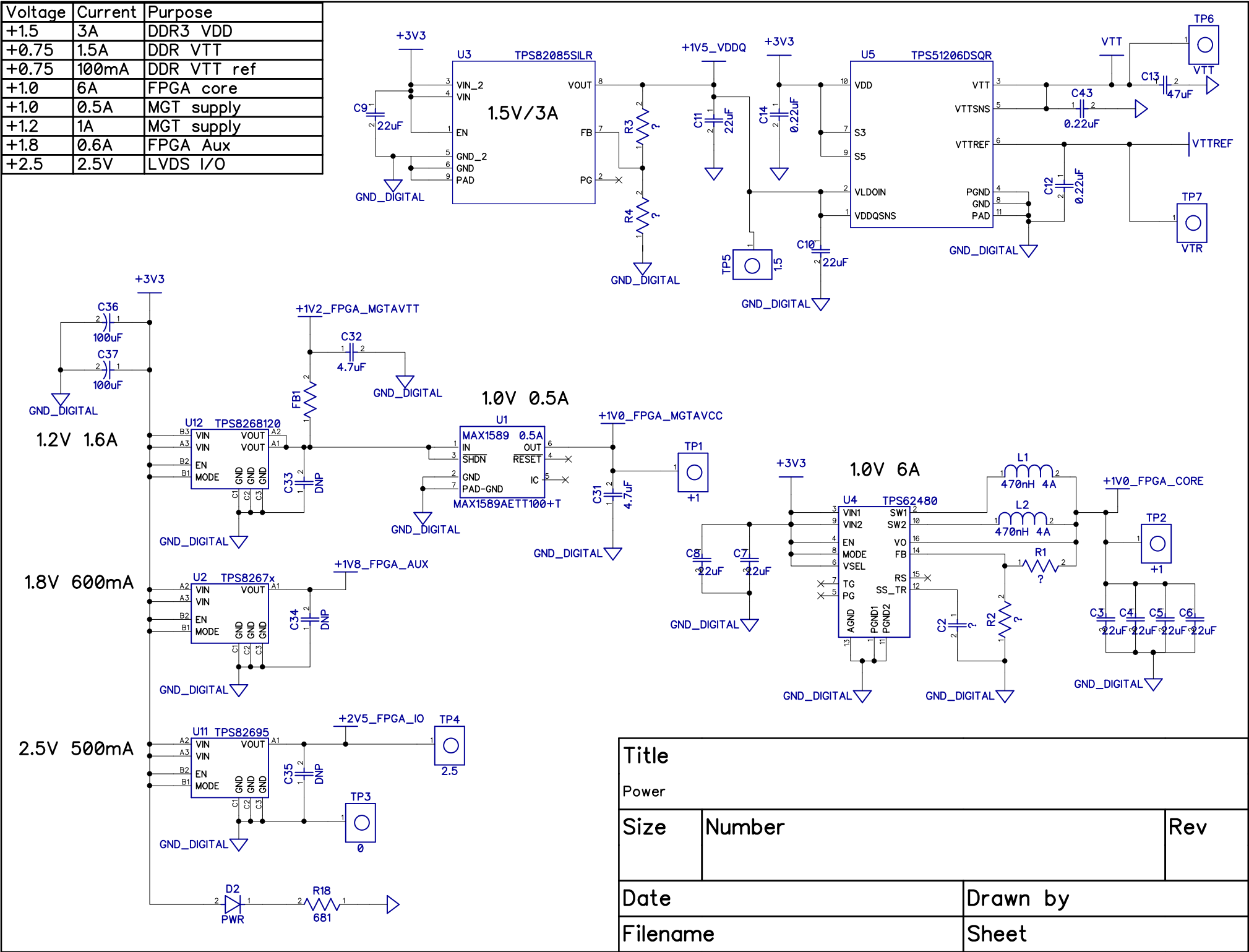
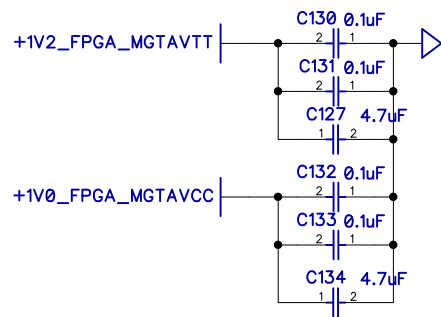


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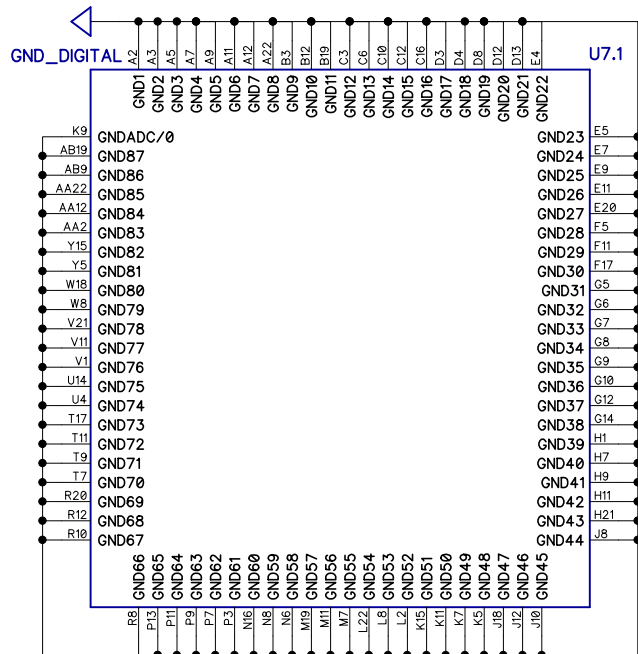
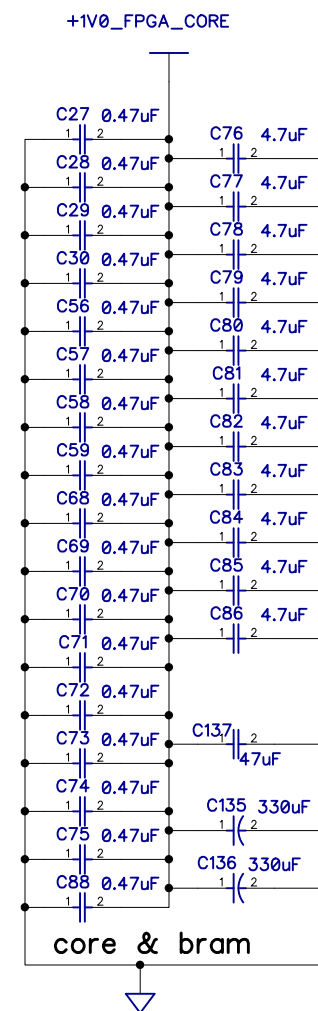
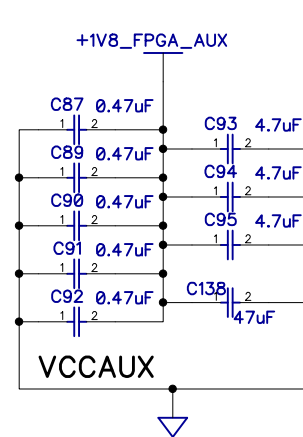
Title	
Block Diagram	
Size	Number
Rev	
Date	Drawn by
Filename	Sheet

Voltage	Current	Purpose
+1.5	3A	DDR3 VDD
+0.75	1.5A	DDR VTT
+0.75	100mA	DDR VTT ref
+1.0	6A	FPGA core
+1.0	0.5A	MGT supply
+1.2	1A	MGT supply
+1.8	0.6A	FPGA Aux
+2.5	2.5V	LVDS I/O

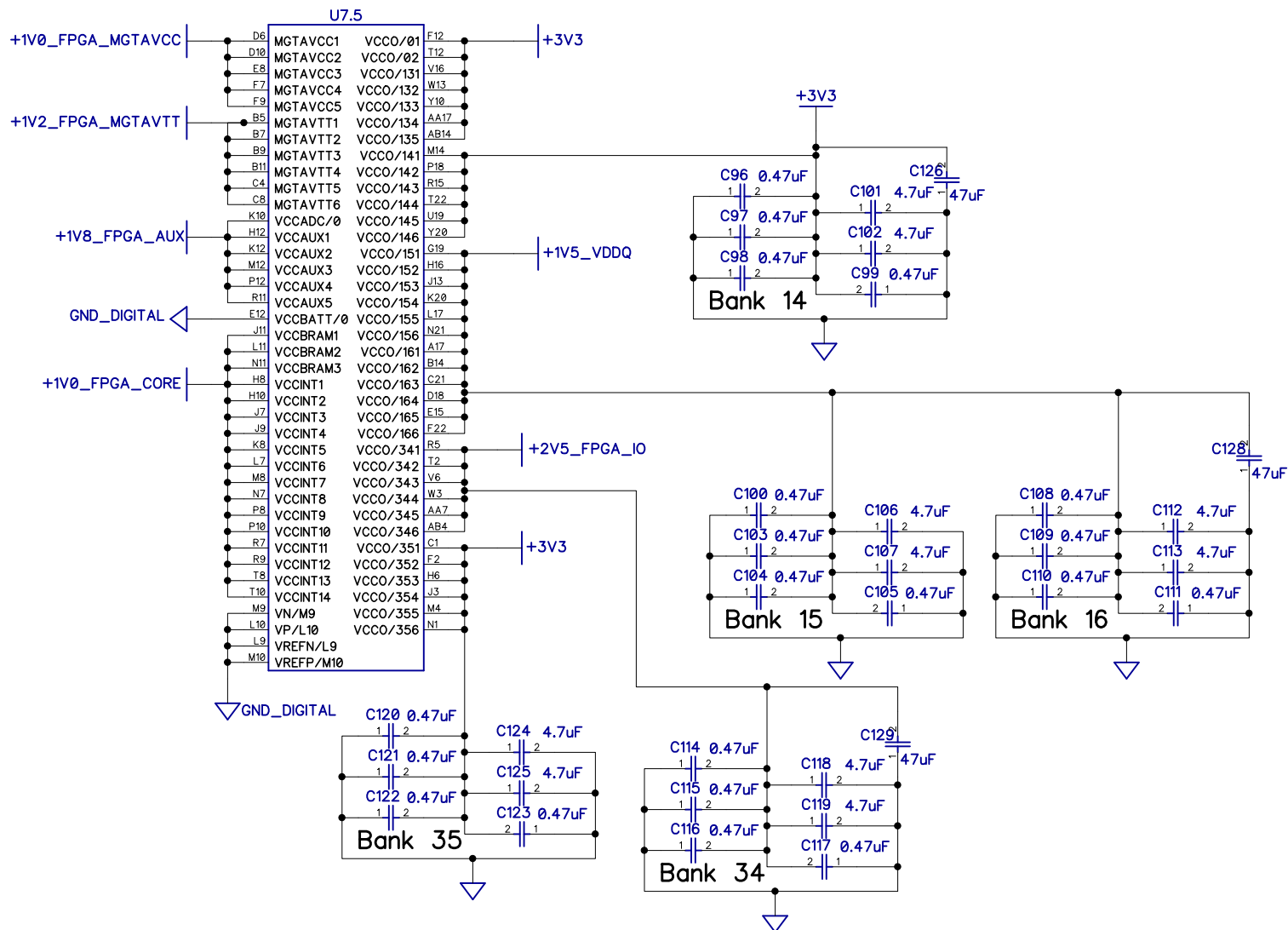




MGT Decouplers

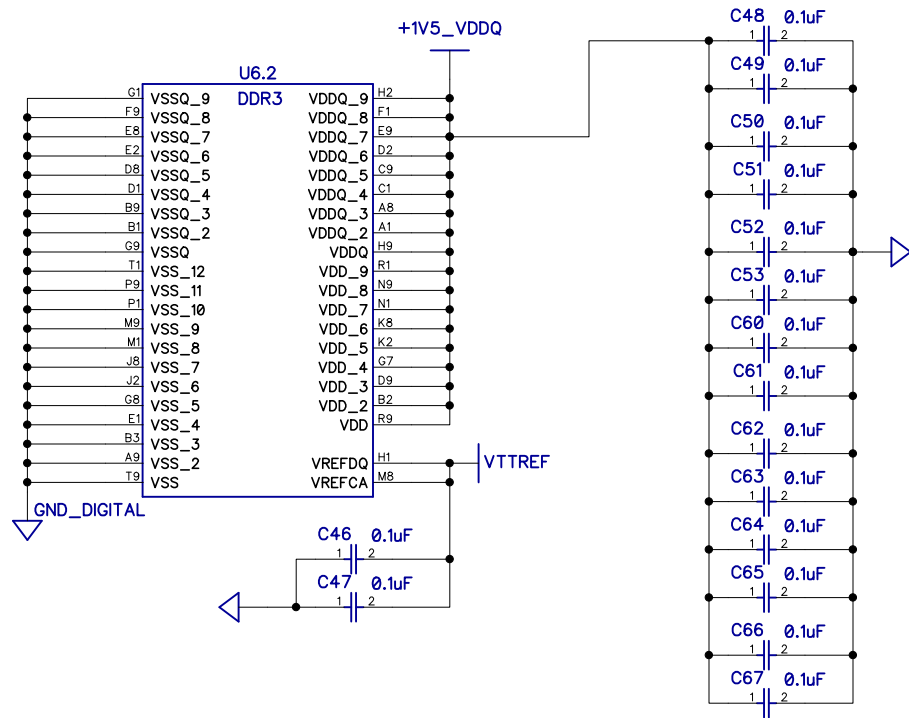


Title			
FPGA power and decoupling			
Size	Number	Bars	Value
		0	
		1 (A)	0.1uF
		2 (B)	4.7uF
		3 (C)	0.47uF
			Rev
Date		Drawn by	
Filename		Sheet	

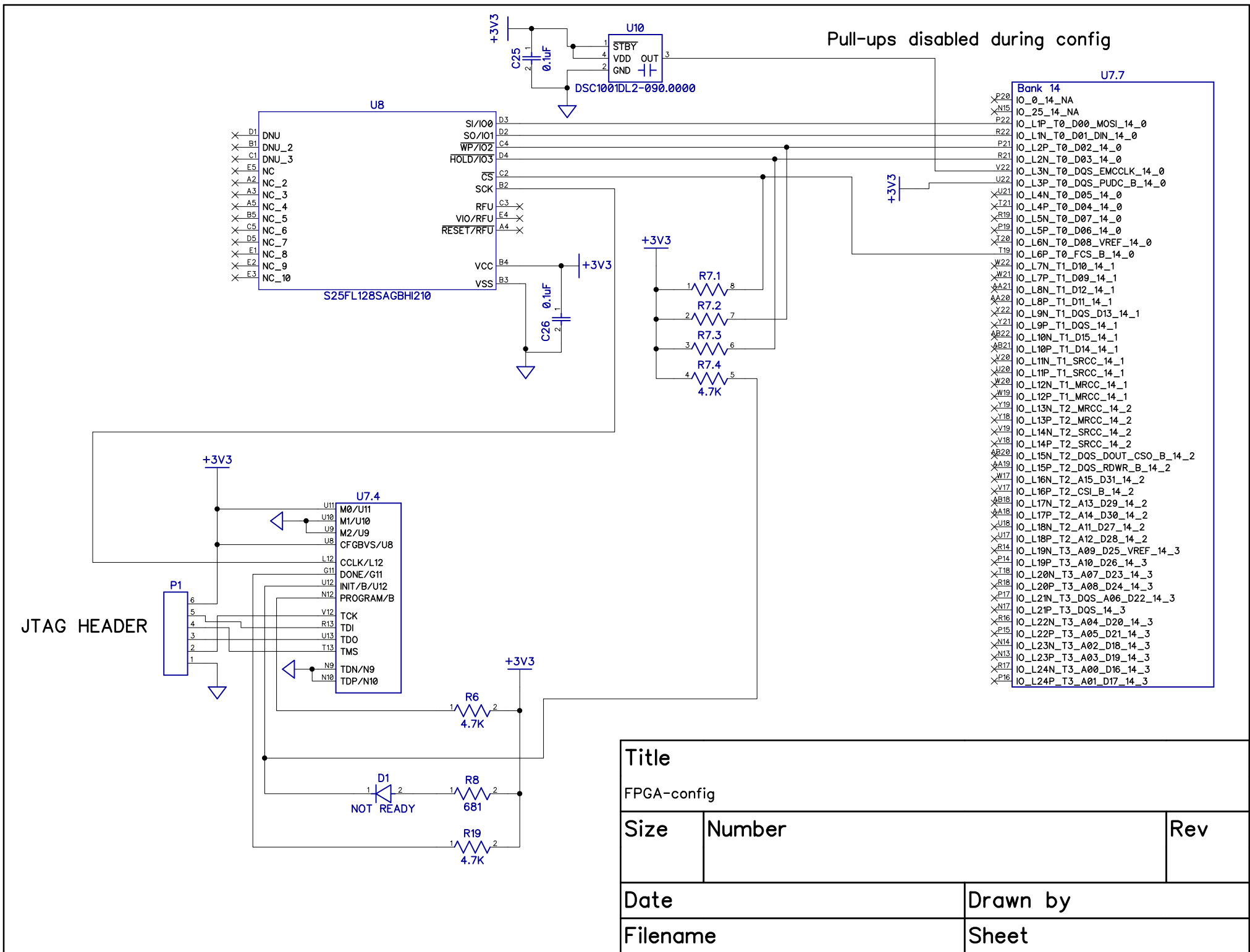


Bank	Voltage	Purpose
0	3.3	SPI, JTAG
13	3.3	Unused (NA on A50)
14	3.3	Config & 3.3V IO
15	1.5	DDR Addr/CTL
16	1.5	DDR data
34	2.5	LVDS I/O
35	3.3	3.3V I/O

Title		
FPGA I/O decoupling		
Size	Number	Rev
Date		Drawn by
Filename		Sheet



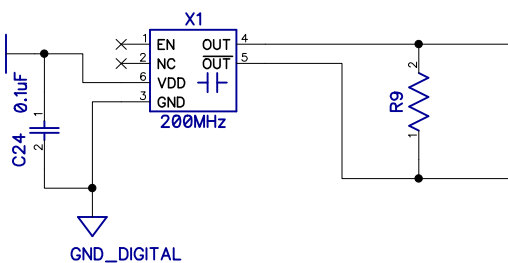
Title		
DRAM Power and decoupling		
Size	Number	Rev
Date		Drawn by
Filename		Sheet



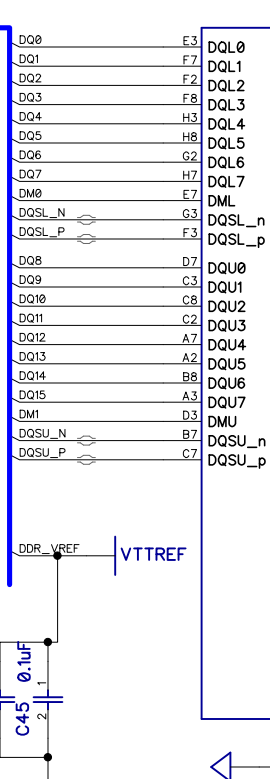
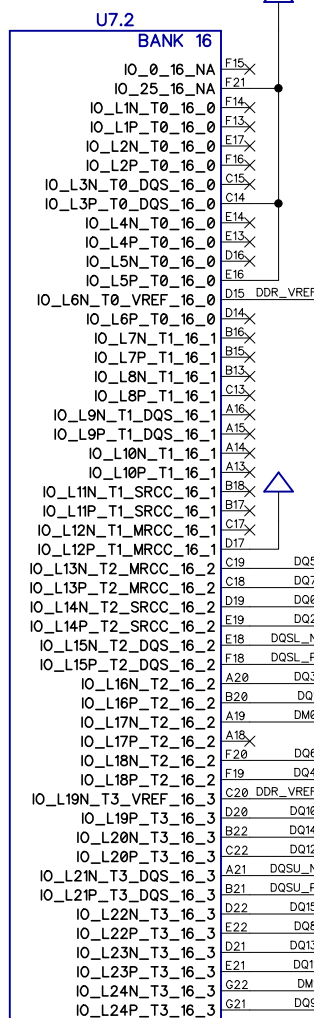
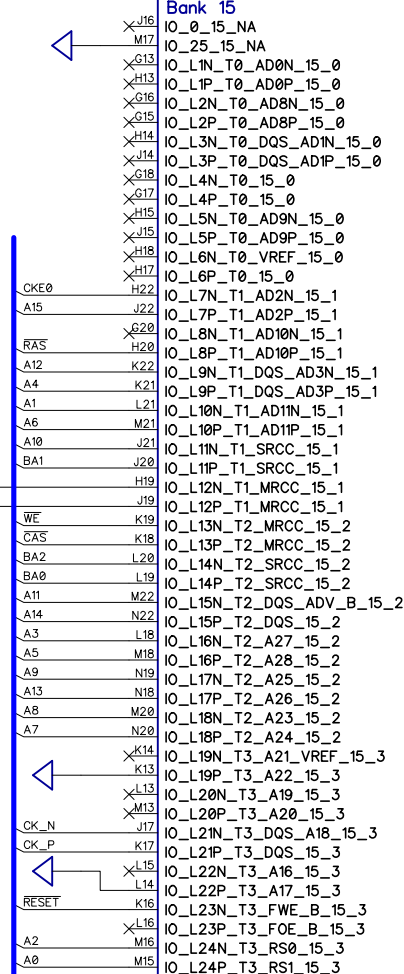
## DDR Termination



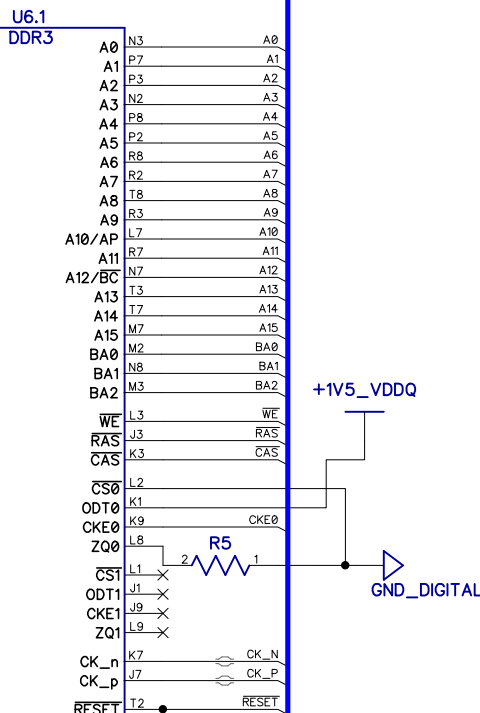
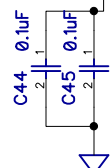
## +2V5\_FPGA\_IO



## U7.8

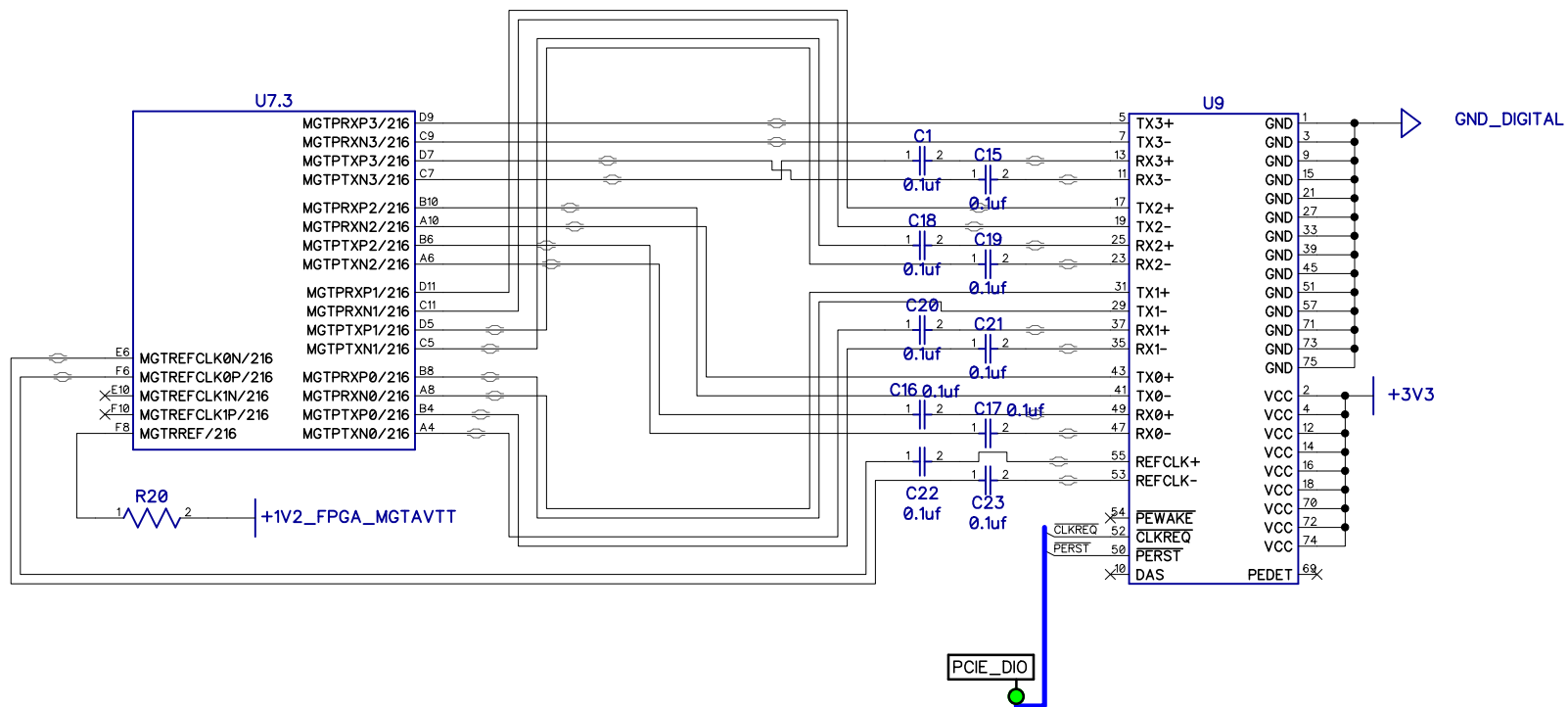


FPGA VTTRef decouplers



## DDR

Size	Number	Rev
Date	Drawn by	
Filename	Sheet	



Title		
FPGA-MGT		
Size	Number	Rev
Date		Drawn by
Filename		Sheet



U7.6

Bank 13

IO/AA9 AA9

IO/AA10 AA10

IO/AA11 AA11

IO/AA12 AA12

IO/AA13 AA13

IO/AA14 AA14

IO/AA15 AA15

IO/AA16 AA16

IO/AB10 AB10

IO/AB11 AB11

IO/AB12 AB12

IO/AB13 AB13

IO/AB15 AB15

IO/AB16 AB16

IO/AB17 AB17

IO/T14 T14

IO/T15 T15

IO/T16 T16

IO/U15 U15

IO/U16 U16

IO/V10 V10

IO/V13 V13

IO/V14 V14

IO/V15 V15

IO/W10 W10

IO/W11 W11

IO/W12 W12

IO/W14 W14

IO/W15 W15

IO/W16 W16

IO/Y11 Y11

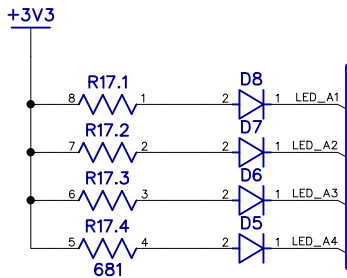
IO/Y12 Y12

IO/Y13 Y13

IO/Y14 Y14

IO/Y16 Y16

IO/Y17 Y17



U7.10

Bank 35

IO\_0\_35\_NA F4

IO\_25\_35\_NA L6

IO\_L1N\_T0\_AD4N\_35\_0 A1

IO\_L1P\_T0\_AD4P\_35\_0 B1

IO\_L2N\_T0\_AD12N\_35\_0 C2

IO\_L2P\_T0\_AD12P\_35\_0 D1

IO\_L3N\_T0\_DQS\_AD5N\_35\_0 E1

IO\_L3P\_T0\_DQS\_AD5P\_35\_0 E2

IO\_L4N\_T0\_35\_0 F1

IO\_L4P\_T0\_35\_0 F2

IO\_L5N\_T0\_AD13N\_35\_0 G1

IO\_L5P\_T0\_AD13P\_35\_0 G2

IO\_L6N\_T0\_VREF\_35\_0 F3

IO\_L6P\_T0\_35\_0 F4

IO\_L7N\_T1\_AD6N\_35\_1 K1

IO\_L7P\_T1\_AD6P\_35\_1 K2

IO\_L8N\_T1\_AD14N\_35\_1 G2

IO\_L8P\_T1\_AD14P\_35\_1 H2

IO\_L9N\_T1\_DQS\_AD7N\_35\_1 J2

IO\_L9P\_T1\_DQS\_AD7P\_35\_1 K2

IO\_L10N\_T1\_AD15N\_35\_1 H5

IO\_L10P\_T1\_AD15P\_35\_1 J5

IO\_L11N\_T1\_SRCC\_35\_1 G3

IO\_L11P\_T1\_SRCC\_35\_1 H3

IO\_L12N\_T1\_MRCC\_35\_1 G4

IO\_L12P\_T1\_MRCC\_35\_1 H4

IO\_L13N\_T2\_MRCC\_35\_2 J4

IO\_L13P\_T2\_MRCC\_35\_2 K4

IO\_L14N\_T2\_SRCC\_35\_2 L3

IO\_L14P\_T2\_SRCC\_35\_2 L4

IO\_L15N\_T2\_DQS\_35\_2 L1

IO\_L15P\_T2\_DQS\_35\_2 M1

IO\_L16N\_T2\_35\_2 M2

IO\_L16P\_T2\_35\_2 T6

IO\_L17N\_T2\_34\_2 J6

IO\_L17P\_T2\_35\_2 K6

IO\_L18N\_T2\_35\_2 L4

IO\_L18P\_T2\_35\_2 N3

IO\_L19N\_T3\_VREF\_35\_3 N4

IO\_L19P\_T3\_35\_3 P1

IO\_L20N\_T3\_35\_3 R1

IO\_L20P\_T3\_35\_3 P4

IO\_L21N\_T3\_DQS\_35\_3 P5

IO\_L21P\_T3\_DQS\_35\_3 N2

IO\_L22N\_T3\_35\_3 P2

IO\_L22P\_T3\_35\_3 M5

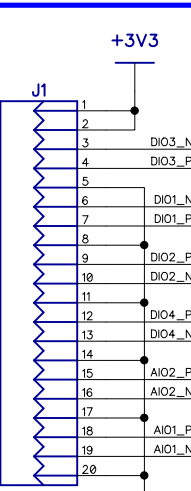
IO\_L23N\_T3\_35\_3 M6

IO\_L23P\_T3\_35\_3 N5

IO\_L24N\_T3\_35\_3 P6

IO\_L24P\_T3\_35\_3 N6

PCIE\_DIO



DIO4\_N

DIO4\_P

DIO3\_N

DIO3\_P

DIO2\_N

DIO2\_P

DIO1\_N

DIO1\_P

LVDS 2.5

U7.9

Bank 34

IO\_0\_34\_NA T3

IO\_25\_34\_NA U7

IO\_L1N\_T0\_34\_0 T1

IO\_L1P\_T0\_34\_0 V2

IO\_L2N\_T0\_34\_0 U2

IO\_L2P\_T0\_34\_0 R2

IO\_L3N\_T0\_DQS\_34\_0 R3

IO\_L3P\_T0\_DQS\_34\_0 Y2

IO\_L4N\_T0\_34\_0 W2

IO\_L4P\_T0\_34\_0 Y1

IO\_L5N\_T0\_34\_0 W1

IO\_L5P\_T0\_34\_0 V3

IO\_L6N\_T0\_VREF\_34\_0 U3

IO\_L6P\_T0\_34\_0 AB1

IO\_L7N\_T1\_34\_1 AA1

IO\_L7P\_T1\_34\_1 AB2

IO\_L8N\_T1\_34\_1 AB3

IO\_L8P\_T1\_34\_1 AA3

IO\_L9N\_T1\_DQS\_34\_1 Y3

IO\_L9P\_T1\_DQS\_34\_1 AB5

IO\_L10N\_T1\_34\_1 AA5

IO\_L10P\_T1\_34\_1 AA4

IO\_L11N\_T1\_SRCC\_34\_1 Y4

IO\_L11P\_T1\_SRCC\_34\_1 W4

IO\_L12N\_T1\_MRCC\_34\_1 V4

IO\_L12P\_T1\_MRCC\_34\_1 T4

IO\_L13N\_T2\_MRCC\_34\_2 R4

IO\_L13P\_T2\_MRCC\_34\_2 U5

IO\_L14N\_T2\_SRCC\_34\_2 T5

IO\_L14P\_T2\_SRCC\_34\_2 W5

IO\_L15N\_T2\_DQS\_34\_2 W6

IO\_L15P\_T2\_DQS\_34\_2 V5

IO\_L16N\_T2\_34\_2 U6

IO\_L16P\_T2\_34\_2 R6

IO\_L17P\_T2\_34\_2 W6

IO\_L18N\_T2\_34\_2 AB7

IO\_L18P\_T2\_34\_2 W7

IO\_L19N\_T3\_VREF\_34\_3 V7

IO\_L19P\_T3\_34\_3 AB6

IO\_L20N\_T3\_34\_3 AB7

IO\_L20P\_T3\_34\_3 V8

IO\_L21N\_T3\_DQS\_34\_3 V9

IO\_L21P\_T3\_DQS\_34\_3 AB8

IO\_L22N\_T3\_34\_3 AA8

IO\_L22P\_T3\_34\_3 Y7

IO\_L23N\_T3\_34\_3 Y8

IO\_L23P\_T3\_34\_3 Y9

IO\_L24N\_T3\_34\_3 W9

IO\_L24P\_T3\_34\_3 W9

Title		
FPGA-IO		
Size	Number	Rev
Date	Drawn by	
Filename	Sheet	