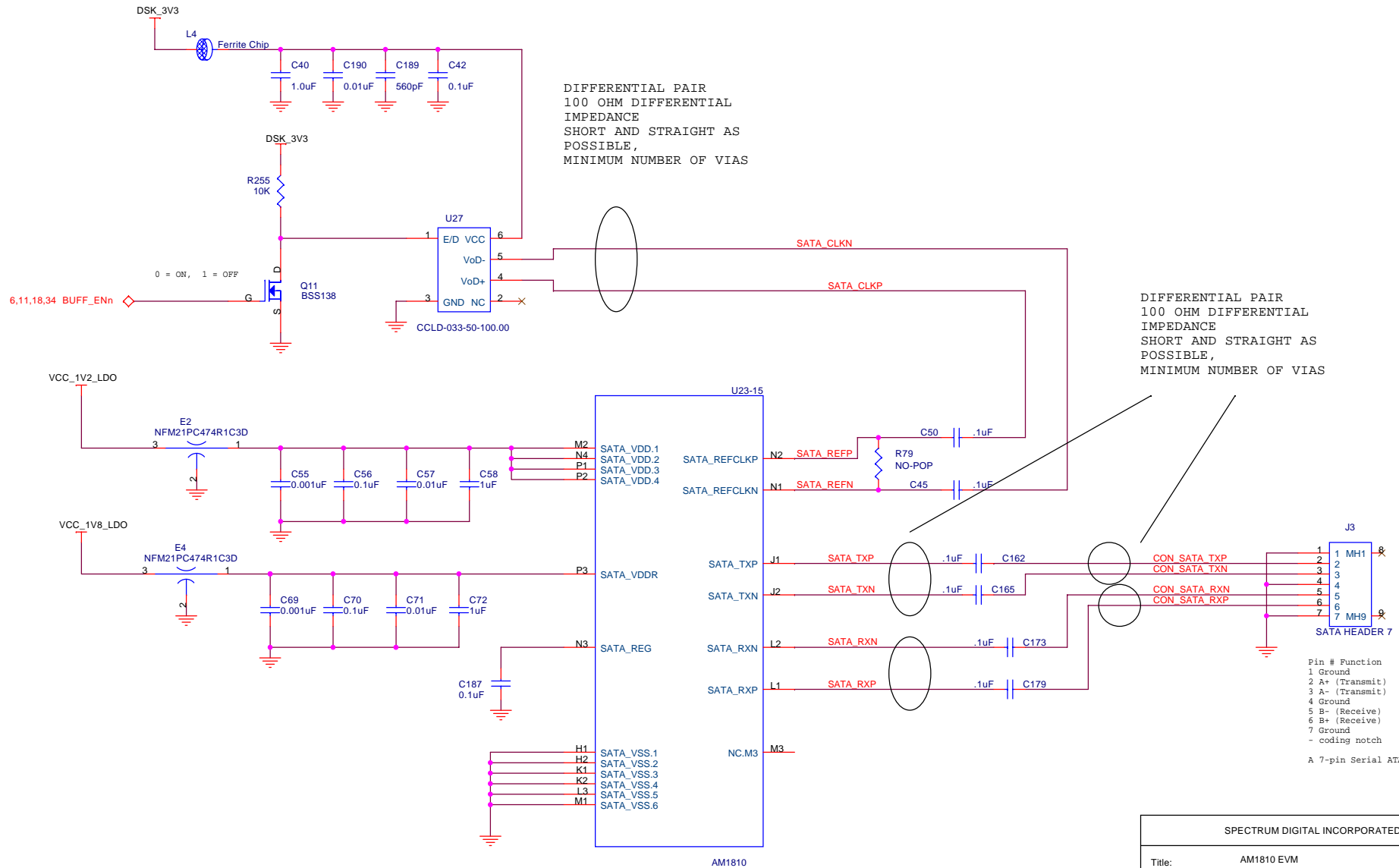


AM1810

SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: McASP/MII Ethernet MAC			
Size: B	DWG NO	513302-0031	Revision: A
Date:	Monday, December 20, 2010	Sheet 2 of	38

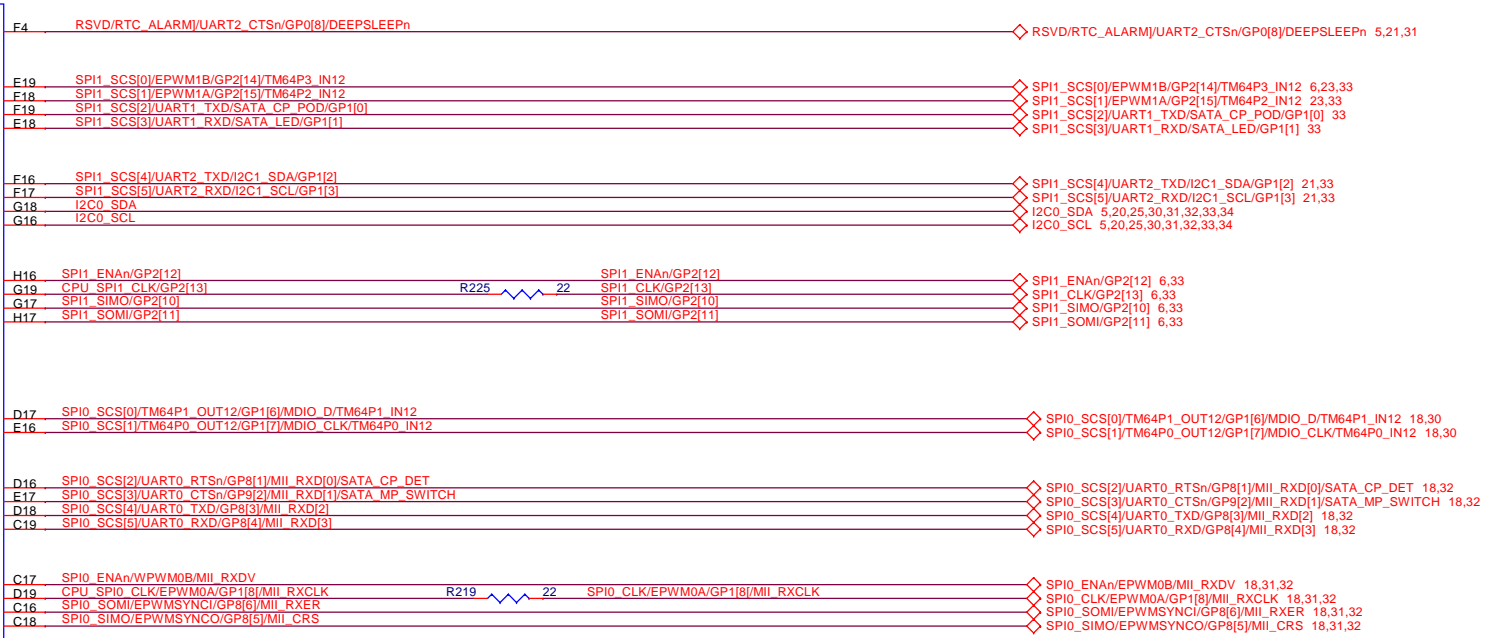


SPECTRUM DIGITAL INCORPORATED			
Title:		AM1810 EVM	
Page Contents: SATA INTERFACE			
Size: B	DWG NO	513302-0031	Revision: A
Date:	Monday, December 20, 2010	Sheet 3 of	38

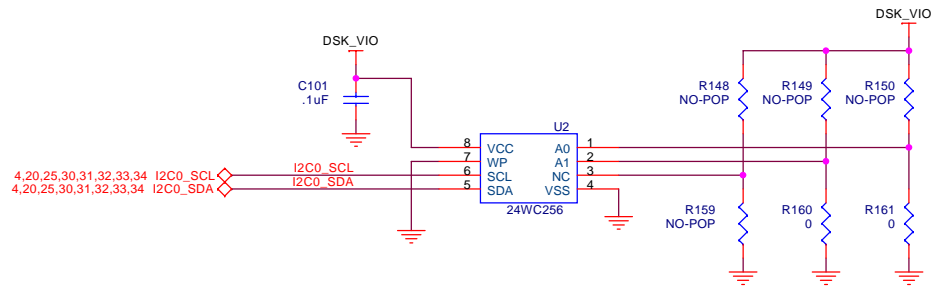
U23-6



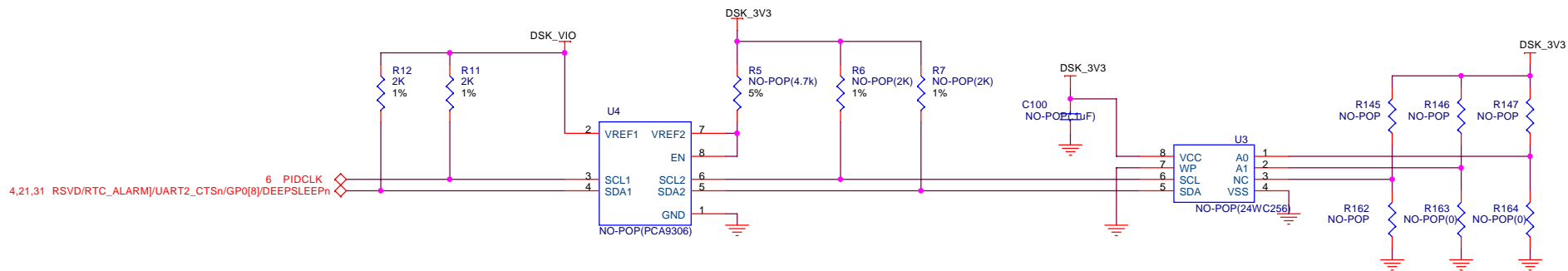
AM1810



SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: AM1808 SERIAL I/O			
Size: B	DWG NO	513302-0031	Revision: A
Date:	Monday, December 20, 2010	Sheet 4 of	38



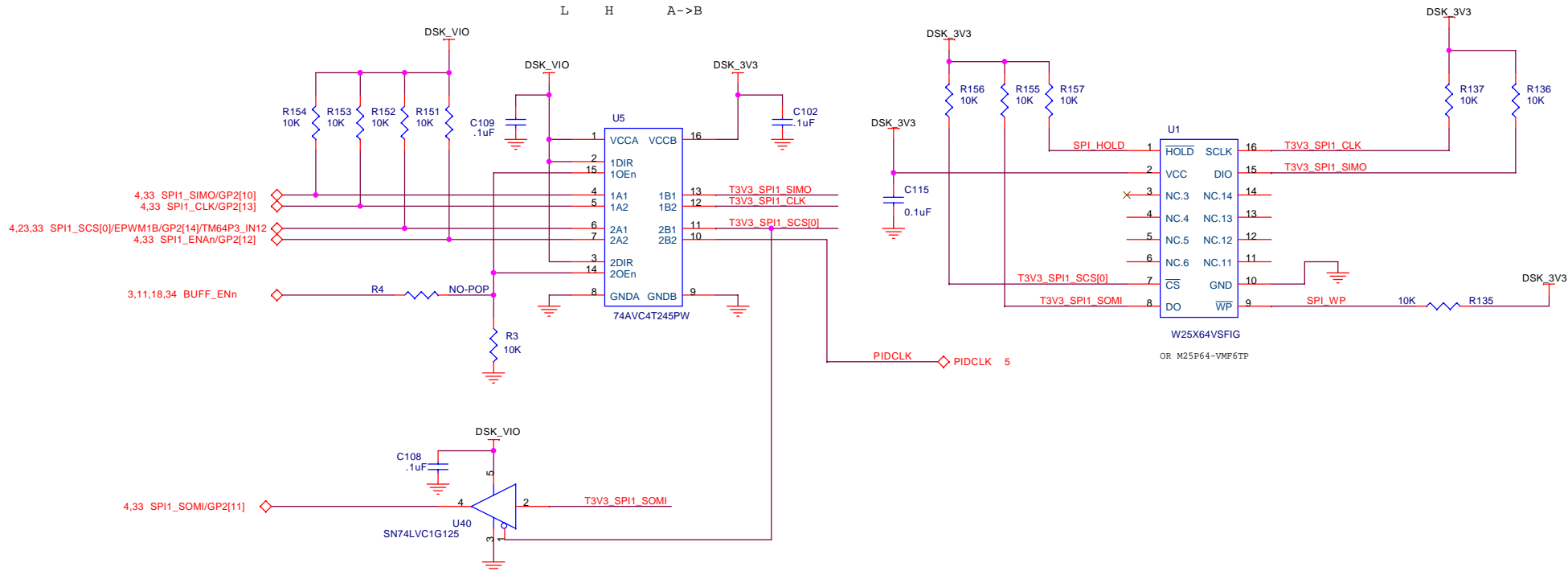
DO NOT POPULATE



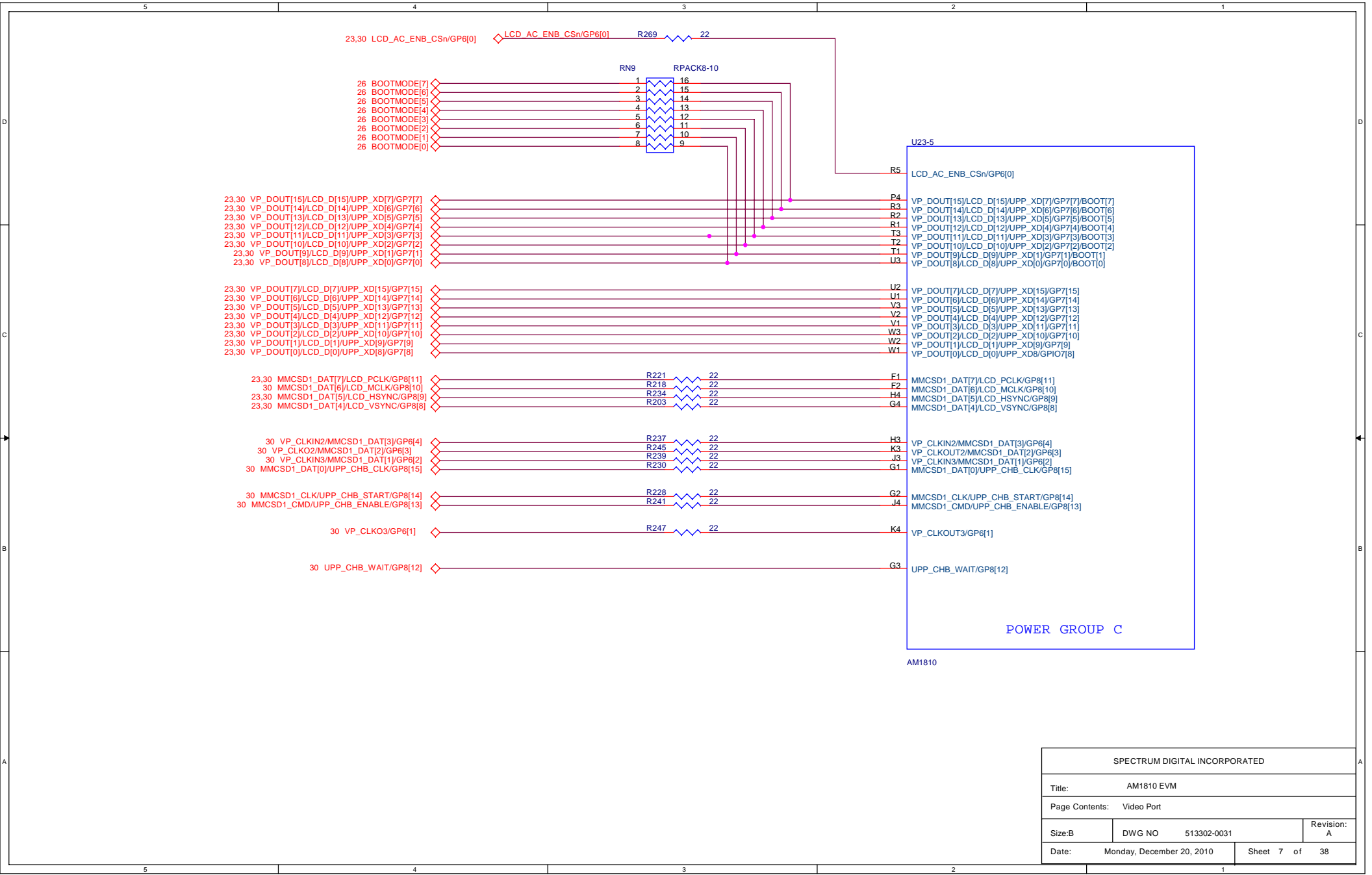
SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: I2C EEPROM / PARAMETER I2C EEPROM			
Size: B	DWG NO	513302-0031	Revision: A
Date:	Monday, December 20, 2010	Sheet 5 of	38

### LEVEL TRANSLATORS

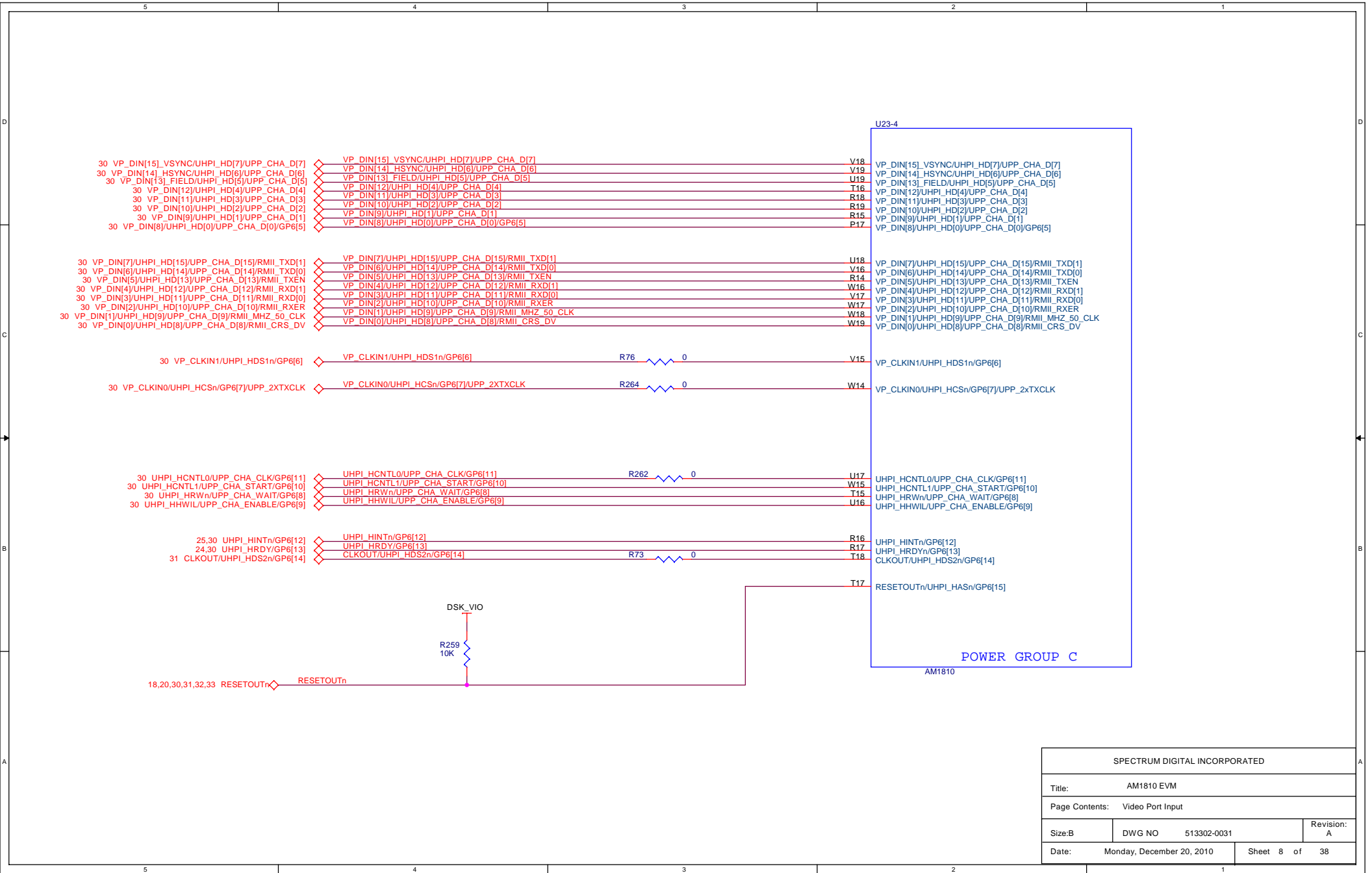
OE	DIR	FUNCTION
L	L	B->A
L	H	A->B



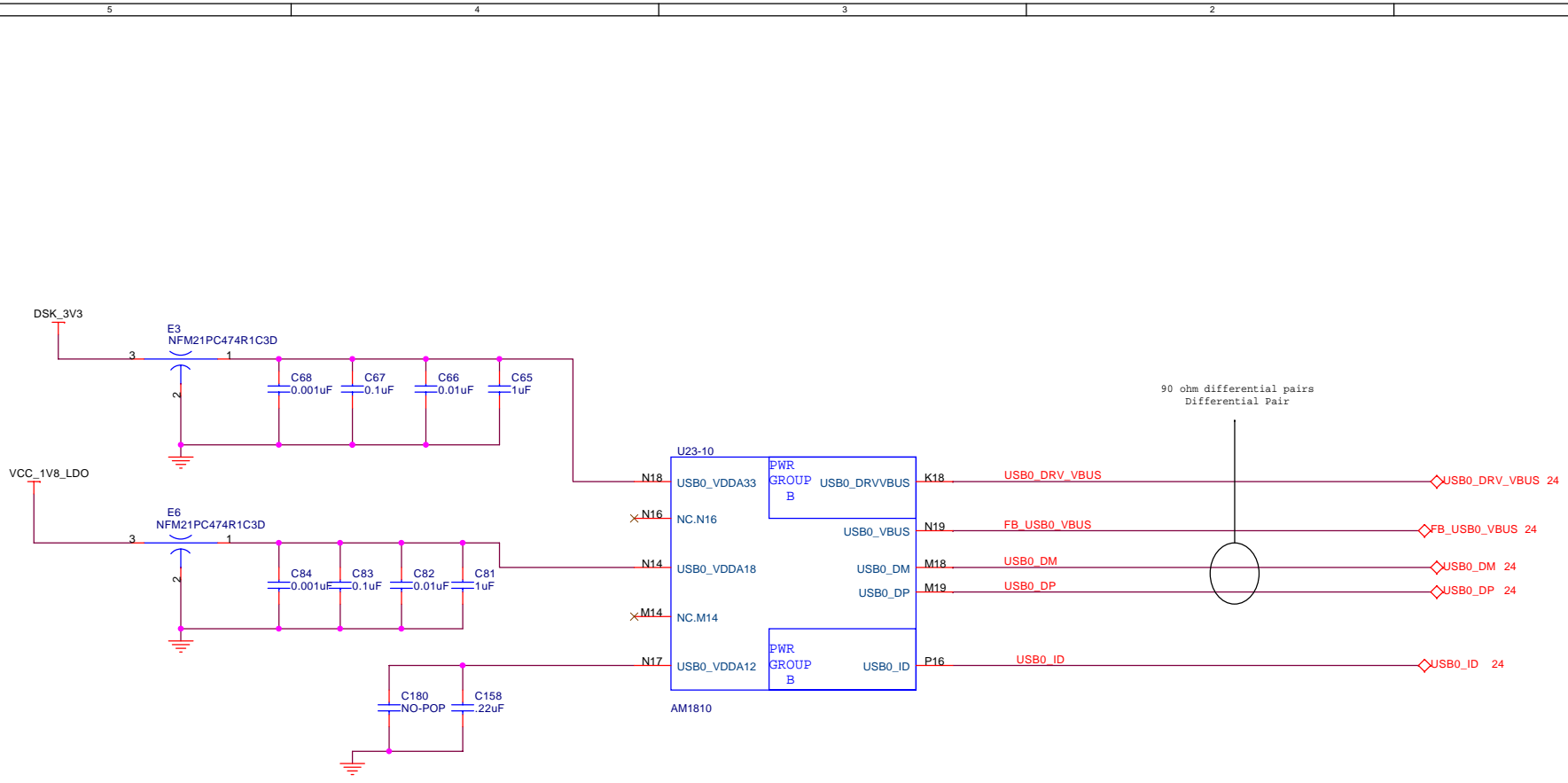
SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: SPI ROM			
Size: B	DWG NO	513302-0031	Revision: A
Date:	Monday, December 20, 2010	Sheet 6 of	38



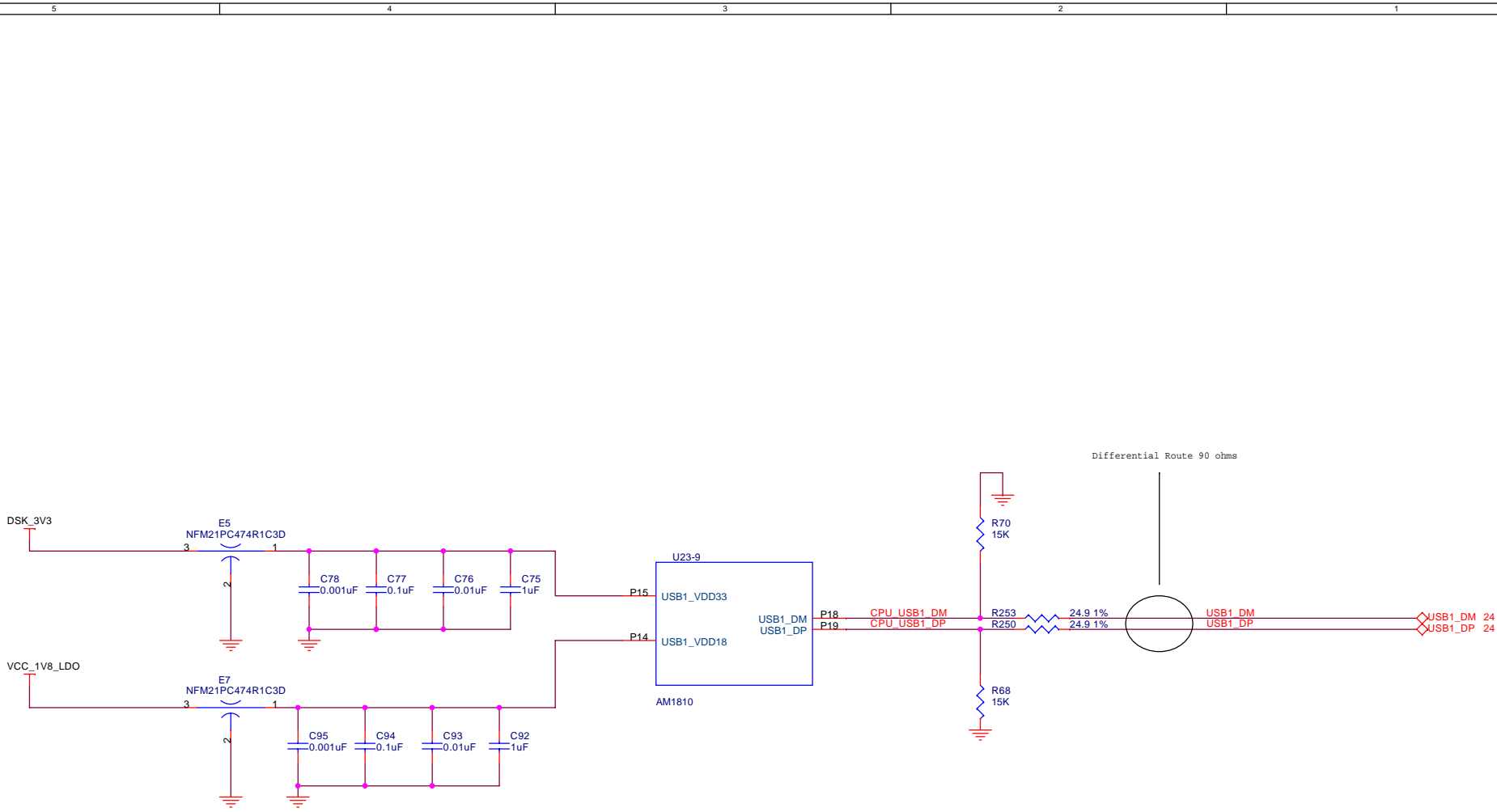
SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: Video Port			
Size: B	DWG NO	513302-0031	Revision: A
Date:	Monday, December 20, 2010	Sheet 7 of	38



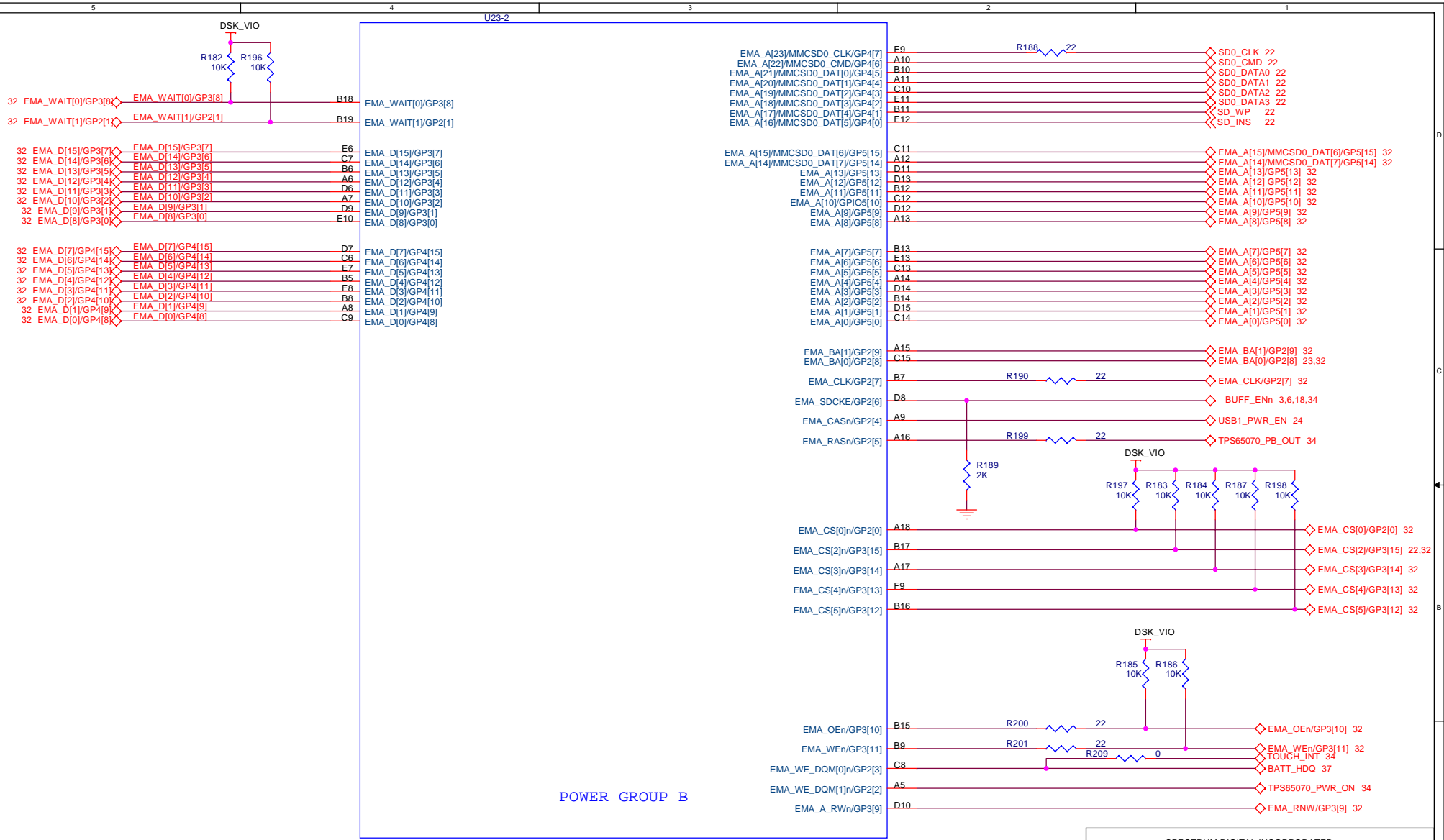
SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: Video Port Input			
Size: B	DWG NO	513302-0031	Revision: A
Date:	Monday, December 20, 2010	Sheet 8	of 38



SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: USB 2.0 INTERFACE			
Size: B	DWG NO	513302-0031	Revision: A
Date:	Monday, December 20, 2010	Sheet 9 of	38



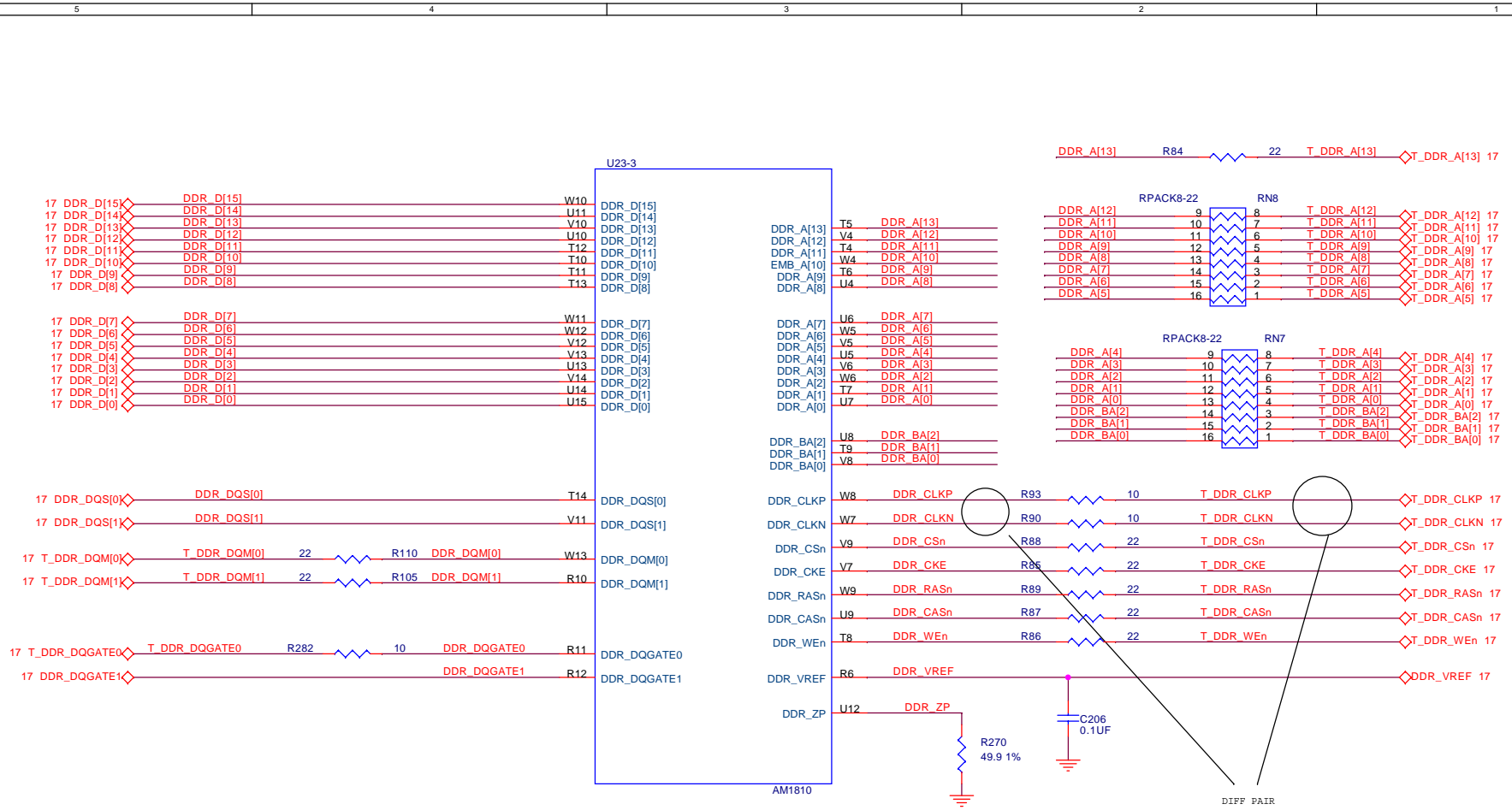
SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: USB 1.0 HOST INTERFACE			
Size: B	DWG NO	513302-0031	Revision: A
Date:	Monday, December 20, 2010	Sheet 10 of	38



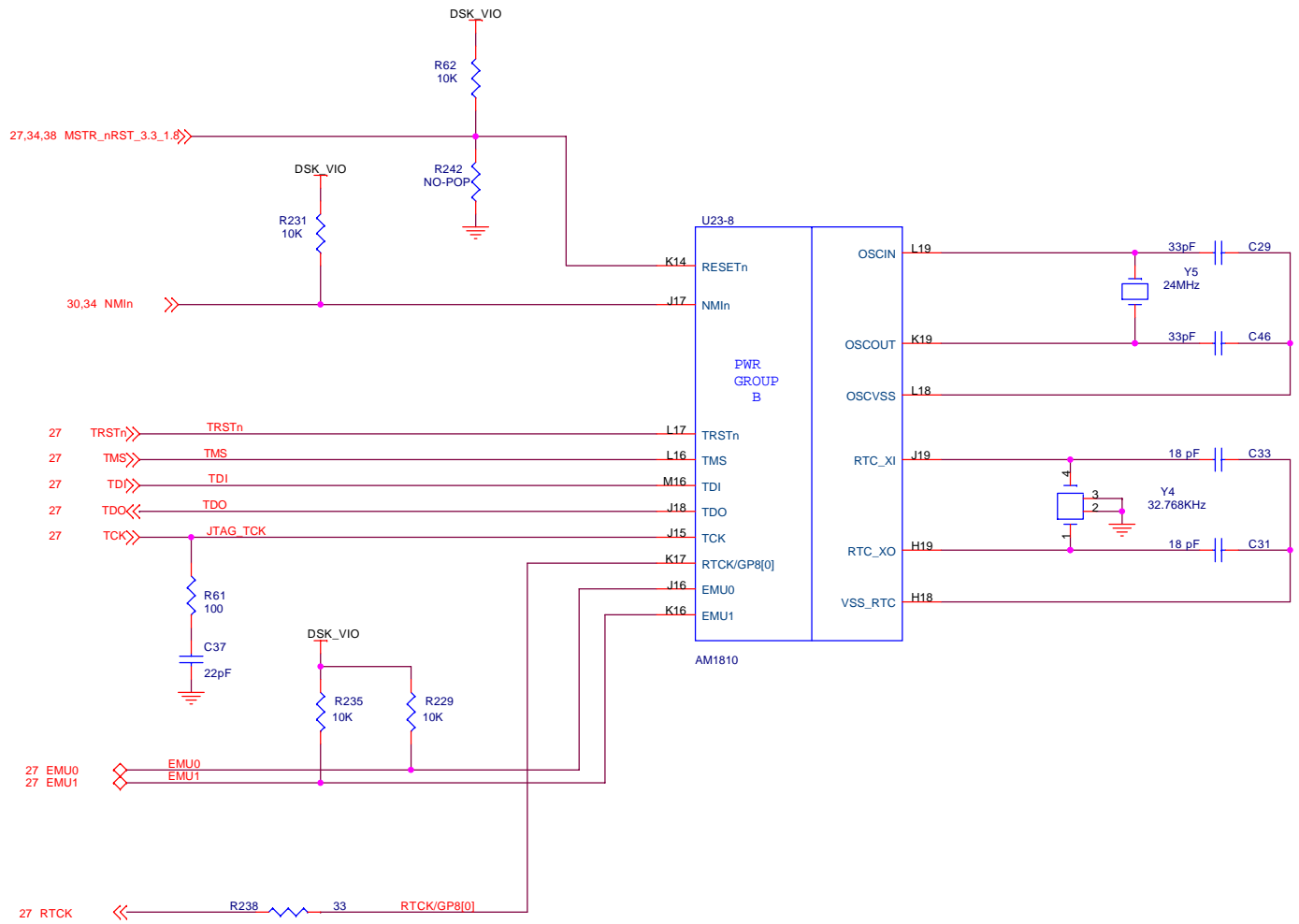
POWER GROUP B

AM1810

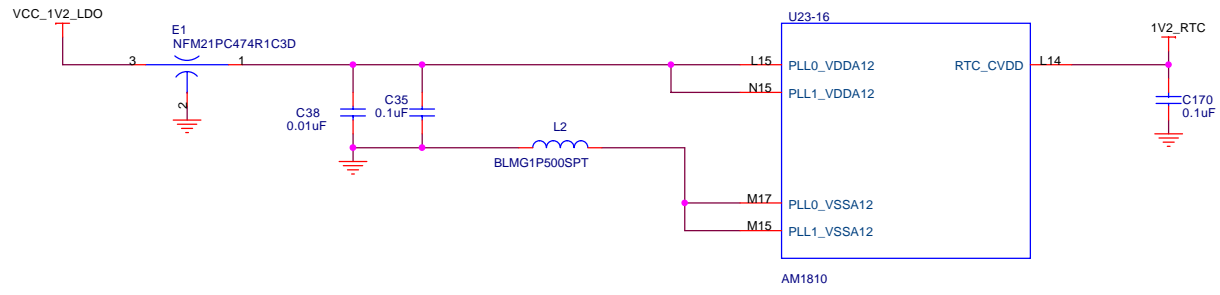
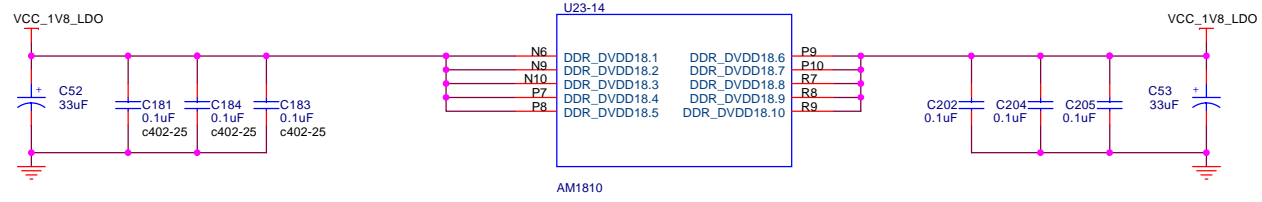
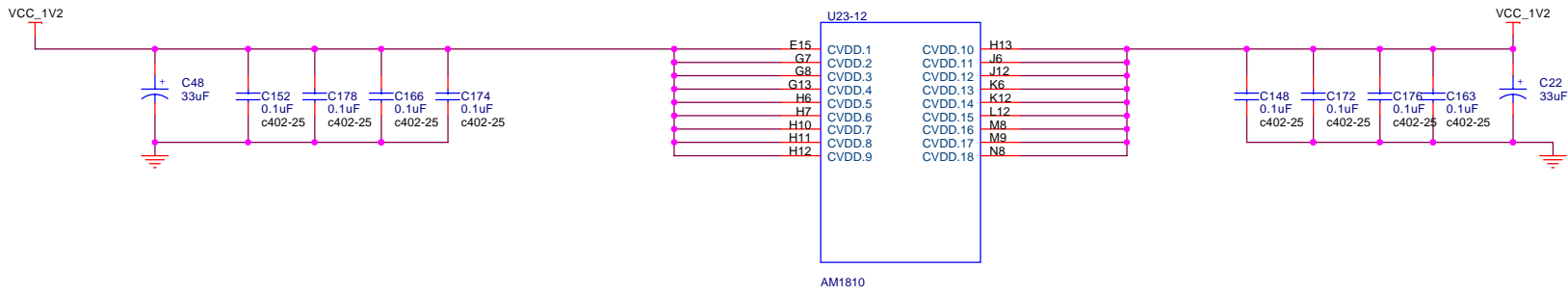
SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: EMIFA Interface			
Size: B	DWG NO	513302-0031	Revision: A
Date:	Monday, December 20, 2010	Sheet	11 of 38



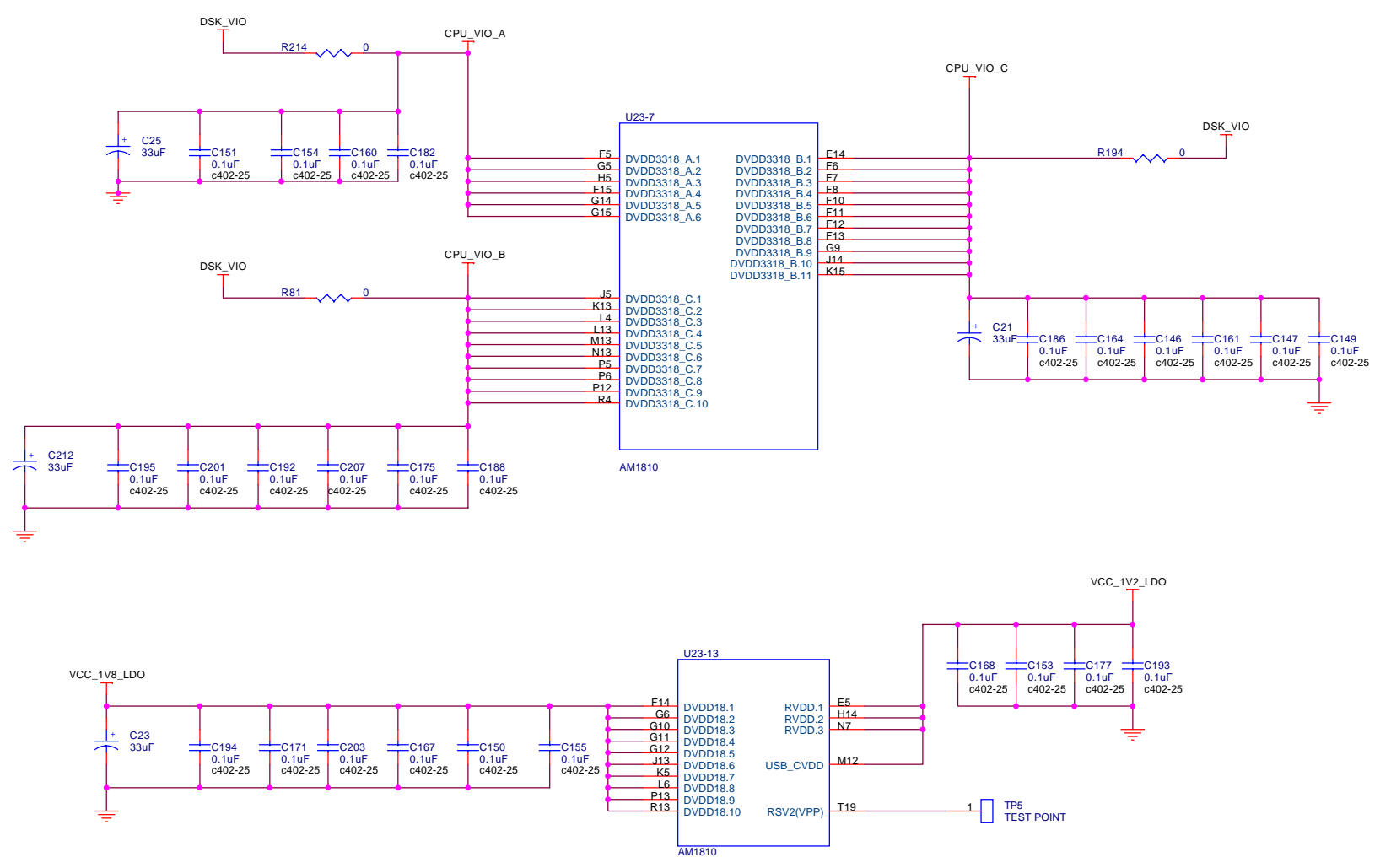
SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: DDR2 INTERFACE			
Size: B	DWG NO	513302-0031	Revision: A
Date:	Monday, December 20, 2010	Sheet 12 of	38



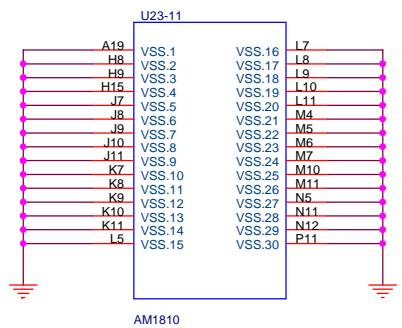
SPECTRUM DIGITAL INCORPORATED			
Title:		AM1810 EVM	
Page Contents:		JTAG/CLOCKS	
Size: B	DWG NO	513302-0031	Revision: A
Date:	Monday, December 20, 2010	Sheet 13 of	38



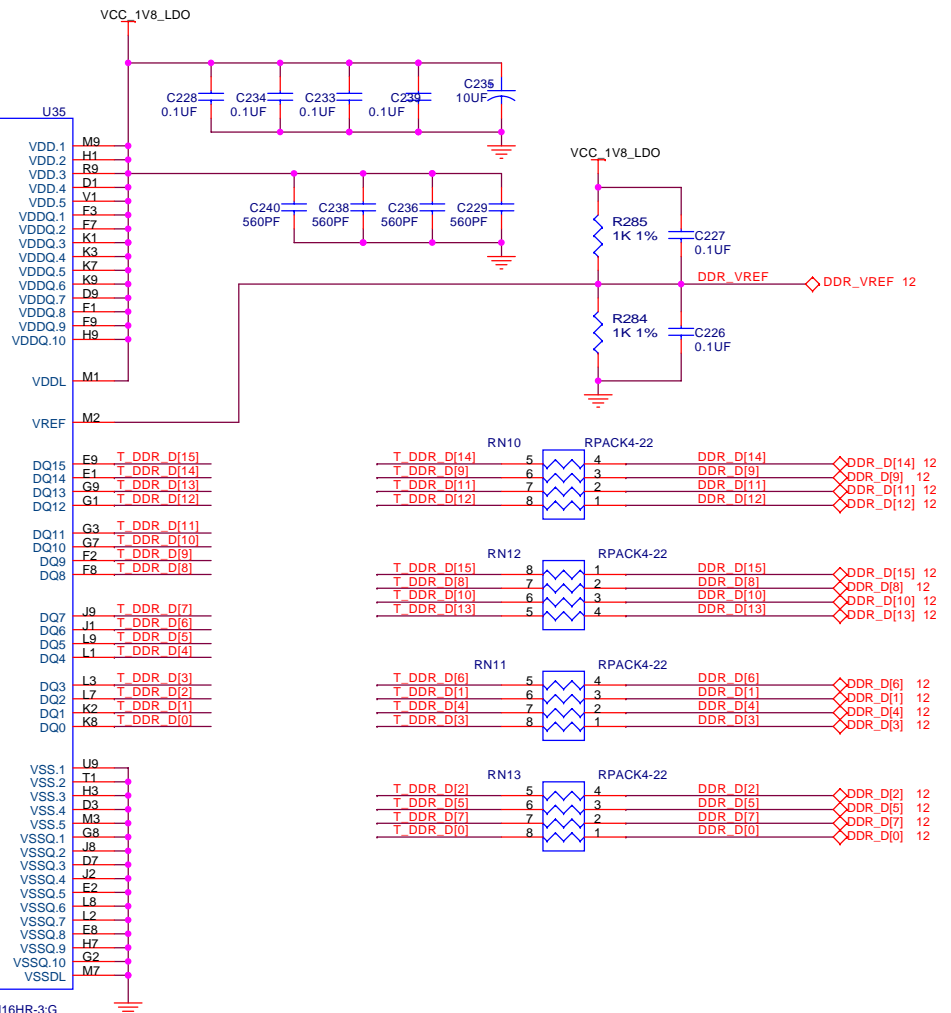
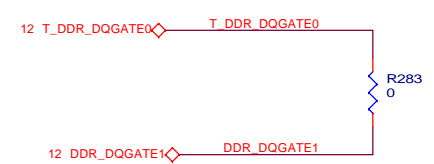
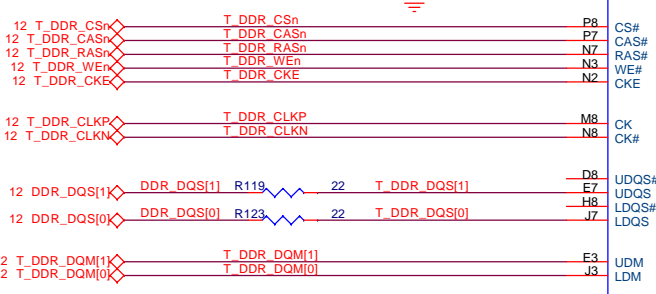
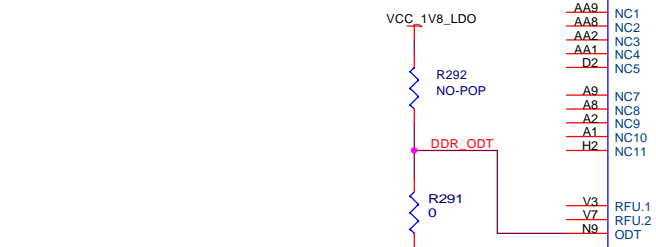
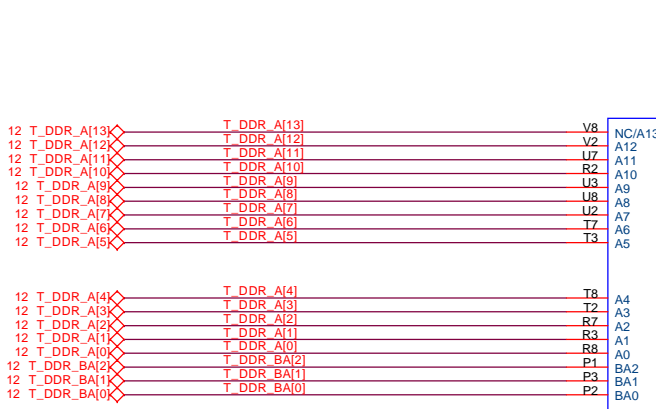
SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: AM1810 POWER PINS			
Size: B	DWG NO	513302-0031	Revision: C
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SPECTRUM DIGITAL INCORPORATED			
Title:		AM1810 EVM	
Page Contents: AM1810 I/O POWER PINS			
Size: B	DWG NO	513302-0031	Revision: A
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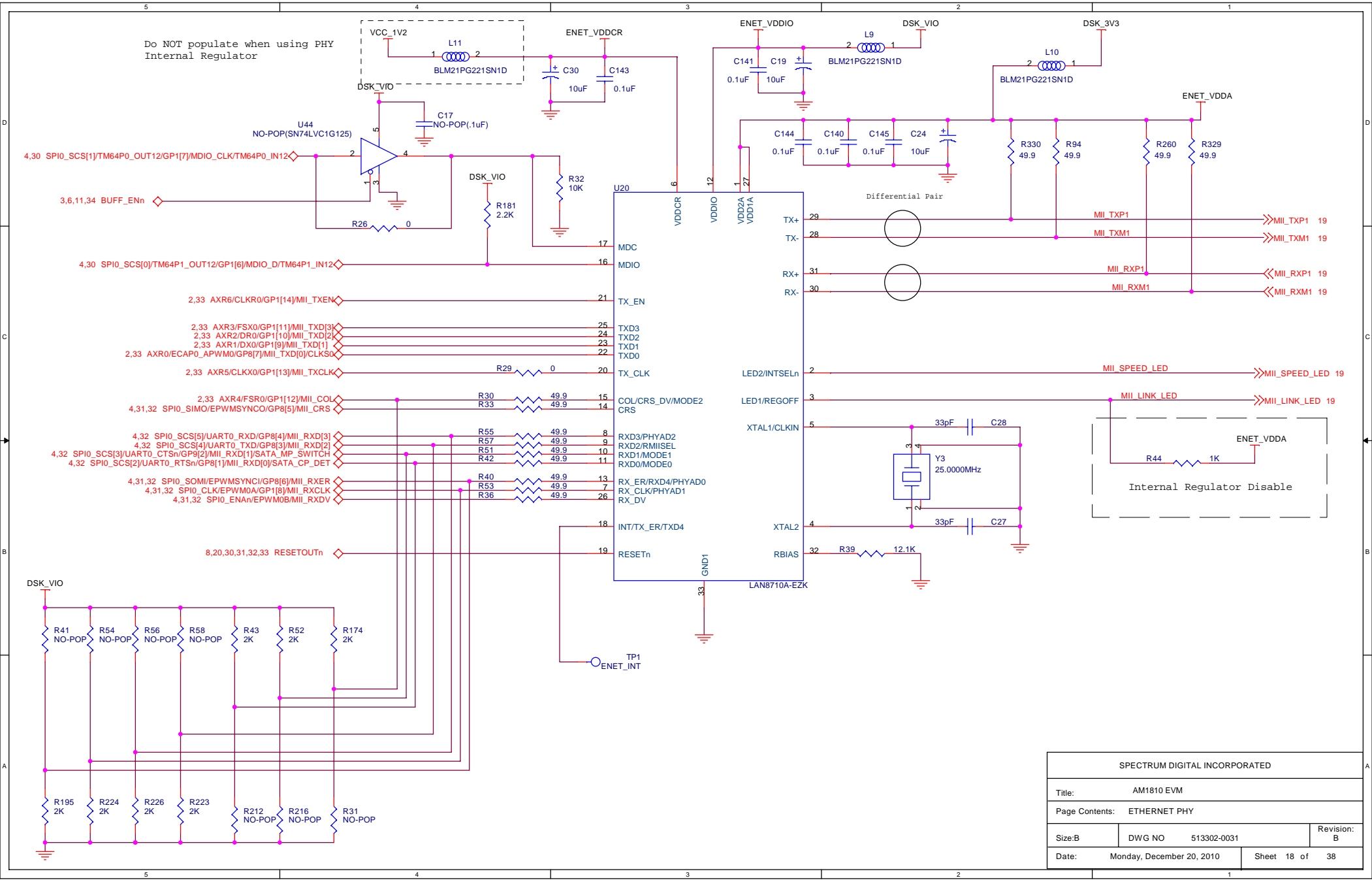


SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: AM1810 GROUND PINS			
Size: B	DWG NO	513302-0031	Revision: A
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MT47H64M16HR-3-G

SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: DDR2 - EMIF B			
Size: B	DWG NO	513302-0031	Revision: A
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SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: ETHERNET PHY			
Size: B	DWG NO	513302-0031	Revision: B
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5

4

3

2

1

18\_MIL\_TXP1  
18\_MIL\_TXM1  
18\_MIL\_RXP1  
18\_MIL\_RXM1

Differential Pair 100 ohm

Differential Pair 100 ohm

DSK\_3V3

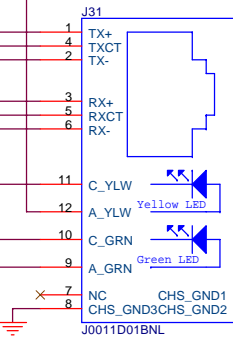
R220 NO-POP R227 NO-POP

DSK\_3V3

R211 10 R236 10

DSK\_3V3

R232 330 R217 330



18\_MII\_SPEED\_LED  
18\_MII\_LINK\_LED

R213 NO-POP R233 NO-POP

C157 0.1uF C159 0.1uF

SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: ETHERNET MII CONNECTOR			
Size: B	DWG NO: 513302-0031	Revision: B	
Date: Monday, December 20, 2010	Sheet 19 of 38		

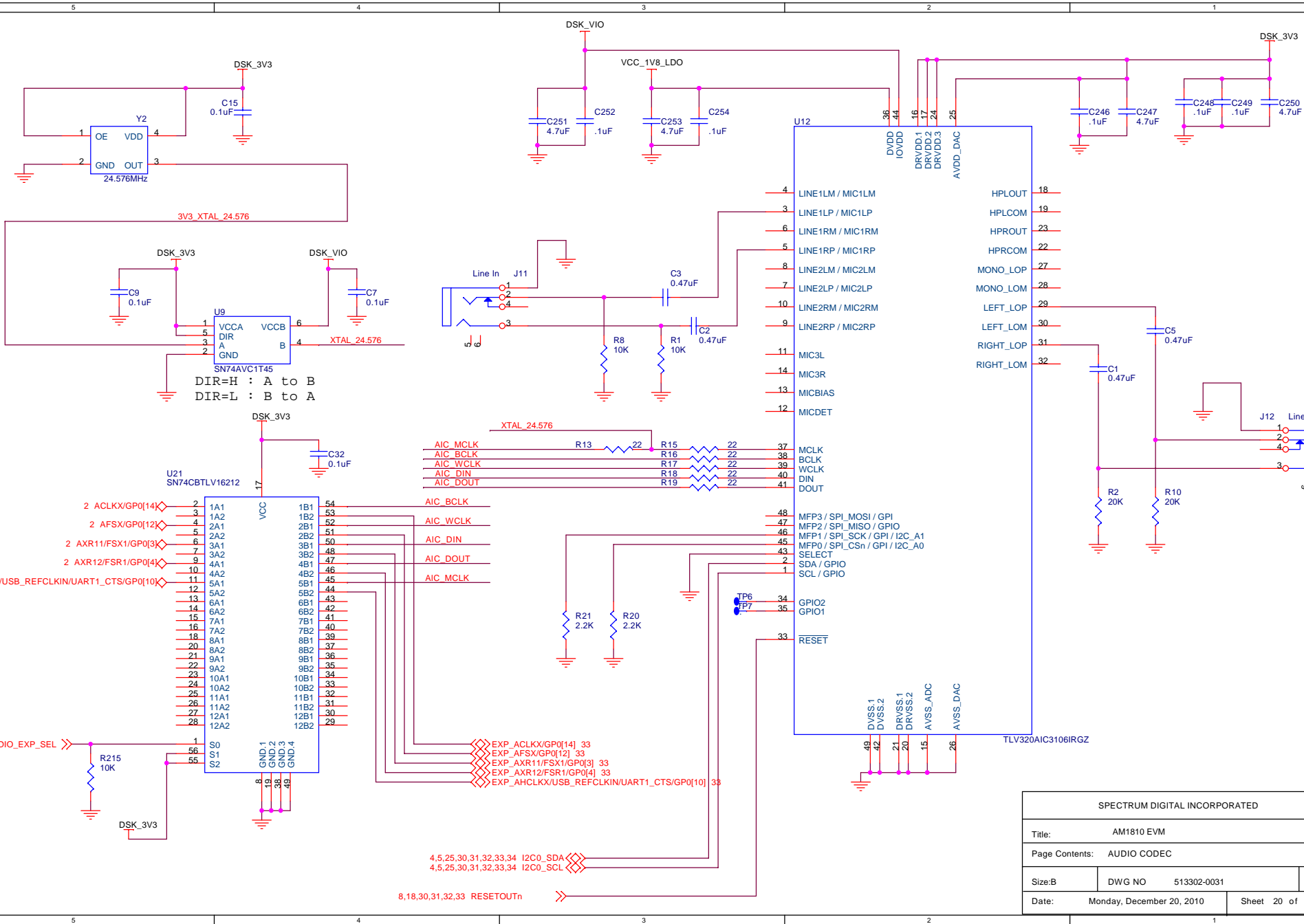
5

4

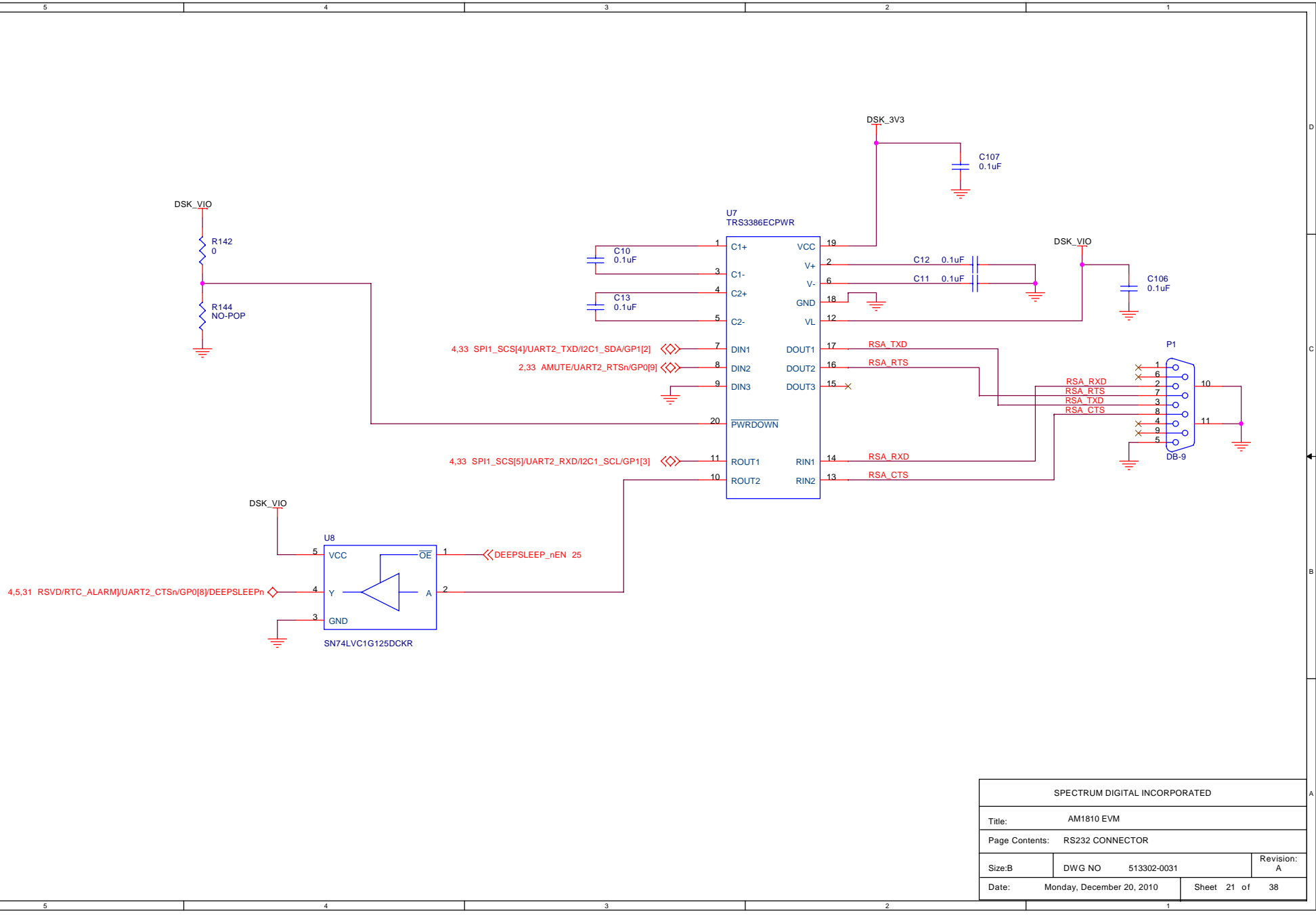
3

2

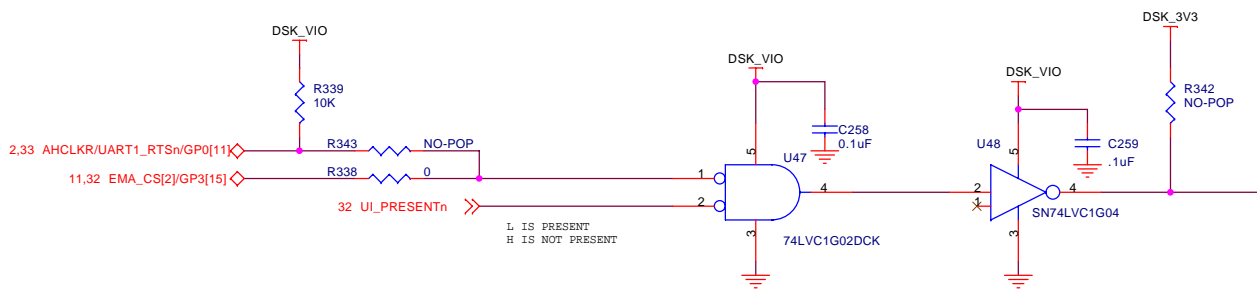
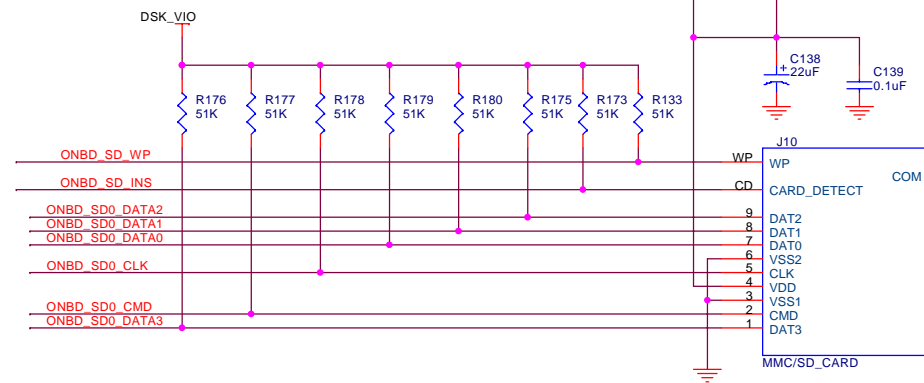
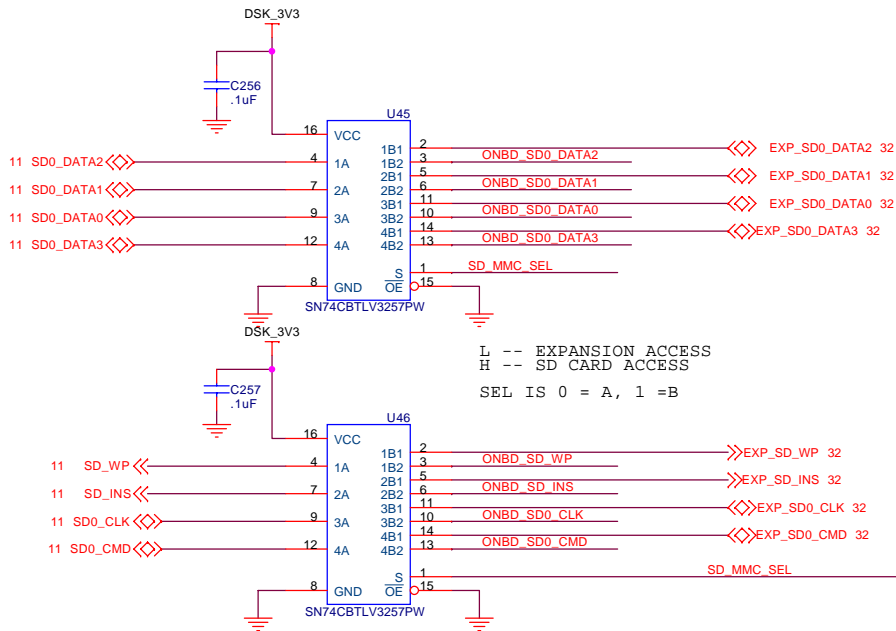
1



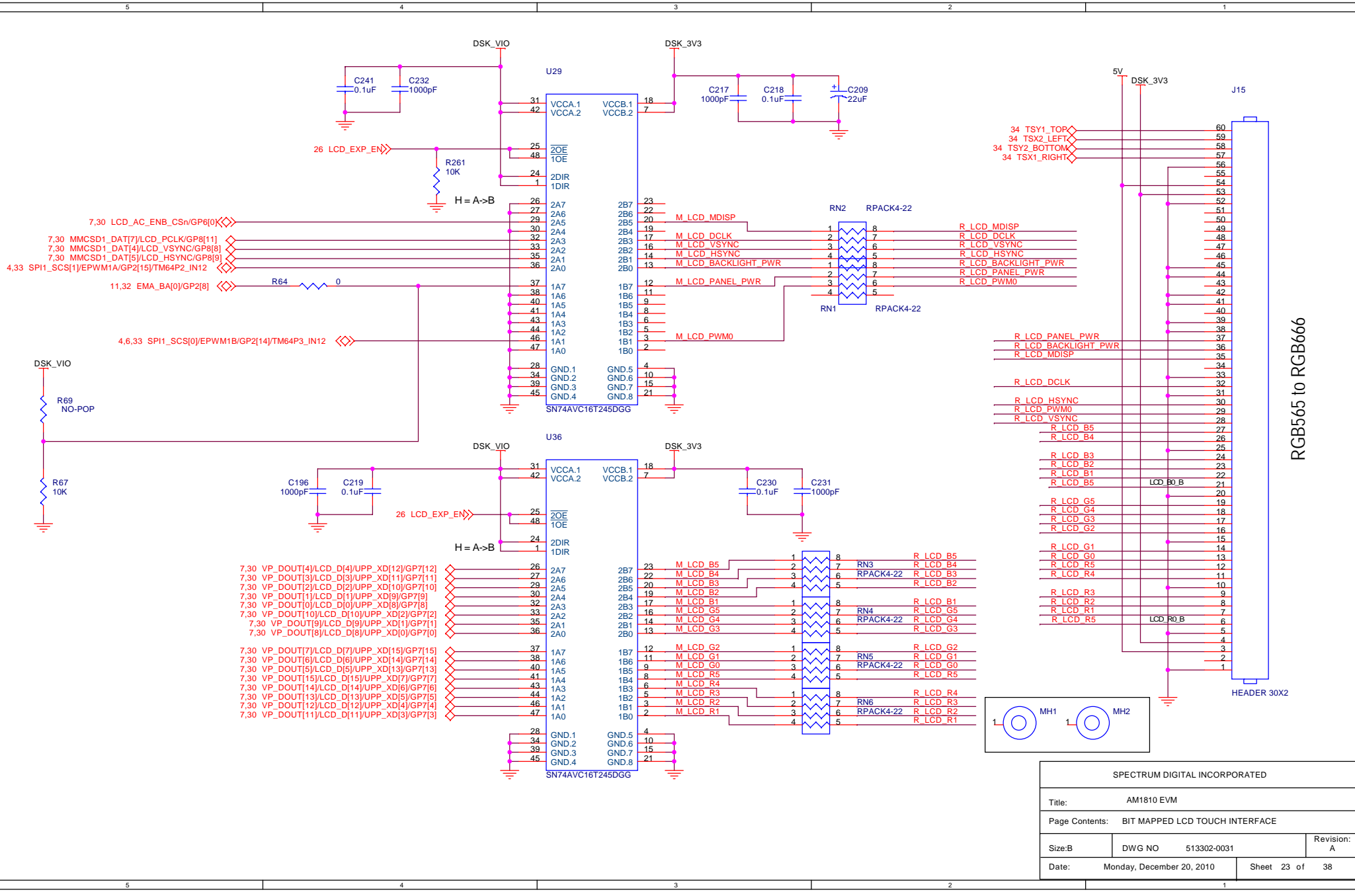
SPECTRUM DIGITAL INCORPORATED			
Title:		AM1810 EVM	
Page Contents:		AUDIO CODEC	
Size: B	DWG NO	513302-0031	Revision: A
Date:	Monday, December 20, 2010	Sheet 20 of	38



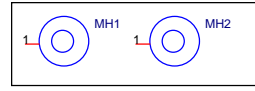
SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: RS232 CONNECTOR			
Size: B	DWG NO	513302-0031	Revision: A
Date:	Monday, December 20, 2010	Sheet 21 of	38



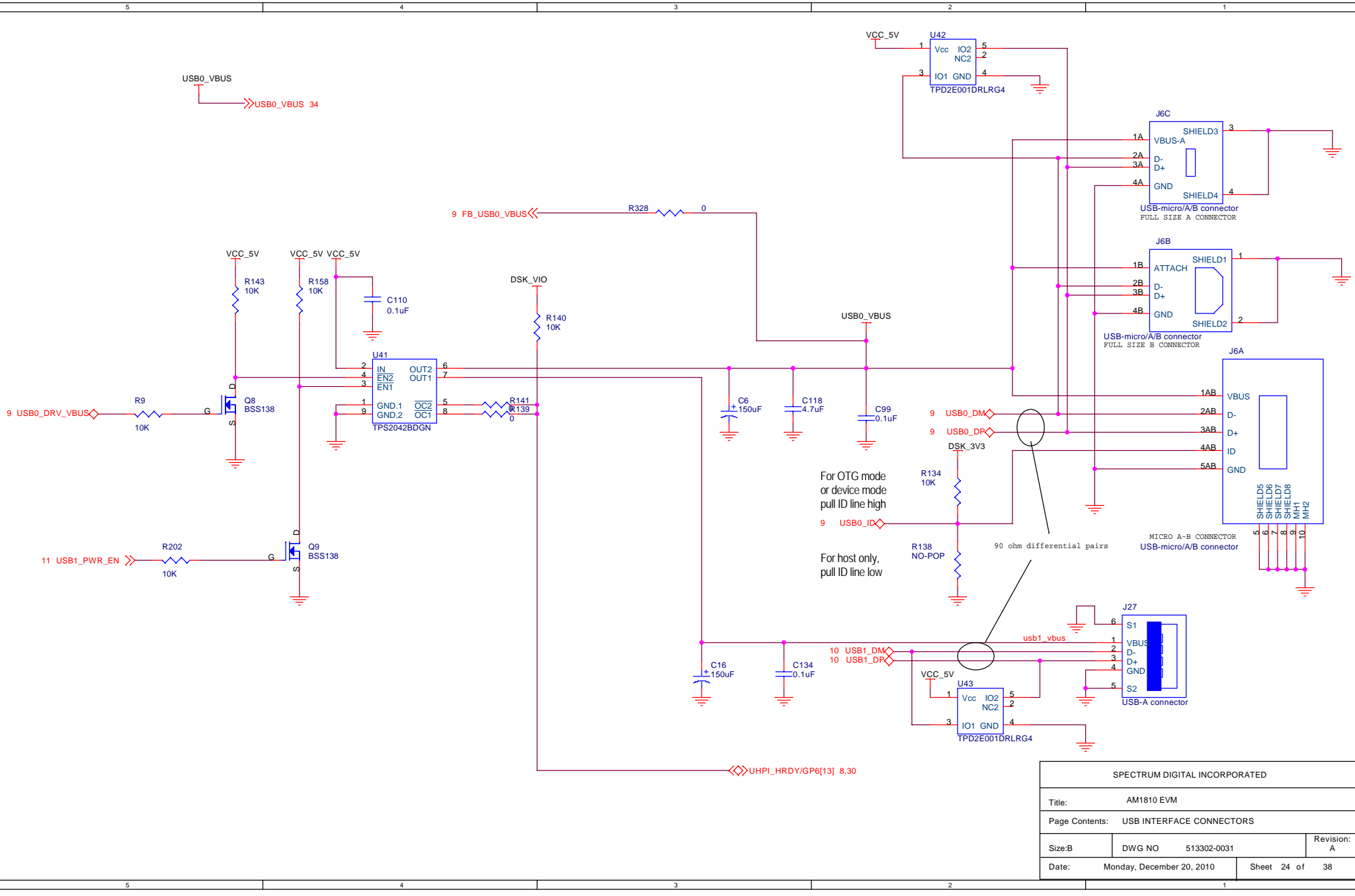
SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: SD/MMC CONNECTOR			
Size: B	DWG NO	513302-0031	Revision: A
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RGB565 to RGB666



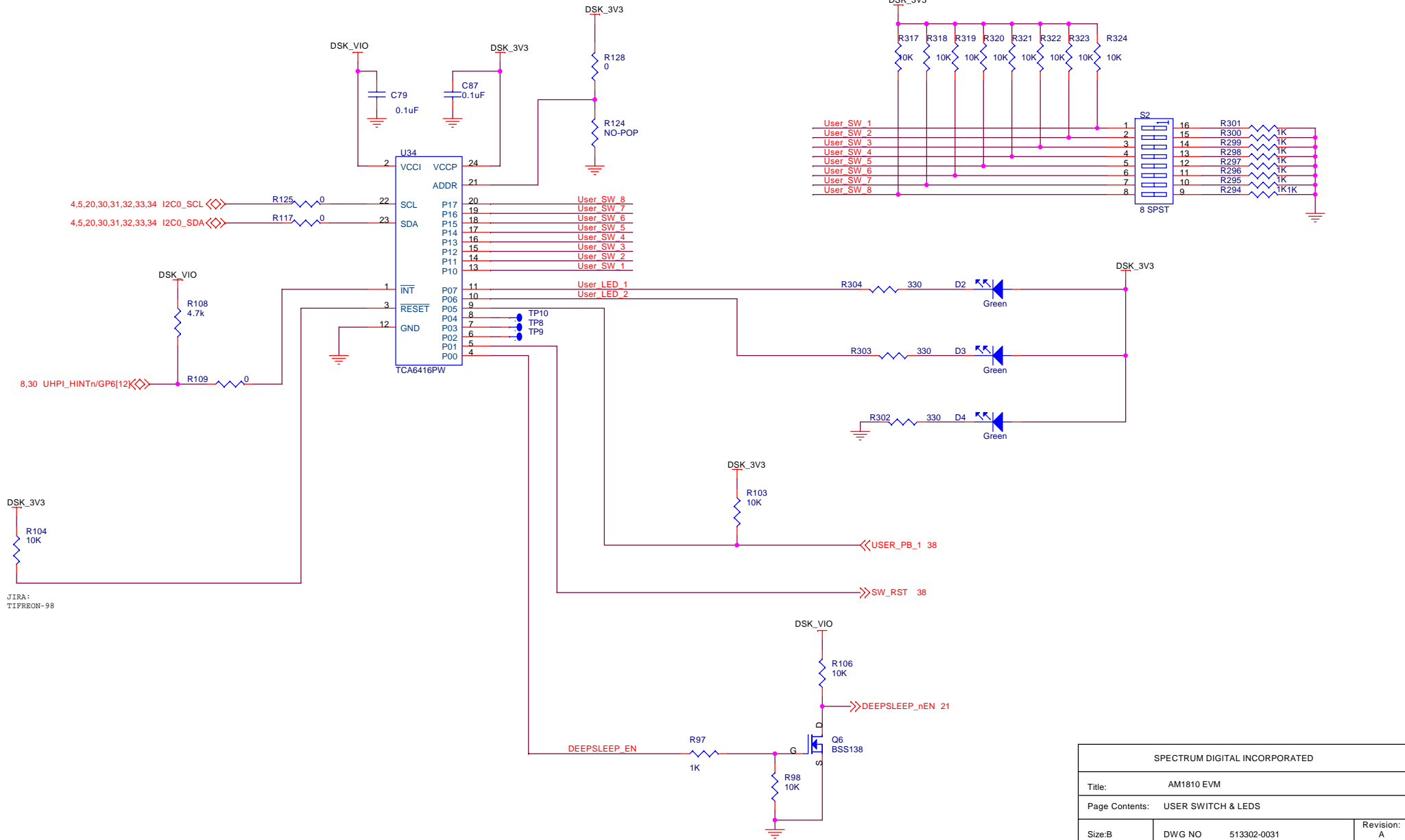
SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: BIT MAPPED LCD TOUCH INTERFACE			
Size: B	DWG NO	513302-0031	Revision: A
Date:	Monday, December 20, 2010	Sheet	23 of 38



SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: USB INTERFACE CONNECTORS			
Size: B	DWG NO	513302-0031	Revision: A
Date:	Monday, December 20, 2010	Sheet 24 of	38

### IO EXPANDER

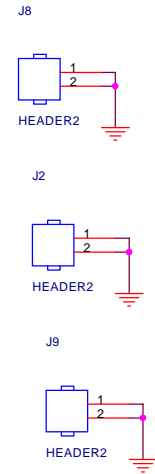
### USER DIP SWITCHES



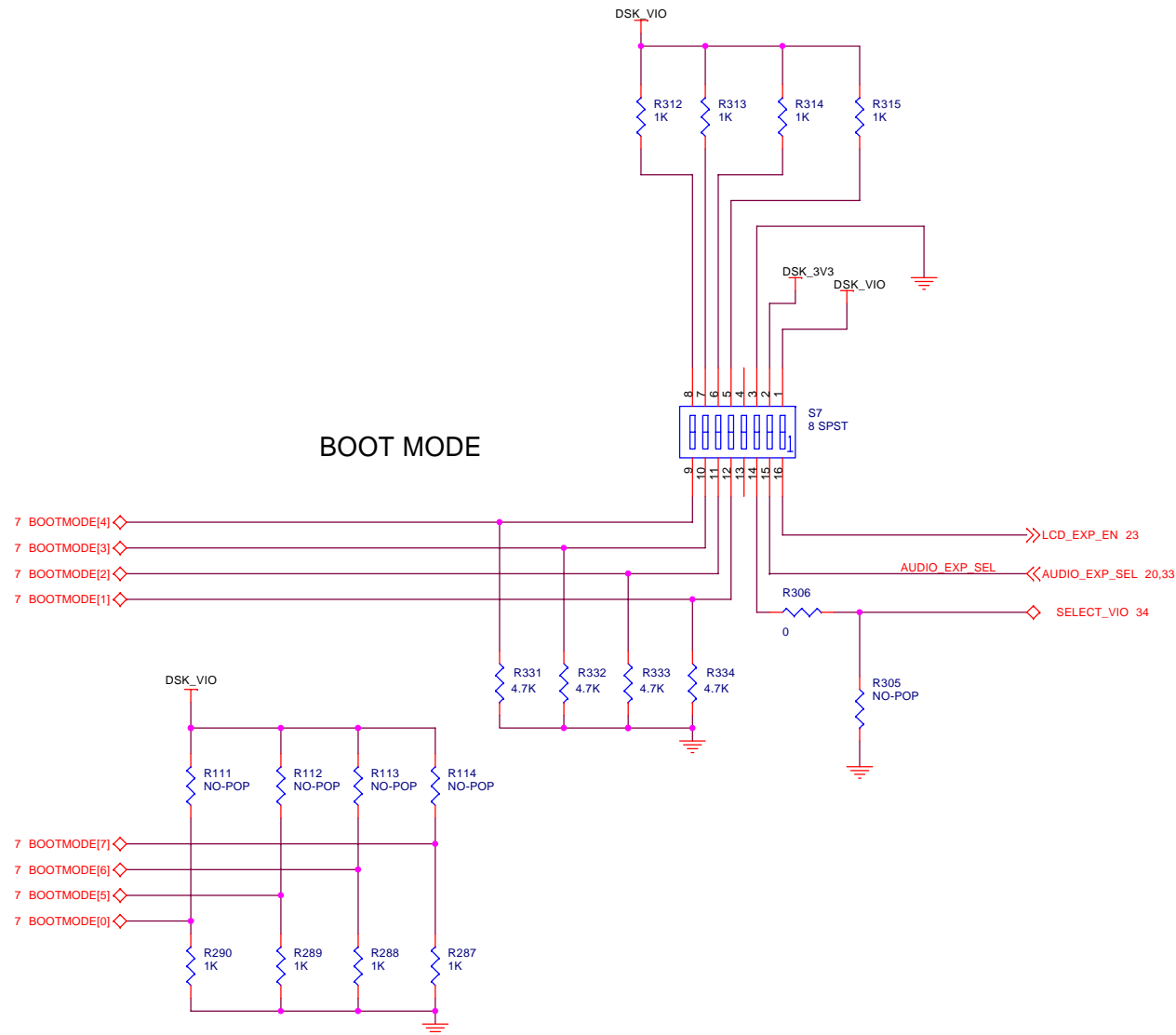
JIRA:  
TIFREON-98

SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: USER SWITCH & LEADS			
Size: B	DWG NO	513302-0031	Revision: A
Date:	Monday, December 20, 2010	Sheet 25 of	38

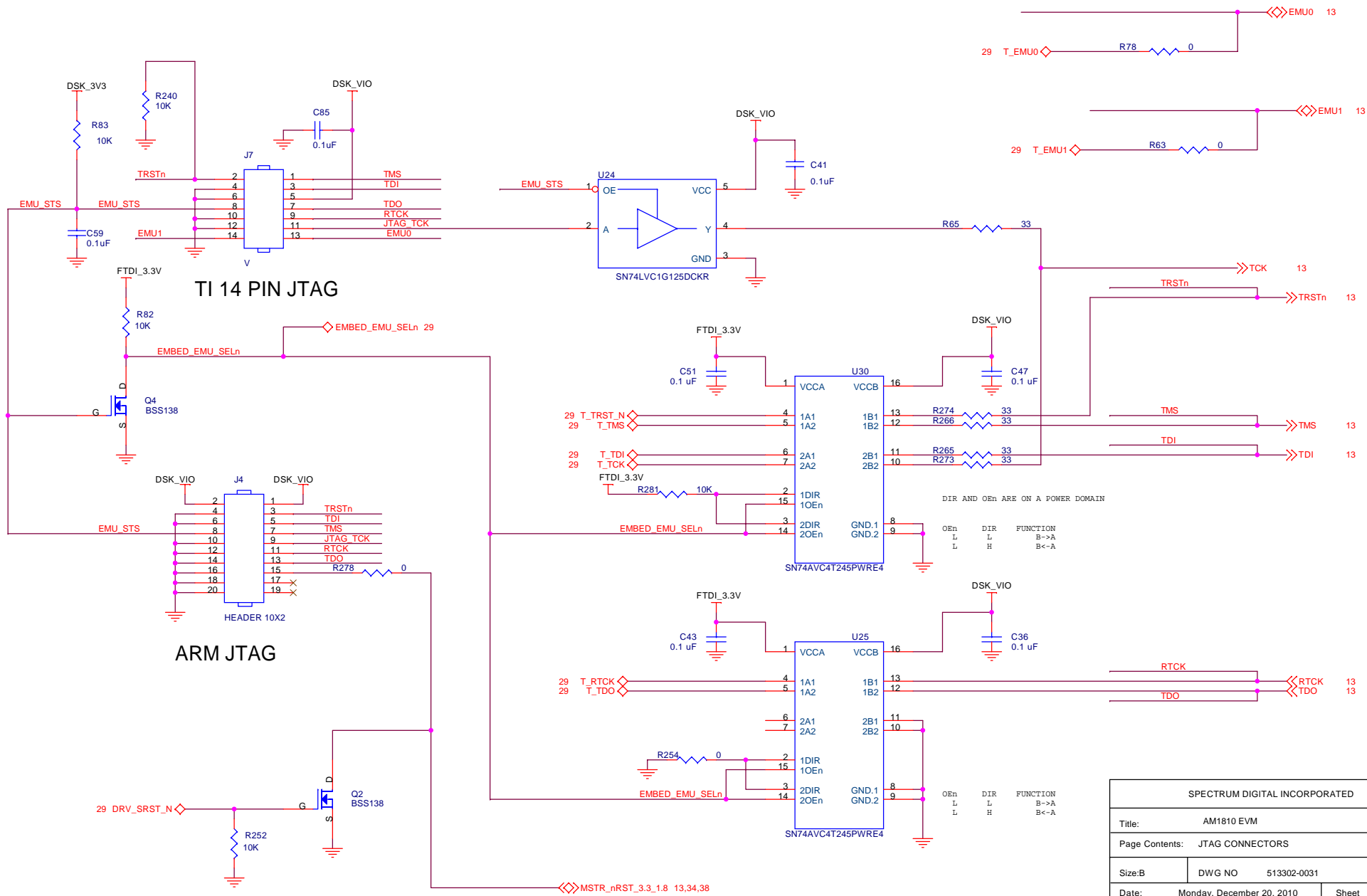
# PROBE GND CONNECTOR



Distribute 2 pin headers around outside edges of the board



SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: BOOT SWITCH			
Size: B	DWG NO	513302-0031	Revision: A
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**TI 14 PIN JTAG**

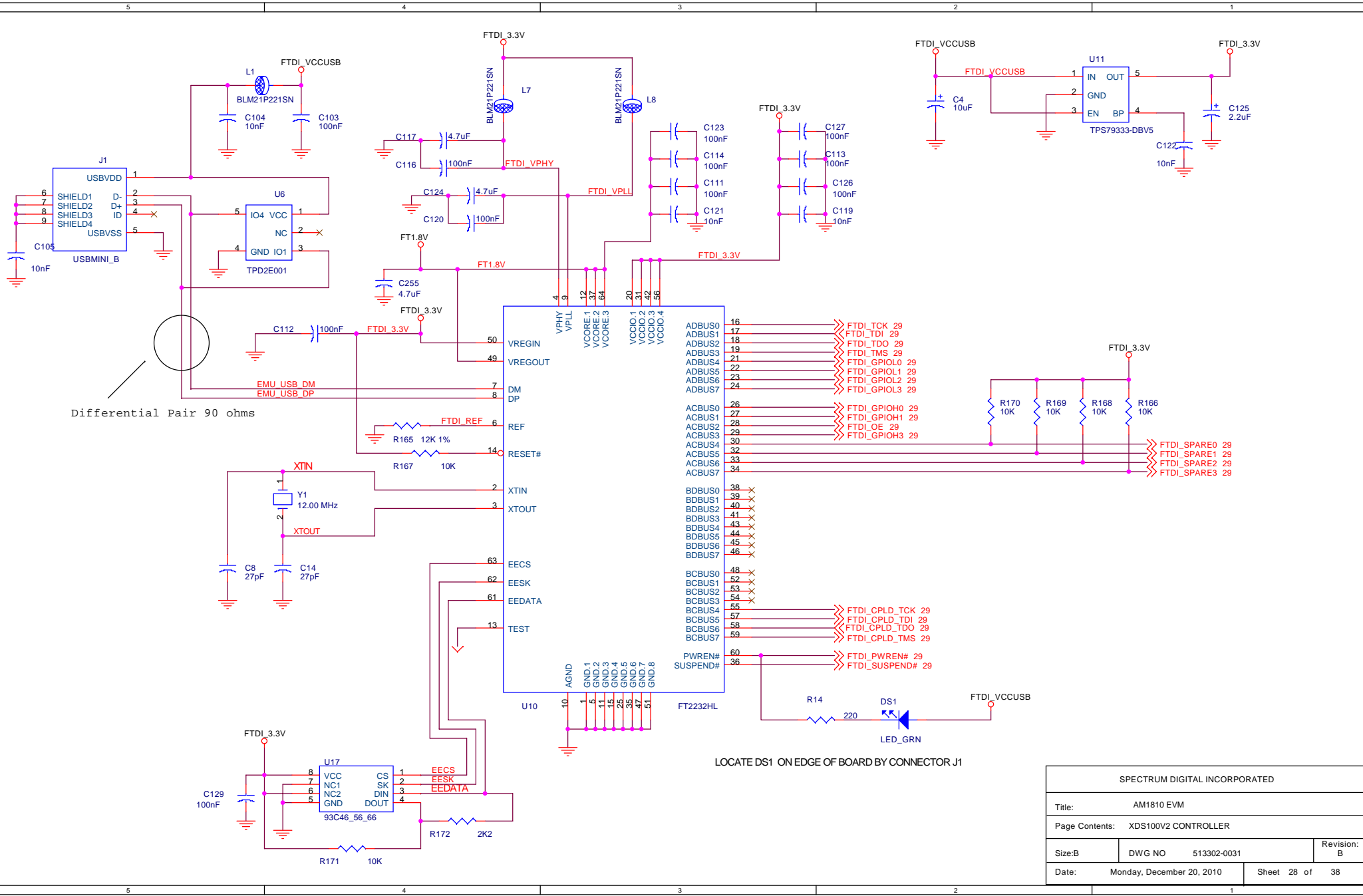
**ARM JTAG**

DIR AND OE<sub>n</sub> ARE ON A POWER DOMAIN

OEn	DIR	FUNCTION
L	L	B->A
L	H	B<-A

OEn	DIR	FUNCTION
L	L	B->A
L	H	B<-A

SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: JTAG CONNECTORS			
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Differential Pair 90 ohms

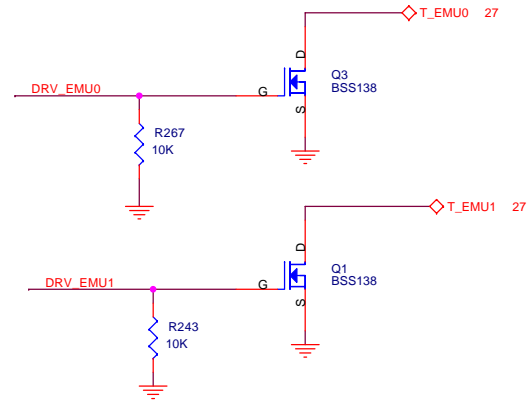
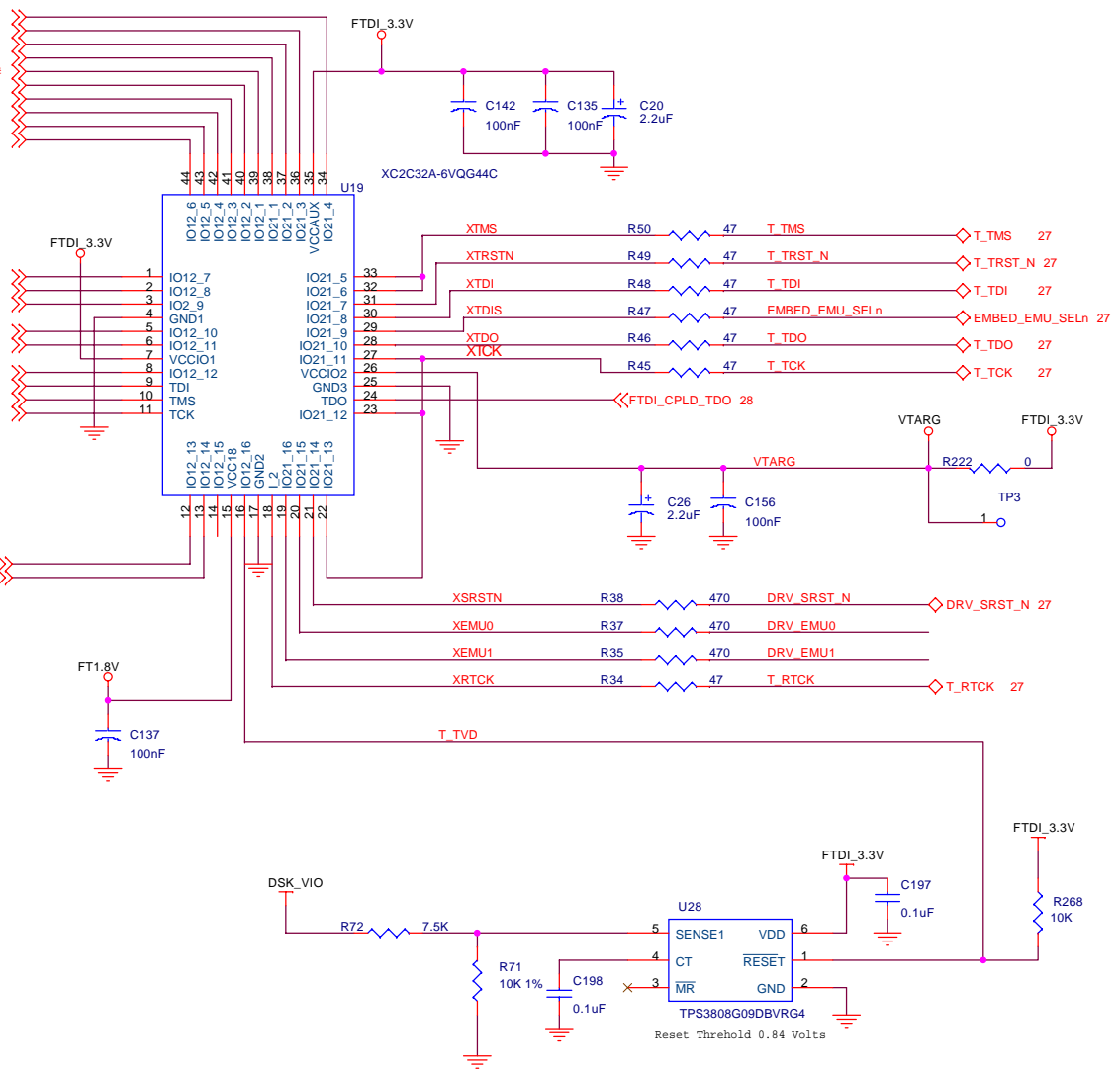
LOCATE DS1 ON EDGE OF BOARD BY CONNECTOR J1

SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: XDS100V2 CONTROLLER			
Size: B	DWG NO	513302-0031	Revision: B
Date:	Monday, December 20, 2010	Sheet 28 of	38

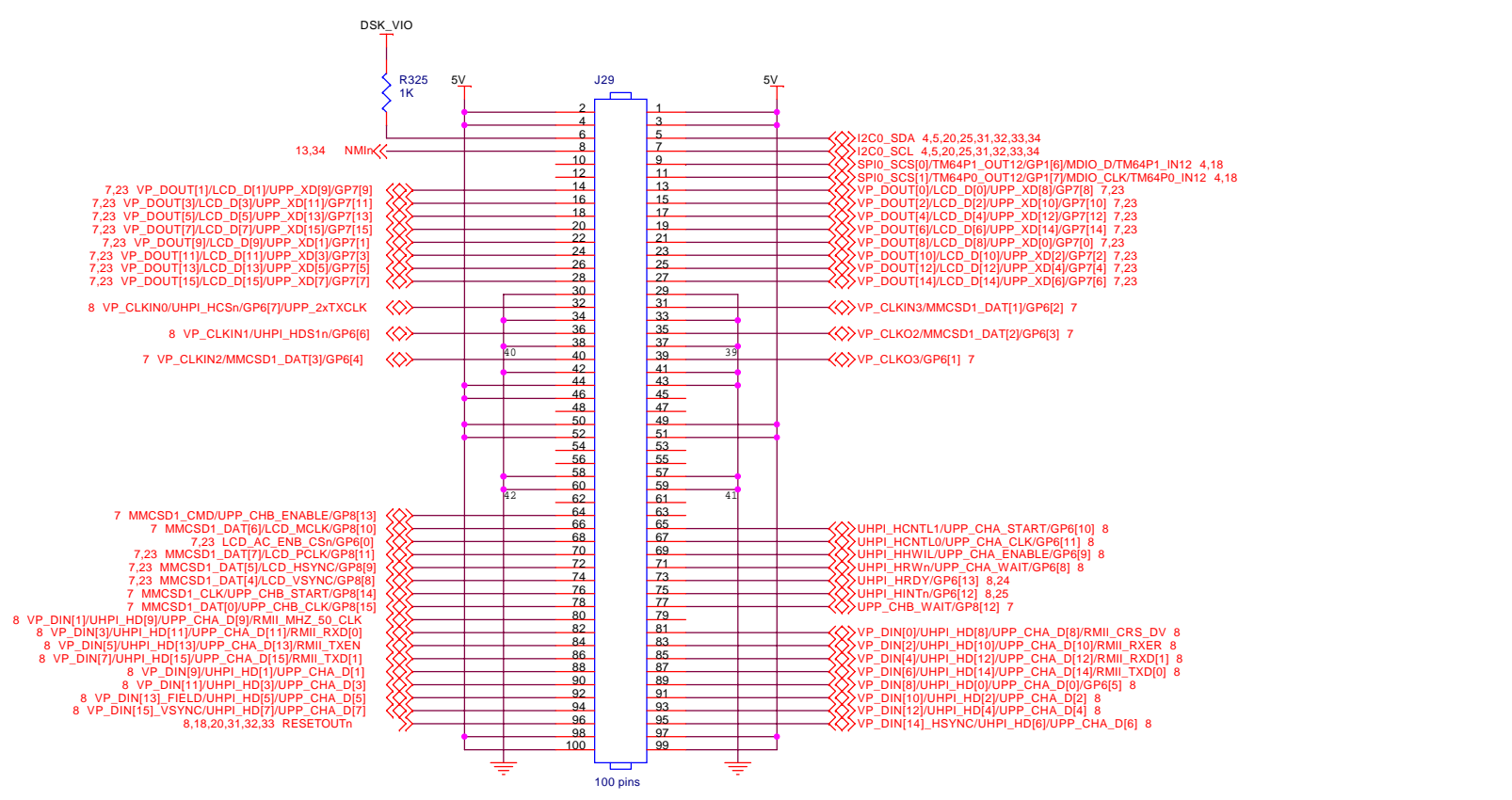
- 28 FTDI\_SPARE3
- 28 FTDI\_SPARE2
- 28 FTDI\_SPARE1
- 28 FTDI\_SPARE0
- 28 FTDI\_SUSPEND#
- 28 FTDI\_GPIOH3
- 28 FTDI\_OE
- 28 FTDI\_PWREN#
- 28 FTDI\_GPIOH1
- 28 FTDI\_GPIOH0

- 28 FTDI\_GPIOL3
- 28 FTDI\_GPIOL2
- 28 FTDI\_GPIOL1
- 28 FTDI\_GPIOL0
- 28 FTDI\_TMS
- 28 FTDI\_TDO
- 28 FTDI\_CPLD\_TDI
- 28 FTDI\_CPLD\_TMS
- 28 FTDI\_CPLD\_TCK

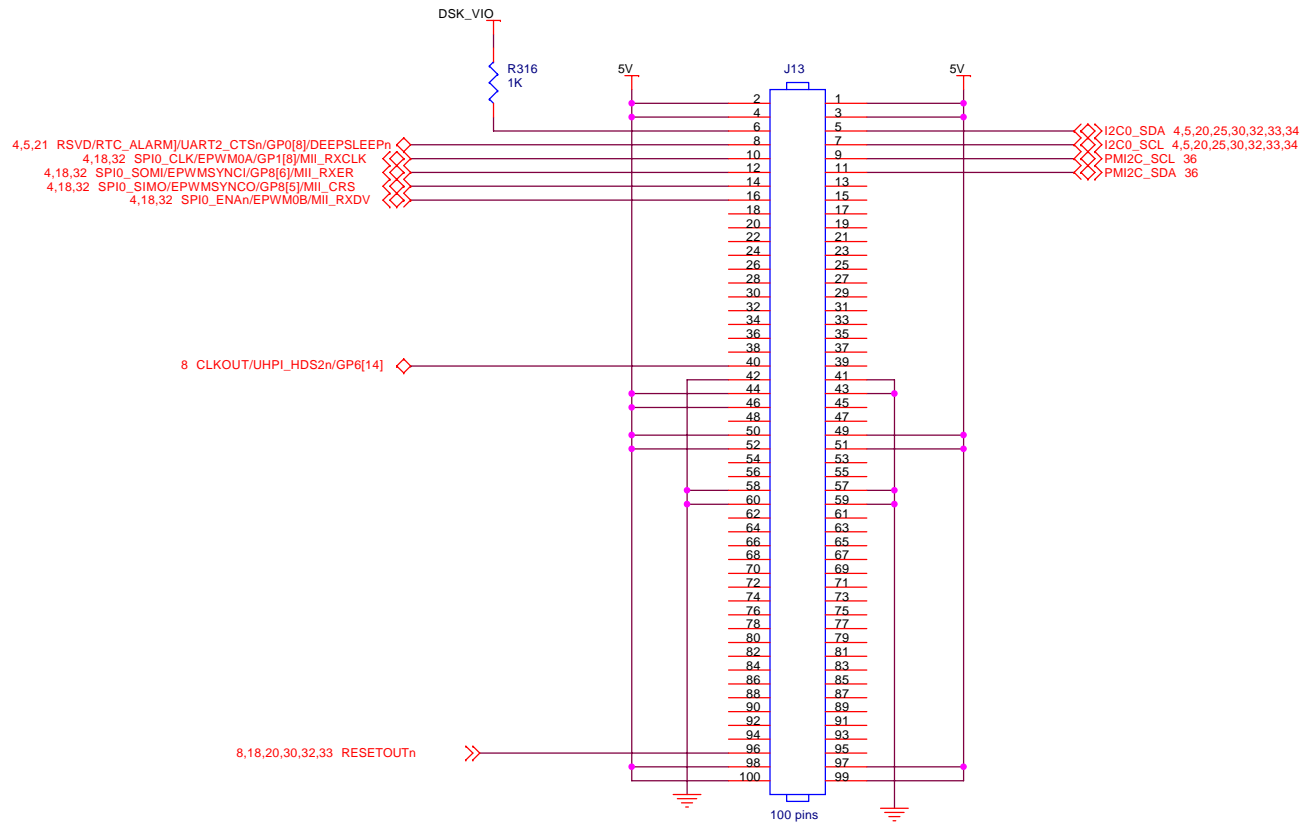
- 28 FTDI\_TDI
- 28 FTDI\_TCK



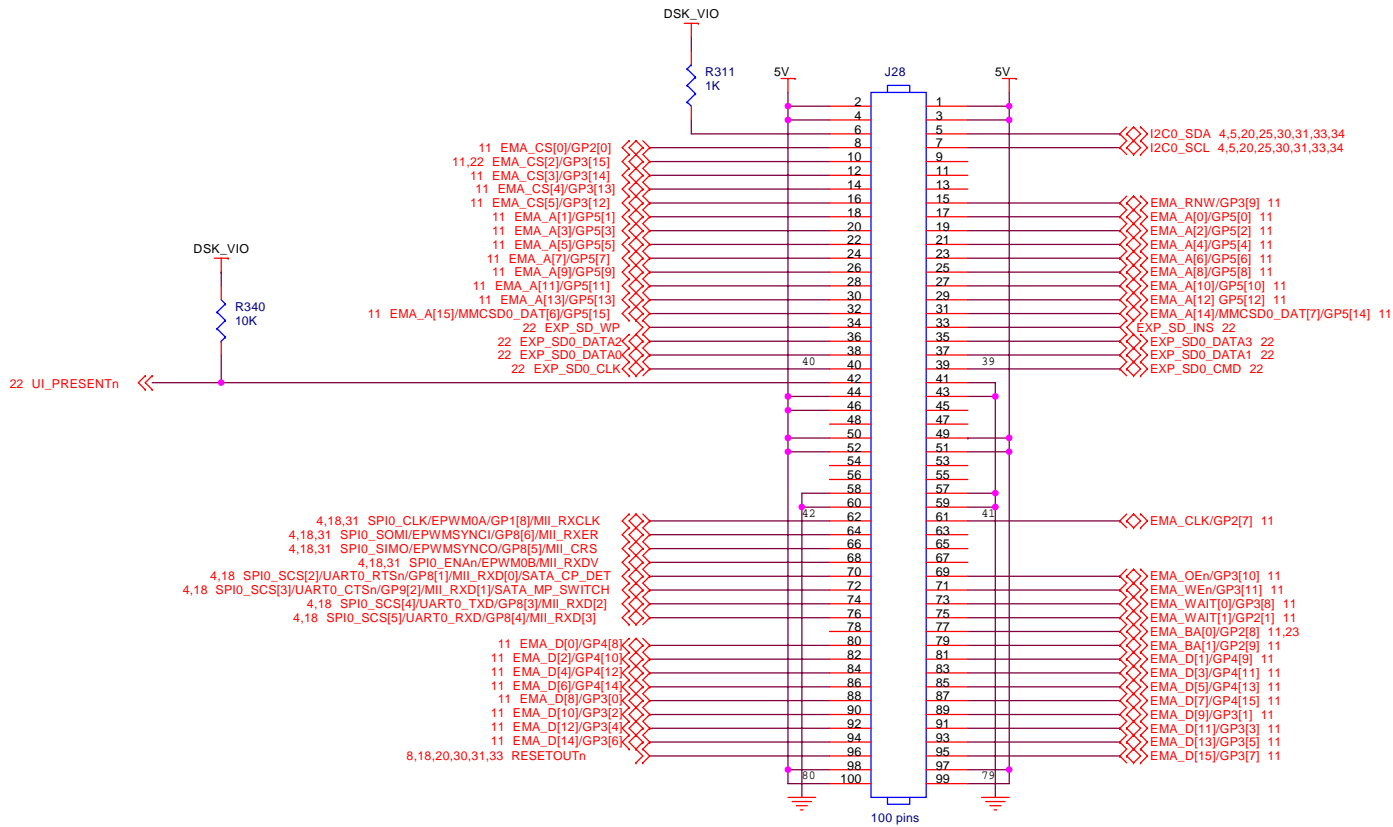
SPECTRUM DIGITAL INCORPORATED			
Title:		AM1810 EVM	
Page Contents: XDS100v2 BUFFERING			
Size: B	DWG NO	513302-0031	Revision: A
Date:	Monday, December 20, 2010	Sheet	29 of 38



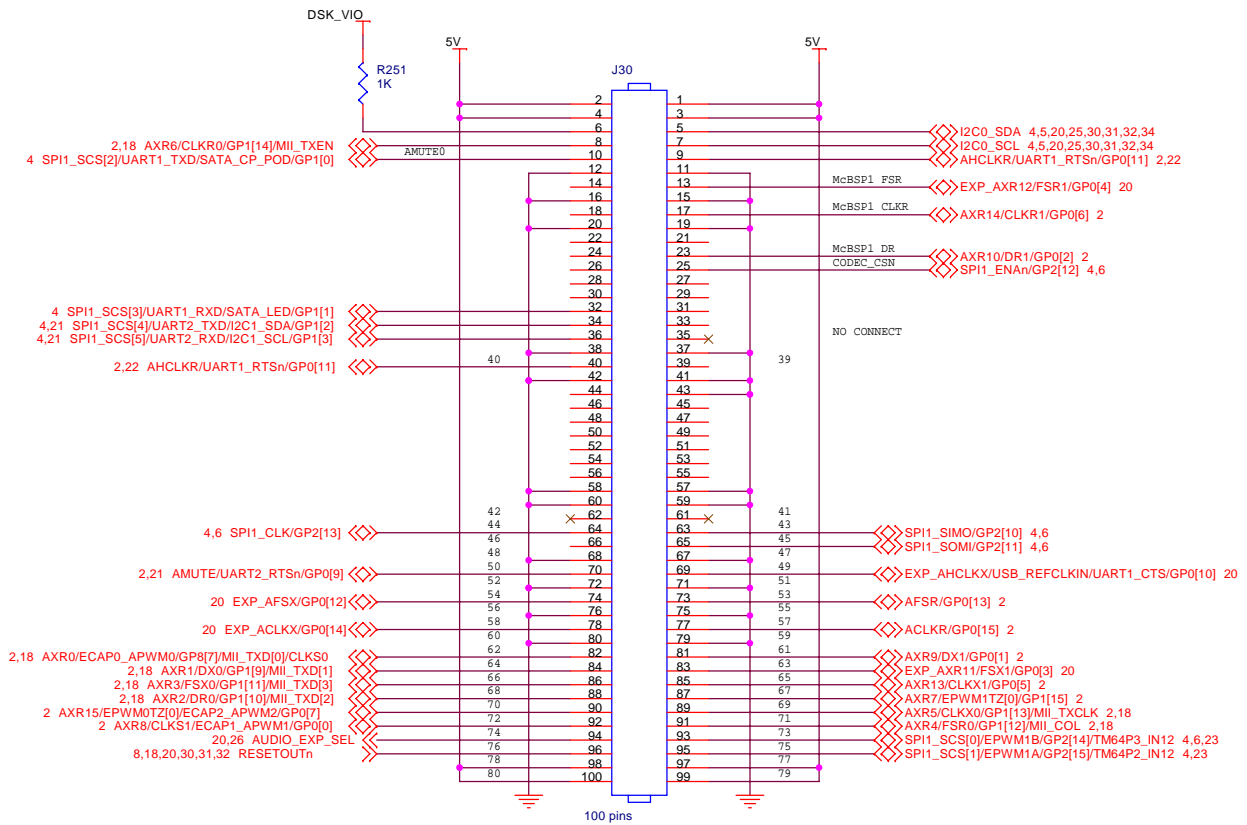
SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: LCD/VPIF EXPANSION CONNECTOR			
Size: B	DWG NO	513302-0031	Revision: A
Date:	Monday, December 20, 2010	Sheet	30 of 38



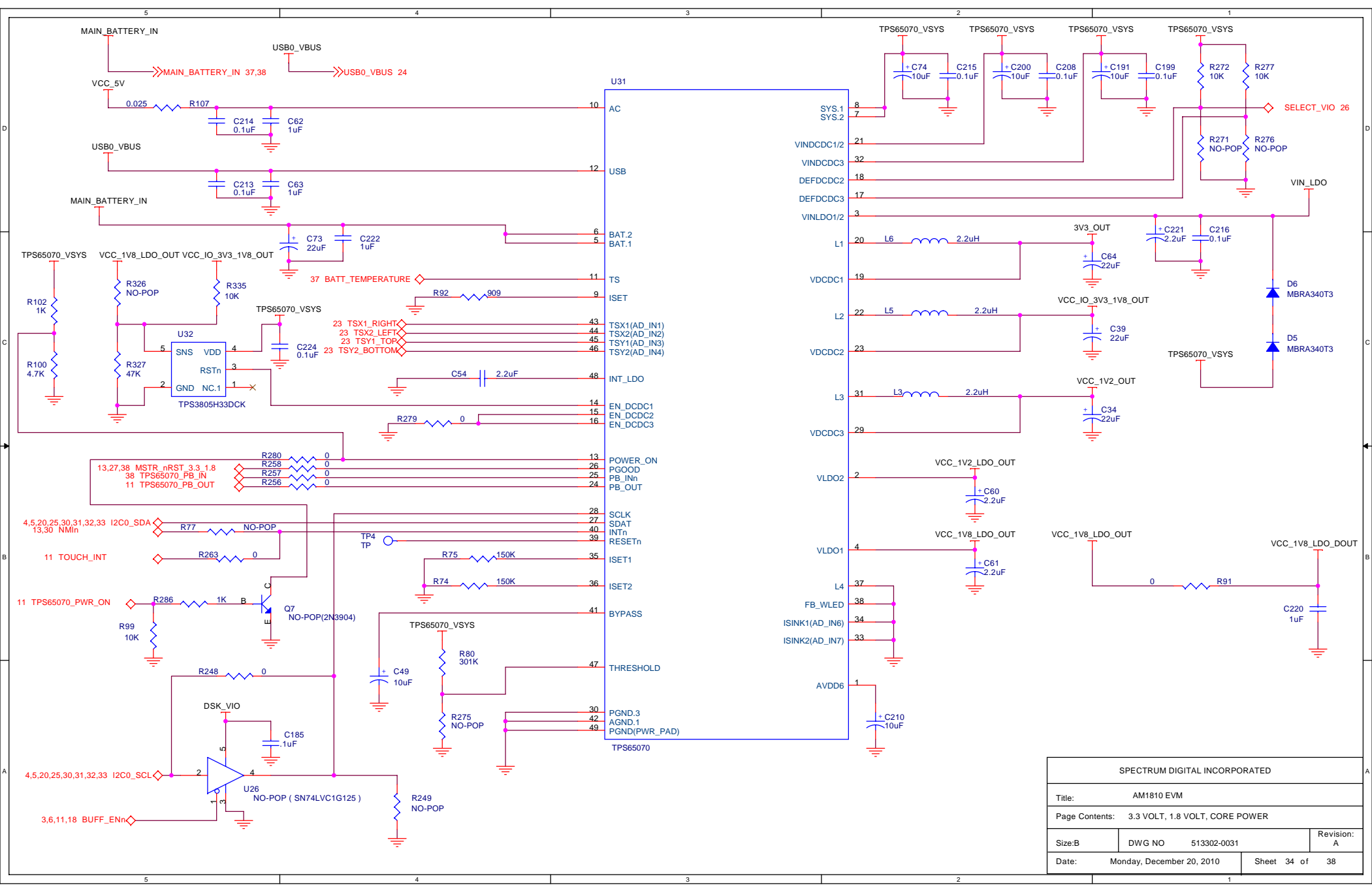
SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: PMDC CONNECTOR			
Size: B	DWG NO	513302-0031	Revision: A
Date:	Monday, December 20, 2010	Sheet 31 of	38



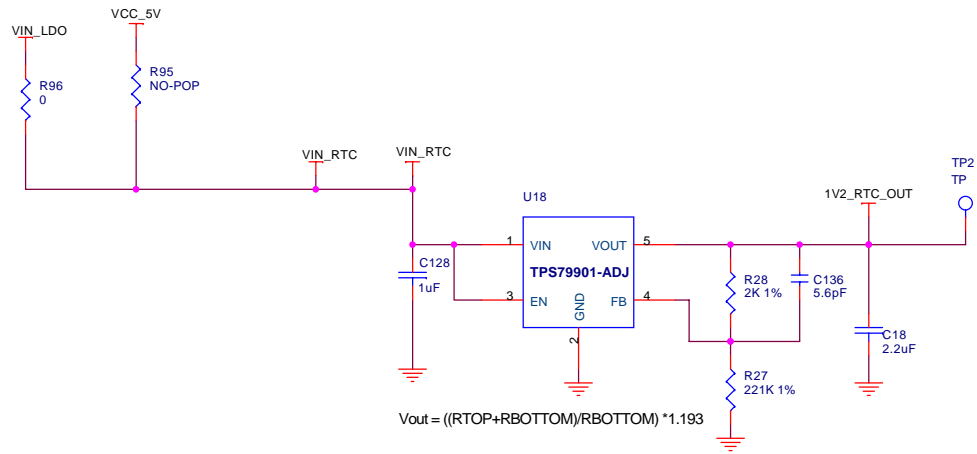
SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: EMIF-A EXPANSION CONNECTOR			
Size: B	DWG NO	513302-0031	Revision: A
Date:	Monday, December 20, 2010	Sheet 32 of	38



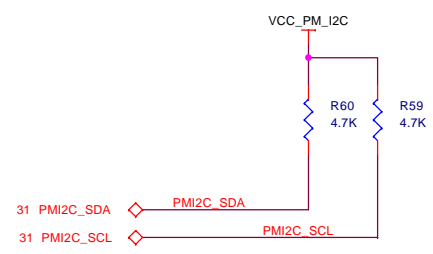
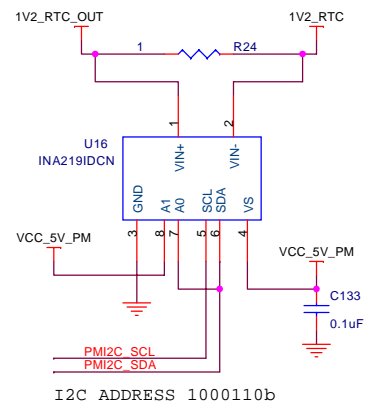
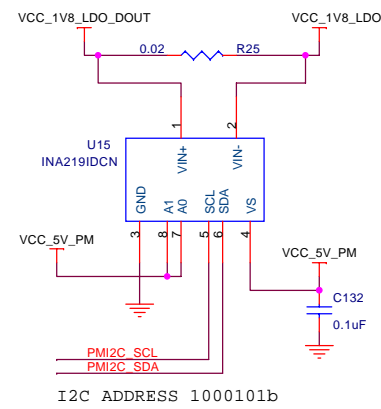
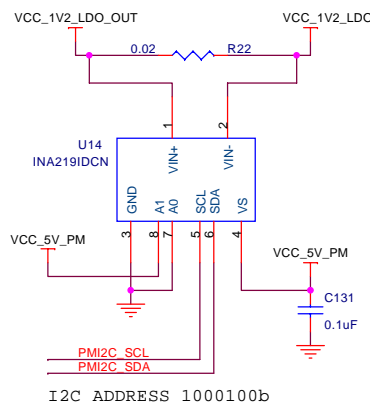
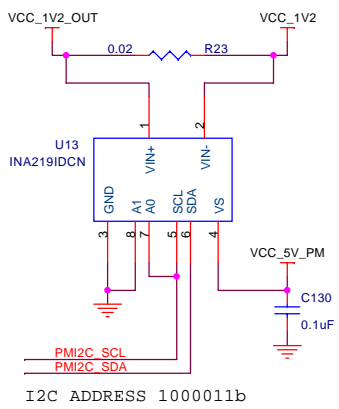
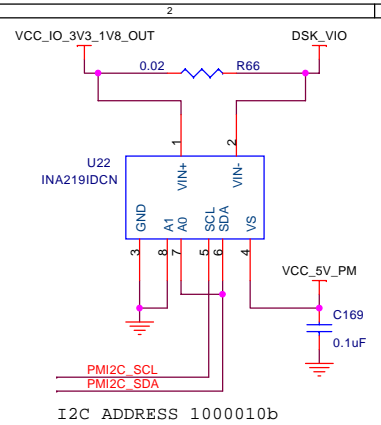
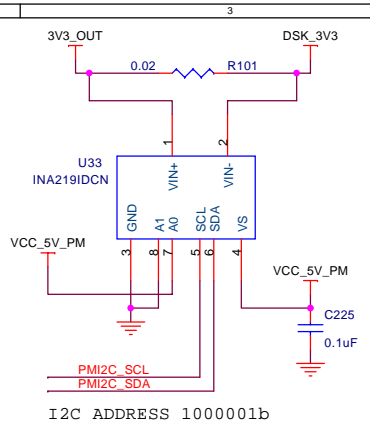
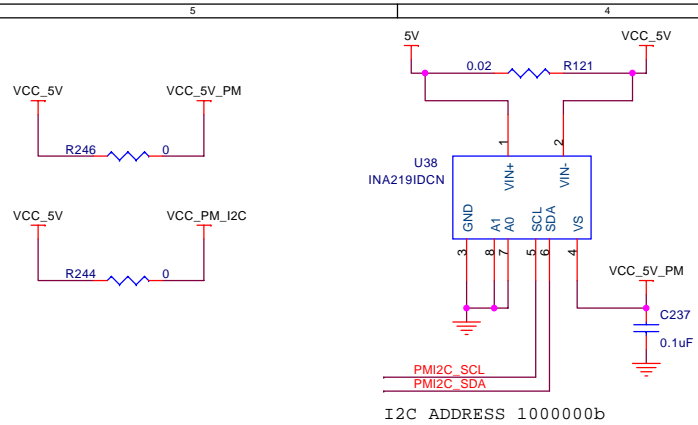
SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: AUDIO EXPANSION CONNECTOR			
Size: B	DWG NO	513302-0031	Revision: A
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Title: AM1810 EVM			
Page Contents: 3.3 VOLT, 1.8 VOLT, CORE POWER			
Size: B	DWG NO	513302-0031	Revision: A
Date:	Monday, December 20, 2010	Sheet 34 of 38	

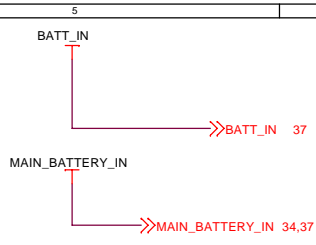


SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: RTC POWER,ETC			
Size:B	DWG NO	513302-0031	Revision: A
Date:	Monday, December 20, 2010	Sheet 35 of	38

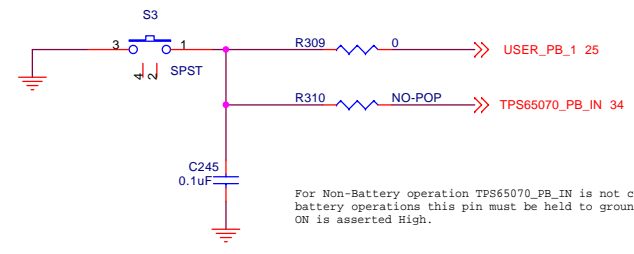
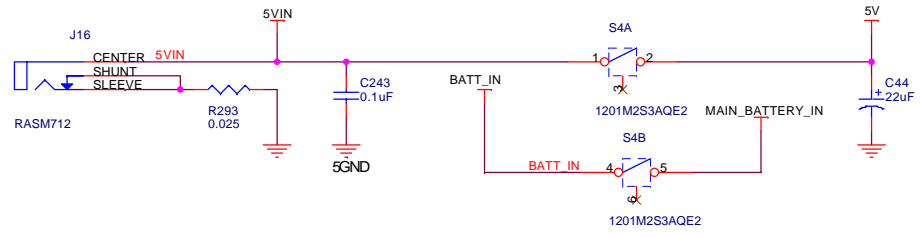


SPECTRUM DIGITAL INCORPORATED			
Title: AM1810 EVM			
Page Contents: 3.3 VOLT, 1.8 VOLT, CORE POWER			
Size: B	DWG NO: 513302-0031	Revision: B	
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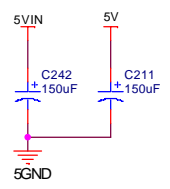




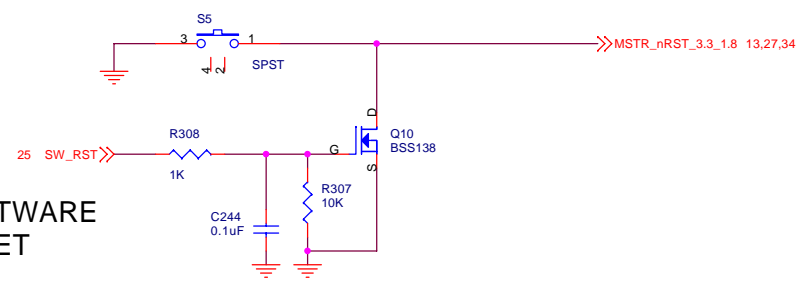
### 5V POWER INPUT



For Non-Battery operation TPS65070\_PB\_IN is not connected, for battery operations this pin must be held to ground until POWER ON is asserted High.



### SOFTWARE RESET



SPECTRUM DIGITAL INCORPORATED			
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