

# Appendix A

## eZdsp™ F28335

### Schematics

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The schematics for the eZdsp™ F28335 can be found on the CD-ROM that accompanies this board. The schematics were drawn on ORCAD.

The schematics are correct for both the socketed and unsocketed version of the eZdsp™.

#### **WARNING !**

The TMS320F28335 supports +3.3V Input/Output levels which are NOT +5V tolerant. Connecting the eZdsp to a system with +5V Input/Output levels will damage the TMS320F28335. If the eZdsp is connected to another target then the eZdsp must be powered up first and powered down last to prevent latchup conditions.

#### **Design Notes:**

1. The TMS320F28335 X1/CLKIN pin is +1.8 volt input. The clock input is buffered with a SN74LVC1G14 whose supply is +1.8 volts. This provides +3.3 volts to the +1.8 volt clock translation. Refer to sheet 4 of the schematics.

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	ALPHA RELEASE	29-July-2007	

SCHMATIC CONTENTS

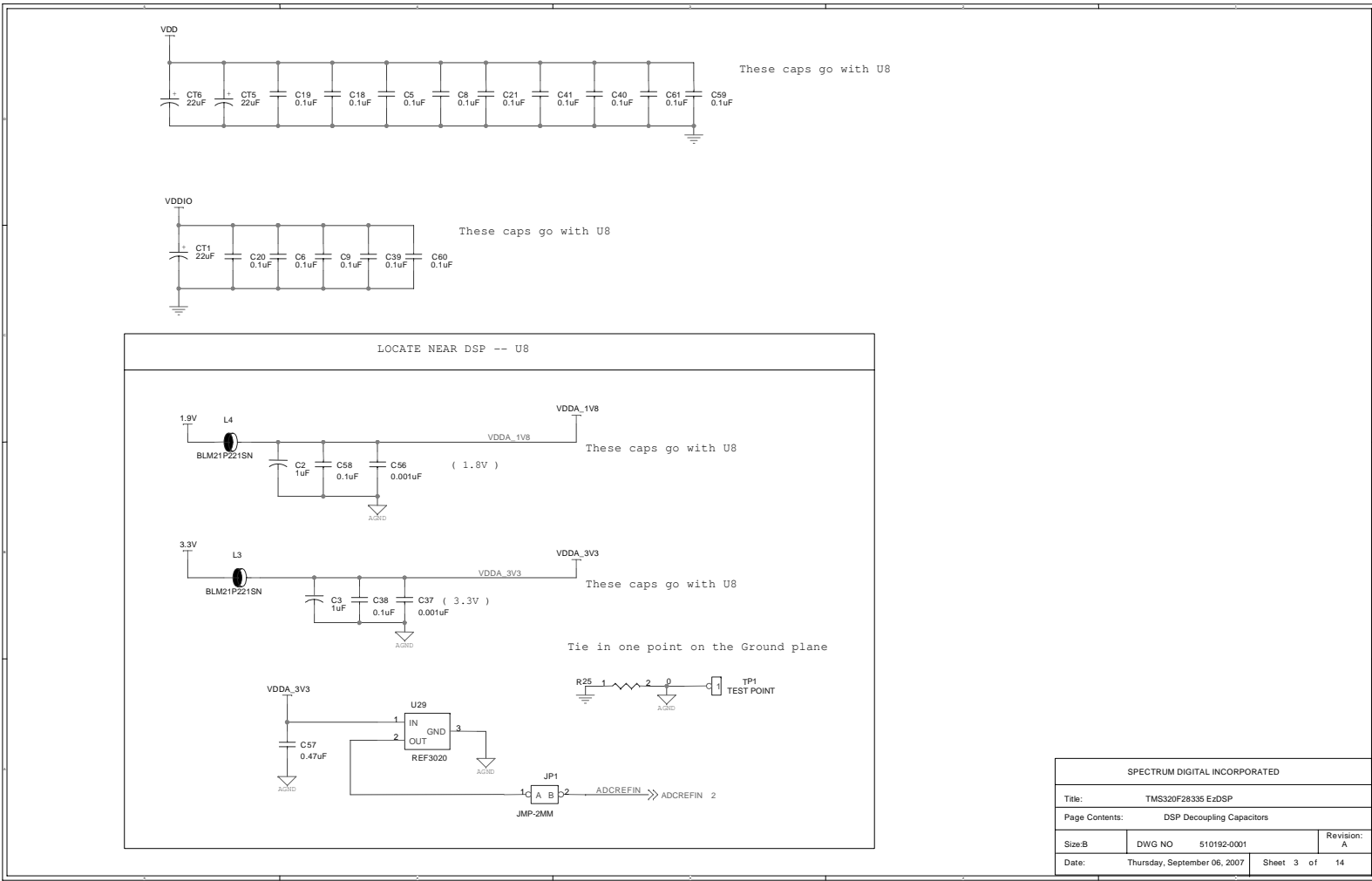
- SHEET01 - TITLE PAGE
- SHEET02 - TMS320F28335 DSP
- SHEET03 - DSP DECOUPLING CAPS
- SHEET04 - BOOT SWITCHES, OSC
- SHEET05 - MEMORY
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- SHEET07 - CAN, RS232
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- SHEET10 - ANALOG EXPANSION
- SHEET11 - JTAG
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- SHEET13 - PLACEMENT TOP
- SHEET14 - PLACEMENT BOTTOM

The TMS320F28335 EzDSP design is based on preliminary information (SPRS439 June 2007) for the TMS320F28335 device. This schematic is subject to change without notification. Spectrum Digital Inc. assumes no liability for applications assistance, customer product design or infringement of patents described herein.

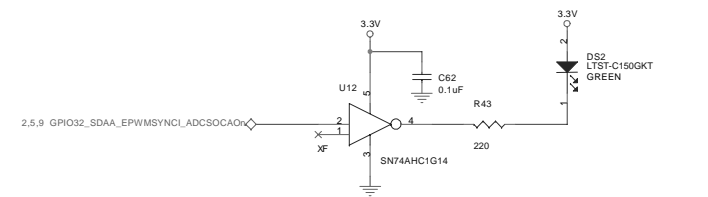
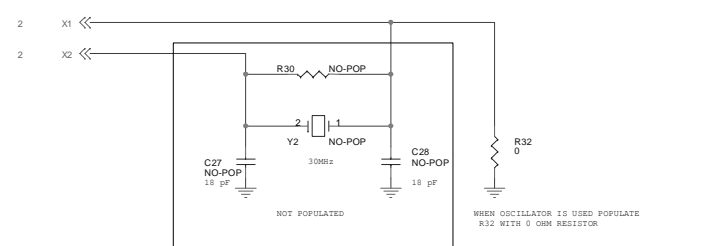
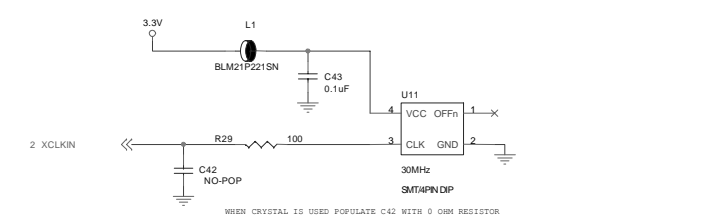
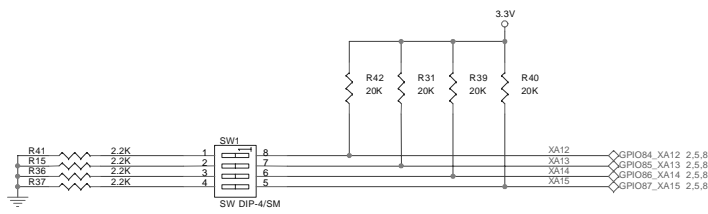
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SR	1	2	3	4	5	6	7	ELSE	DATE
								APPLICATION	

SPECTRUM DIGITAL INCORPORATED			
Title: TMS320F28335 EzDSP			
Page Contents: Title Block			
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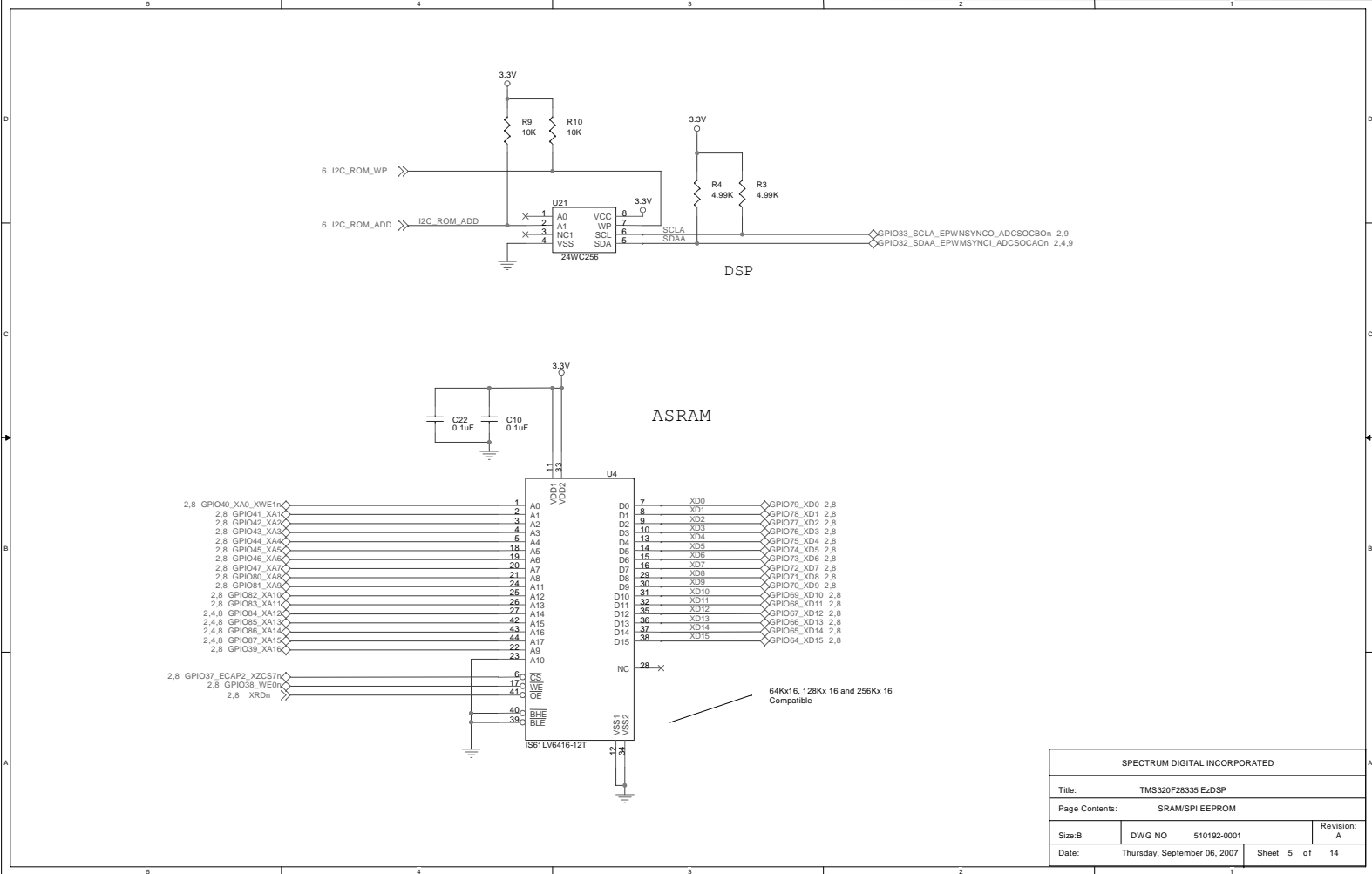
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Pin	BOOT-3 XA15	BOOT-2 XA14	BOOT-1 XA13	BOOT-0 XA12	MODE
0000	ON	ON	ON	ON	Branch to SCI, skip ADC CAL
0001	ON	ON	ON	OFF	Branch to SARAM, skip ADC CAL
0010	ON	ON	OFF	ON	Branch to Flash, skip ADC CAL
0011	ON	ON	OFF	OFF	Branch to check boot mode
0100	ON	OFF	ON	ON	Jump to SARAM
0101	ON	OFF	ON	OFF	Parallel XINTF boot
0110	ON	OFF	OFF	ON	Parallel GPIO I/O boot
0111	ON	OFF	OFF	OFF	Jump to OTP
1000	OFF	ON	ON	ON	Jump to XINTF x32
1001	OFF	ON	ON	OFF	Jump to XINTF x16
1010	OFF	ON	OFF	ON	McBSP-A boot
1011	OFF	ON	OFF	OFF	eCAN-A boot
1100	OFF	OFF	ON	ON	I2C-A boot
1101	OFF	OFF	ON	OFF	SPI-A boot
1110	OFF	OFF	OFF	ON	SCI-A boot
1111	OFF	OFF	OFF	OFF	Jump to Flash

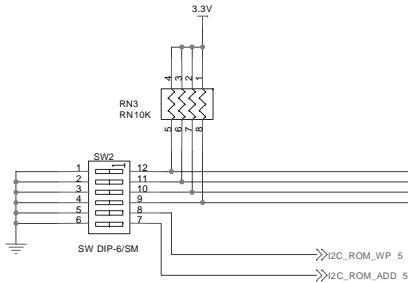
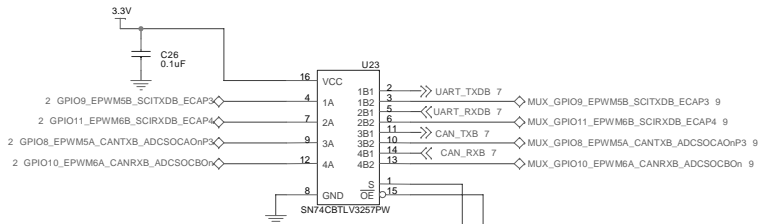
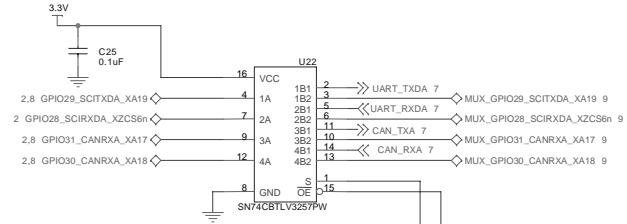
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Page Contents: Boot Switches/ OSC		
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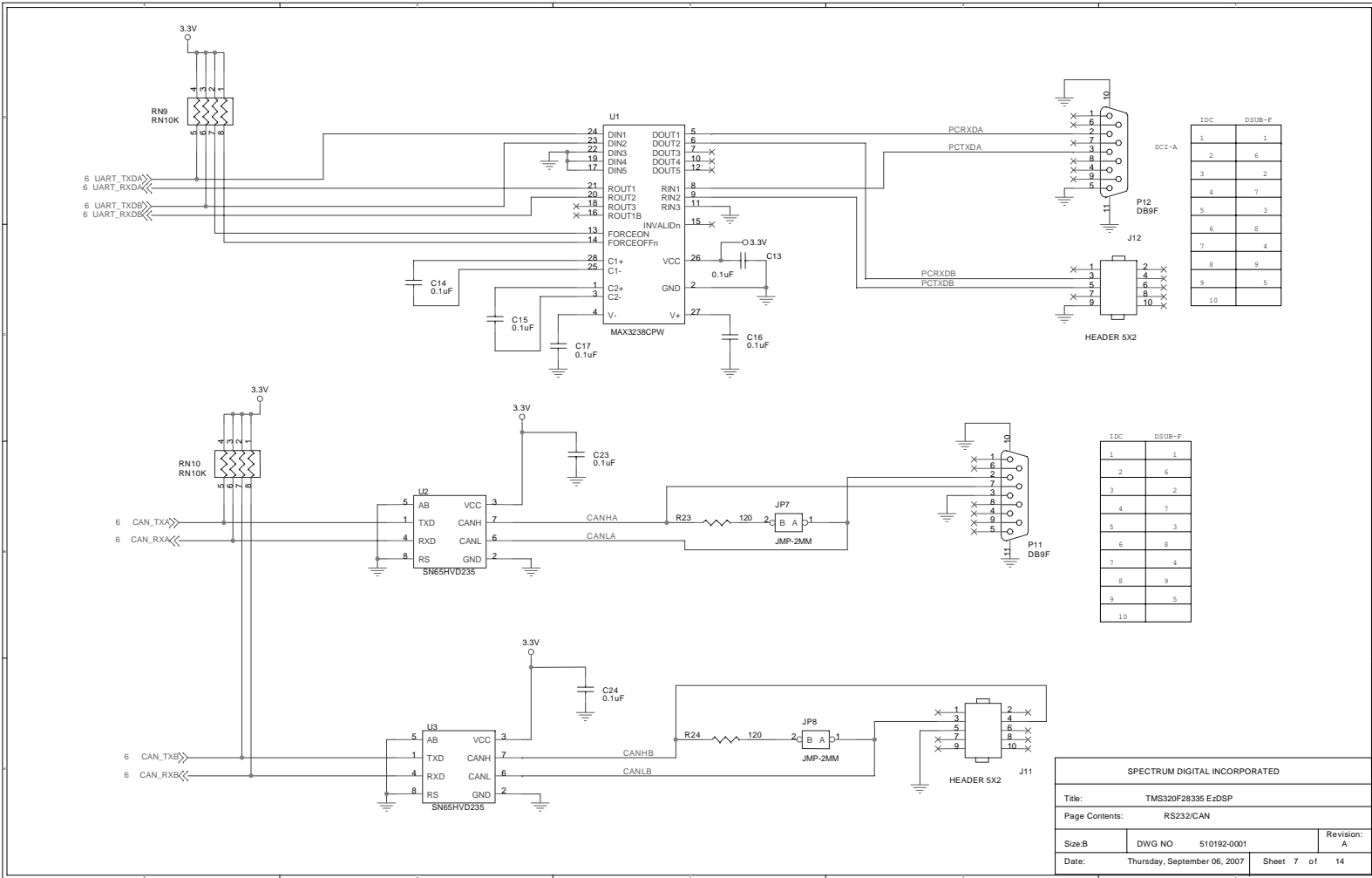


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Switch	Position	Value	Function
SW2-1	OFF	1	Select GPIO28,GPIO29,GPIO30,GPIO31 as expansion
SW2-1	ON	0	Select GPIO28,GPIO29,GPIO30,GPIO31 as on board SCI/CAN A
SW2-2	OFF	1	Disable Mux U22
SW2-2	ON	0	Enable Mux U22
SW2-3	OFF	1	Select GPIO8,GPIO9,GPIO10,GPIO11 as expansion
SW2-3	ON	0	Select GPIO8,GPIO9,GPIO10,GPIO11 as on board SCI/CAN B
SW2-4	OFF	1	Disable Mux U23
SW2-4	ON	0	Enable Mux U23
SW2-5	OFF	1	Write Protect I2C EEPROM
SW2-5	ON	0	Enable Writes to I2C EEPROM
SW2-6	OFF	1	I2C EEPROM lowest address is 1
SW2-6	ON	0	I2C EEPROM lowest address is 0

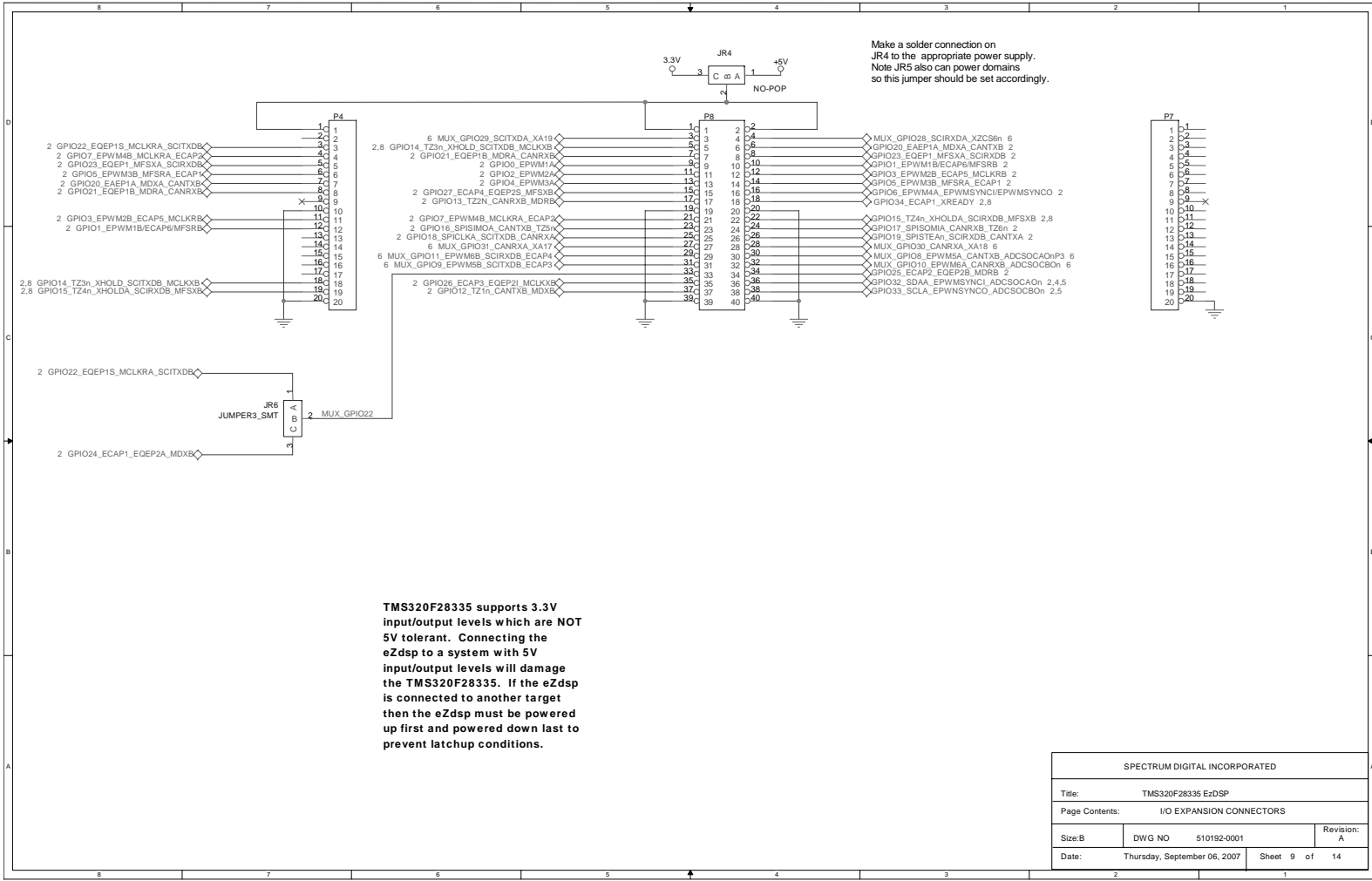


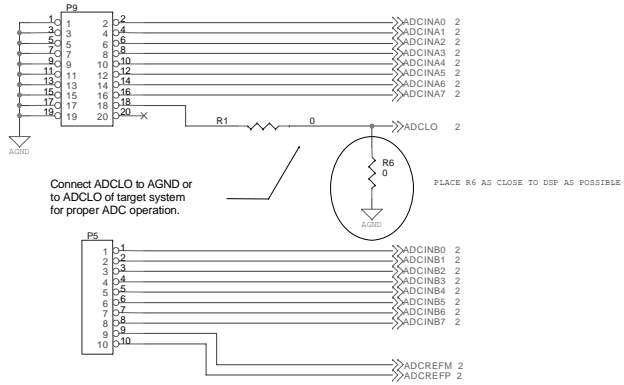
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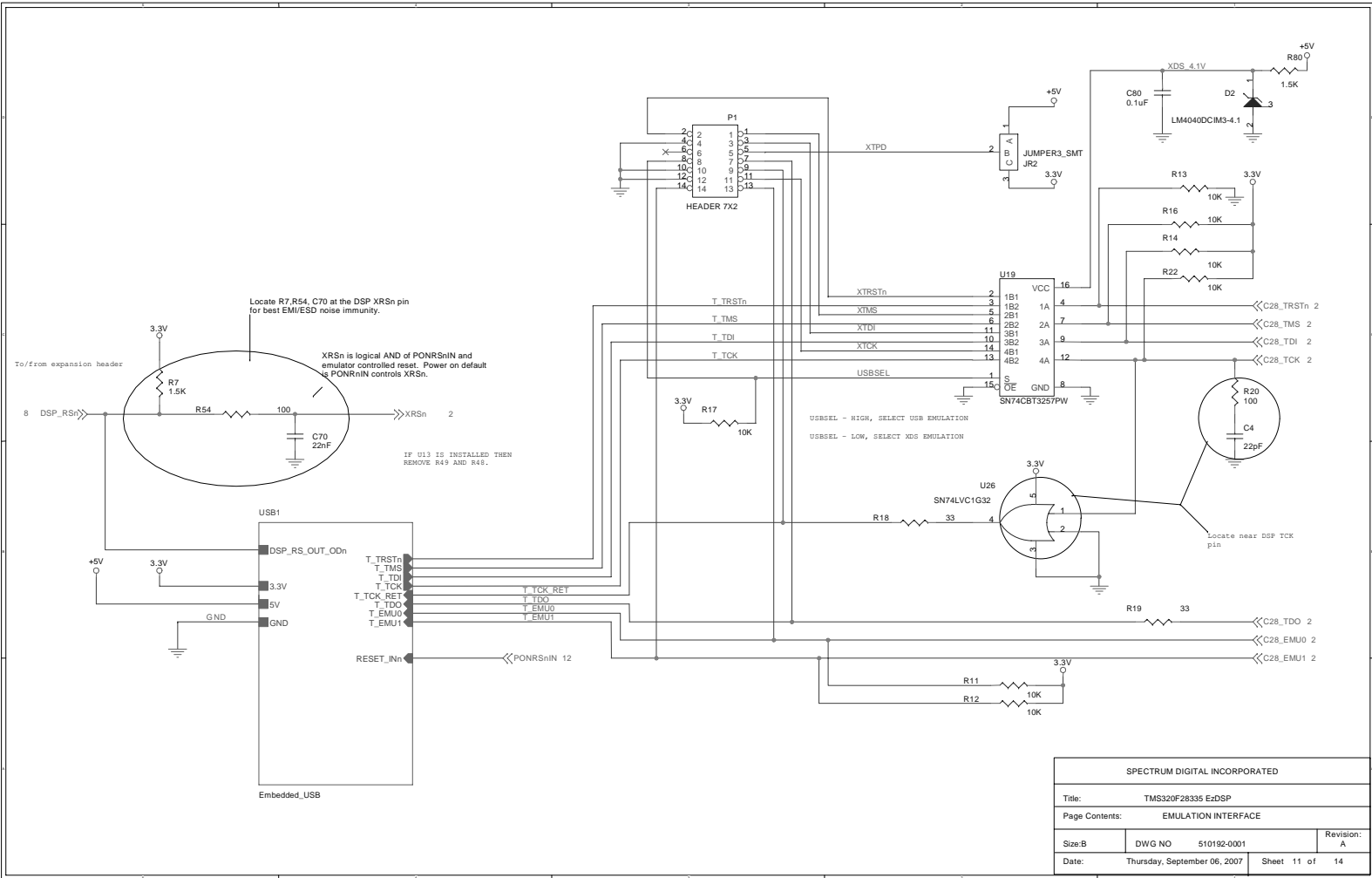


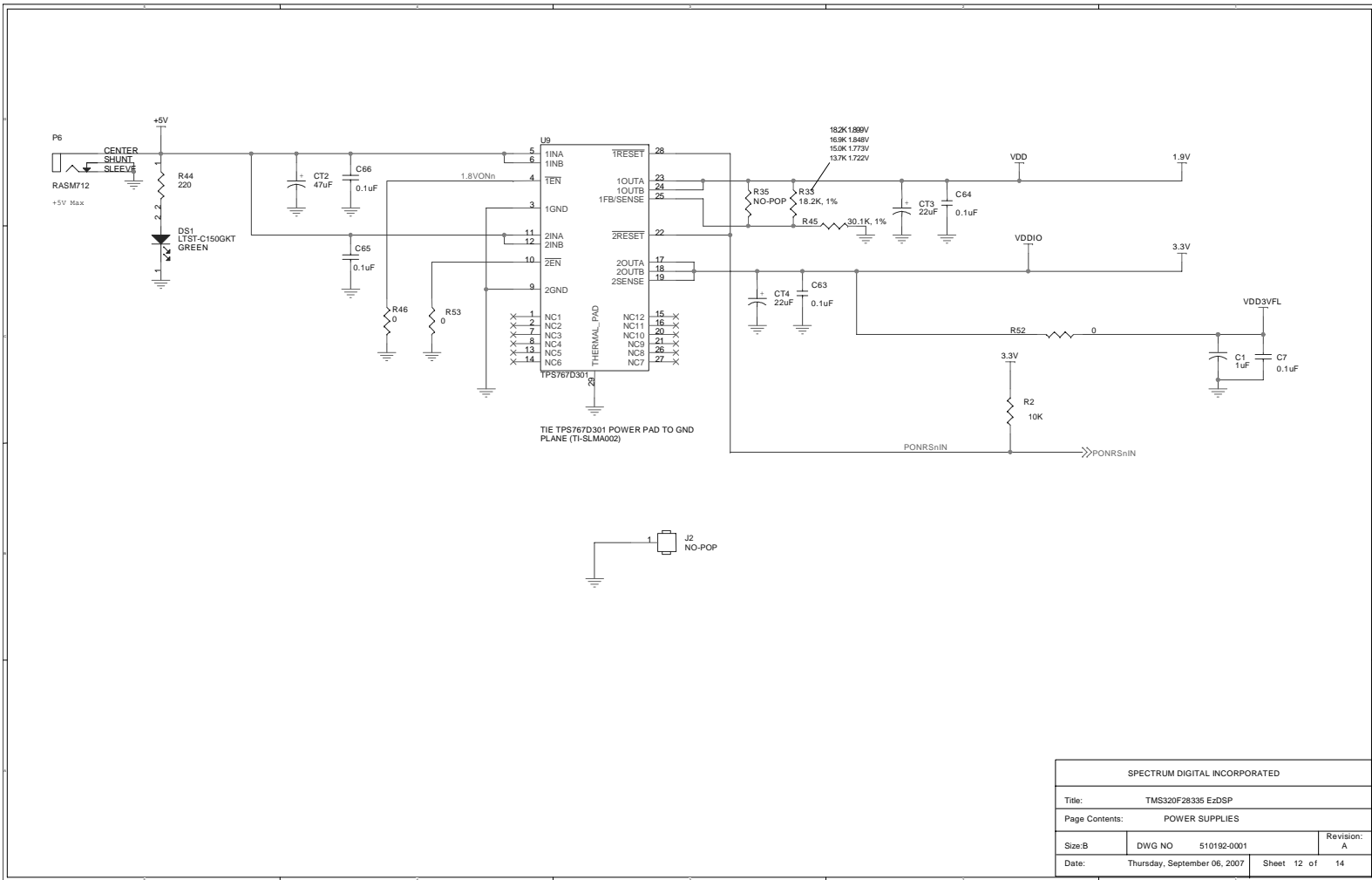






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