

REV	DESCRIPTION	DATE	APPROVED
A	Initial schematic ready for layout.	08/15/08	RRP

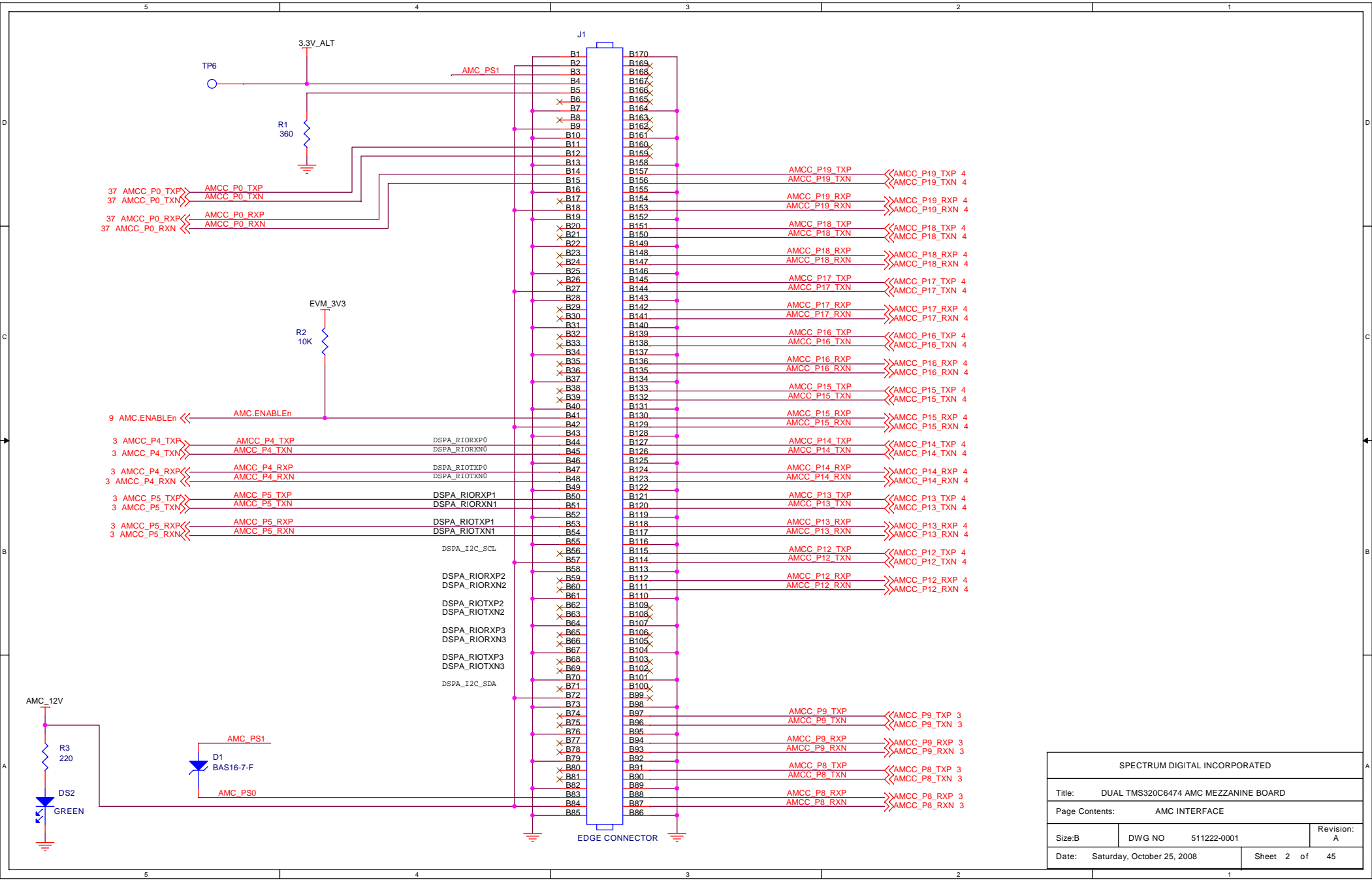
- 01 EVM TITLE SHEET
- 02 AMC INTERFACE
- 03 SRIO ROUTING
- 04 AIF ROUTING
- 05 MASTER CLOCK DOMAIN
- 06 SRIO CLOCK DOMAIN
- 07 McBSP MICTOR/ FSYNC EXP CONN
- 08 HIERARCHIAL EMULATION BLOCK
- 09 CPLD1 - JTAG/ENABLES
- 10 CPLD2 - C6474 CPU-1 INTERFACE PINS
  
- 11 CPLD 3 - SWITCHES
- 12 CPLD 4 - C6474 CPU-2 INTERFACE PINS
- 13 CPLD 5 - POWER PINS
- 14 EMU0/1 ROUTING
- 15 C6474-CPU1 DDR2 MEMORY
- 16 C6474-CPU1 McBSP/GPIO/BOOT STRAPPING
- 17 C6474-CPU1 DDR2 INTERFACE CONTROLLER
- 18 C6474-CPU1 AIF/FSYNC INTERFACE
- 19 C6474-CPU1 EMU INTERFACE
  
- 20 C6474-CPU1 I2C/VCTL/MISC
- 21 C6474-CPU1 PLL
- 22 C6474-CPU1 SRIO/SGMII
- 23 C6474-CPU1 PWR PINS
- 24 C6474-CPU1 PWR PINS II
- 25 C6474-CPU1 PWR CAPS CORE
- 26 C6474-CPU2 DDR2 MEMORY
- 27 C6474-CPU2 McBSP/GPIO/BOOT STRAPPING
- 28 C6474-CPU2 DDR2 INTERFACE CONTROLLER
- 29 C6474-CPU2 AIF/FSYNC INTERFACE
- 30 C6474-CPU2 EMU INTERFACE
  
- 31 C6474-CPU2 I2C/VCTL/MISC
- 32 C6474-CPU2 PLL
- 33 C6474-CPU2 SRIO/SGMII
- 34 C6474-CPU2 PWR PINS
- 35 C6474-CPU2 PWR PINS II
- 36 C6474-CPU2 PWR CAPS CORE
- 37 88E6122 INTERFACE
- 38 88E6122 POWER
- 39 ETHERNET CONNECTOR
- 40 POWER
  
- 41 POWER MONITORS
- 42 C6474-CPU1 CORE POWER
- 43 C6474-CPU2 CORE POWER
- 44 POWER IN 12V TO 5 V CONVERTER
- 45 EMU TOPOLOGY DIAGRAM

REVISION STATUS OF SHEETS

REV											
SHEET											
REV	A	A	A	A	A						
SHEET	41	42	43	44	45						
REV	A	A	A	A	A	A	A	A	A	A	
SHEET	31	32	33	34	35	36	37	38	39	40	
REV	A	A	A	B	A	A	A	A	A	A	
SHEET	21	22	23	24	25	26	27	28	29	30	
REV	A	A	A	A	A	A	A	A	A	A	
SHEET	11	12	13	14	15	16	17	18	19	20	
REV	A	A	A	A	B	A	A	A	A	A	NEXT ASSY USED ON
SHEET	1	2	3	4	5	6	7	8	9	10	APPLICATION

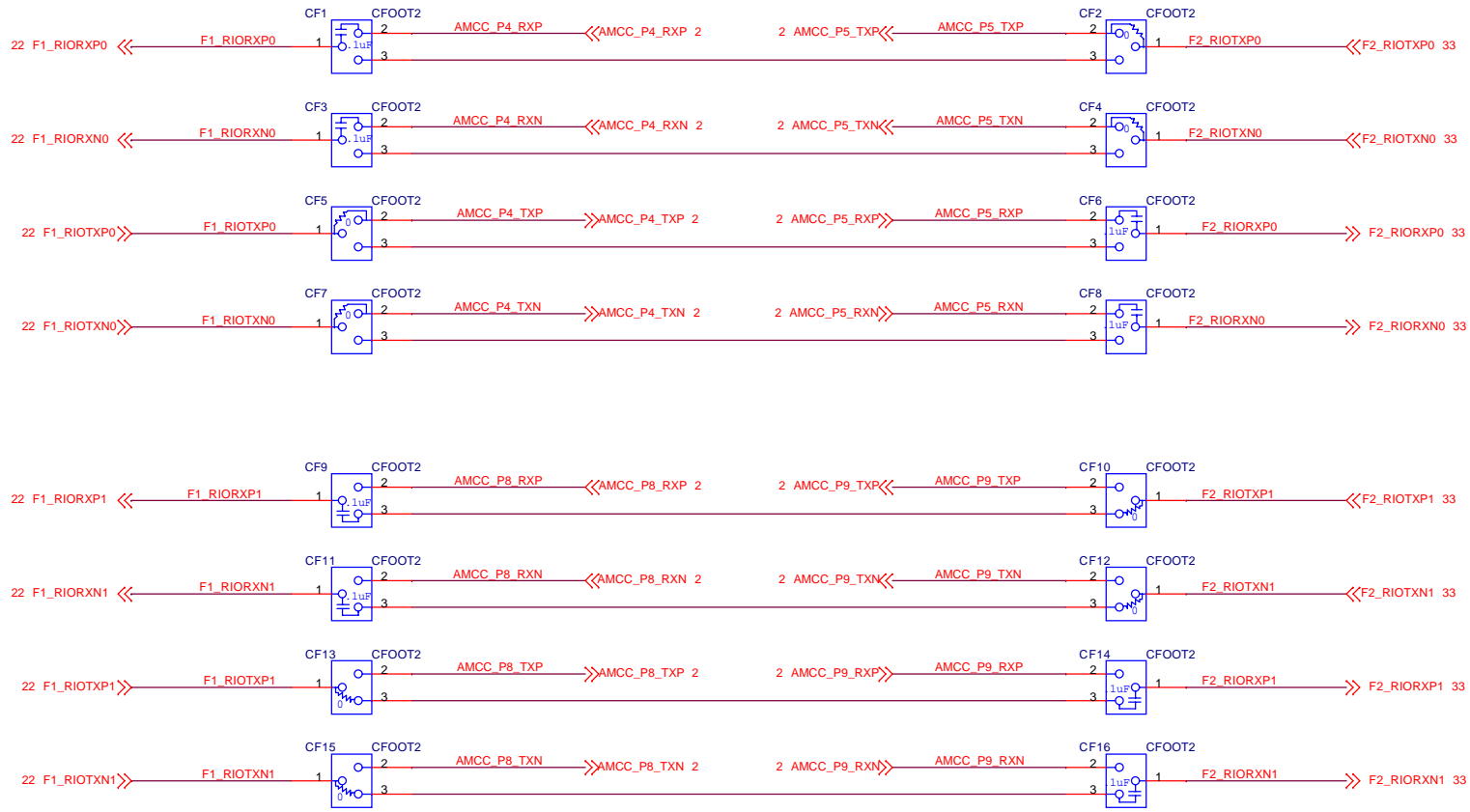
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ENGR	R.R.P.	08/15/2008				
ENGR-MGR	R.R.P.	08/15/2008				
QA	C.M.D.	08/15/2008				
MFG	R.R.P.	08/15/2008				
RLSE	R.R.P.	08/15/2008				

SPECTRUM DIGITAL INCORPORATED			
Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: Title Page			
Size: B	DWG NO	511222-0001	Revision: B
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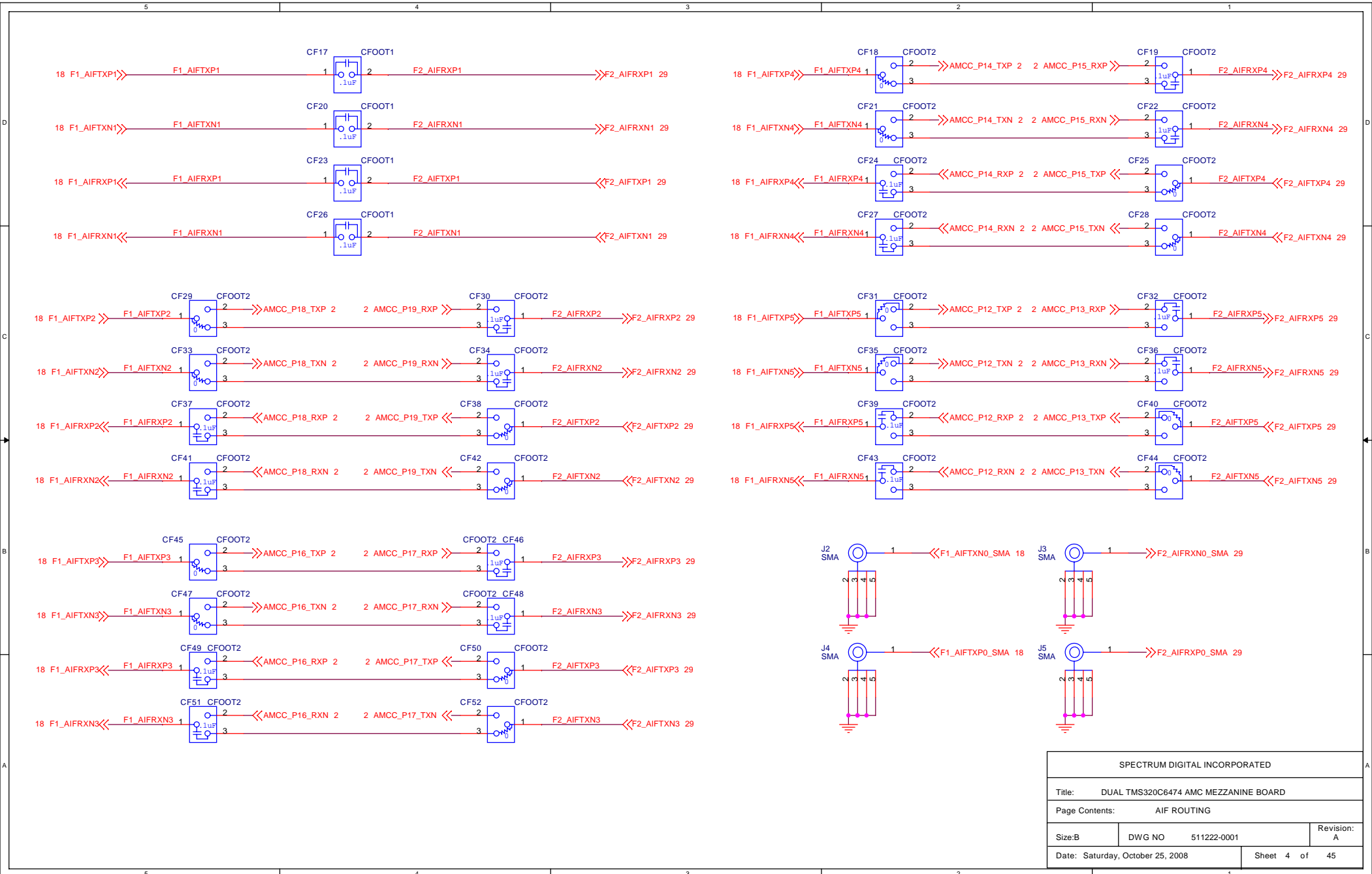
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Page Contents: AMC INTERFACE			
Size: B	DWG NO	511222-0001	Revision: A
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5 4 3 2 1

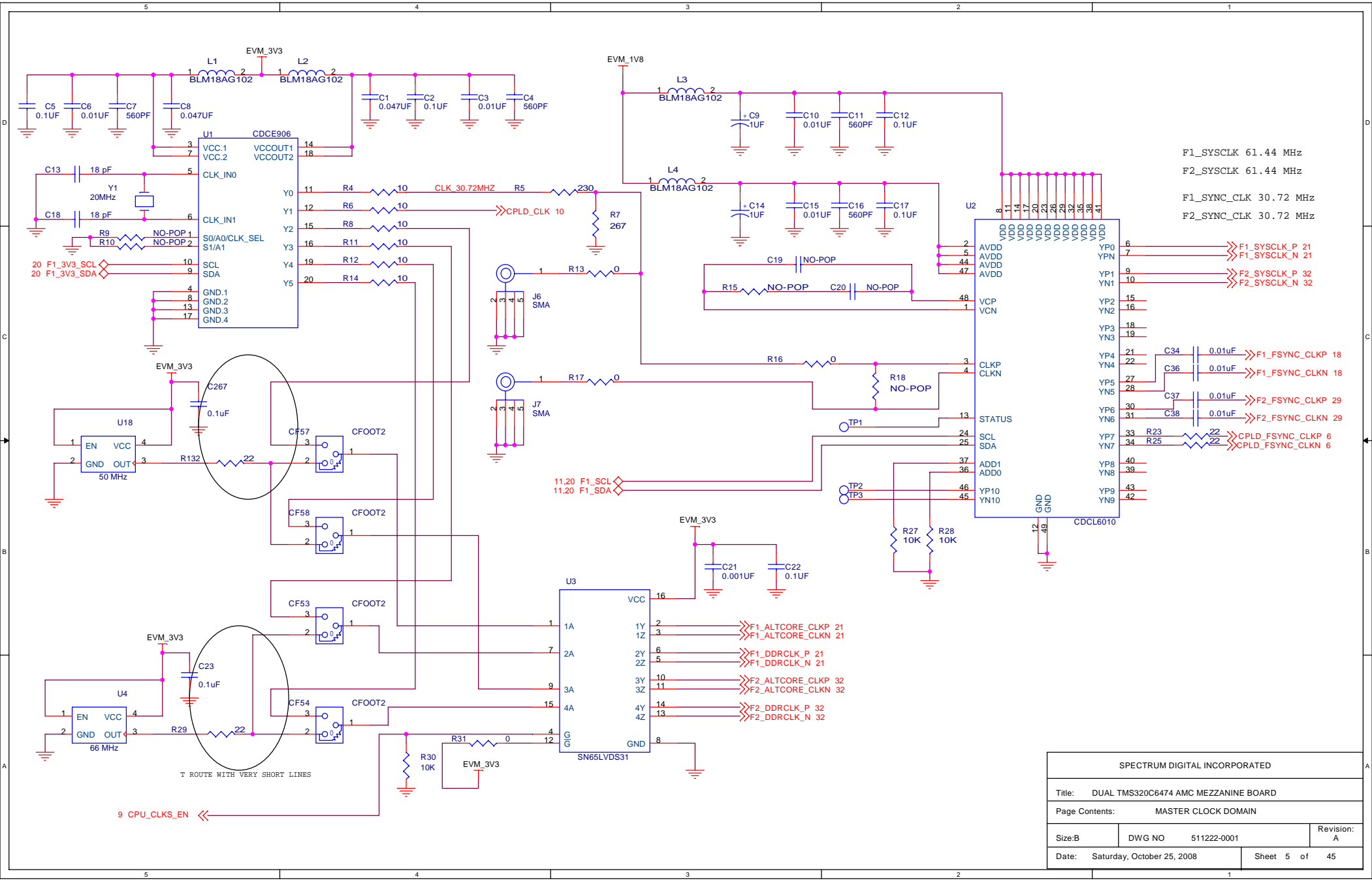


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Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: SRIO ROUTING			
Size: B	DWG NO	511222-0001	Revision: A
Date: Saturday, October 25, 2008			Sheet 3 of 45

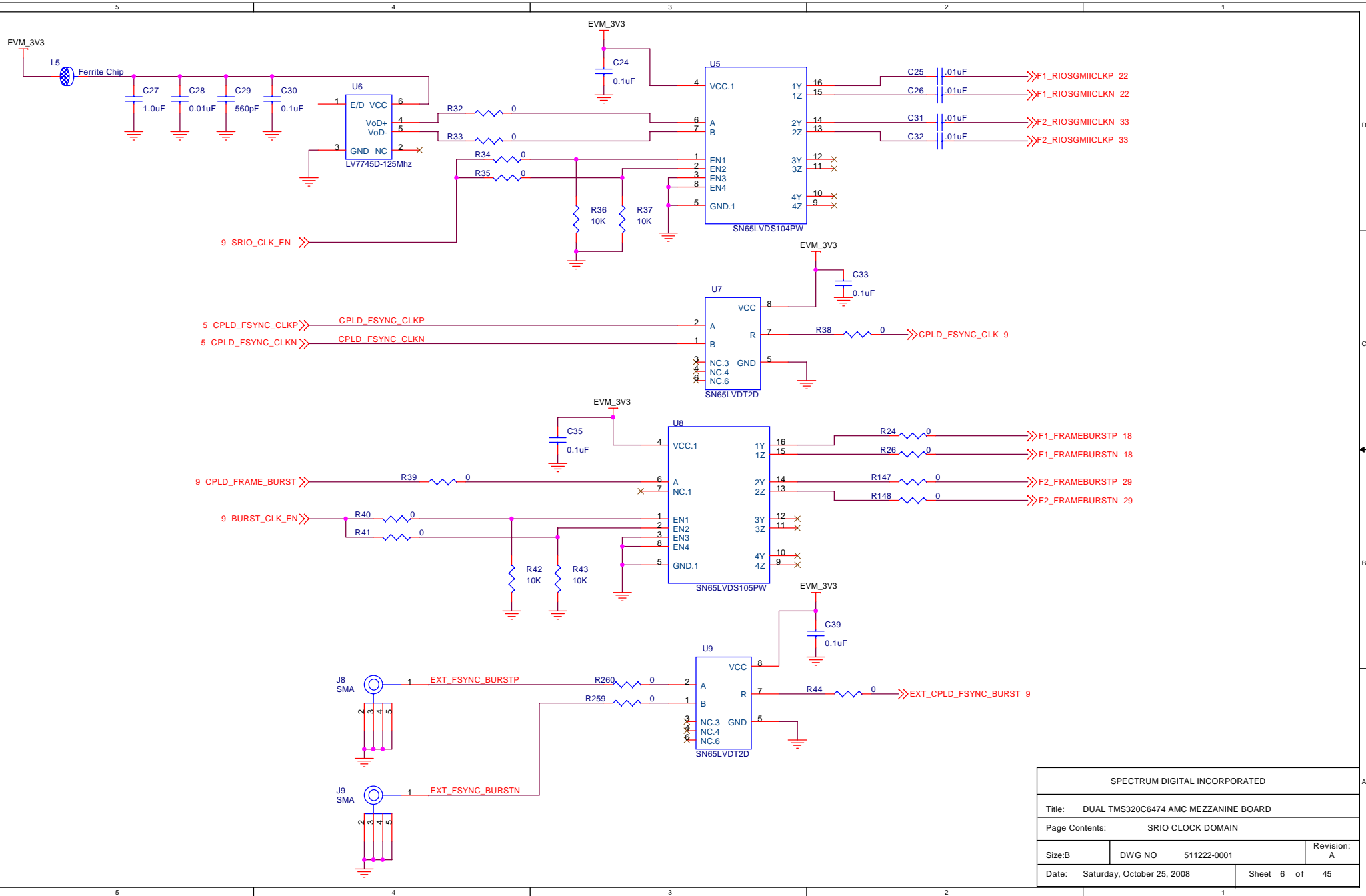
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SPECTRUM DIGITAL INCORPORATED			
Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: AIF ROUTING			
Size: B	DWG NO	511222-0001	Revision: A
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Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: MASTER CLOCK DOMAIN			
Size: B	DWG NO	511222-0001	Revision: A
Date:	Saturday, October 25, 2008	Sheet 5 of 45	

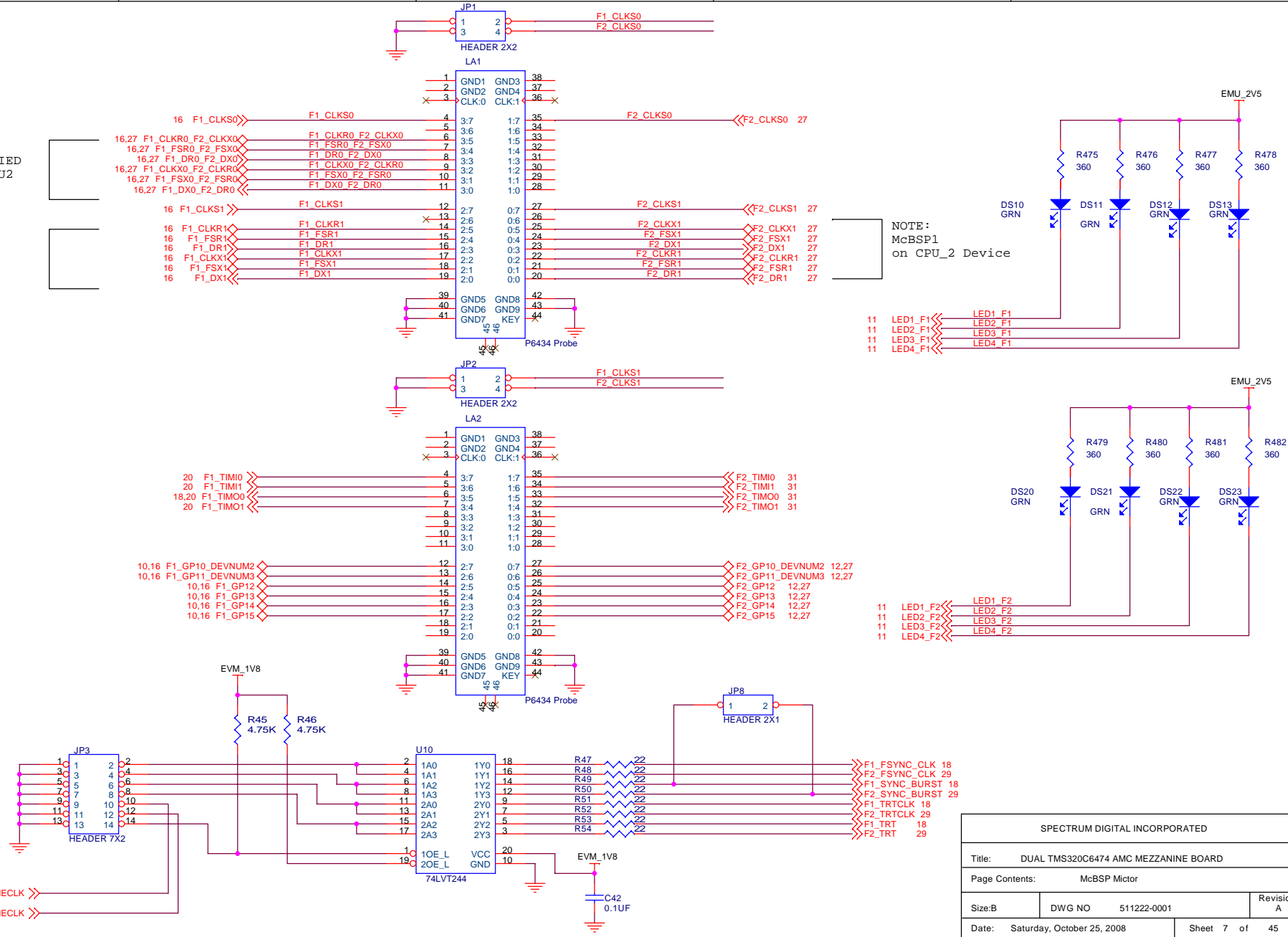


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Page Contents: SRIO CLOCK DOMAIN			
Size: B	DWG NO	511222-0001	Revision: A
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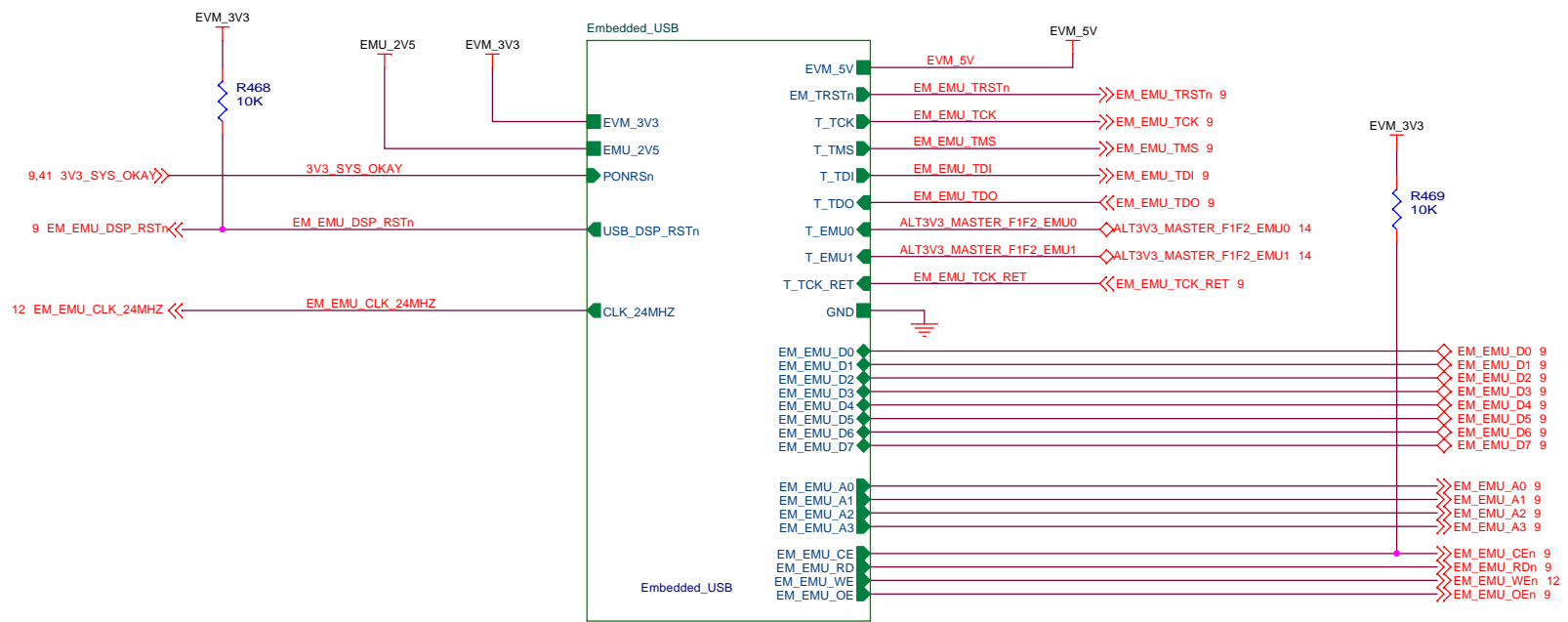
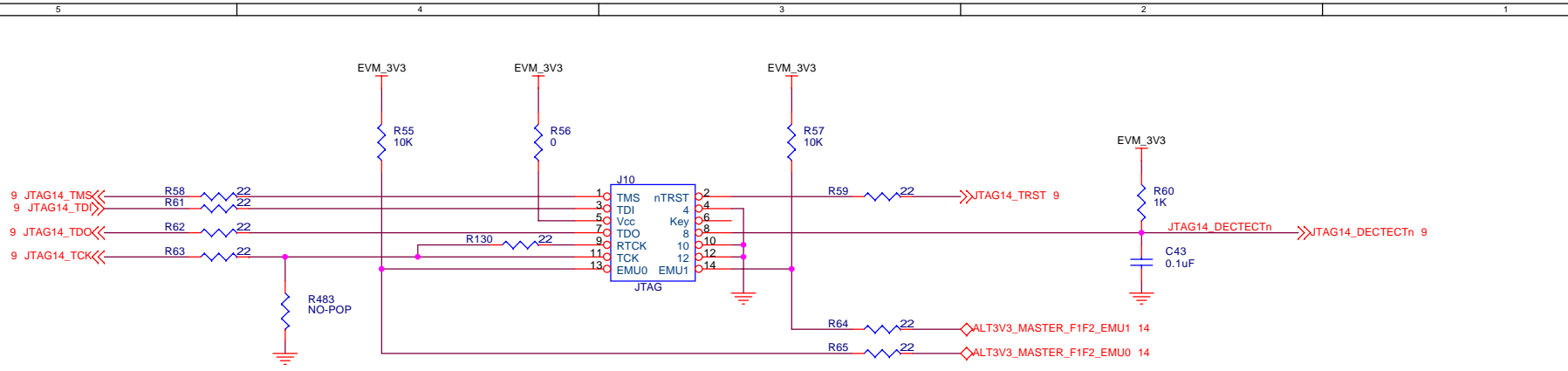
NOTE:  
McBSP0 on CPU1 TIED  
TO McBSP0 on CPU2

NOTE:  
McBSP1 on CPU1  
Device

NOTE:  
McBSP1  
on CPU\_2 Device



SPECTRUM DIGITAL INCORPORATED			
Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: McBSP Mictor			
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Date: Saturday, October 25, 2008	Sheet 7 of 45		

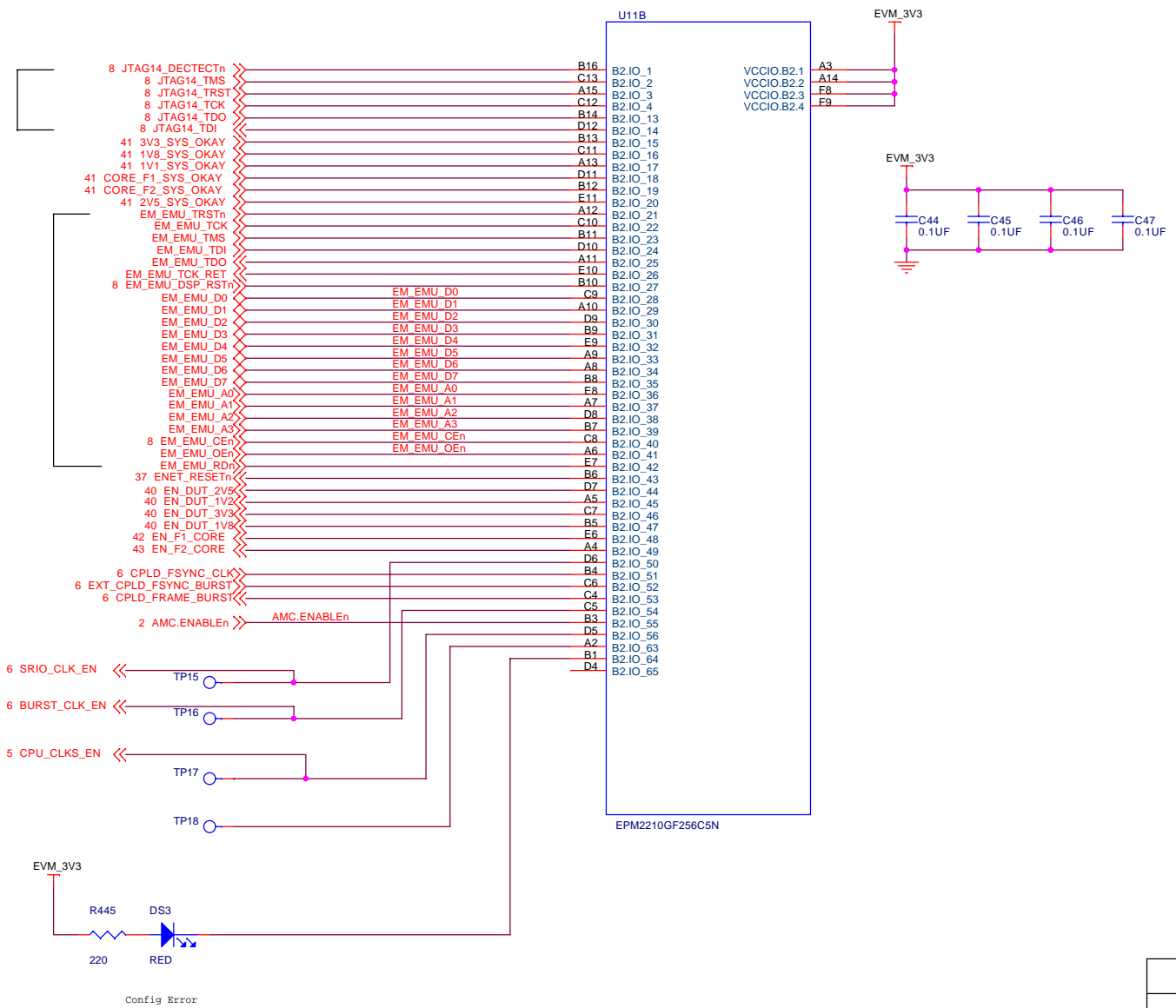


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Page Contents: McBSP Mictor			
Size: B	DWG NO	511222-0001	Revision: A
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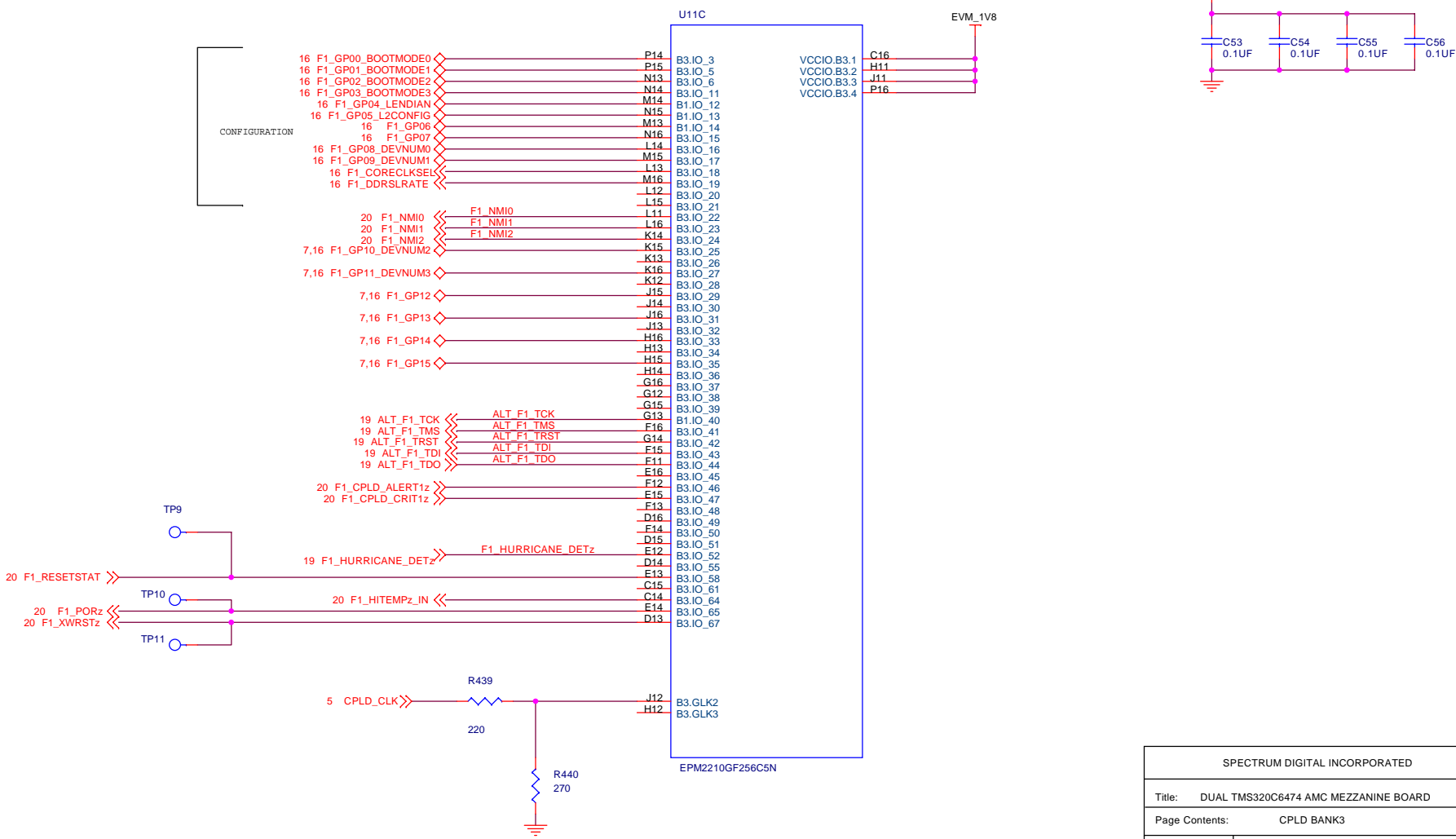


14 PIN JTAG

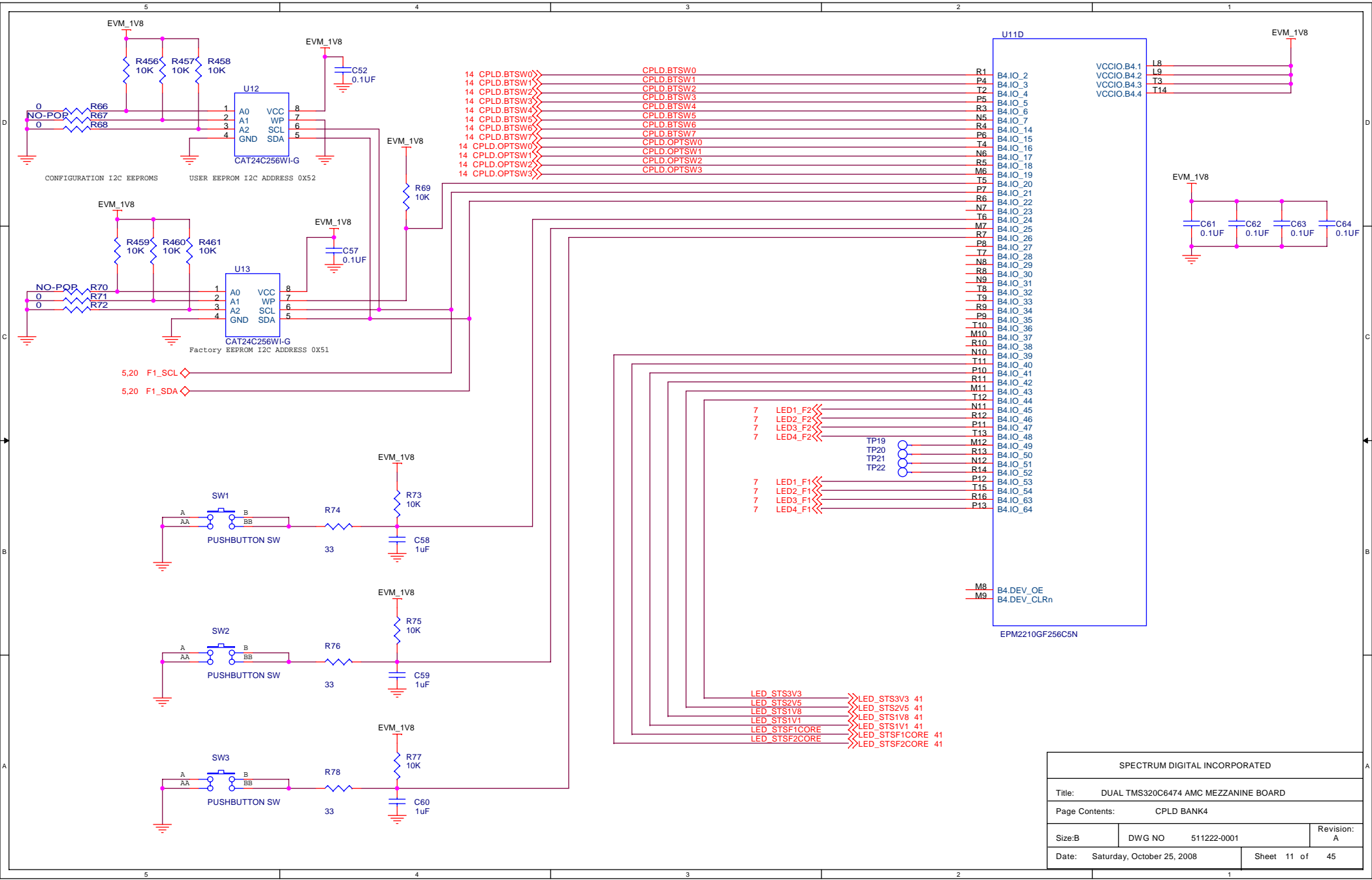
EMBEDDED EMU



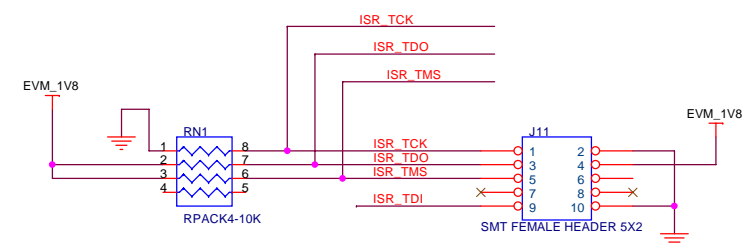
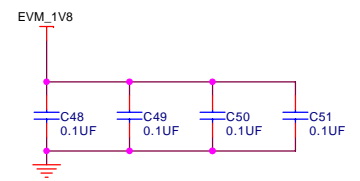
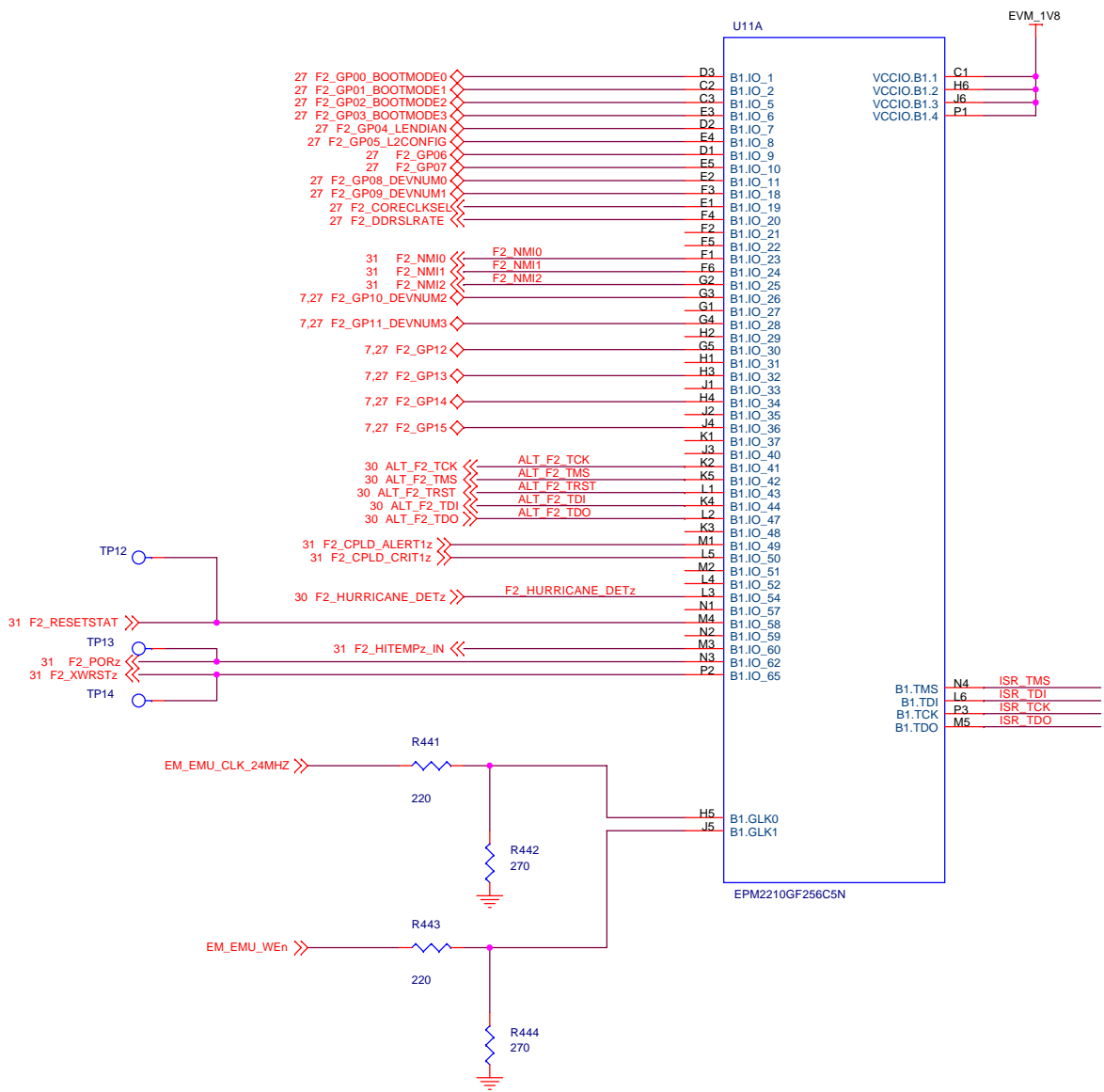
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Page Contents: CPLD BANK2			
Size: B	DWG NO	511222-0001	Revision: A
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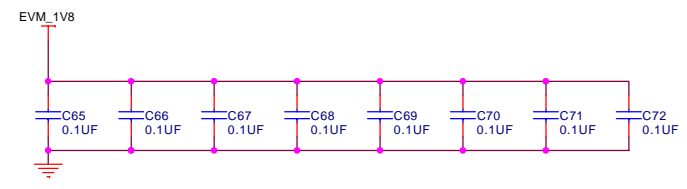
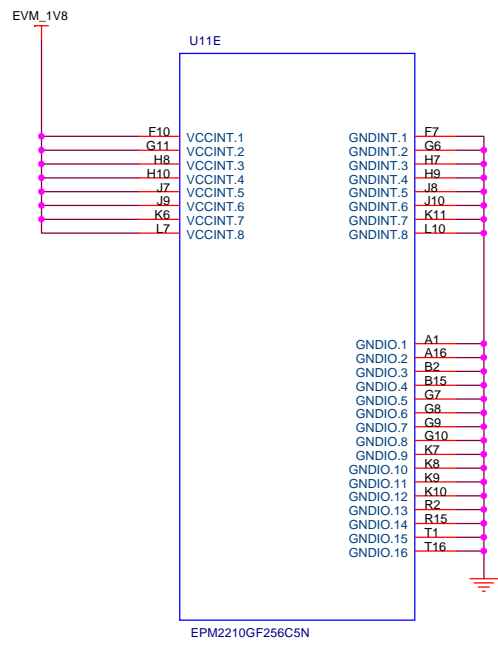
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Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: CPLD BANK3			
Size: B	DWG NO	511222-0001	Revision: A
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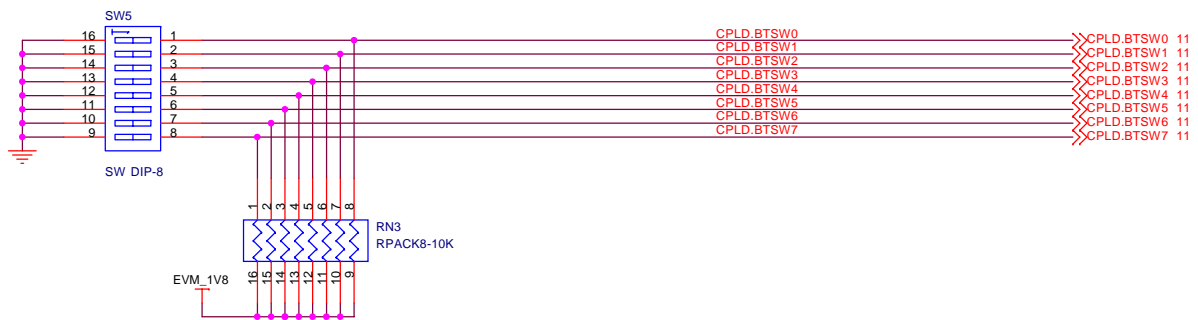
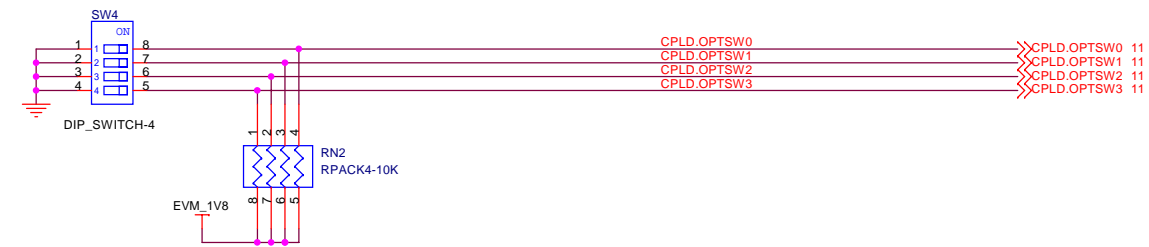
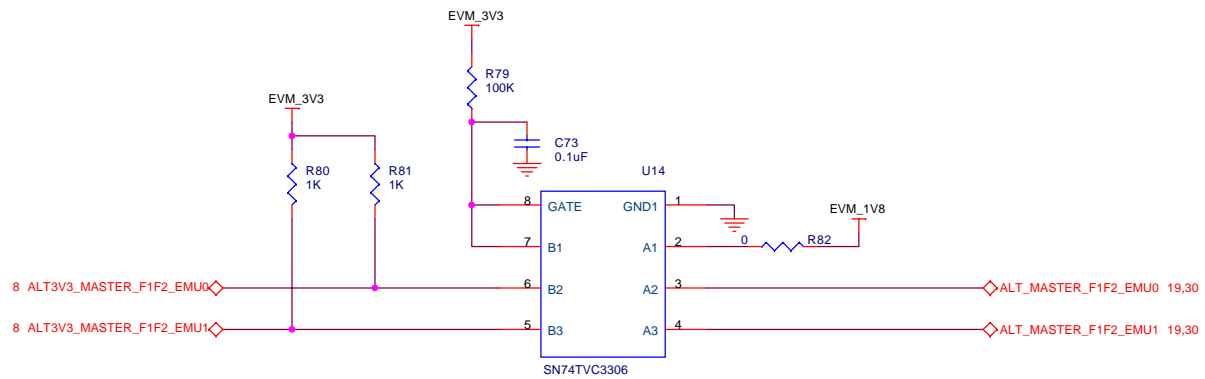
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Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: CPLD BANK4			
Size: B	DWG NO	511222-0001	Revision: A
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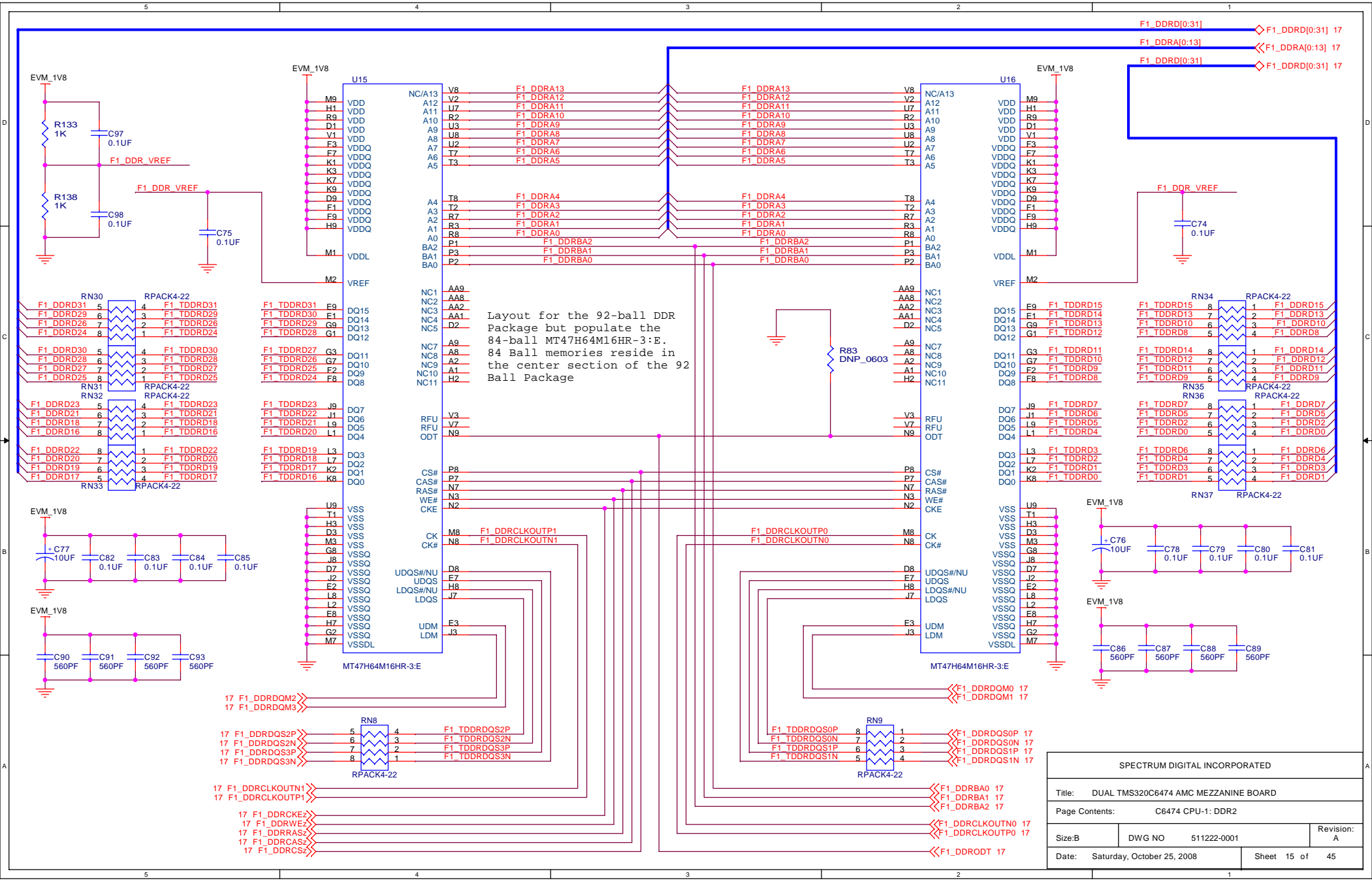
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Page Contents: CPLD BANK1			
Size: B	DWG NO: 511222-0001	Revision: A	
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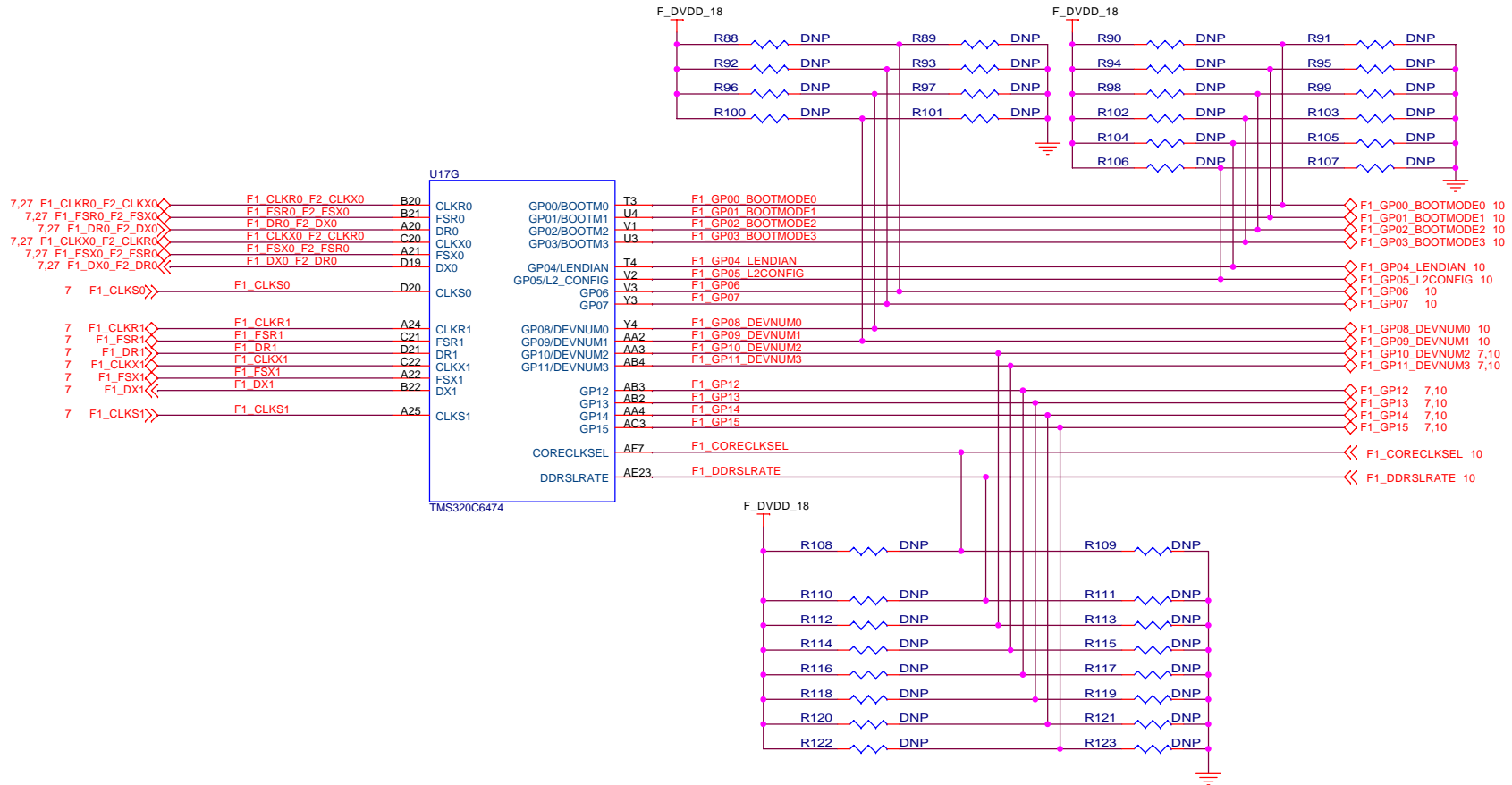
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Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: CPLD POWER PINS			
Size: B	DWG NO	511222-0001	Revision: A
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SPECTRUM DIGITAL INCORPORATED			
Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: BOOT SWITCHES/ EMU PINS VOLTAGE SHIFTER			
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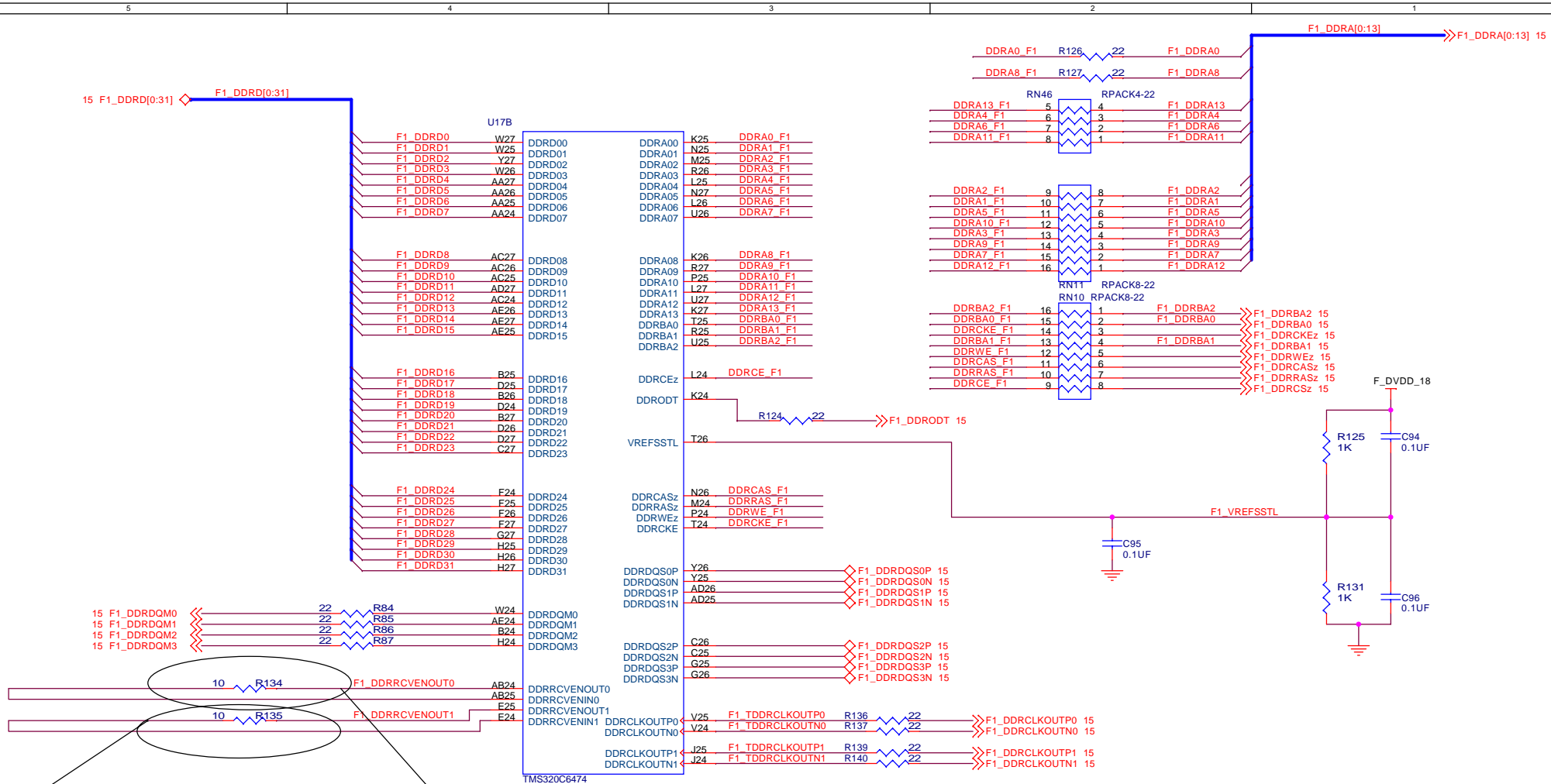


SPECTRUM DIGITAL INCORPORATED			
Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: C6474 CPU-1: DDR2			
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SPECTRUM DIGITAL INCORPORATED			
Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: C6474 CPU-1: McBSP, GPIO, CONFIG			
Size: B	DWG NO	511222-0001	Revision: A
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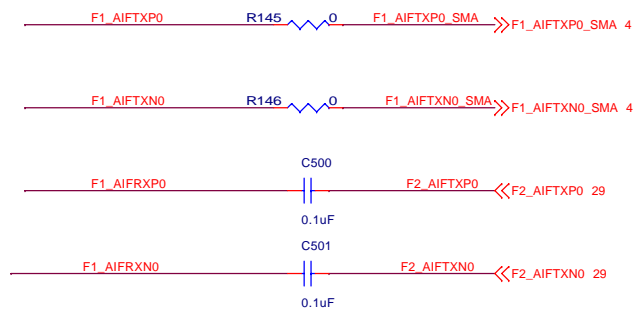
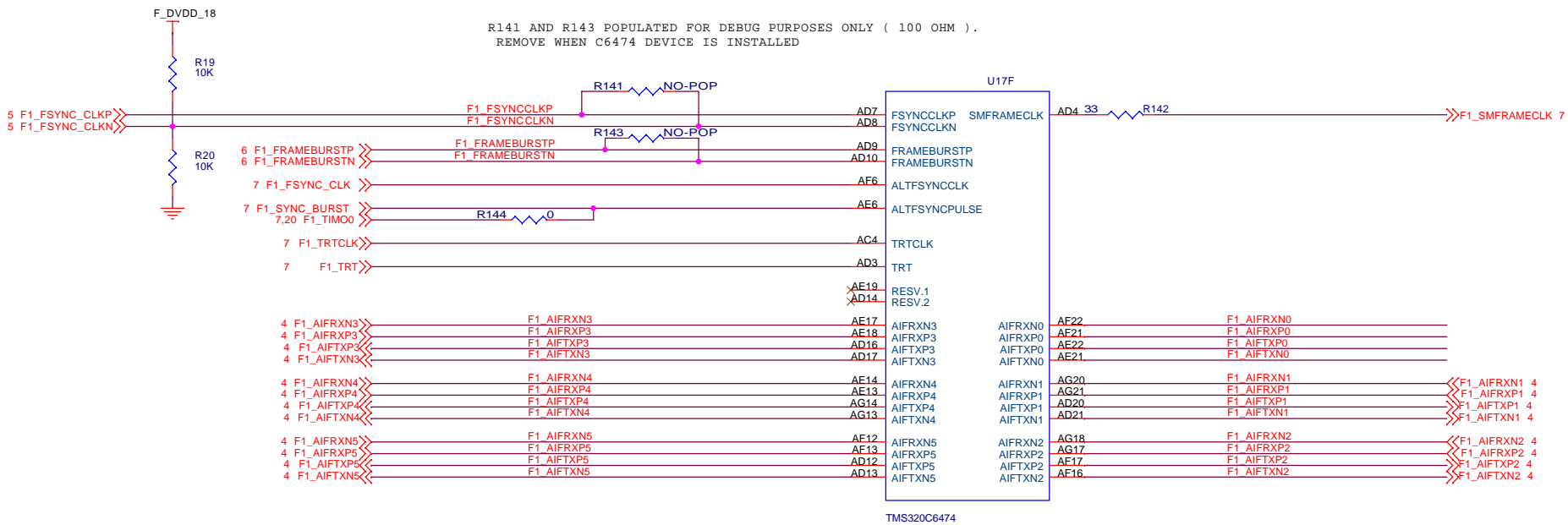




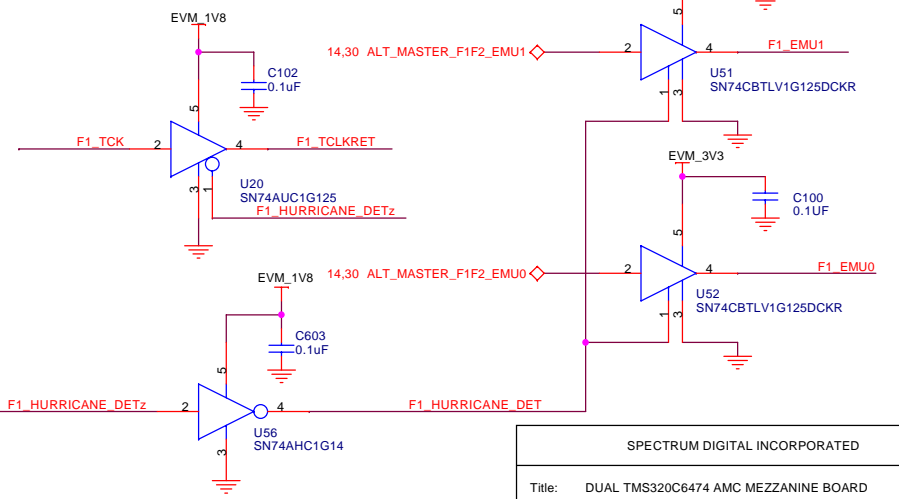
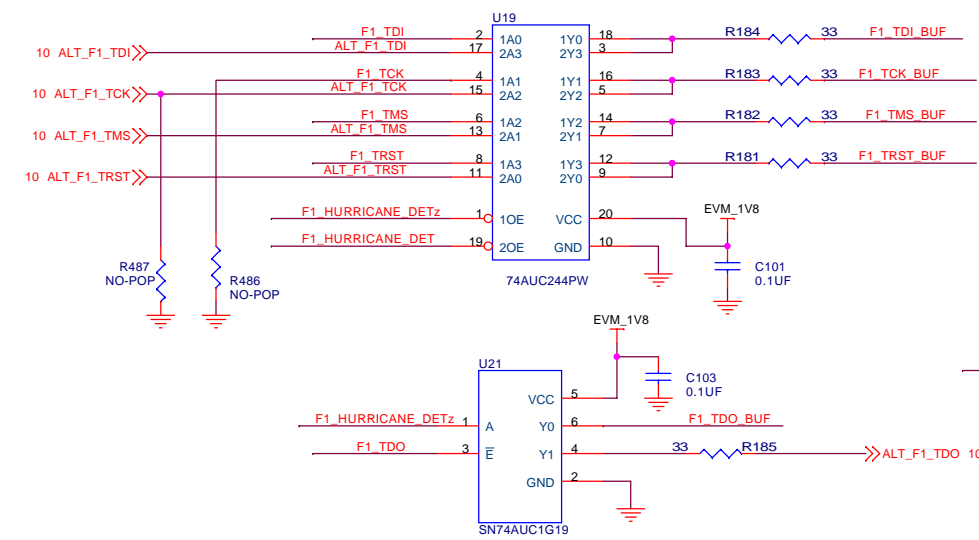
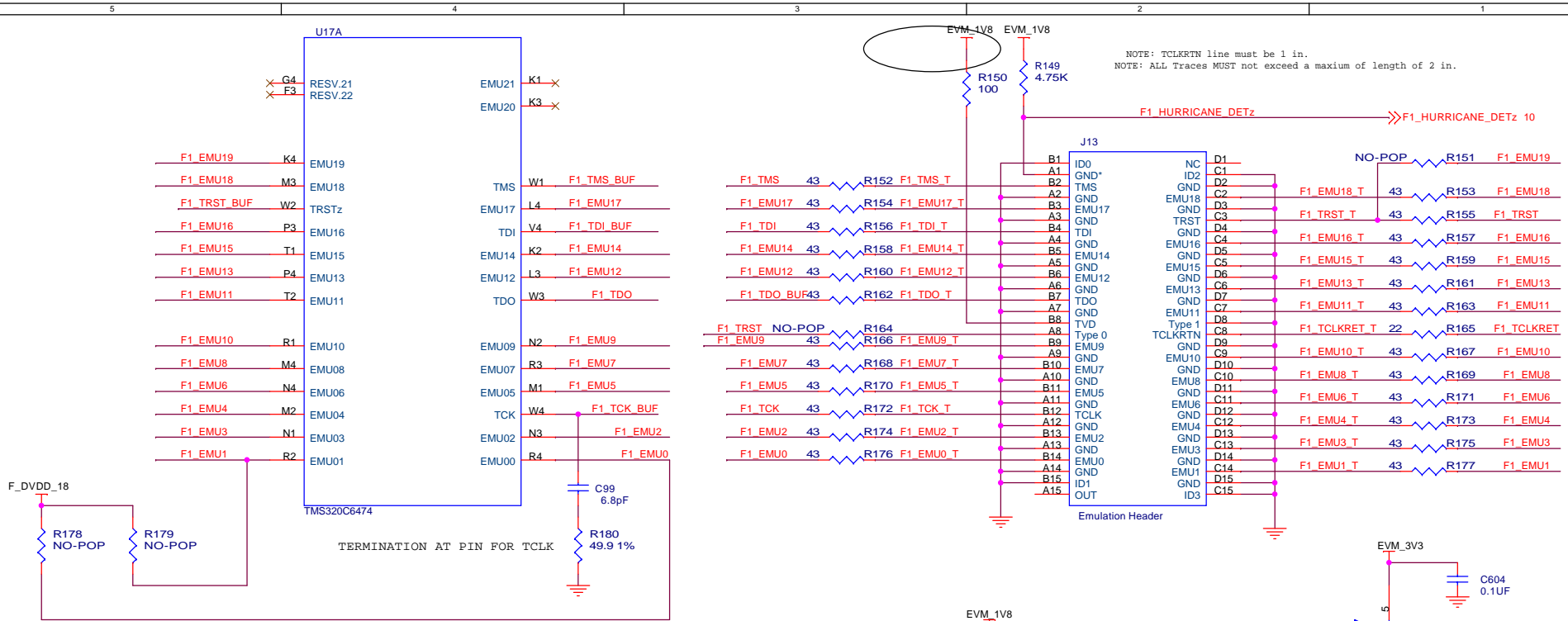
NOTE: Route DDRRCVENOUT0 signals needs to run to DDR memories near D31-D16 and back to DDRRCVENIN0

NOTE: Route DDRRCVENOUT1 signals needs to run to DDR memories near D15-D0 and back to DDRRCVENIN0

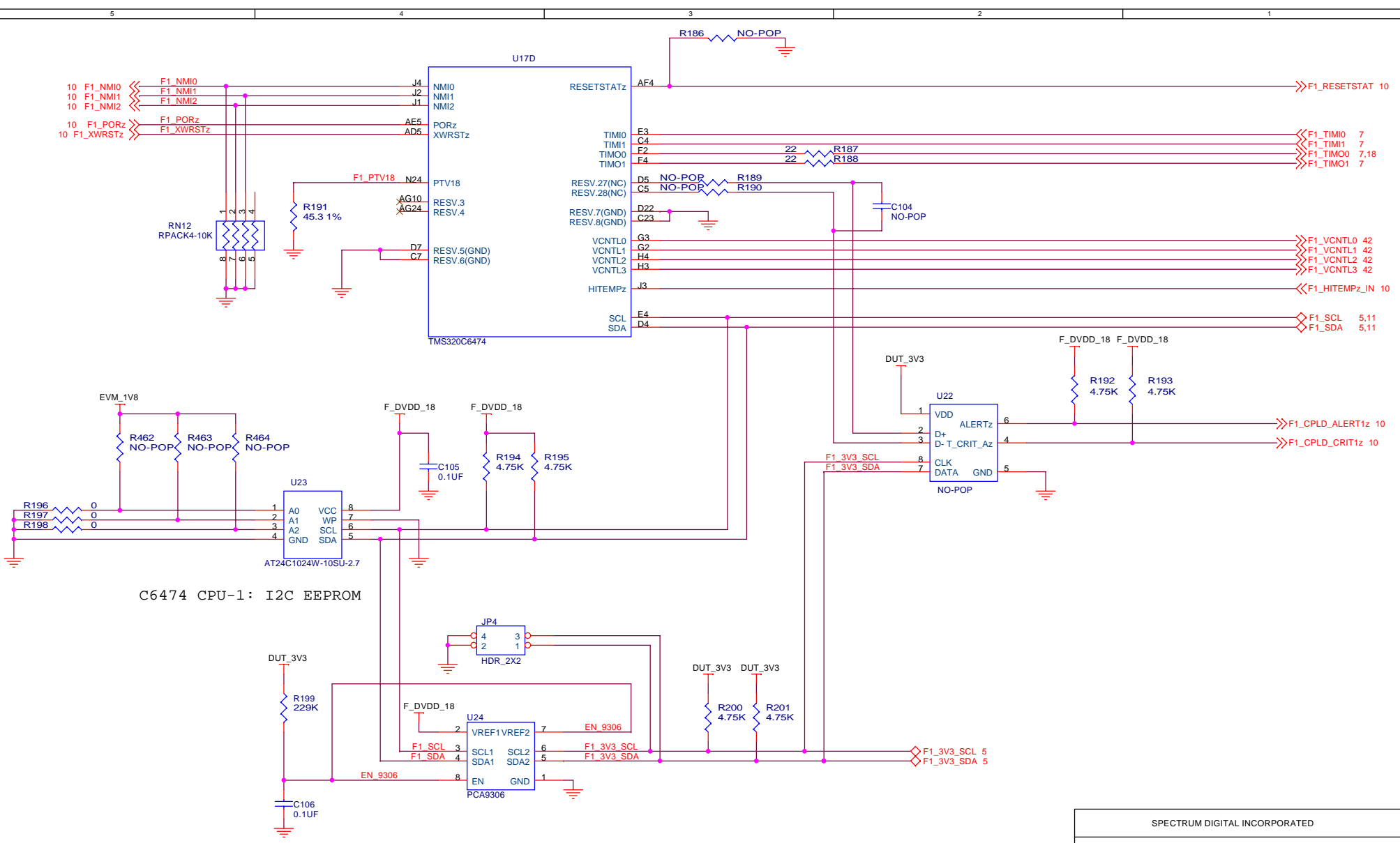
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Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: C6474 CPU-1: DDR2 interface			
Size: B	DWG NO	511222-0001	Revision: A
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SPECTRUM DIGITAL INCORPORATED			
Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: C6474 CPU-1: AIF and FSYNCLK Interfaces			
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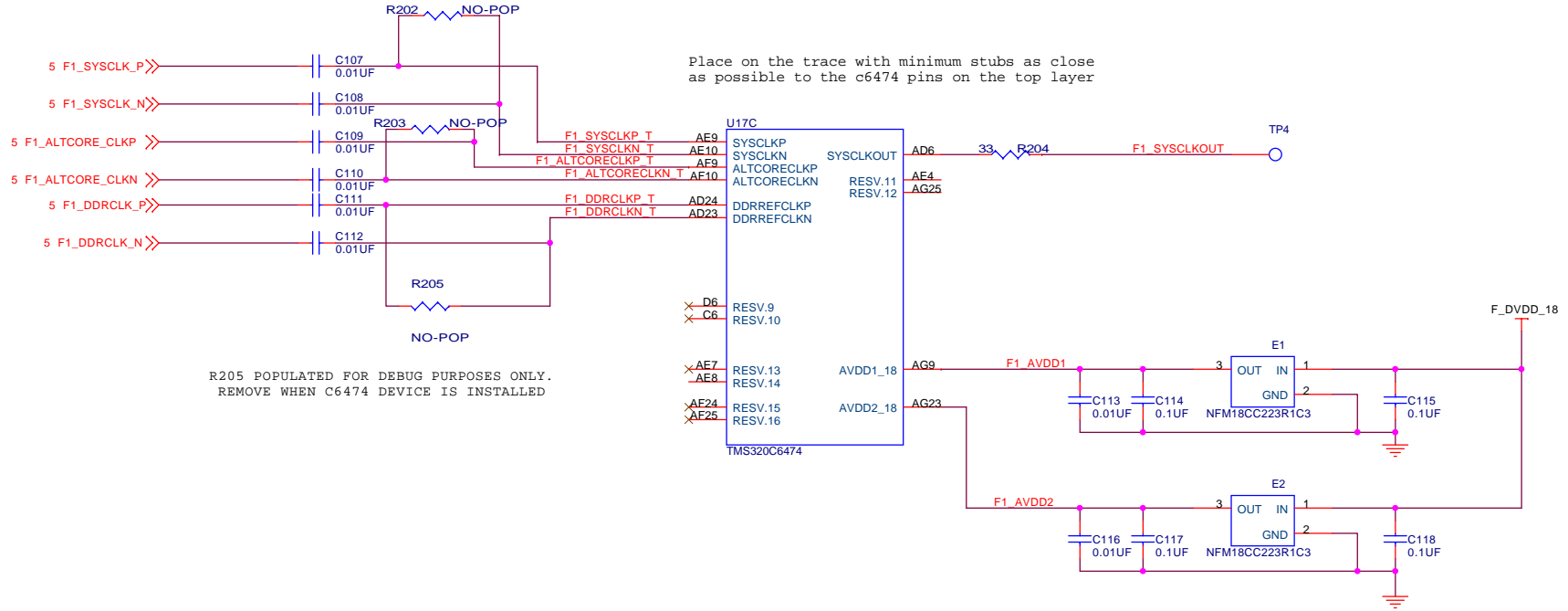
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Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: C6474 CPU-1: Emulation Interface			
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C6474 CPU-1: I2C EEPROM

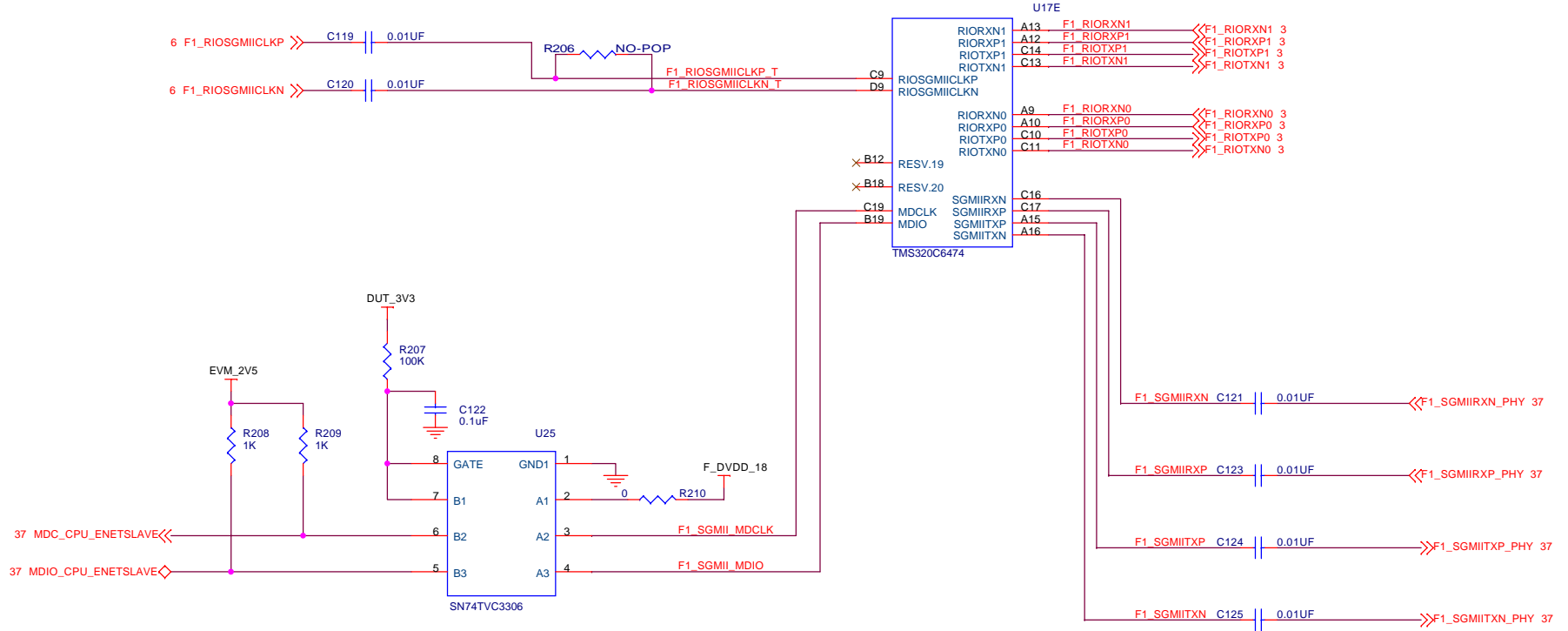
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Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: C6474 CPU-1: I2C,Timer,VCNTL,Reset/NMI,Misc Test			
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R202 AND R203 POPULATED FOR DEBUG PURPOSES ONLY ( 100 OHM ).  
REMOVE WHEN C6474 DEVICE IS INSTALLED



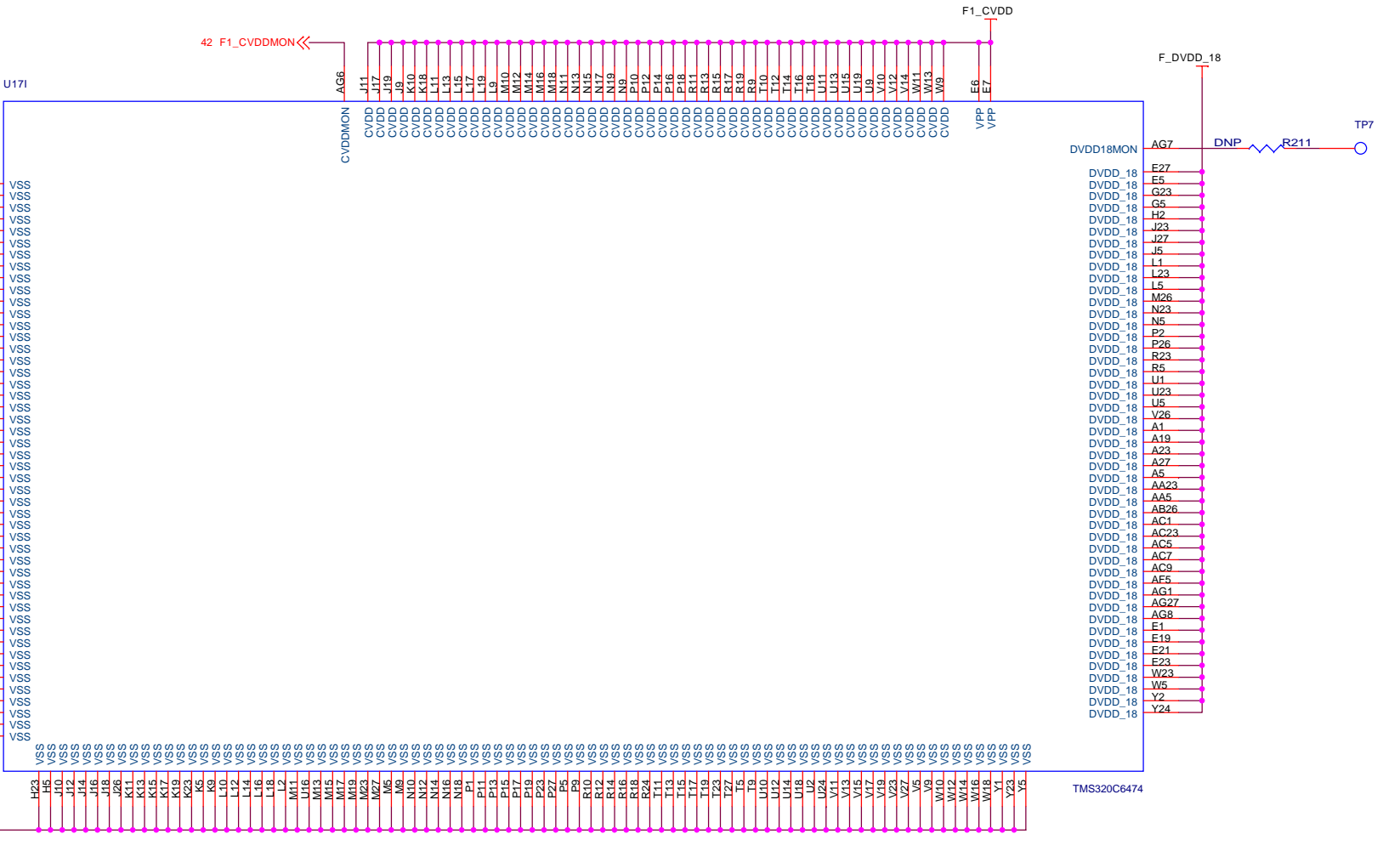
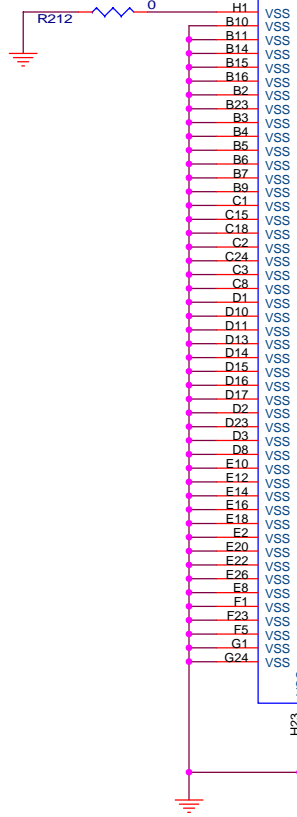
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Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: C6474 CPU-1: PLLs			
Size: B	DWG NO	511222-0001	Revision: A
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R206 FOR POPULATE FOR DEBUG PURPOSES ONLY( 100 OHM ).  
REMOVE WHEN C6474 DEVICE IS INSTALLED

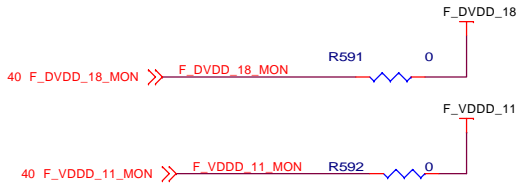
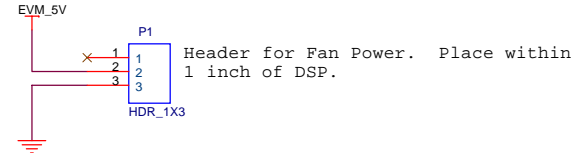
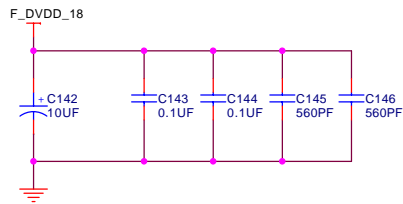
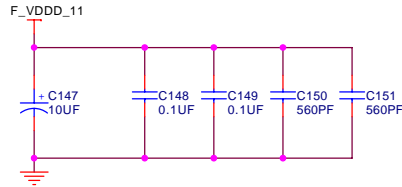
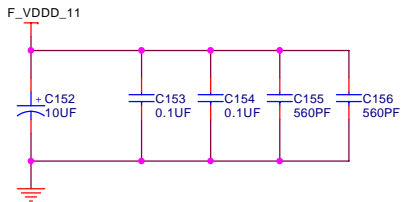
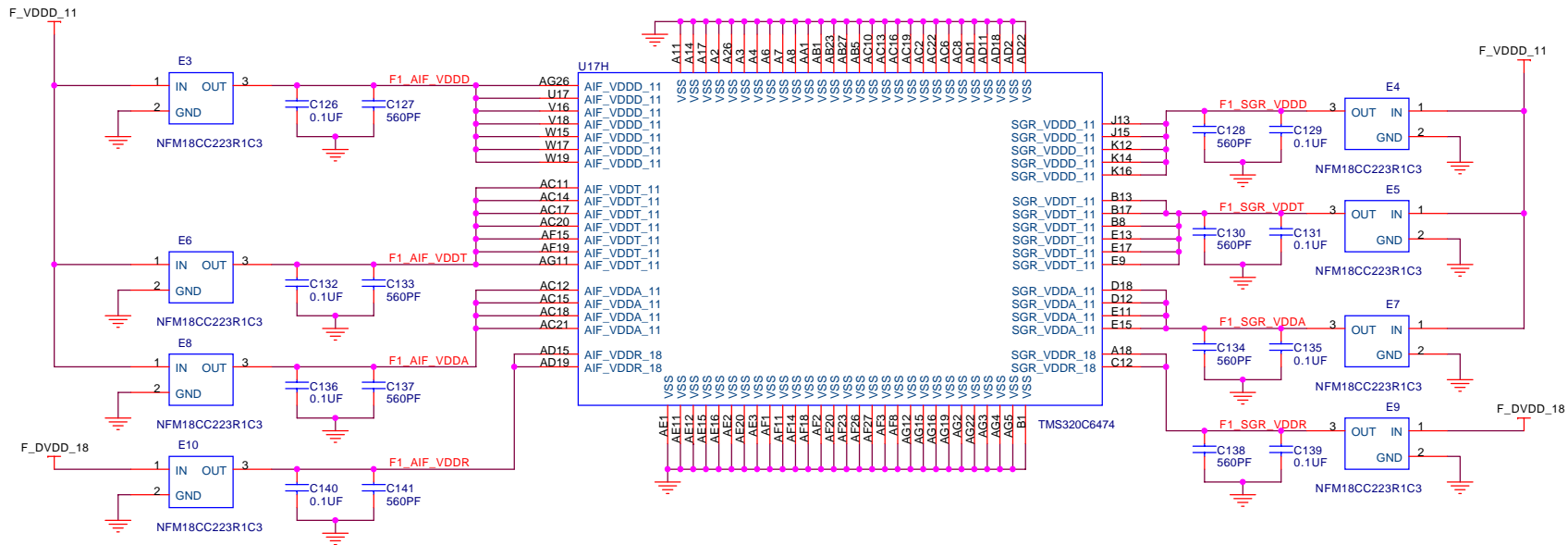


SPECTRUM DIGITAL INCORPORATED			
Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: C6474 CPU-1: SRIO, SGMII			
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Resistor on top layer. Allows probing of internal VSS.



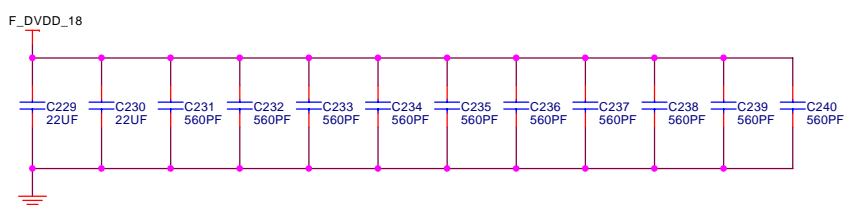
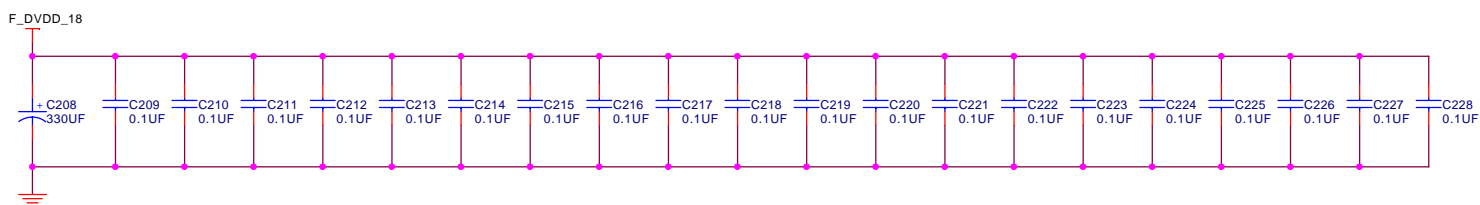
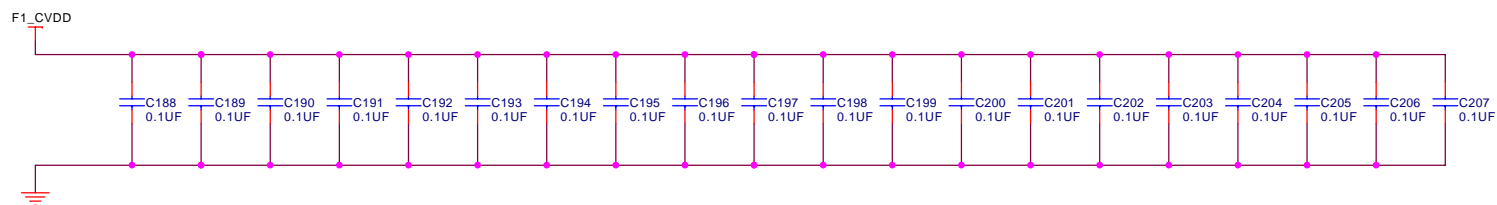
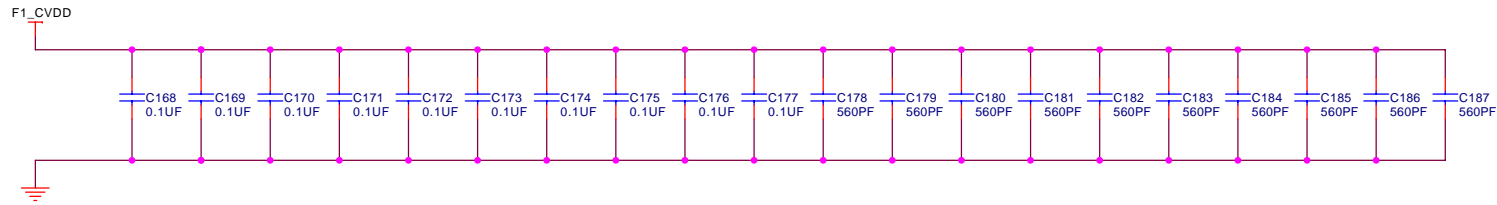
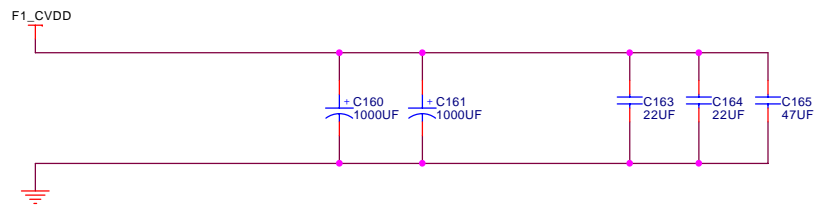
SPECTRUM DIGITAL INCORPORATED			
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Page Contents: C6474 CPU-1: Power Pins; CVDD, DVDD_18, VSS			
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SPECTRUM DIGITAL INCORPORATED			
Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: C6474 CPU-1: Power pins; SERDES PWR, VSS			
Size: B	DWG NO	511222-0001	Revision: B
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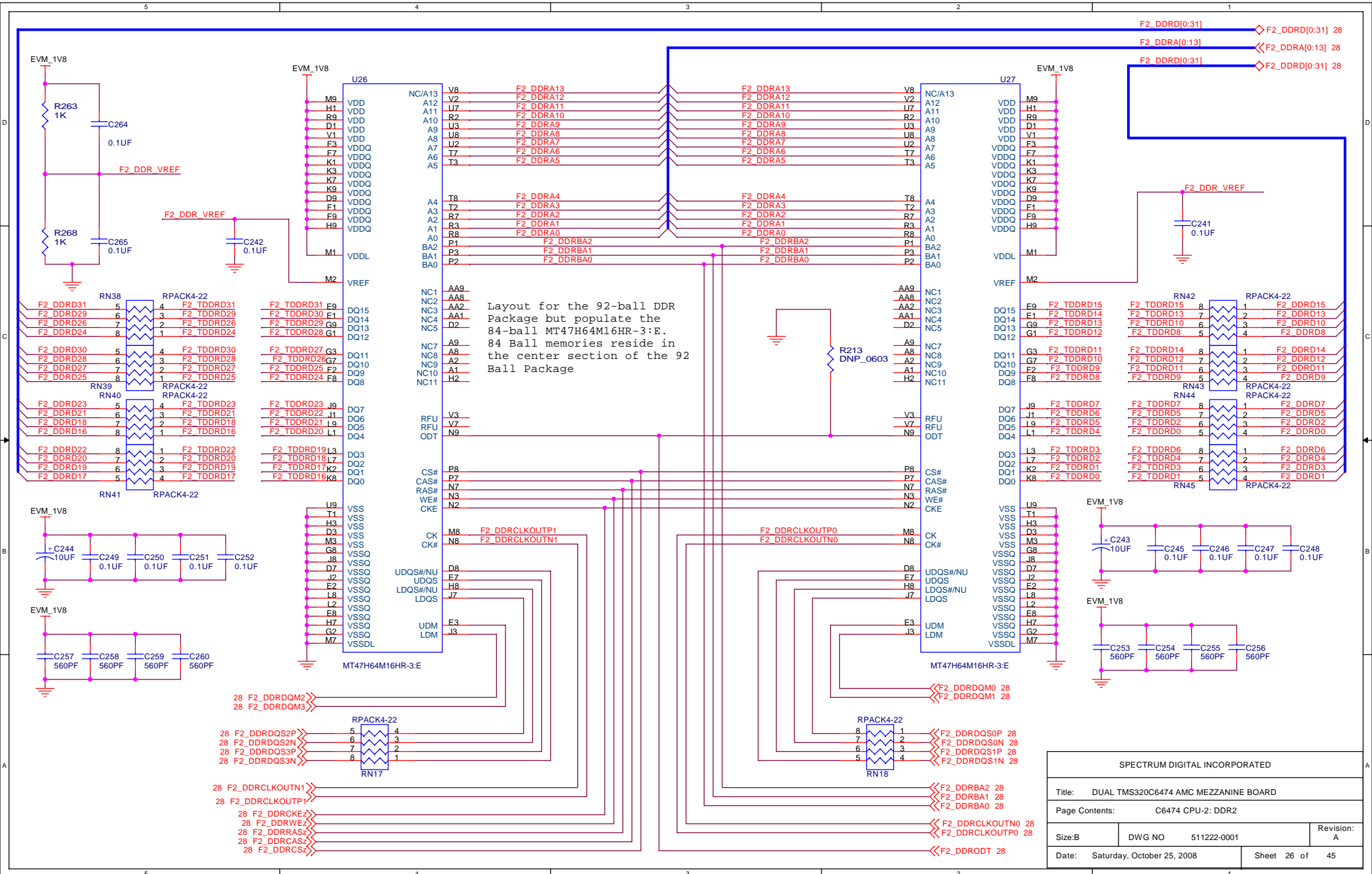


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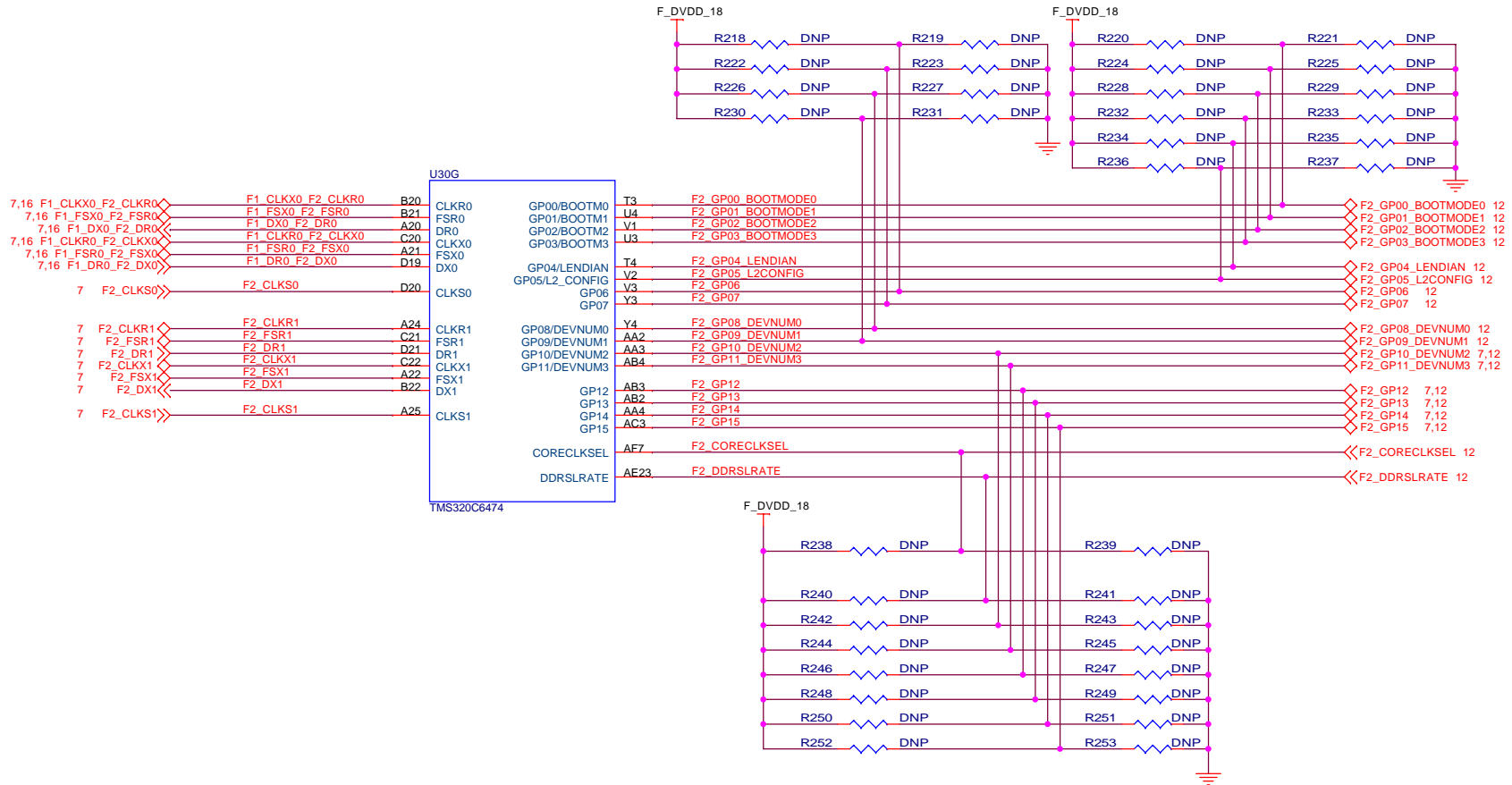


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Page Contents: C6474 CPU-1: Decoupling: CVDD and DVDD_18		
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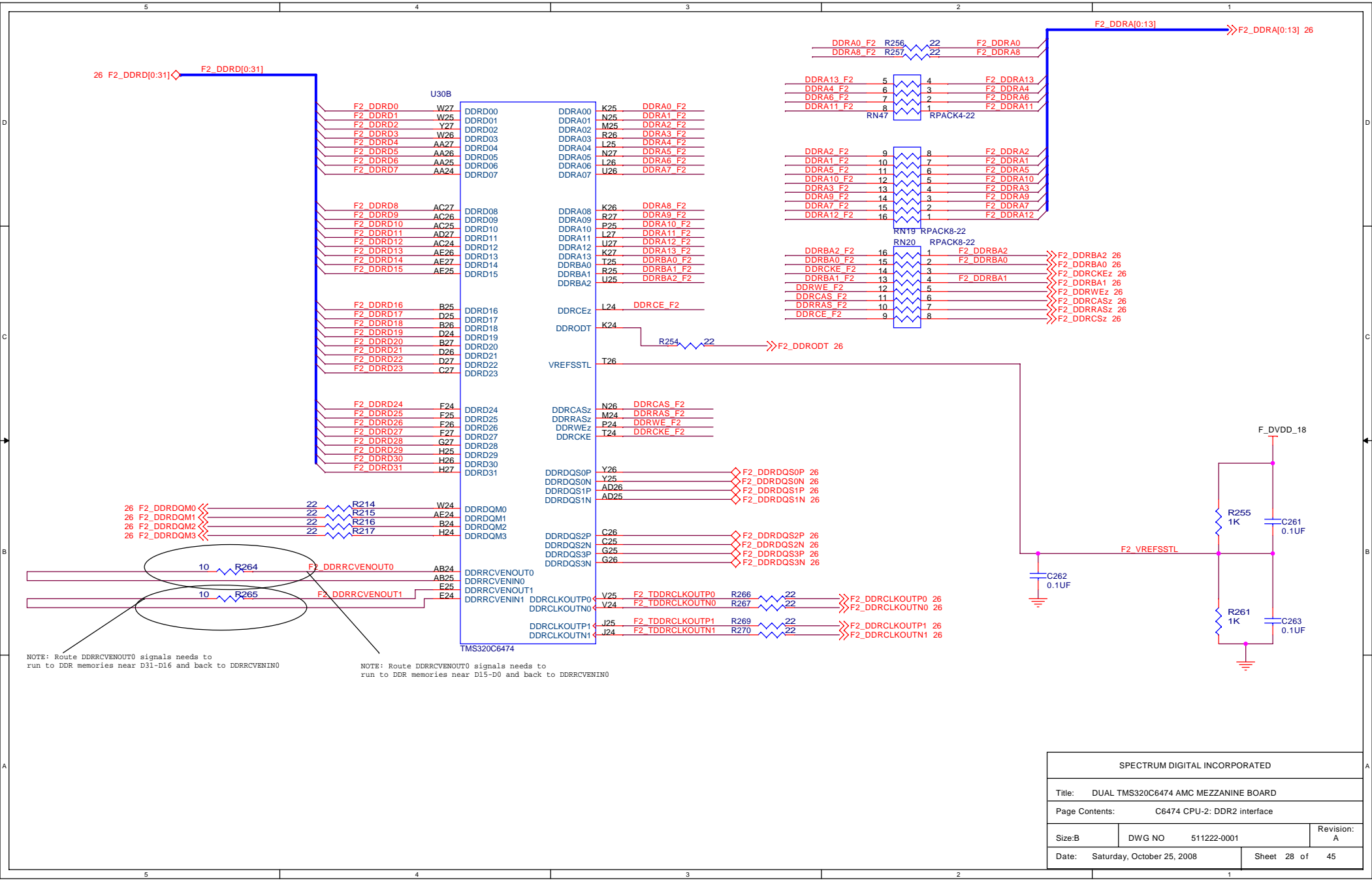
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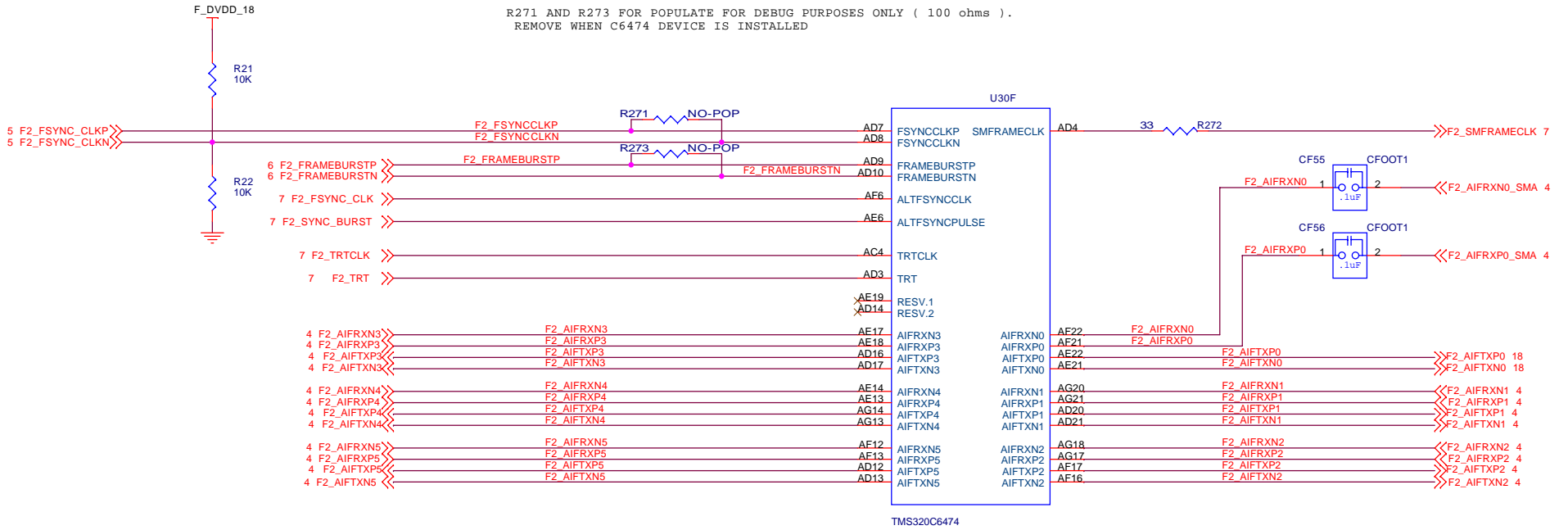
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Page Contents: C6474 CPU-2: DDR2			
Size: B	DWG NO	511222-0001	Revision: A
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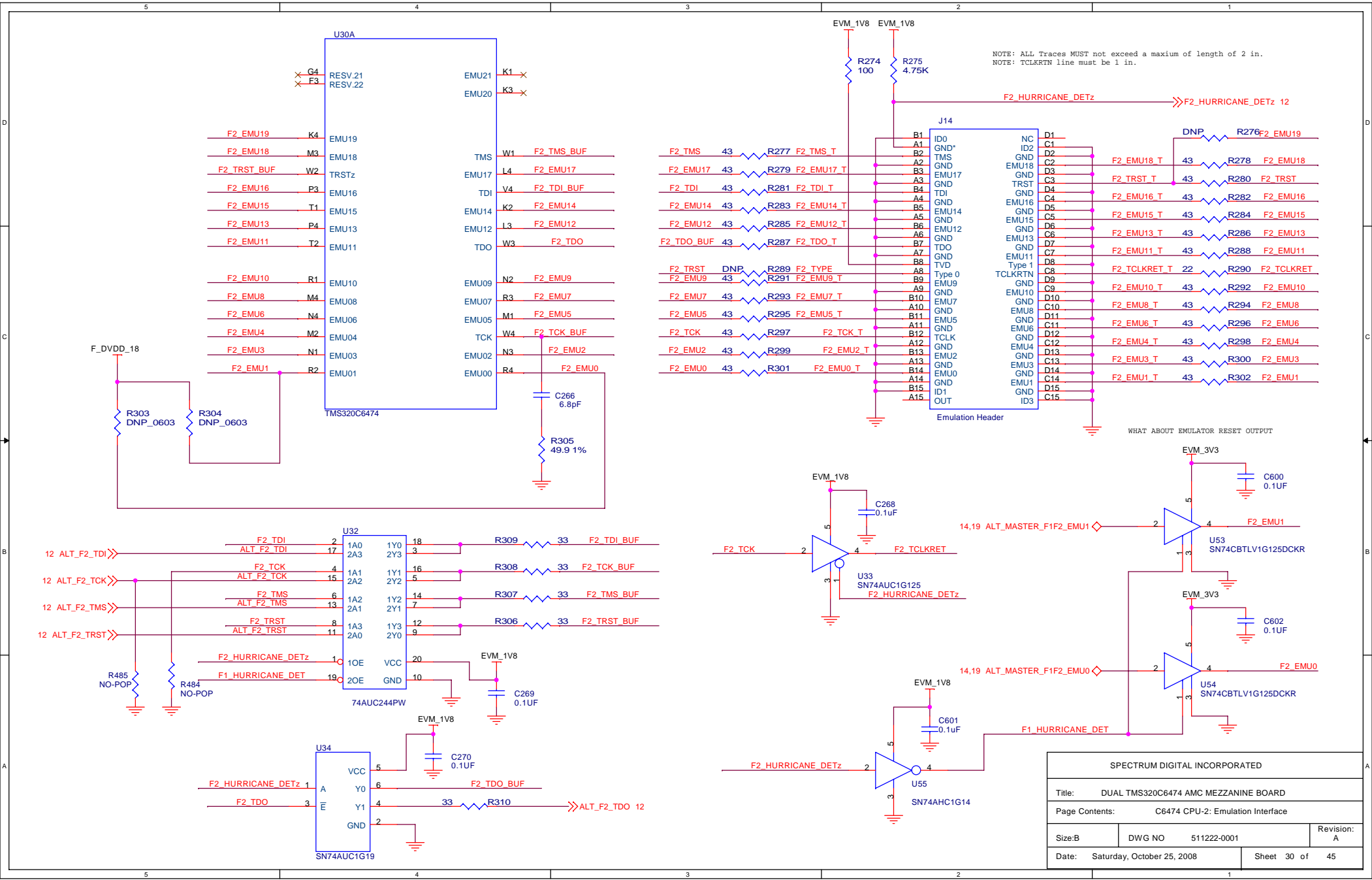
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Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: C6474 CPU-2: McBSP, GPIO, CONFIG			
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SPECTRUM DIGITAL INCORPORATED			
Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: C6474 CPU-2: DDR2 interface			
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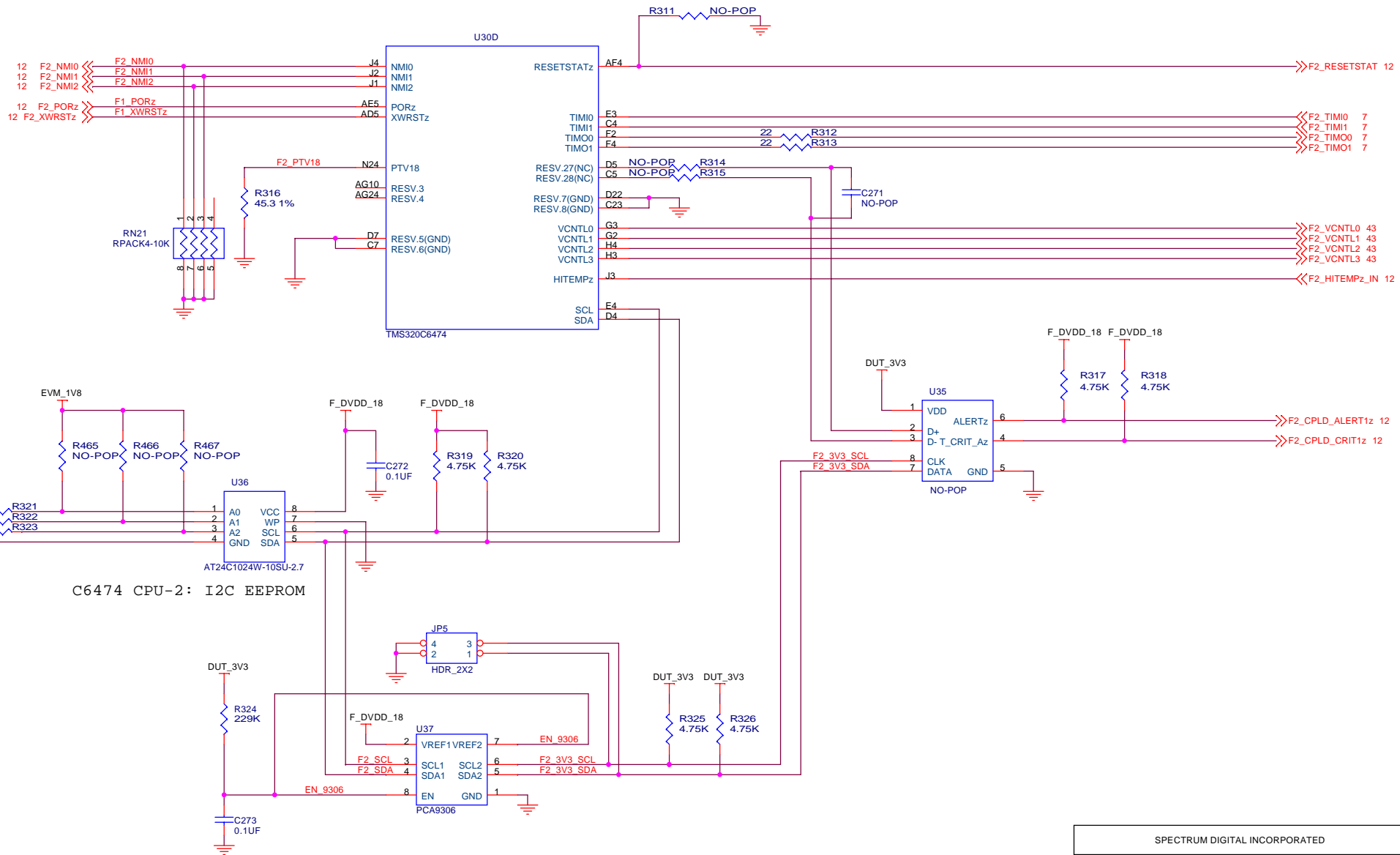
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Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: C6474 CPU-2: AIF and FSYNC Interfaces			
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NOTE: ALL Traces MUST not exceed a maximum of length of 2 in.  
NOTE: TCLKRTN line must be 1 in.

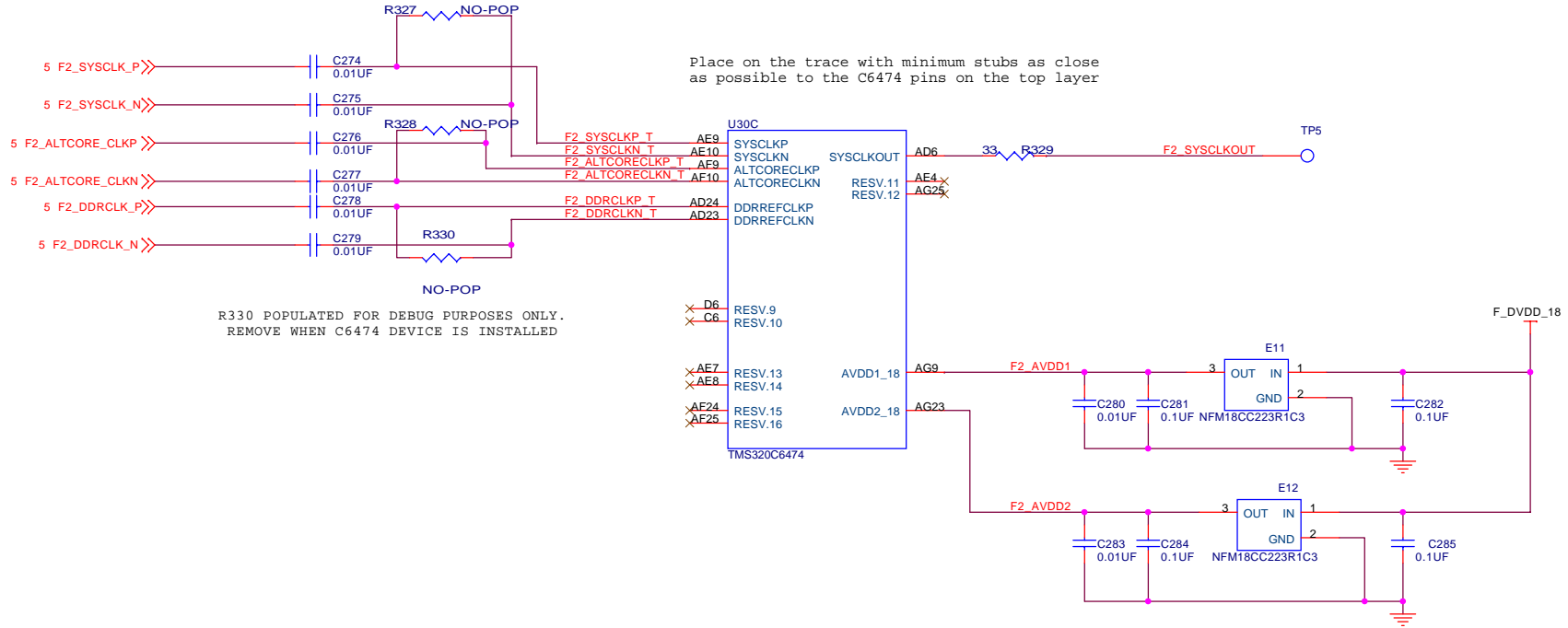
WHAT ABOUT EMULATOR RESET OUTPUT

SPECTRUM DIGITAL INCORPORATED			
Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: C6474 CPU-2: Emulation Interface			
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Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: C6474 CPU-2: I2C,Timer,VCNTL,Reset/NMI,Misc Test			
Size:B	DWG NO	511222-0001	Revision: A
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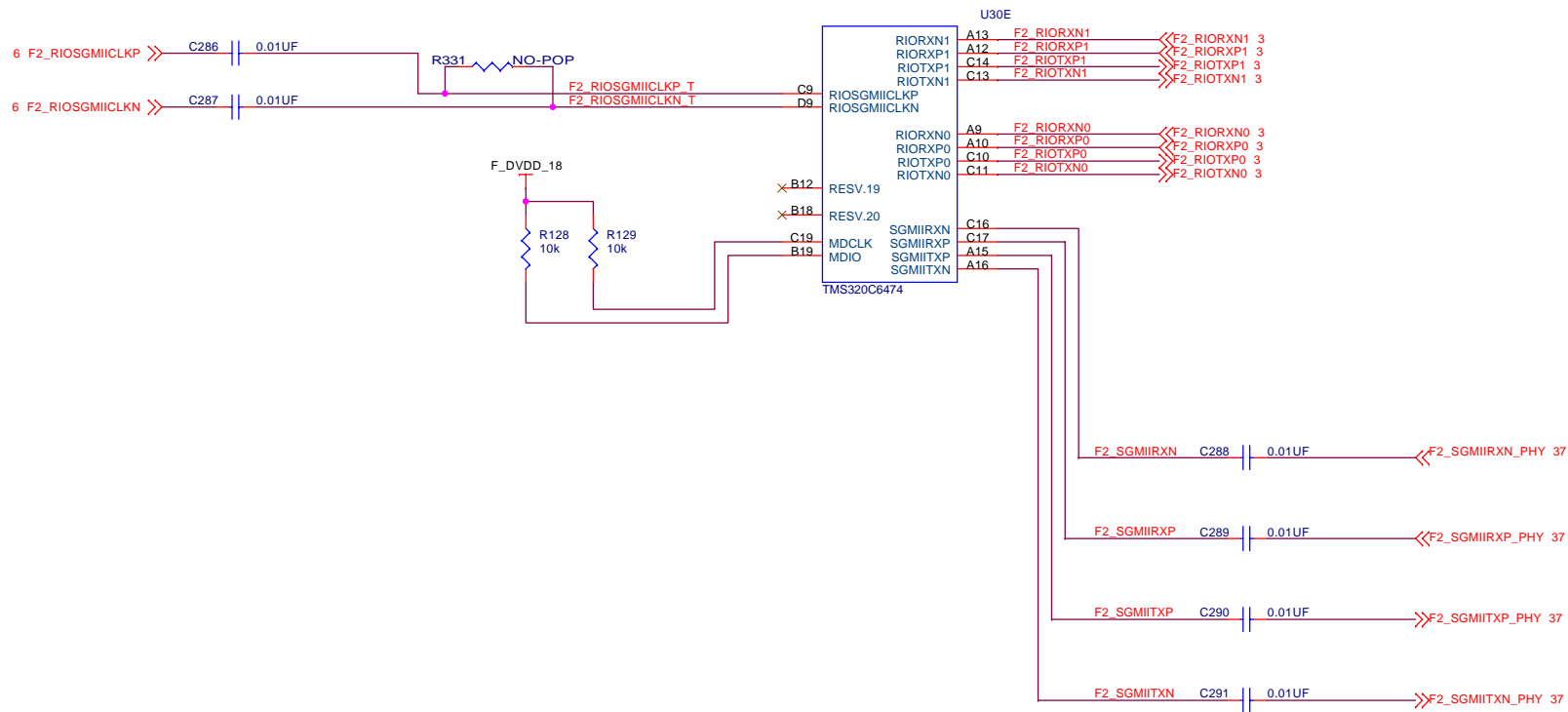
R327 AND R328 AND R330 POPULATED FOR DEBUG PURPOSES ONLY ( 100 OHM).  
 REMOVE WHEN C6474 DEVICE IS INSTALLED



SPECTRUM DIGITAL INCORPORATED			
Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: C6474 CPU-2: PLLs			
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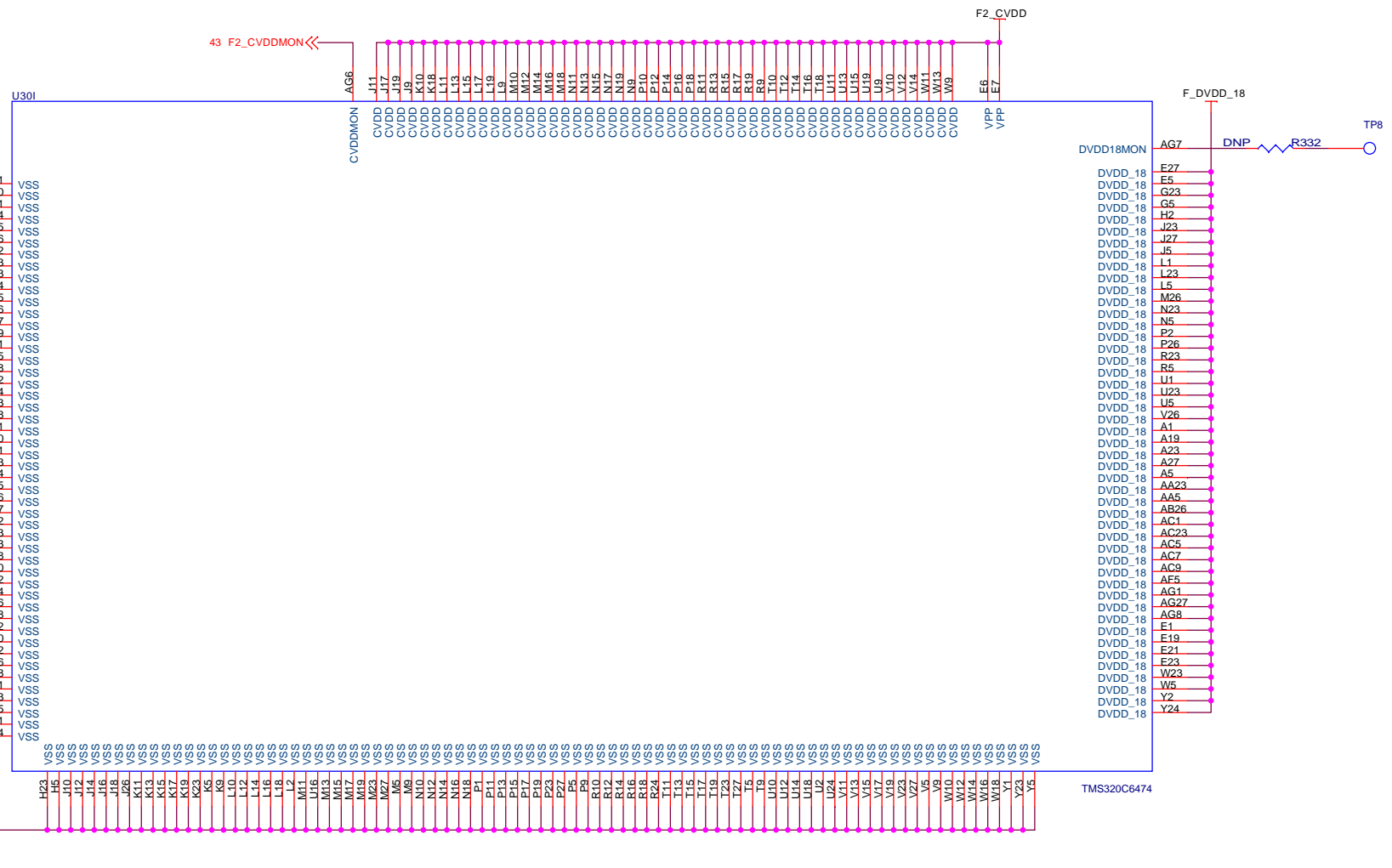
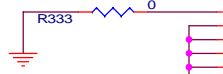


R331 POPULATED FOR DEBUG PURPOSES ONLY.  
REMOVE WHEN C6474 DEVICE IS INSTALLED

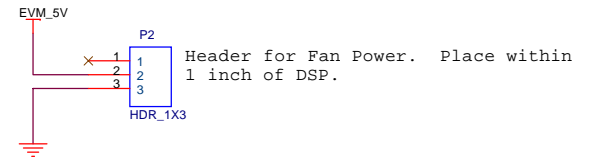
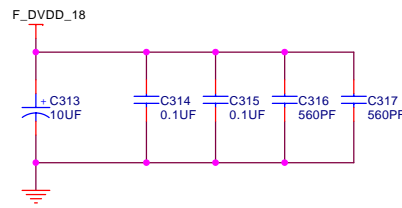
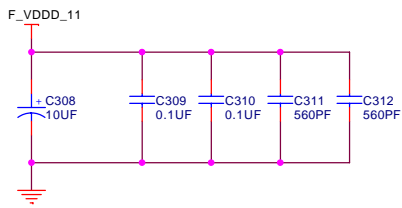
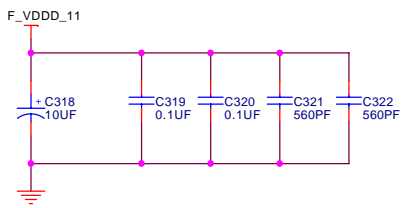
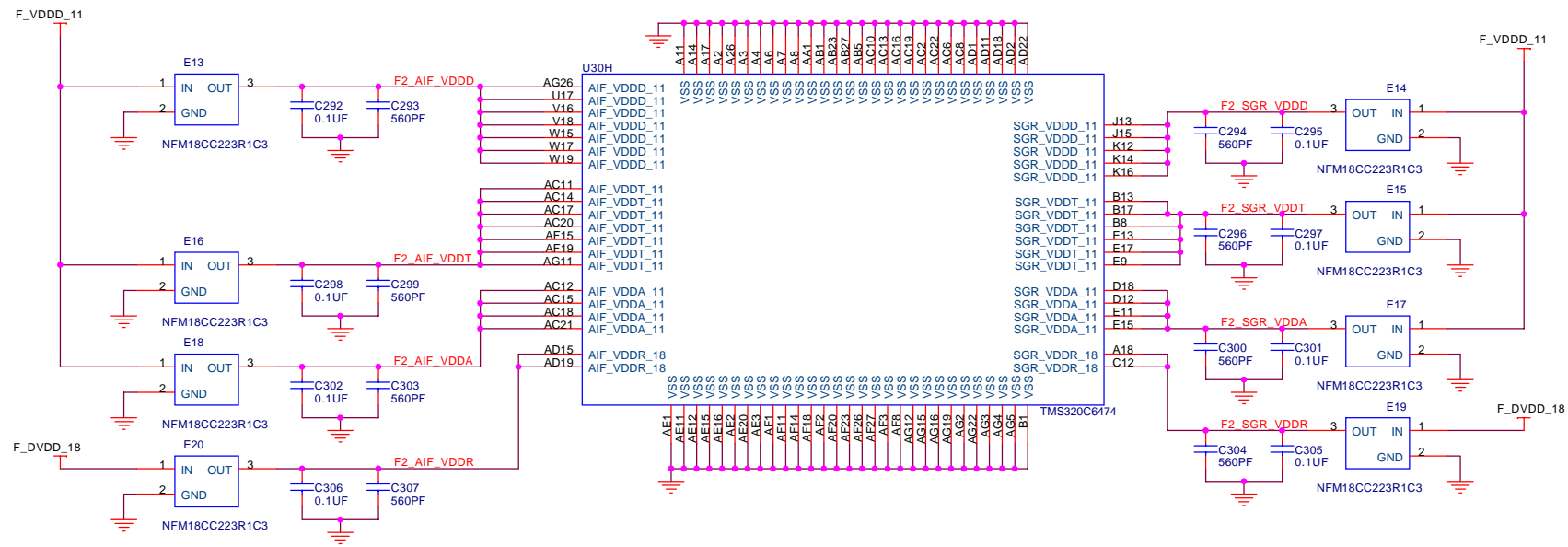


SPECTRUM DIGITAL INCORPORATED			
Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: C6474 CPU-2: SRIO, SGMII			
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Resistor on top layer. Allows probing of internal VSS.

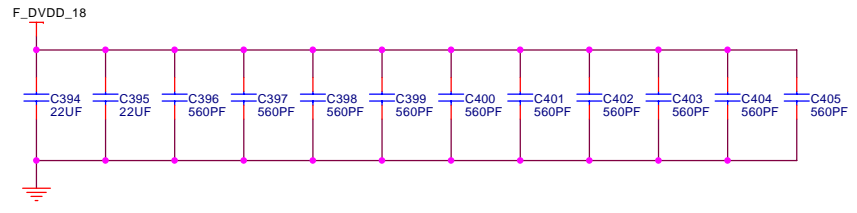
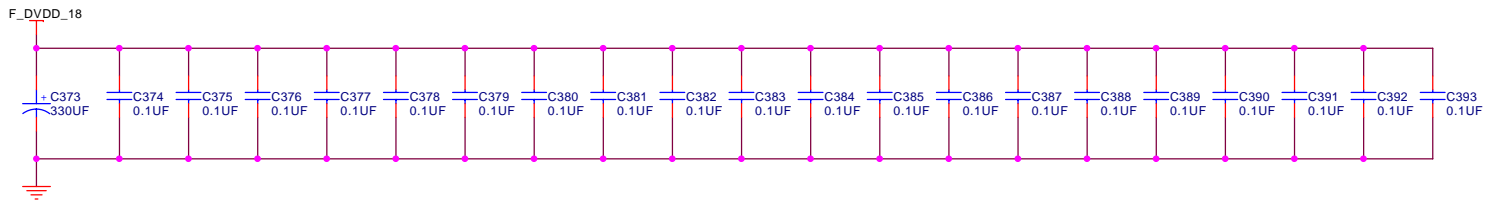
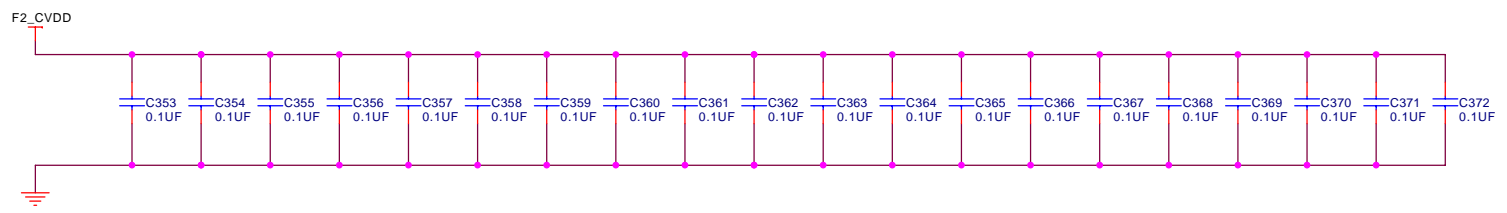
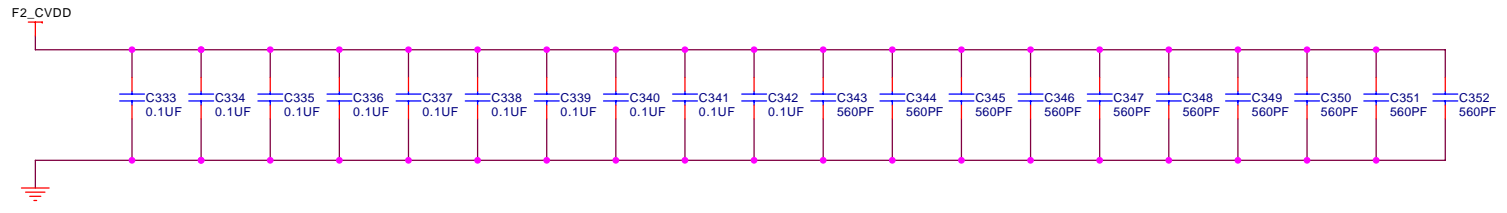
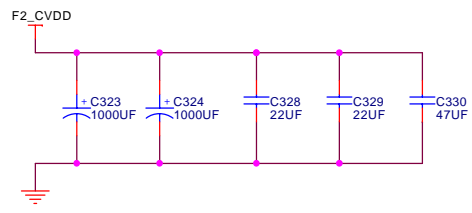


SPECTRUM DIGITAL INCORPORATED			
Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: C6474 CPU-2: Power Pins; CVDD, DVDD_18, VSS			
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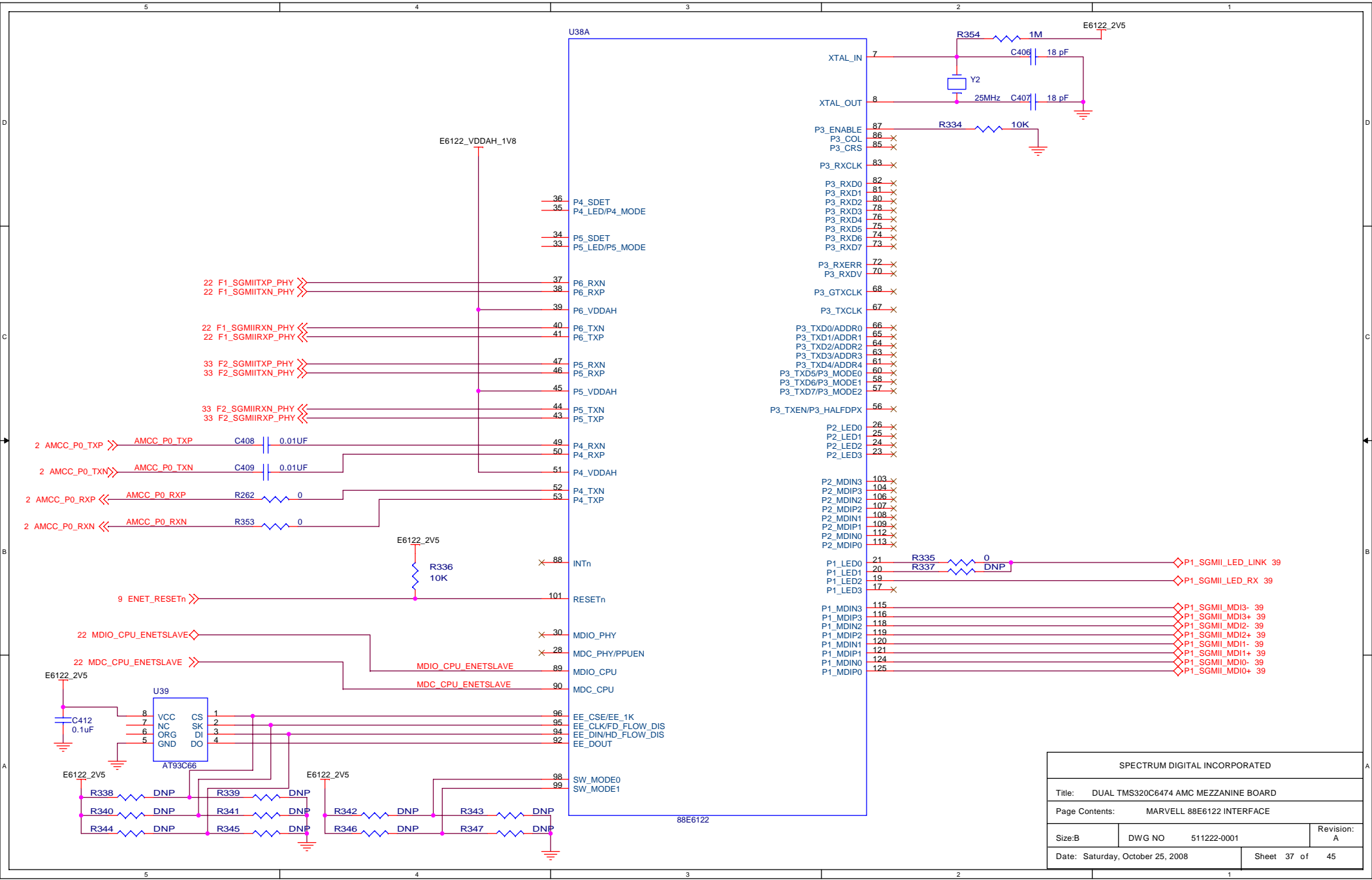
SPECTRUM DIGITAL INCORPORATED			
Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: C6474 CPU-2:: Power pins; SERDES PWR, VSS			
Size: B	DWG NO	511222-0001	Revision: A
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5 4 3 2 1

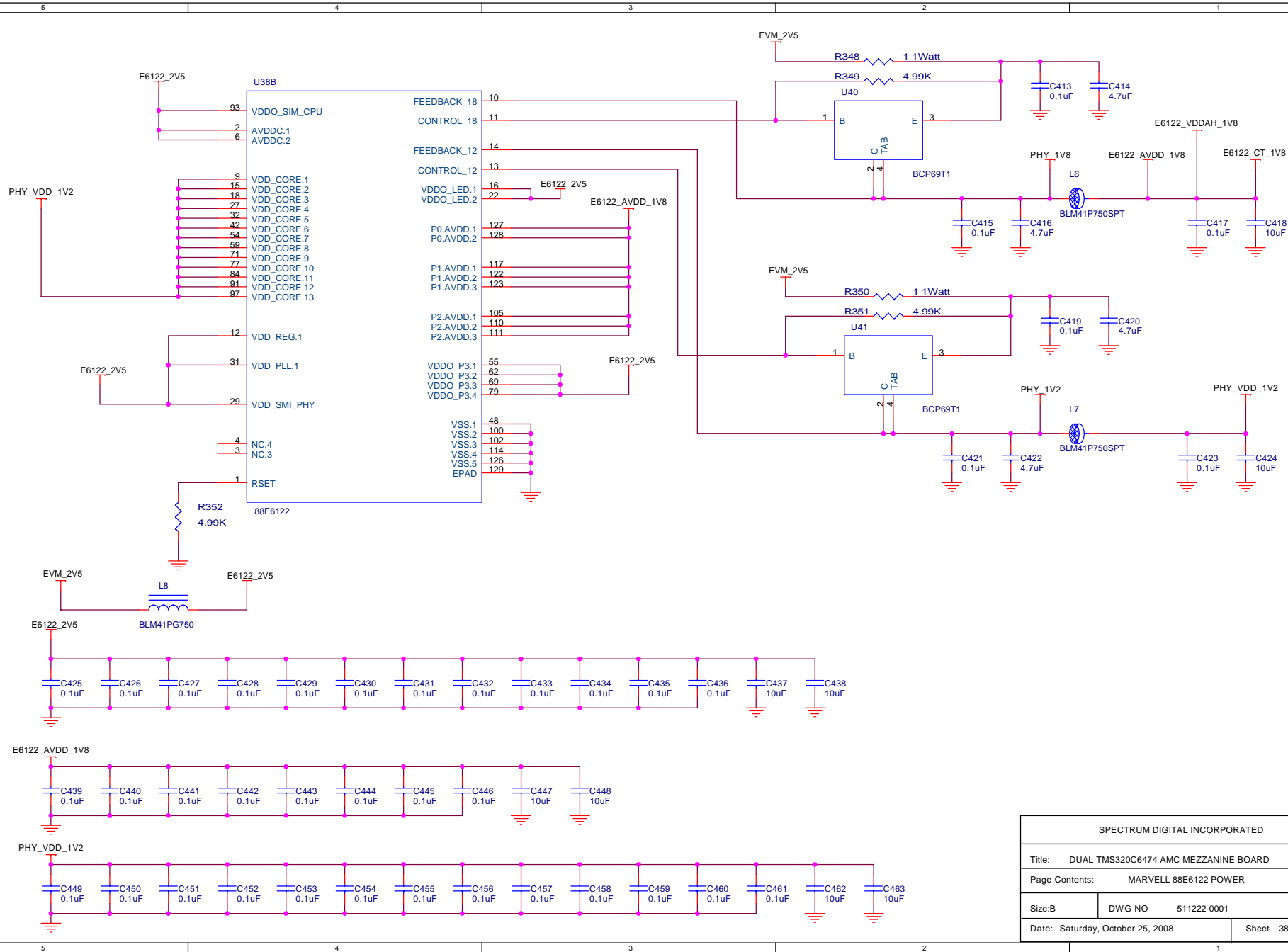


SPECTRUM DIGITAL INCORPORATED		
Title: DUAL TMS320C6474 AMC MEZZANINE BOARD		
Page Contents: C6474 CPU-2: Decoupling; CVDD and DVDD_18		
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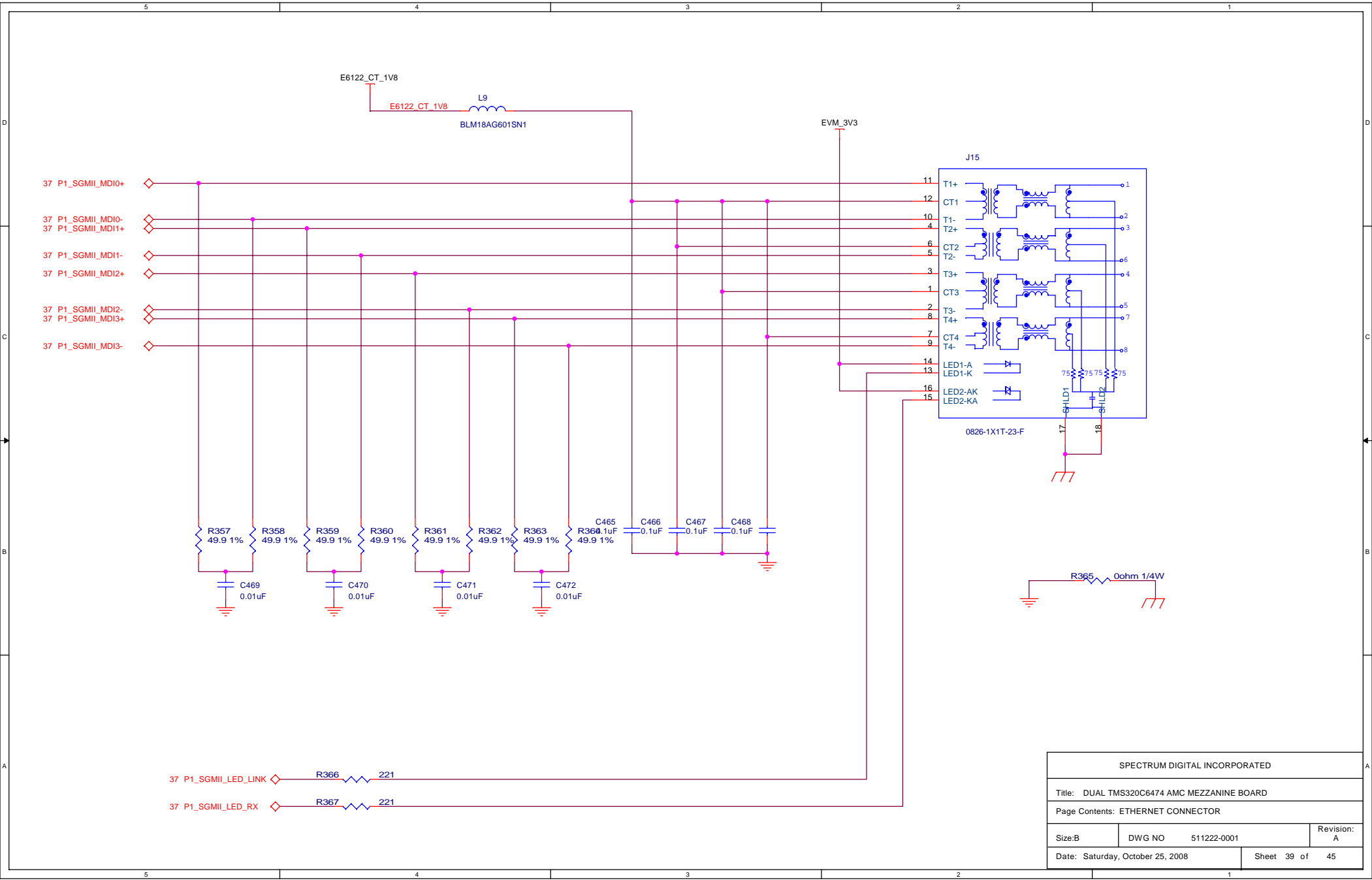
5 4 3 2 1



SPECTRUM DIGITAL INCORPORATED			
Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: MARVELL 88E6122 INTERFACE			
Size: B	DWG NO	511222-0001	Revision: A
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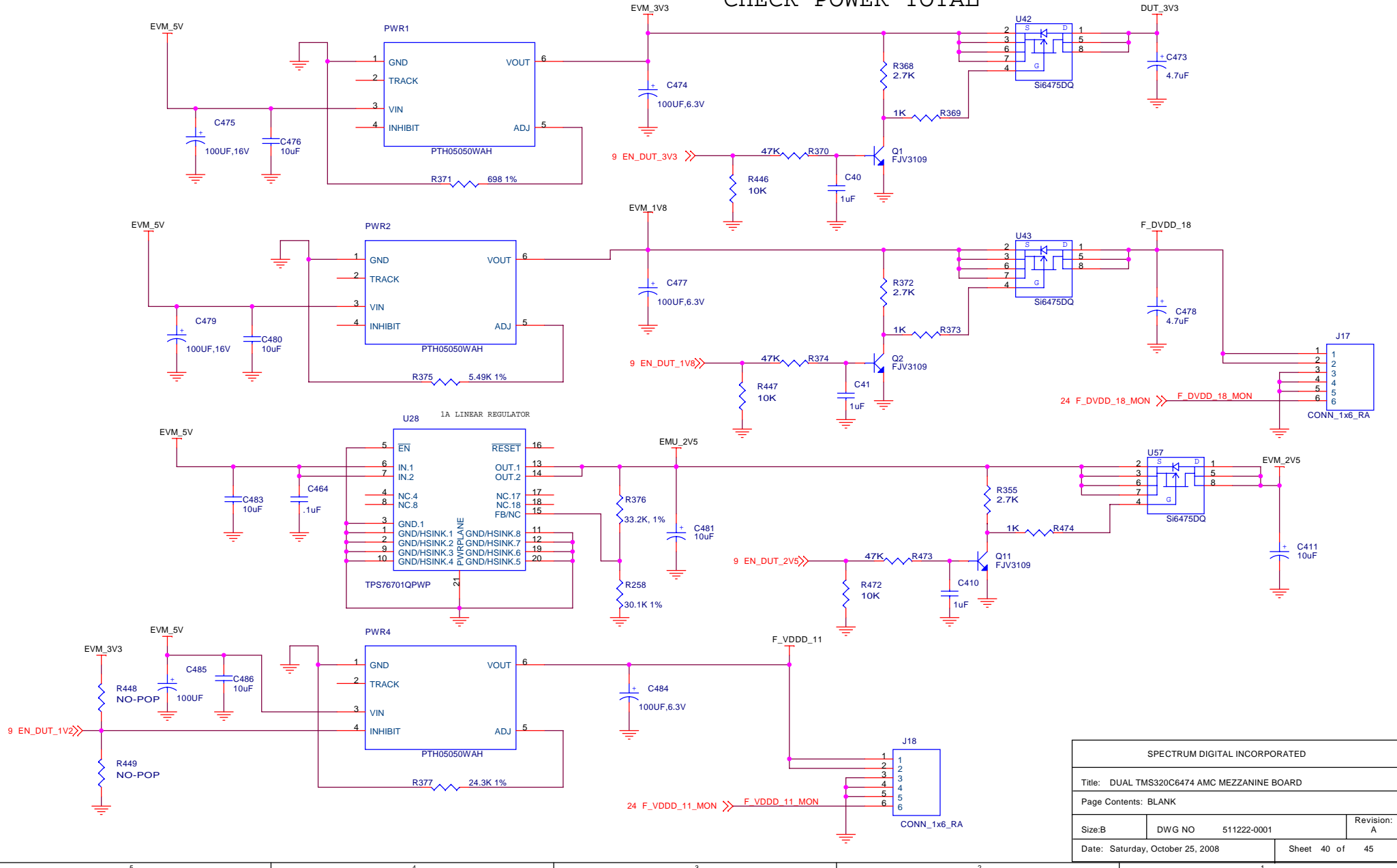


SPECTRUM DIGITAL INCORPORATED			
Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: MARVELL 88E6122 POWER			
Size: B	DWG NO	511222-0001	Revision: A
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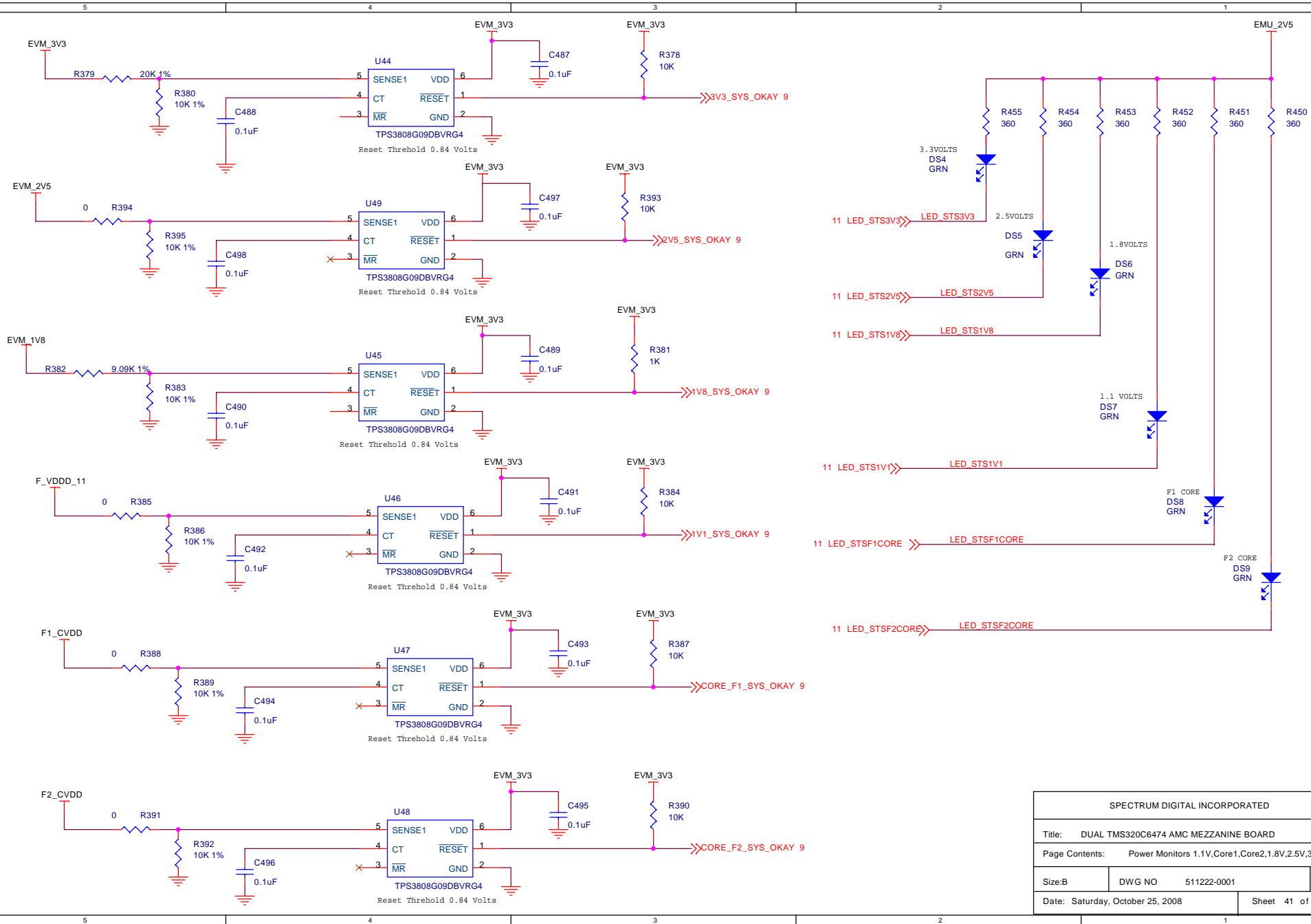
SPECTRUM DIGITAL INCORPORATED			
Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: ETHERNET CONNECTOR			
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# CHECK POWER TOTAL



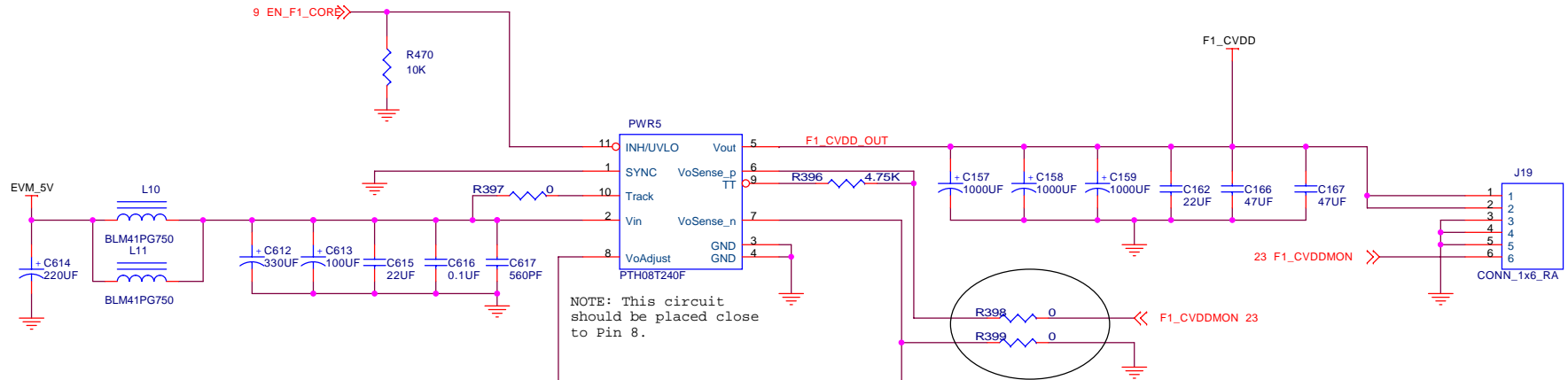
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Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: BLANK			
Size: B	DWG NO	511222-0001	Revision: A
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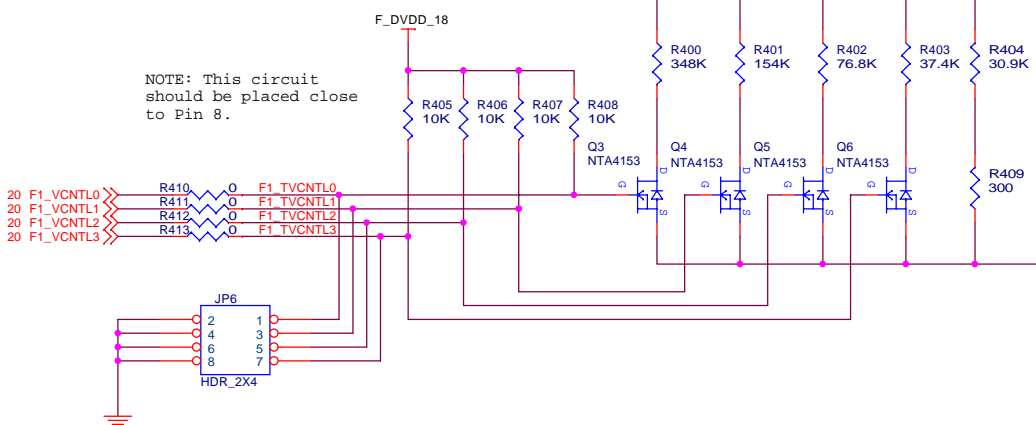
SPECTRUM DIGITAL INCORPORATED			
Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: Power Monitors 1.1V,Core1,Core2,1.8V,2.5V,3.3V			
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5 4 3 2 1



NOTE: This circuit should be placed close to Pin 8.

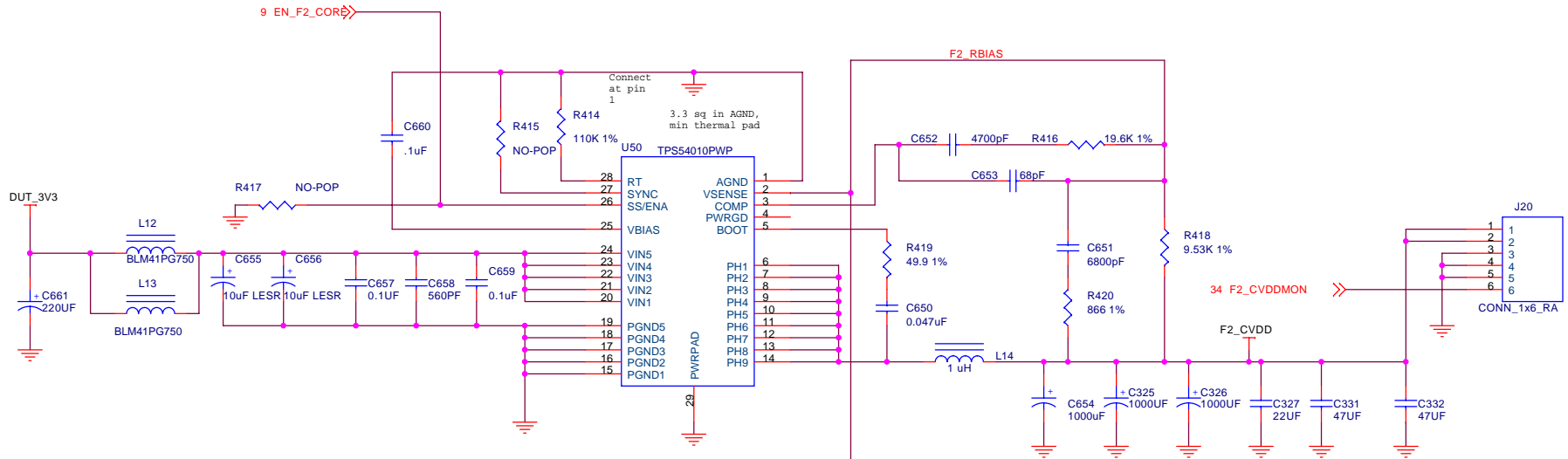
NOTE: Place resistors under the C6474 CPU-1:



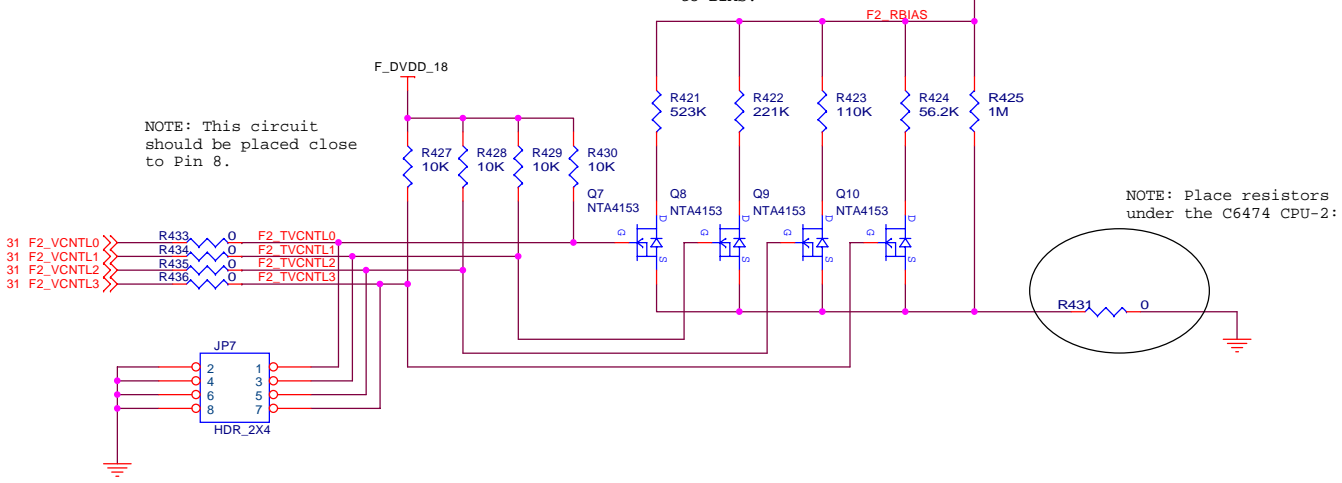
NOTE: This circuit should be placed close to Pin 8.

SPECTRUM DIGITAL INCORPORATED			
Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: C6474 CPU-1: CORE POWER			
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5 4 3 2 1



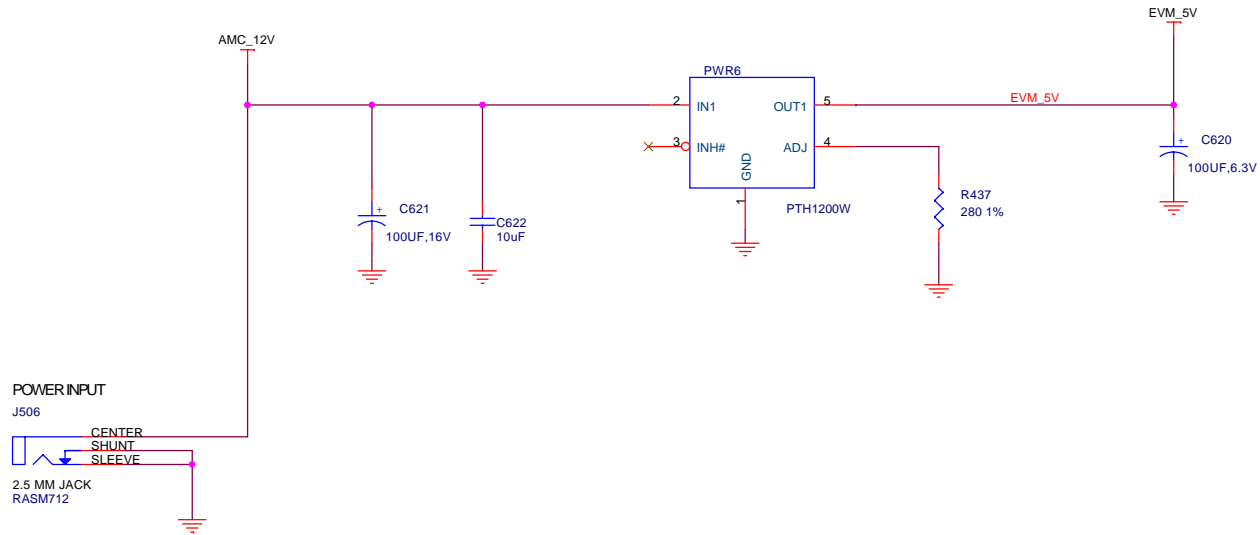
NOTE: This circuit should be placed close to BIAS.



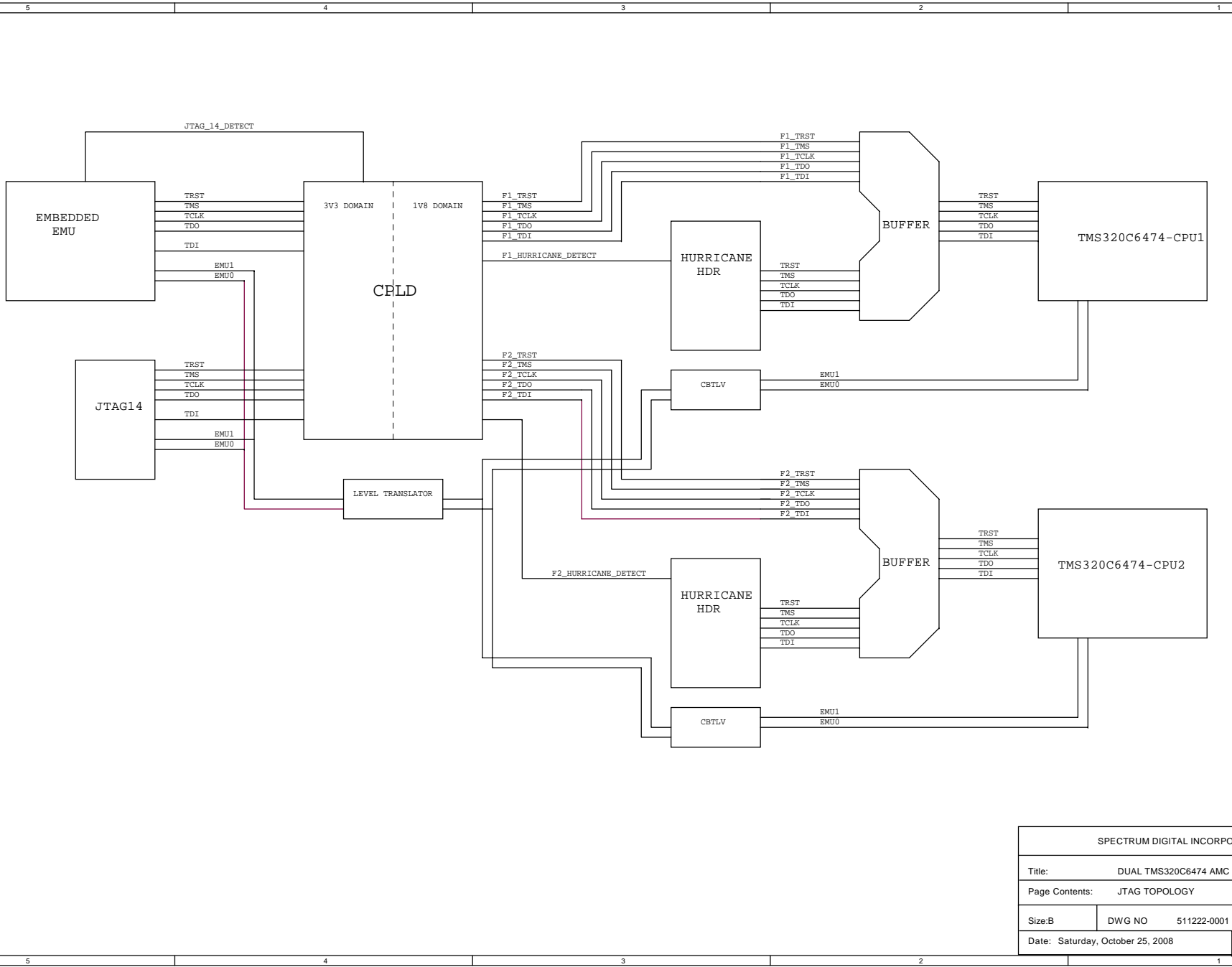
NOTE: This circuit should be placed close to Pin 8.

NOTE: Place resistors under the C6474 CPU-2:

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Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: C6474 CPU-2: CORE POWER			
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Title: DUAL TMS320C6474 AMC MEZZANINE BOARD		
Page Contents: POWER 12 VOLT TO 5 VOLT		
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Title: DUAL TMS320C6474 AMC MEZZANINE BOARD			
Page Contents: JTAG TOPOLOGY			
Size: B	DWG NO	511222-0001	Revision: A
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