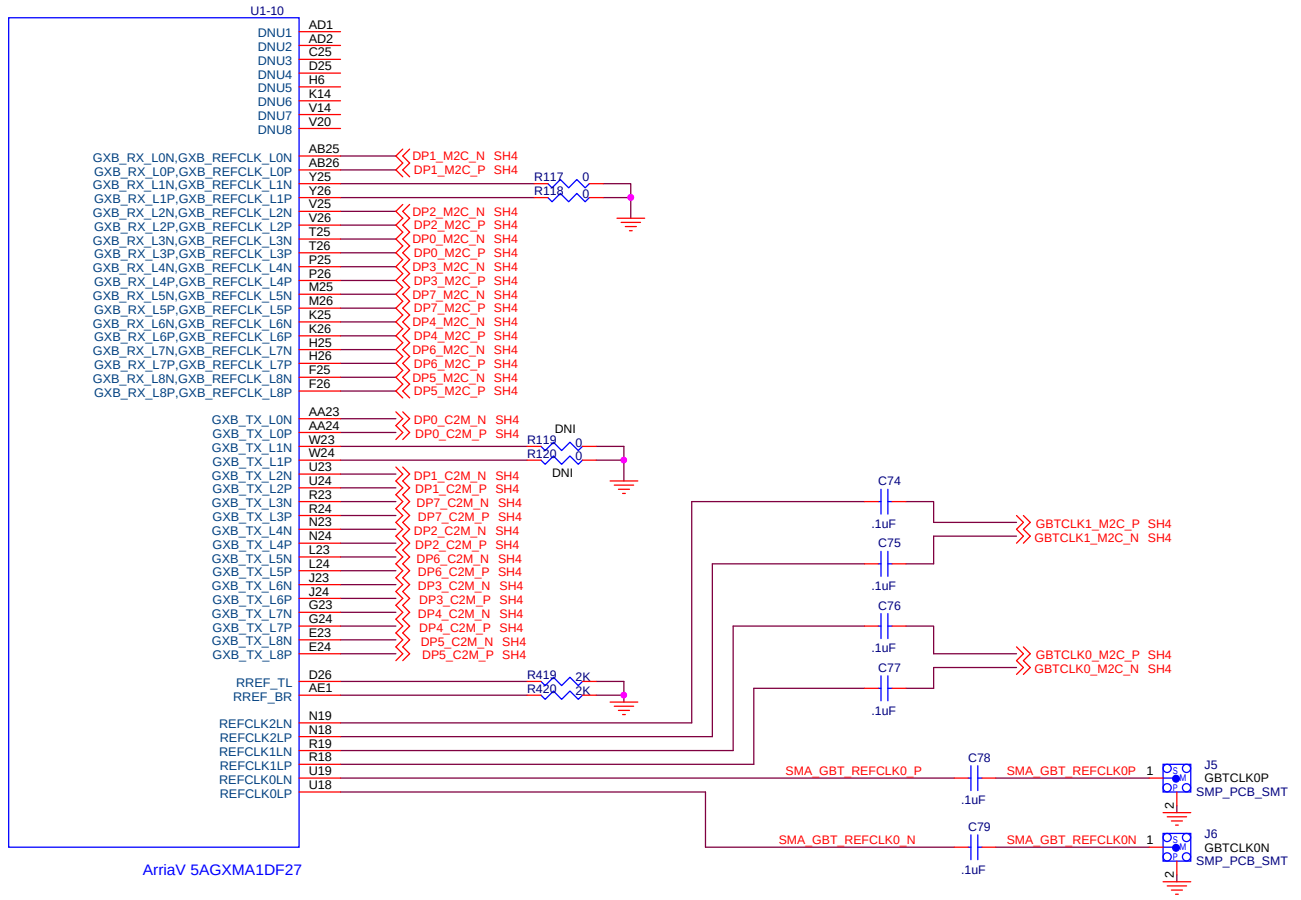
Size B	Document Number	Rev B
Date: Tuesday, March 25, 2014	Sheet 3 of 21	


J4A
CON_40X10_VITA57_F
SEAF-40-05.0-S-10-2-A-K-TR
SH5 DP1_M2C_P
SH5 DP1_M2C_N
SH5 DP2_M2C_P
SH5 DP2_M2C_N
SH5 DP3_M2C_P
SH5 DP3_M2C_N
SH5 DP4_M2C_P
SH5 DP4_M2C_N
SH5 DP5_M2C_P
SH5 DP5_M2C_N
SH5 DP1_C2M_P
SH5 DP1_C2M_N
SH5 DP2_C2M_P
SH5 DP2_C2M_N
SH5 DP3_C2M_P
SH5 DP3_C2M_N
SH5 DP4_C2M_P
SH5 DP4_C2M_N
SH5 DP5_C2M_P
SH5 DP5_C2M_N
DP7_M2C_P SH5
DP7_M2C_N SH5
DP6_M2C_P SH5
DP6_M2C_N SH5
GBTCLK1_M2C_P SH5
GBTCLK1_M2C_N SH5
DP7_C2M_P SH5
DP7_C2M_N SH5
DP6_C2M_P SH5
DP6_C2M_N SH5
J4C
CON_40X10_VITA57_F
SEAF-40-05.0-S-10-2-A-K-TR
PG_M2C_A
R85
DNI 4.75K
VCC_3.3V
SH8 OVRB
SH8 HA20_N_A
VADJ
TX_SYNC_P SH11
TX_SYNC_N SH11
TX_ALT_SYNC_P SH11
TX_ALT_SYNC_N SH11
J4E
CON_40X10_VITA57_F
SEAF-40-05.0-S-10-2-A-K-TR
SH7 FPGA_CLK2_P
SH7 FPGA_CLK2_N
FPGA_CLK1_P SH7
FPGA_CLK1_N SH7
SH8 OVRD
SH8 OVRC
OVRA SH8
SP1 SH8
TX_TRG SH8
J4B
CON_40X10_VITA57_F
SEAF-40-05.0-S-10-2-A-K-TR
SH5 DP0_C2M_P
SH5 DP0_C2M_N
SH5 DP0_M2C_P
SH5 DP0_M2C_N
SH7 PIO_0
SH7 PIO_1
SH7 PIO_9
GBTCLK0_M2C_P SH5
GBTCLK0_M2C_N SH5
LA01_P_CC_A SH7
LA01_N_CC_A SH7
LA05_P_A SH7
LA05_N_A SH7
LA13_P_A SH7
LA13_N_A SH7
LA17_P_CC_A SH7
LA17_N_CC_A SH7
LA23_P_A SH7
LA23_N_A SH7
PIO_2 SH7
PIO_3 SH7
TP1
3.3V
RED
TP2
12V
RED
12V
12V
3P3V
3P3V
3P3V
3P3V
J4D
CON_40X10_VITA57_F
SEAF-40-05.0-S-10-2-A-K-TR
SH12 CLK1_M2C_P_A
SH12 CLK1_M2C_N_A
SH12 CLK_LA0_0P
SH12 CLK_LA0_0N
SH12 SYSREFP
SH12 SYSREFN
SH11 RX_SYNC_P
SH11 RX_SYNC_N
SH7 PIO_4
SH7 PIO_5
SH8 LA16_P_A
PRESENT SH7
CLK0_M2C_P_A SH12
CLK0_M2C_N_A SH12
PIO_6 SH7
PIO_7 SH7
RX_CMOS_SYNC_P SH11
RX_ALT_SYNC_N SH11
TP3
VADJ
RED
VADJ
VADJ
FPGA=CARRIER
DUT=MEZ
M2C - ADC
C2M - DAC
FMC HPC CONNECTOR
TEXAS INSTRUMENTS
Title
TSW14J50
Size
B
Document Number
Rev
B
Date:
Tuesday, March 25, 2014
Sheet
4
of
21



HIGH SPEED BANK

TEXAS INSTRUMENTS

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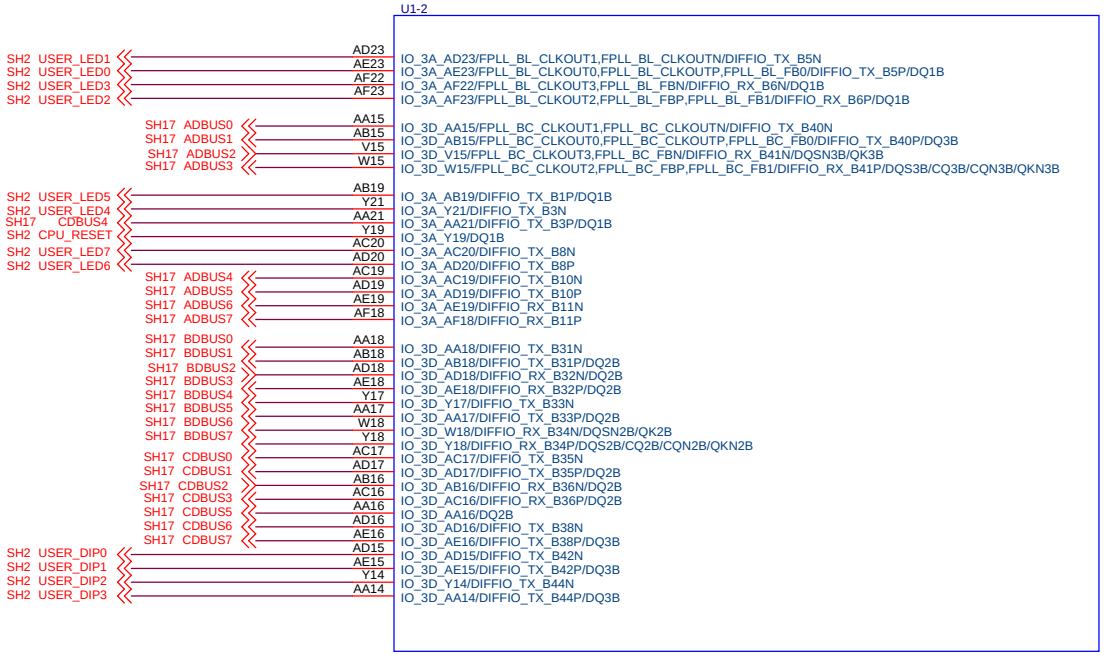
Size B	Document Number	Rev B
Date: Tuesday, March 25, 2014	Sheet 5 of 21	



BANK 3

TEXAS INSTRUMENTS

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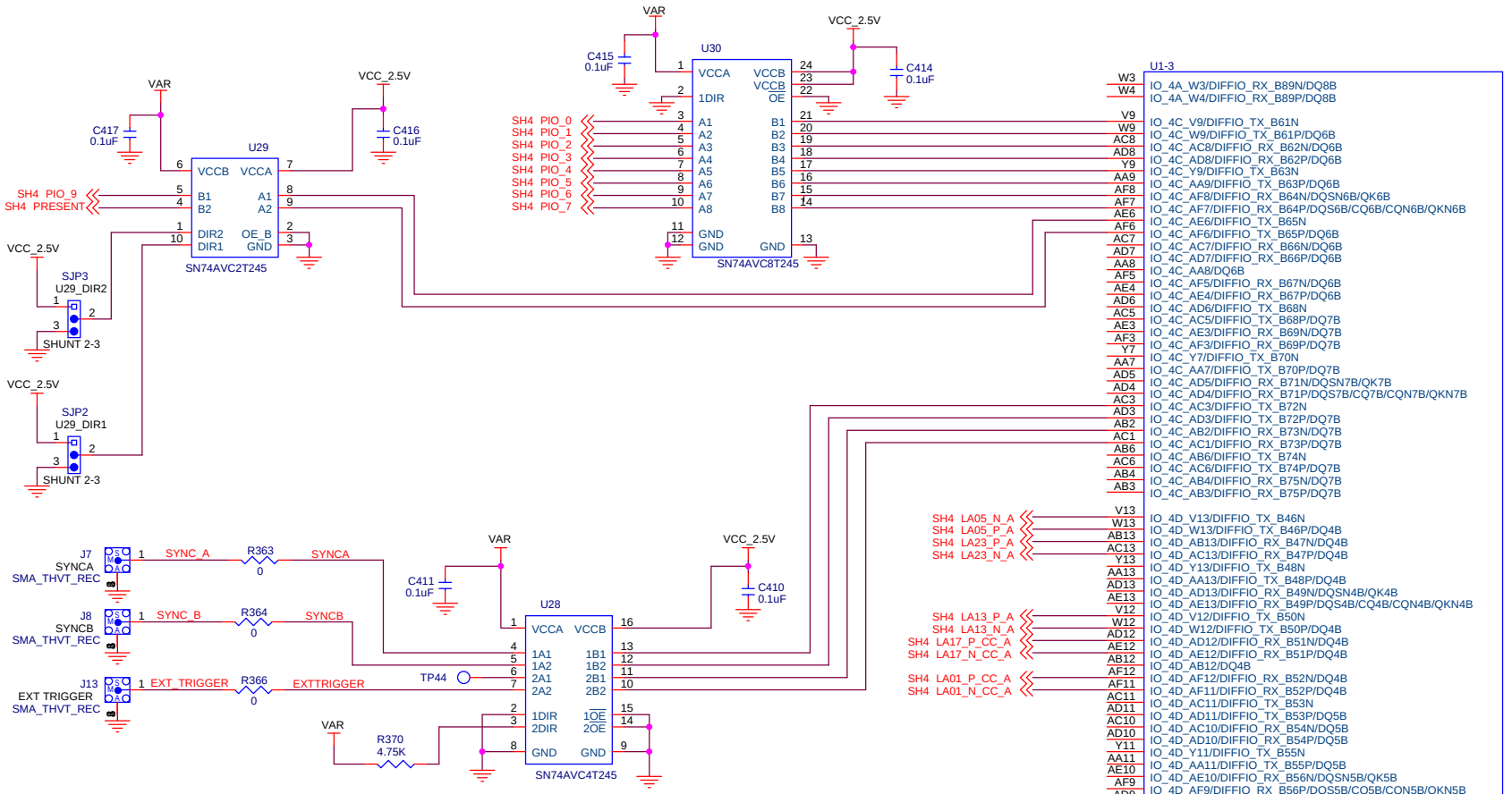
Size: B	Document Number	Rev: B
Date: Tuesday, March 25, 2014	Sheet 6 of 21	



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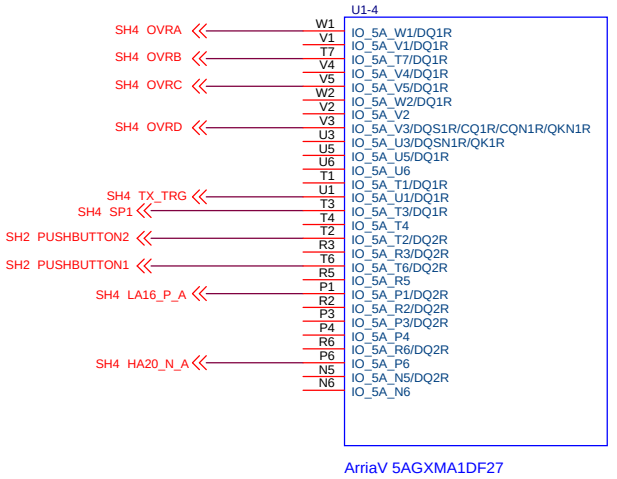
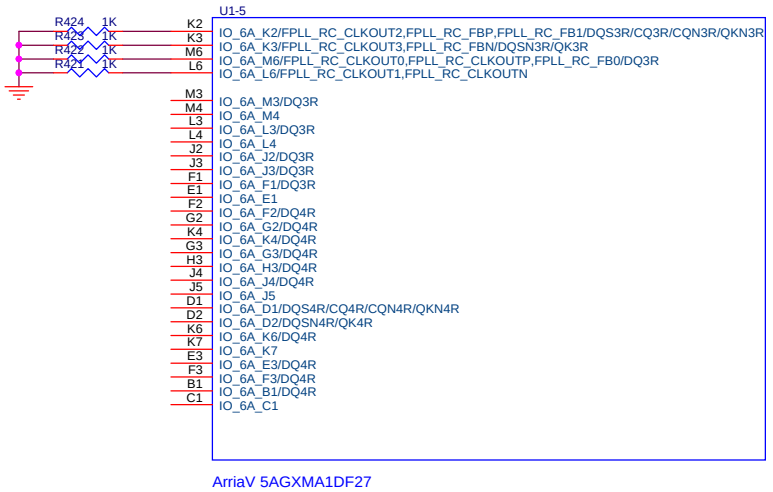
Title	TSW14J50	
Size B	Document Number	Rev B
Date: Tuesday, March 25, 2014	Sheet 7 of 21	



FPGA Bank 5A (VAR)

TEXAS INSTRUMENTS

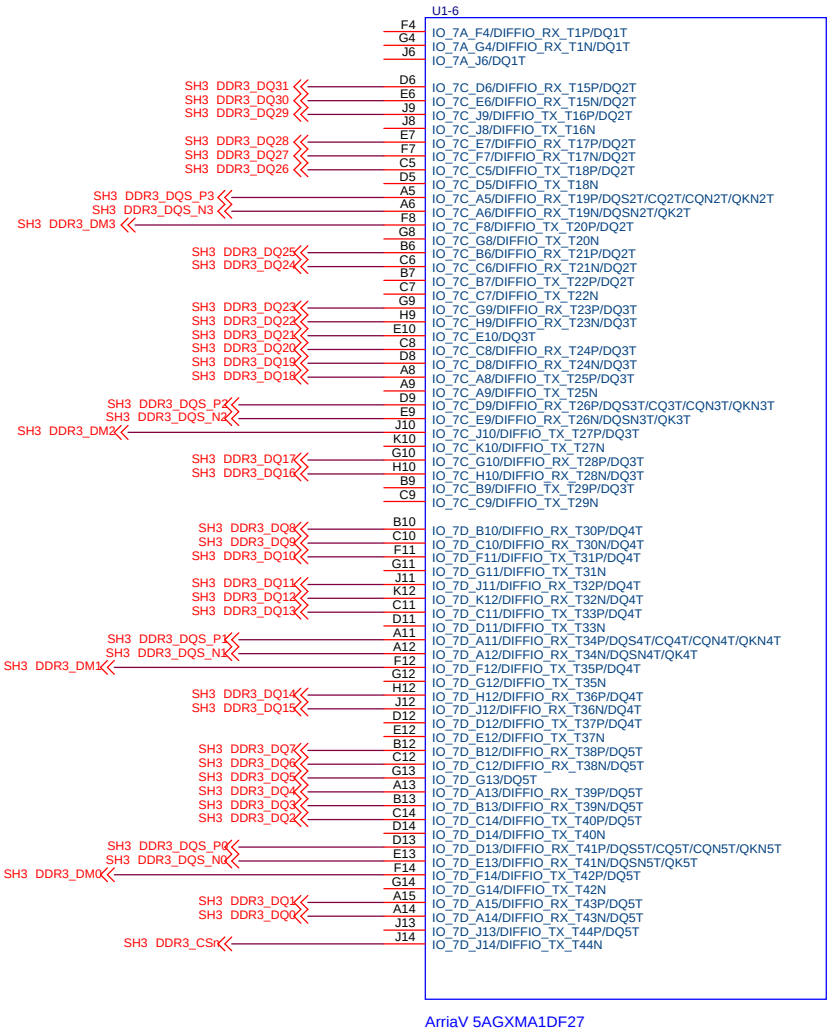
Title: TSW14J50		
Size: B	Document Number	Rev: B
Date: Tuesday, March 25, 2014	Sheet 8 of 21	



FPGA Bank 6 (2.5V)

TEXAS INSTRUMENTS

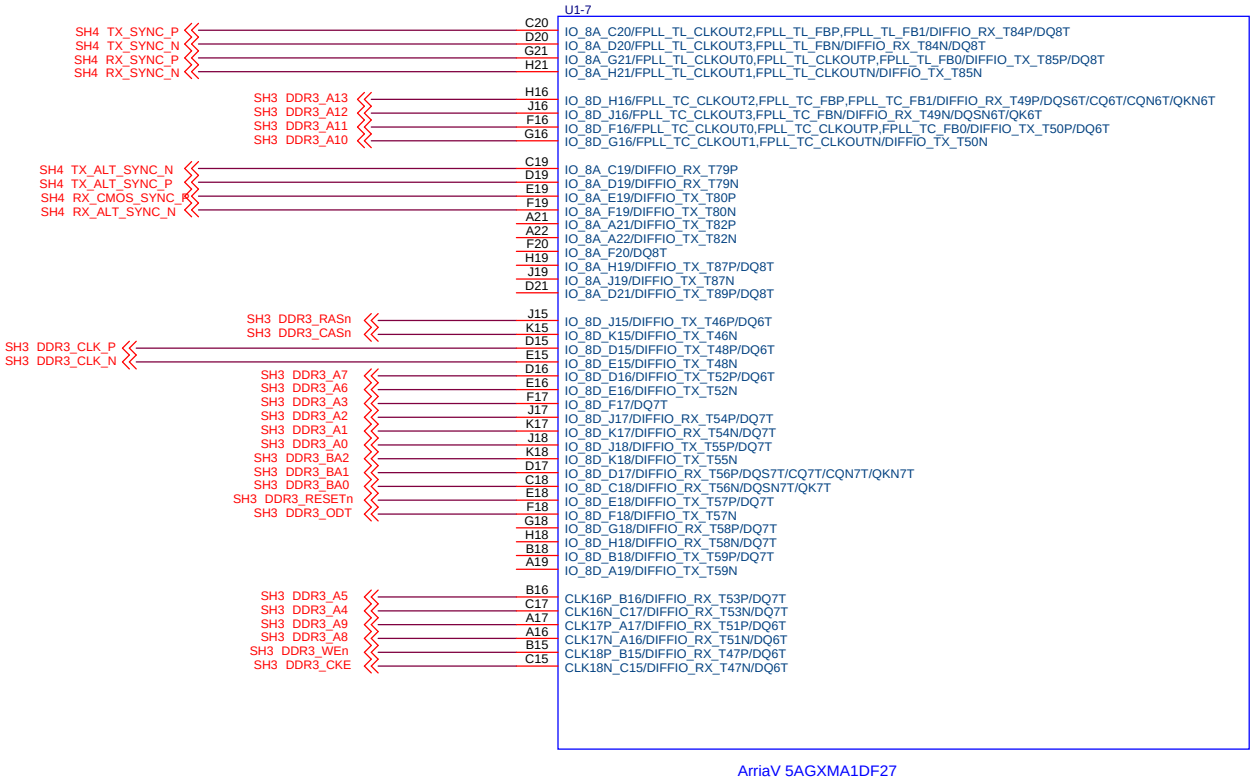
Title: TSW14J50		
Size: B	Document Number	Rev: B
Date: Tuesday, March 25, 2014	Sheet 9 of 21	



DDRIII - FPGA Bank 7C & 7D (1.5V)

TEXAS INSTRUMENTS

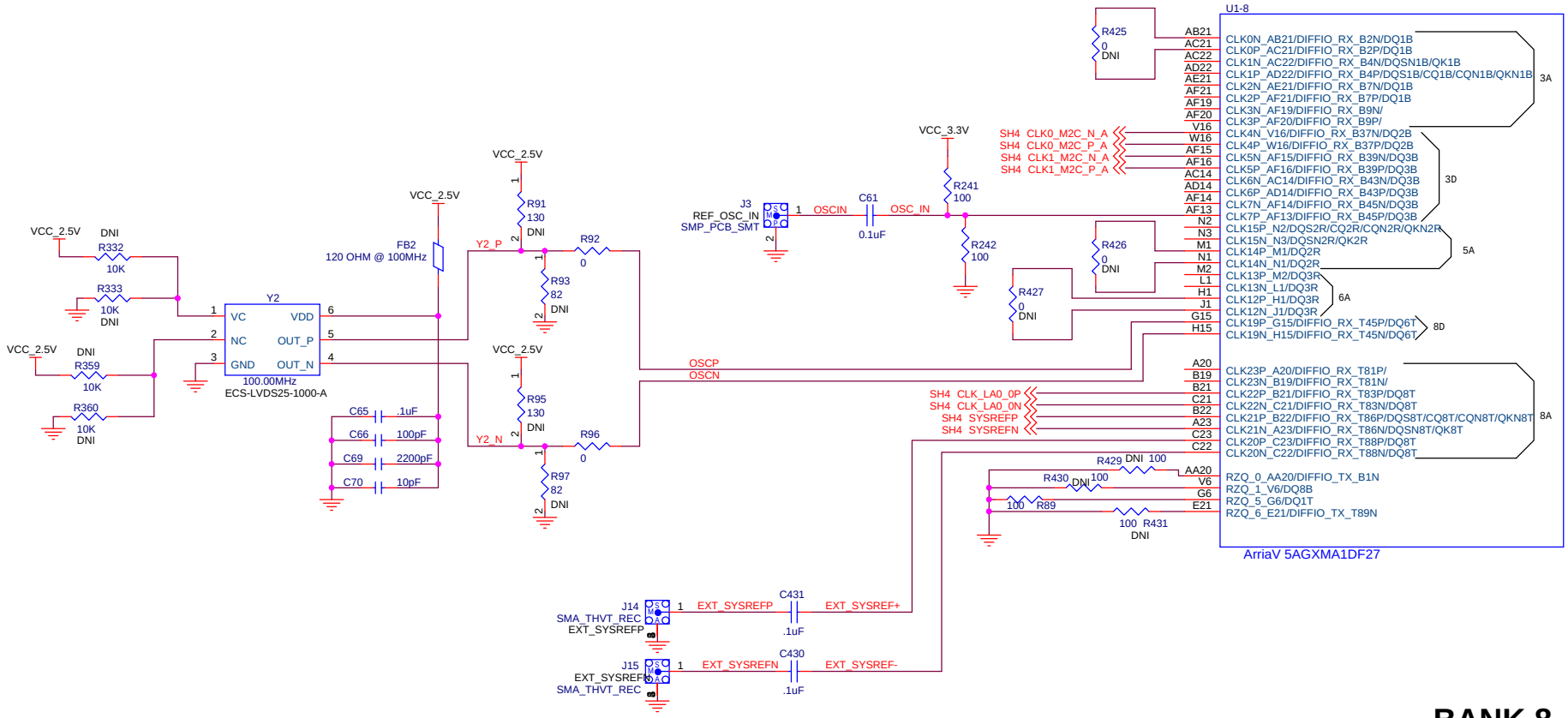
Title: TSW14J50		
Size: B	Document Number	Rev: B
Date: Tuesday, March 25, 2014	Sheet 10 of 21	



DDRIII - FPGA Bank 8D (1.5V)
FPGA Bank 8A (2.5V)

TEXAS INSTRUMENTS

Title	TSW14J50	
Size B	Document Number	Rev B
Date: Tuesday, March 25, 2014	Sheet 11 of 21	



BANK 8

TEXAS INSTRUMENTS

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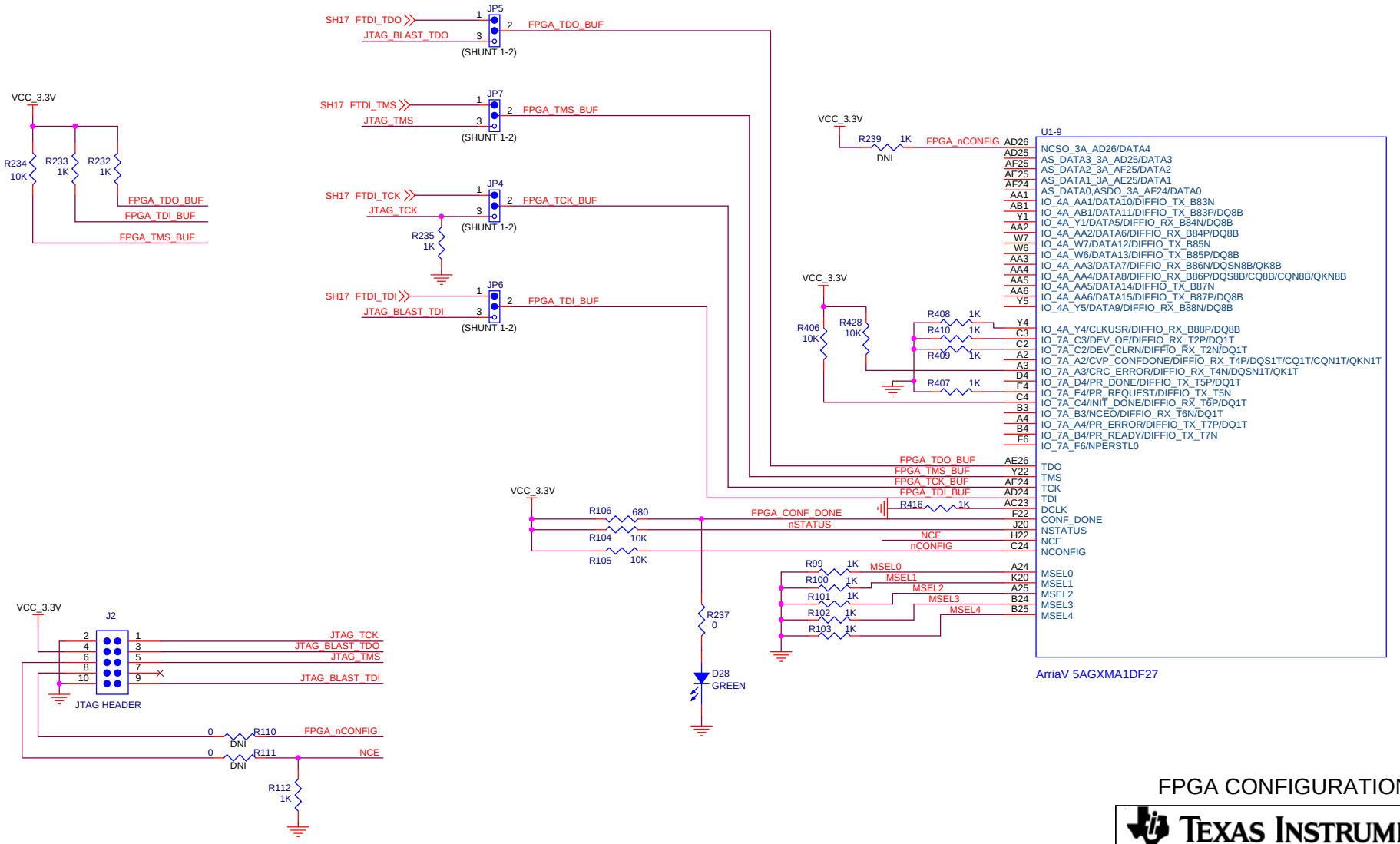

FPGA CONFIGURATION

TEXAS INSTRUMENTS

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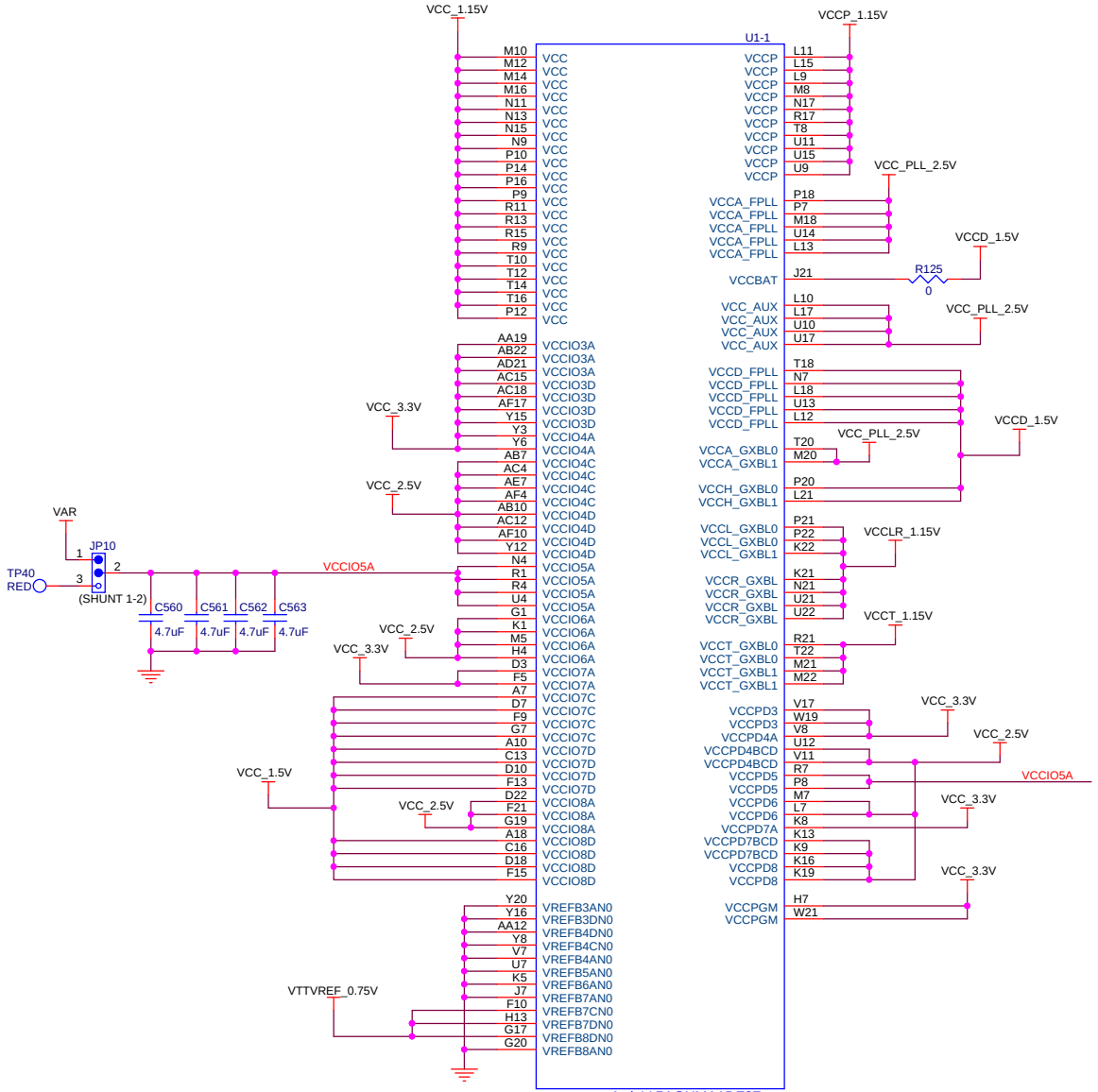
Size B	Document Number		Rev B
Date: Tuesday, March 25, 2014	Sheet 13 of 21		



FPGA POWER

TEXAS INSTRUMENTS

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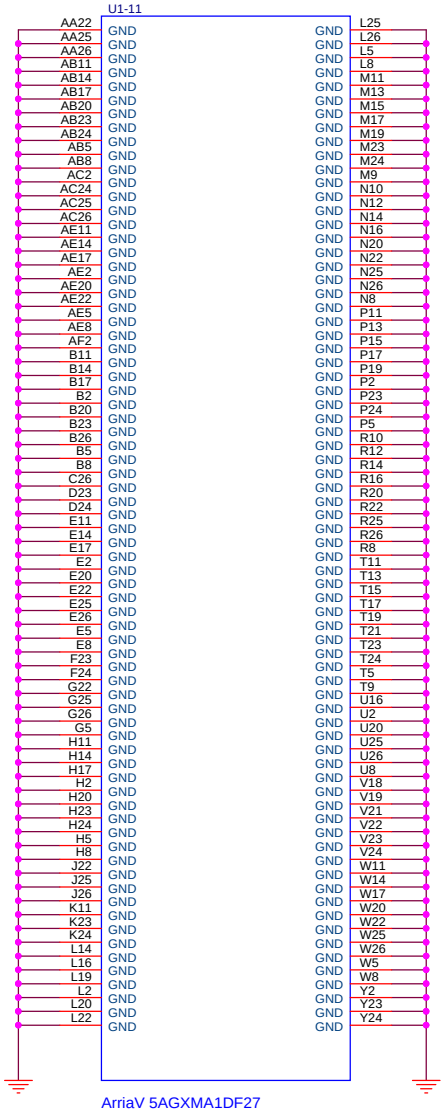
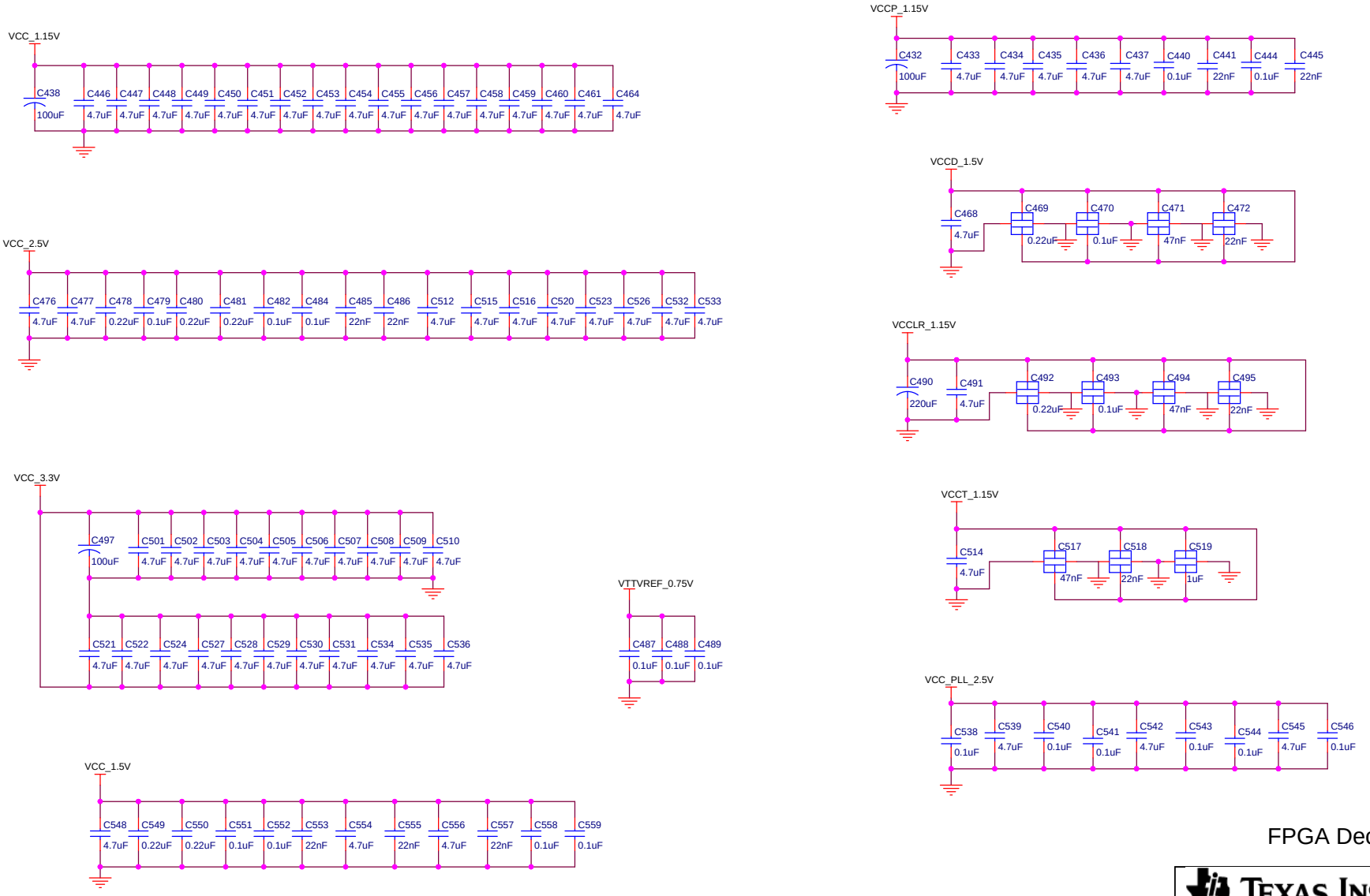
Size B	Document Number		Rev B
Date: Tuesday, March 25, 2014	Sheet 14 of 21		



FPGA GROUND

TEXAS INSTRUMENTS

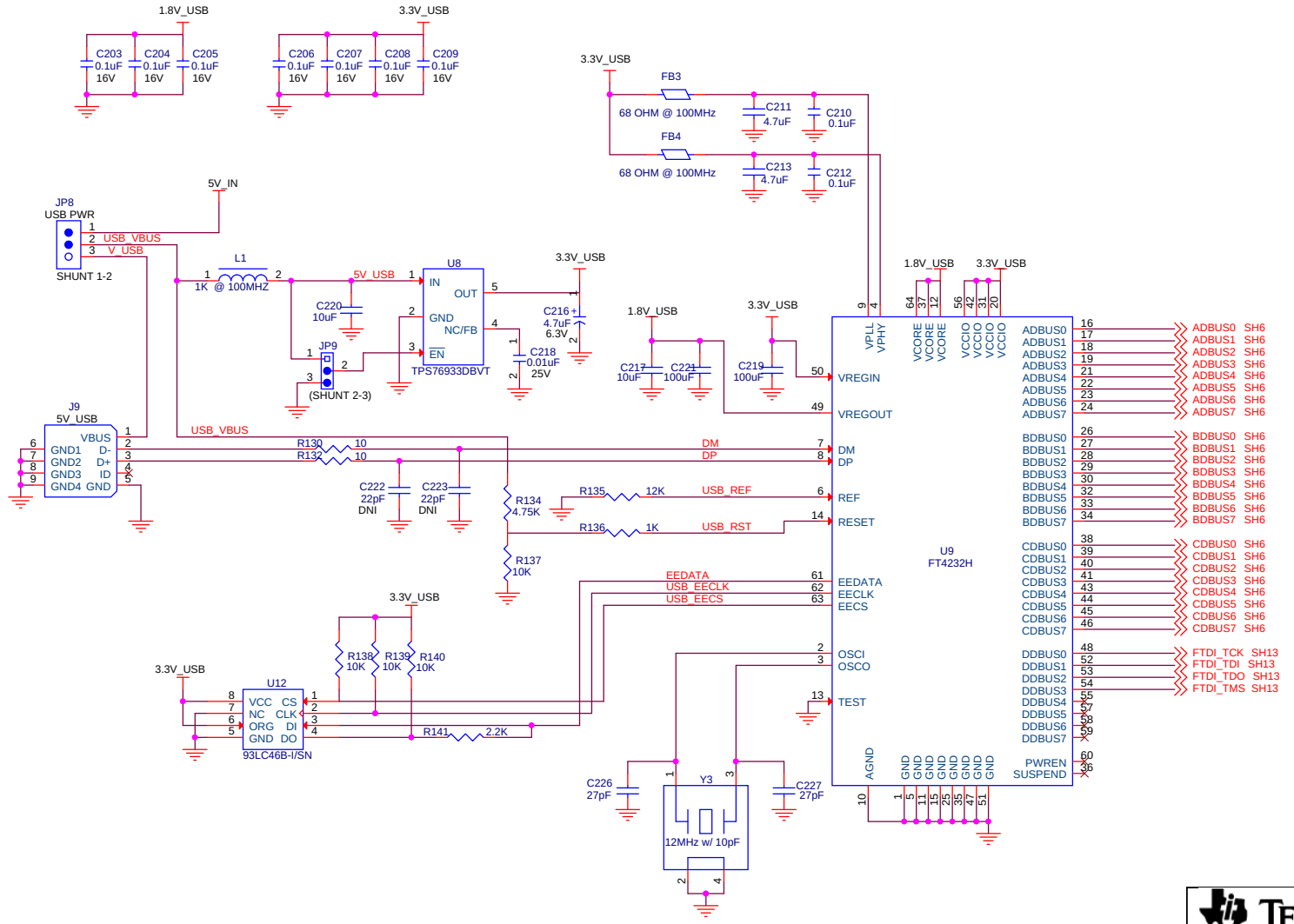
Title	TSW14J50	
Size	Document Number	Rev B
Date: Tuesday, March 25, 2014	Sheet 15 of 21	



FPGA Decoupling

TEXAS INSTRUMENTS

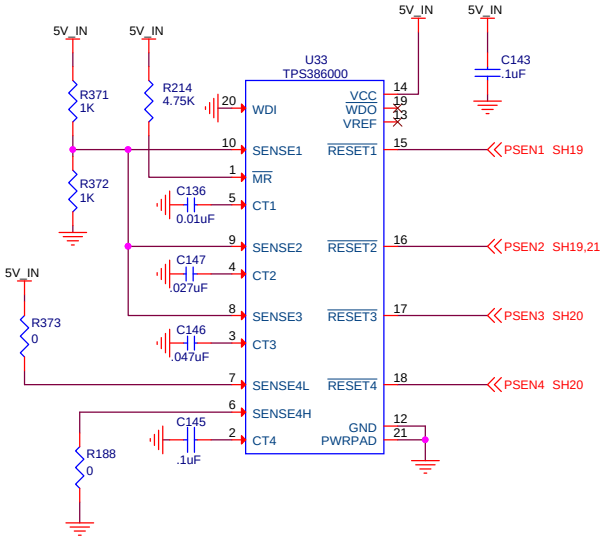
Title	TSW14J50	
Size	Document Number	Rev B
Date: Tuesday, March 25, 2014	Sheet 16 of 21	



USB

TEXAS INSTRUMENTS

Title	TSW14J50	
Size B	Document Number	Rev B
Date: Tuesday, March 25, 2014	Sheet 17 of 21	



SEQUENCER

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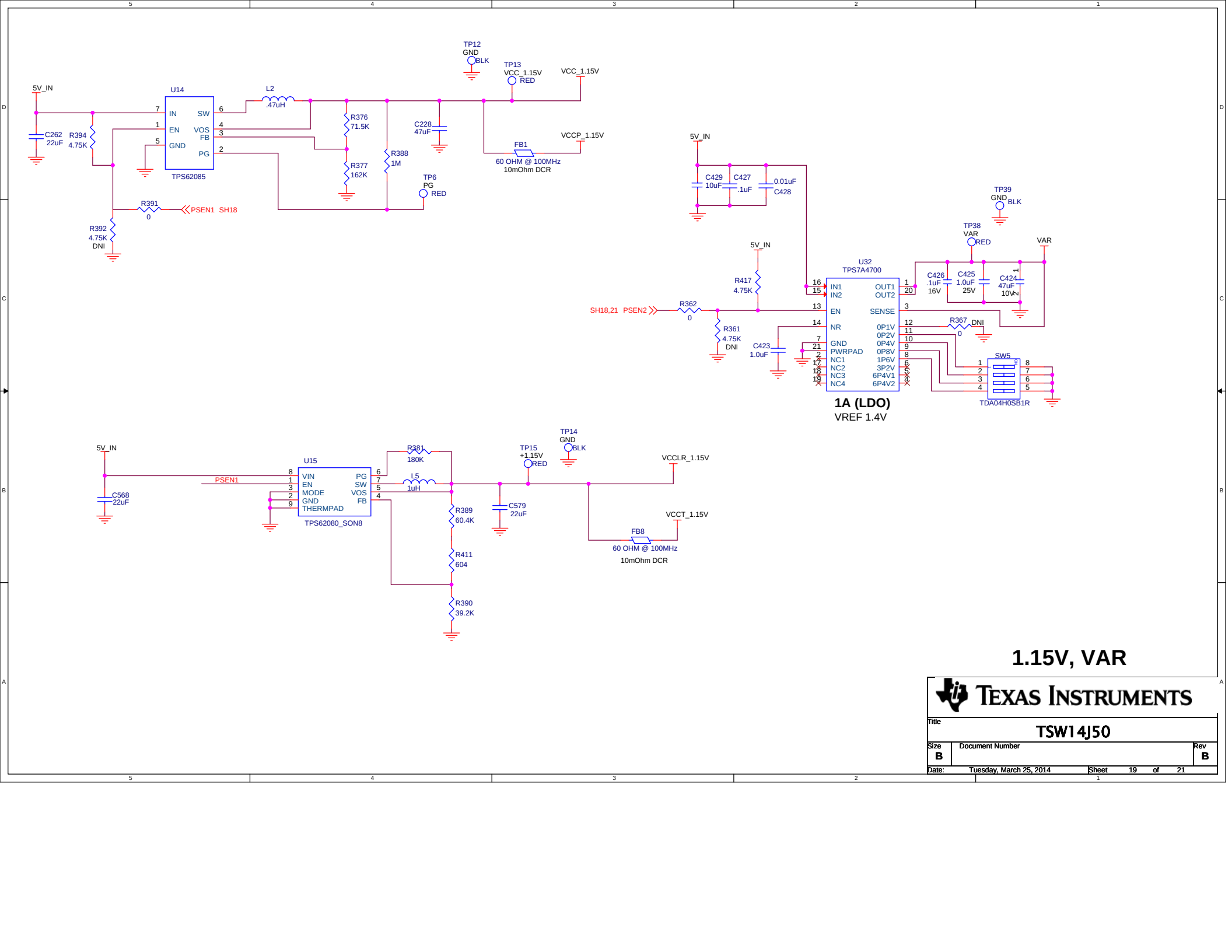
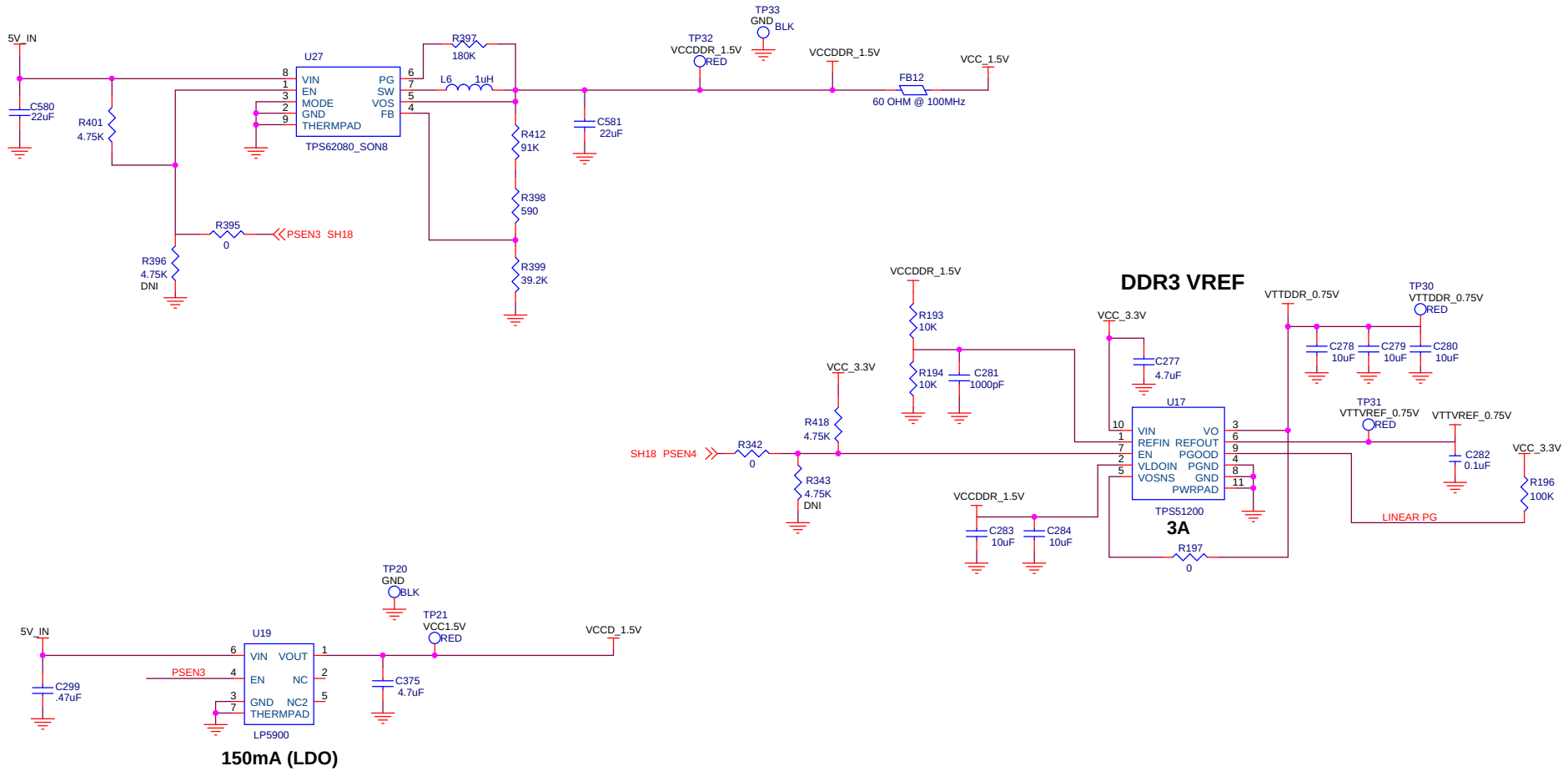
Date: Tuesday, March 25, 2014	Sheet 18 of 21	



1.15V, VAR

TEXAS INSTRUMENTS

Title	TSW14J50	
Size B	Document Number	Rev B
Date: Tuesday, March 25, 2014	Sheet 19 of 21	



0.75V, 1.5V

TEXAS INSTRUMENTS

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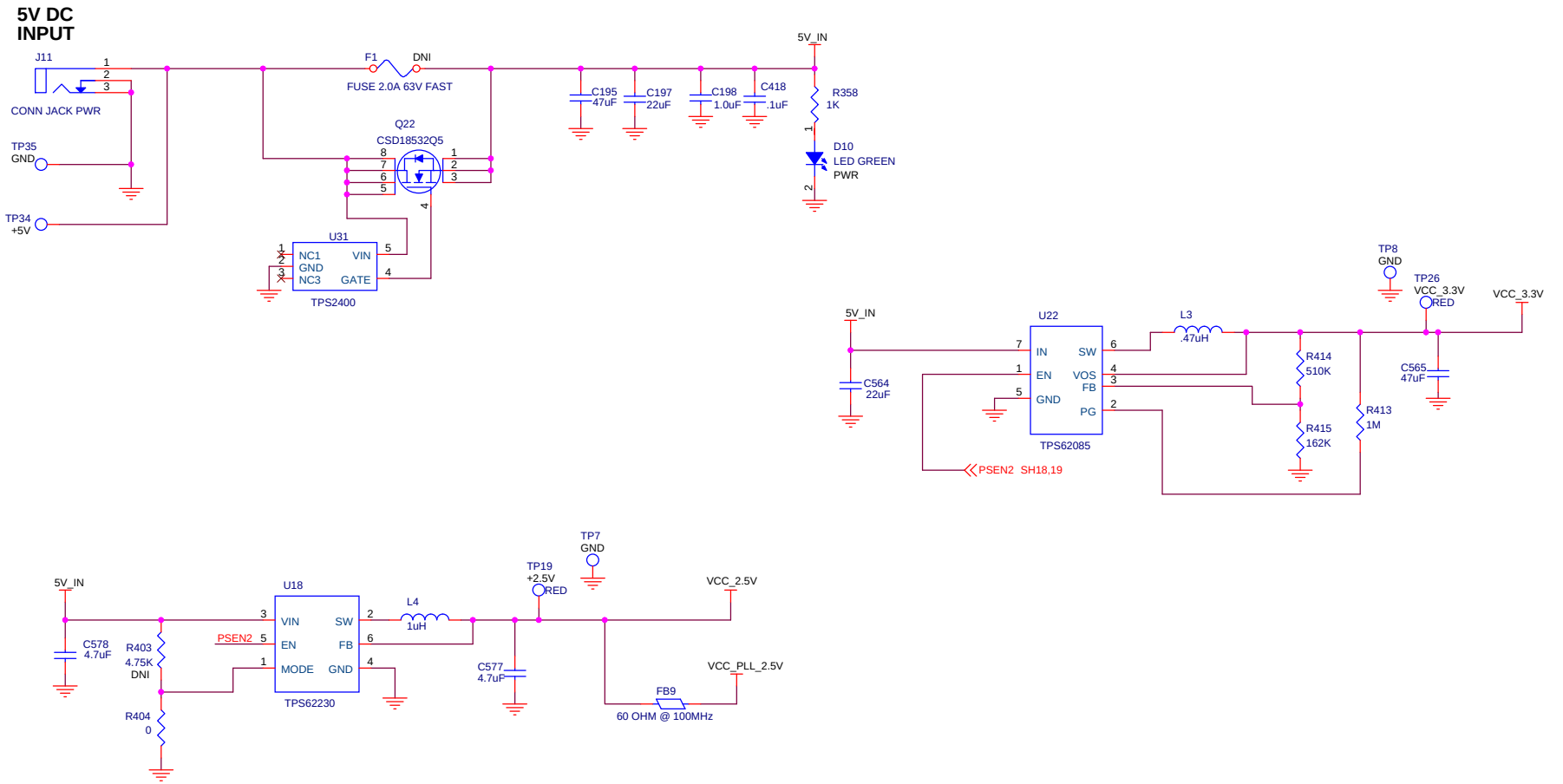
Date: Tuesday, March 25, 2014	Sheet 20 of 21	



3.3V, 2.5V

TEXAS INSTRUMENTS

Title	TSW14J50	
Size B	Document Number	Rev B
Date: Tuesday, March 25, 2014	Sheet 21 of 21	