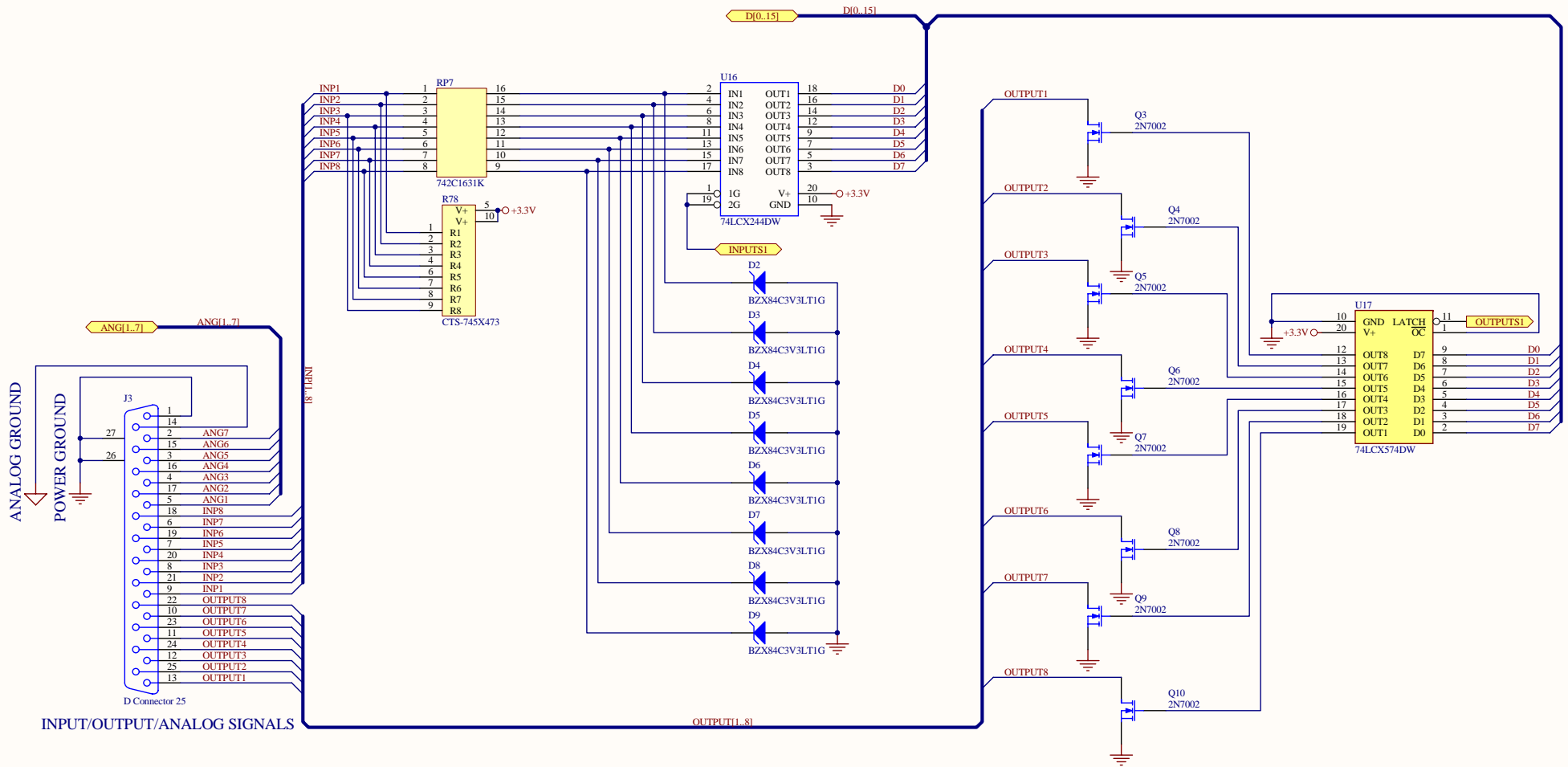
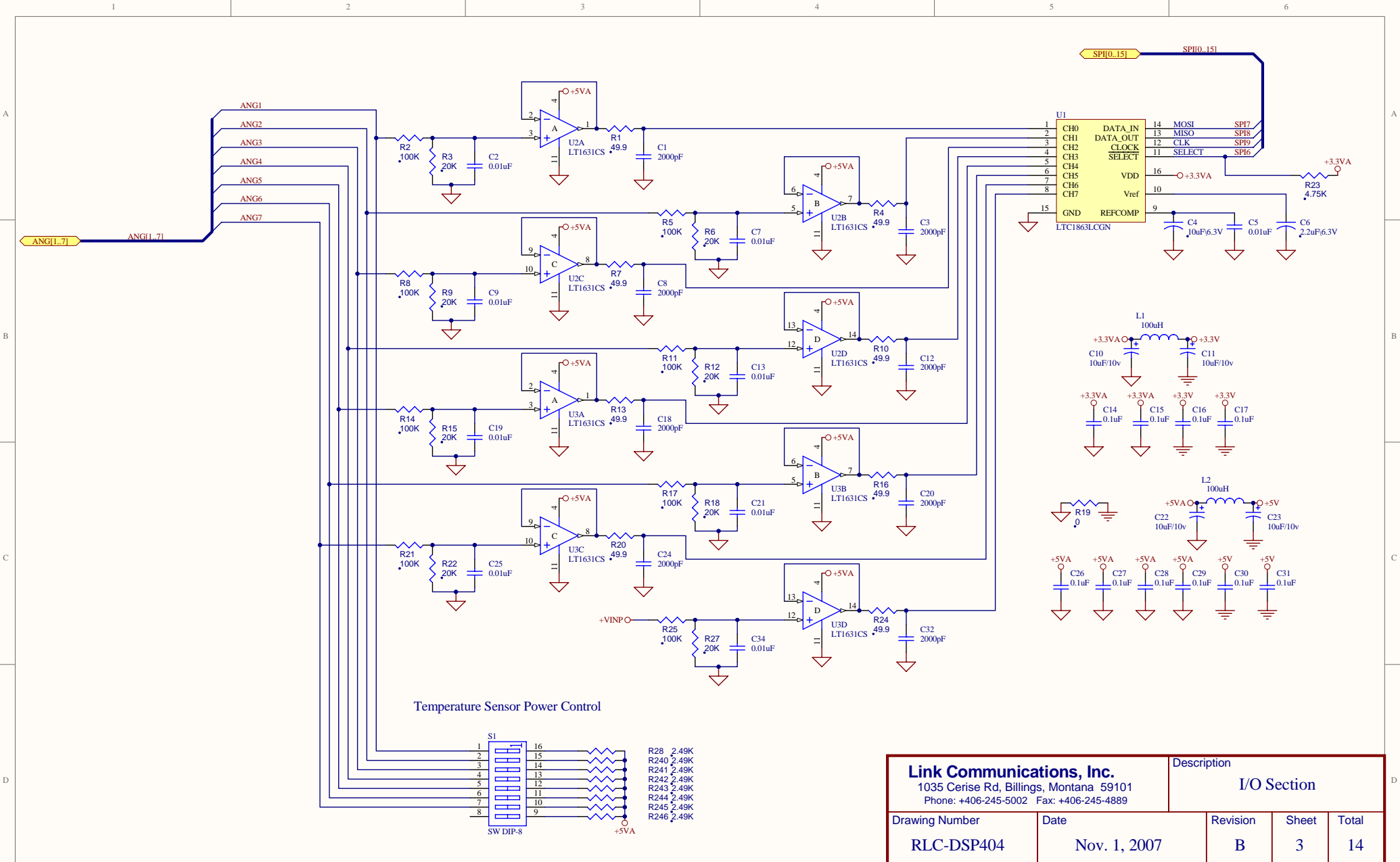


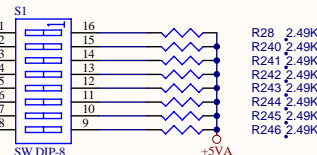
<b>Link Communications, Inc.</b> 1035 Cerise Rd, Billings, Montana 59101 Phone: +406-245-5002 Fax: +406-245-4889		Description <h3 style="text-align: center;">Connections</h3>		
Drawing Number <h3 style="text-align: center;">RLC-DSP404</h3>	Date <h3 style="text-align: center;">Nov. 16, 2007</h3>	Revision <h3 style="text-align: center;">C</h3>	Sheet <h3 style="text-align: center;">1</h3>	Total <h3 style="text-align: center;">14</h3>



<b>Link Communications, Inc.</b> 1035 Cerise Rd, Billings, Montana 59101 Phone: +406-245-5002 Fax: +406-245-4889		Description <b>I/O Section</b>		
Drawing Number	Date	Revision	Sheet	Total
RLC-DSP404	April 04, 2007	A	2	14

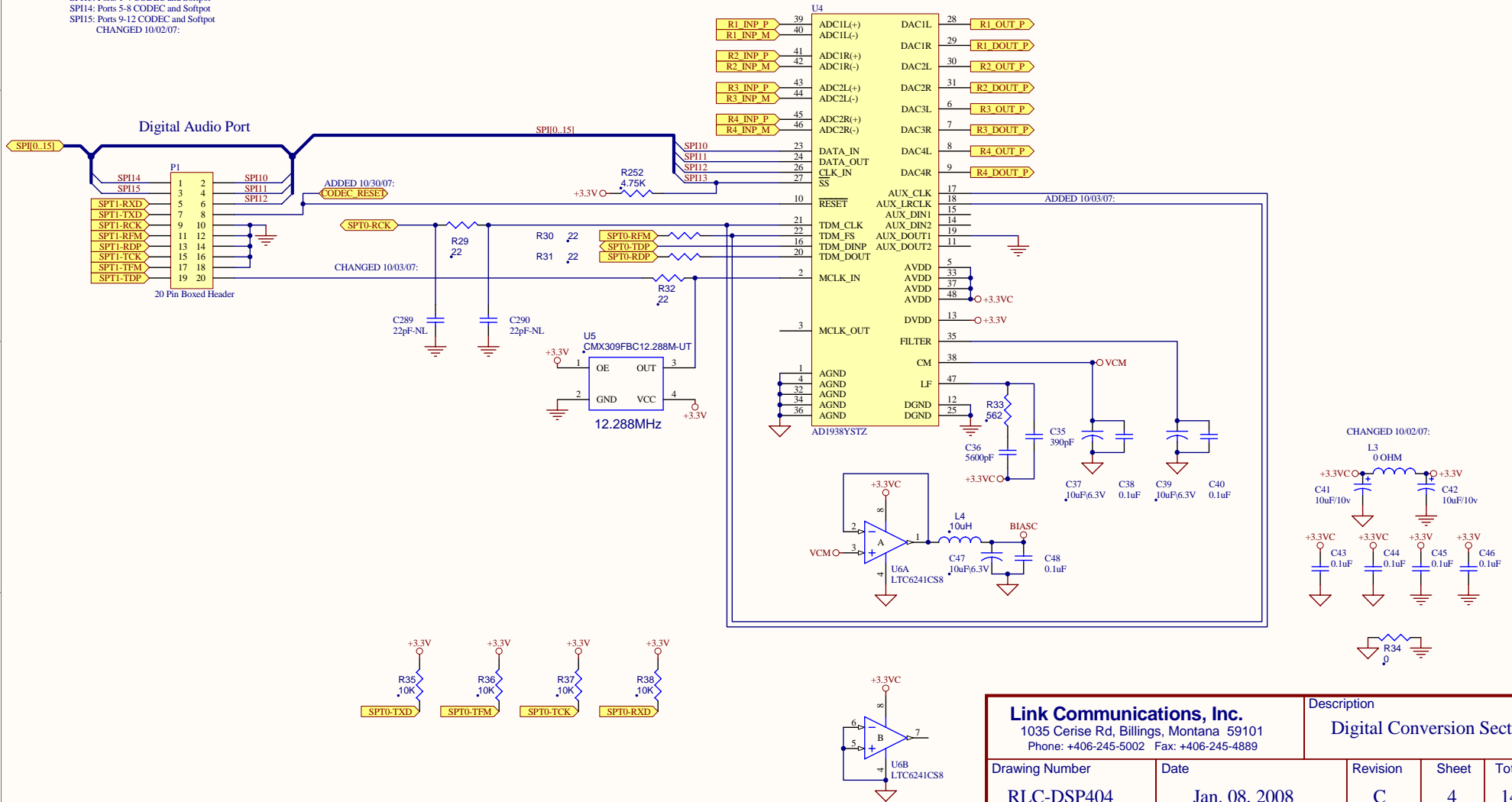


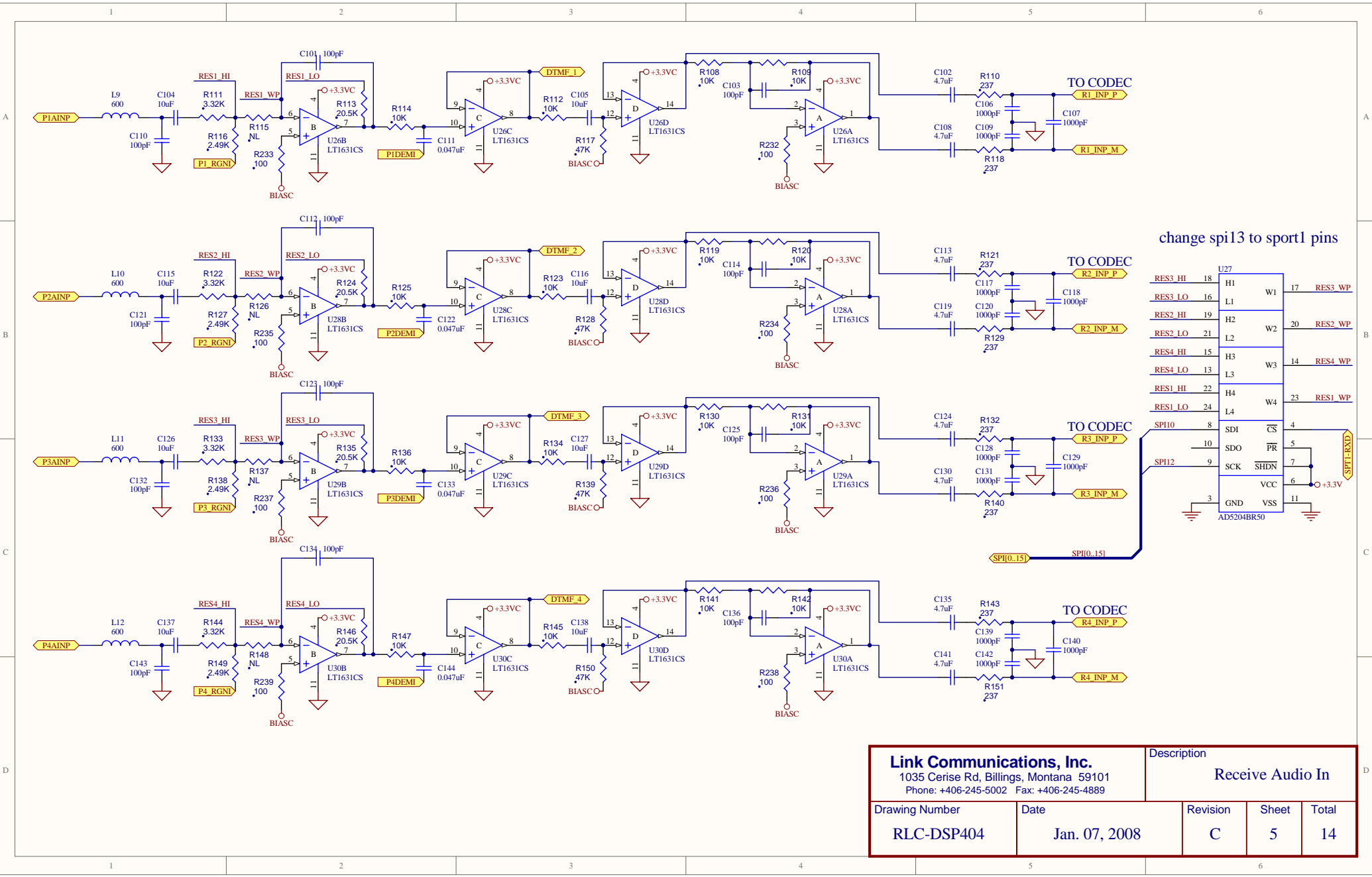
Temperature Sensor Power Control



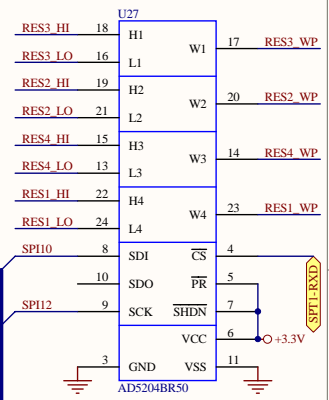
<b>Link Communications, Inc.</b> 1035 Cerise Rd, Billings, Montana 59101 Phone: +406-245-5002 Fax: +406-245-4889		Description <b>I/O Section</b>		
Drawing Number	Date	Revision	Sheet	Total
RLC-DSP404	Nov. 1, 2007	B	3	14

- 1) REMOVED THE SPI DATA FEED FROM THE SOFT POT TO THE AD1938
  - 2) ADDED SPI10 TO FEED THE AD1938
  - 3) BROKE THE SPIDOUT (SPI11) AND RAN THROUGH TOP BOARDS
- SPI10: CODEC SPI Data Out  
 SPI11: CODEC SPI Data In  
 SPI12: CODEC SPI Clock  
 SPI13: Ports 1-4 CODEC and Softpot  
 SPI14: Ports 5-8 CODEC and Softpot  
 SPI15: Ports 9-12 CODEC and Softpot  
 CHANGED 10/02/07:

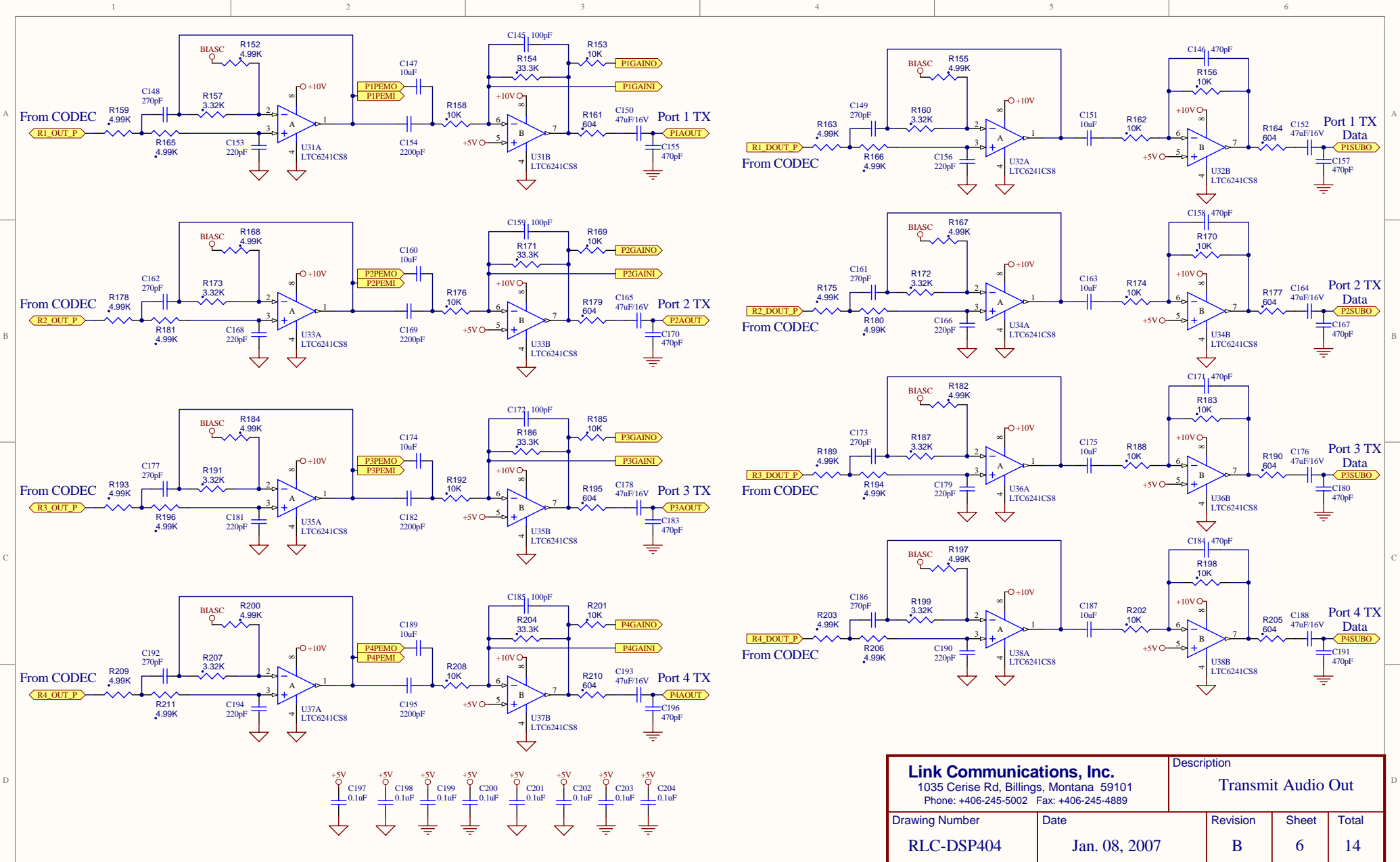




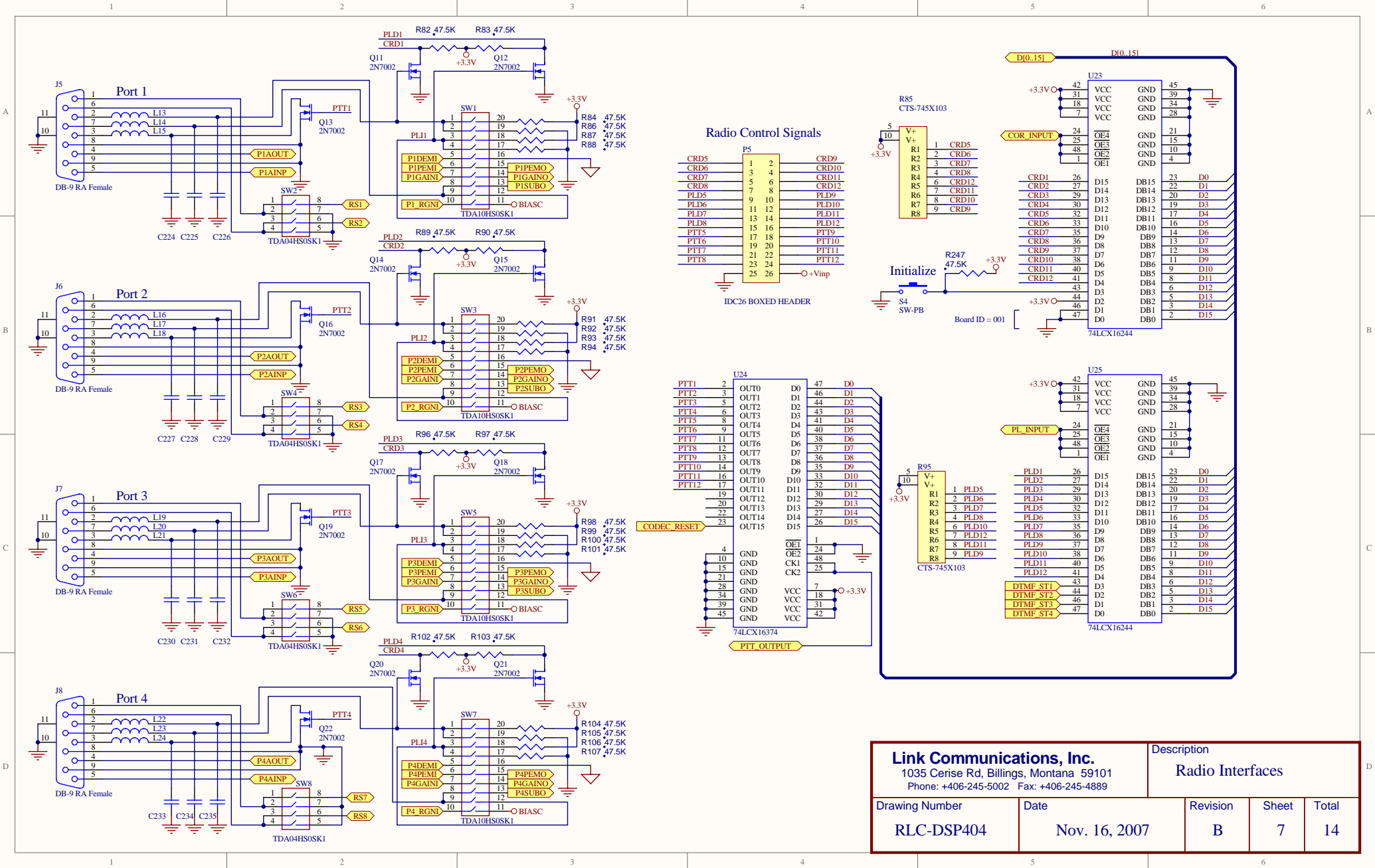
change spi13 to sport1 pins



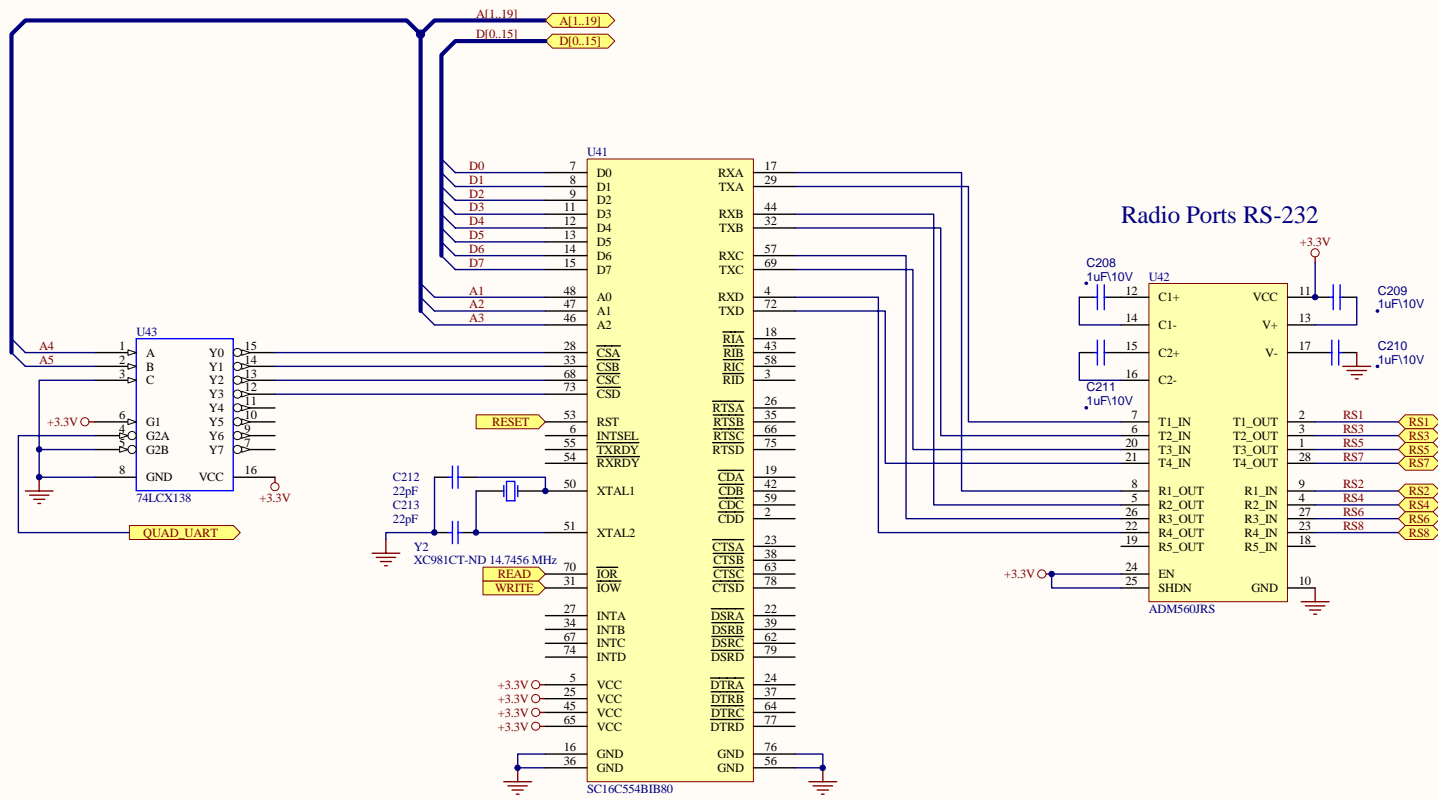
<b>Link Communications, Inc.</b> 1035 Chise Rd, Billings, Montana 59101 Phone: +406-245-5002 Fax: +406-245-4889			Description <b>Receive Audio In</b>		
Drawing Number	Date	Revision	Sheet	Total	
RLC-DSP404	Jan. 07, 2008	C	5	14	



<b>Link Communications, Inc.</b> 1035 Cerise Rd, Billings, Montana 59101 Phone: +406-245-5002 Fax: +406-245-4889		Description <b>Transmit Audio Out</b>		
Drawing Number	Date	Revision	Sheet	Total
RLC-DSP404	Jan. 08, 2007	B	6	14



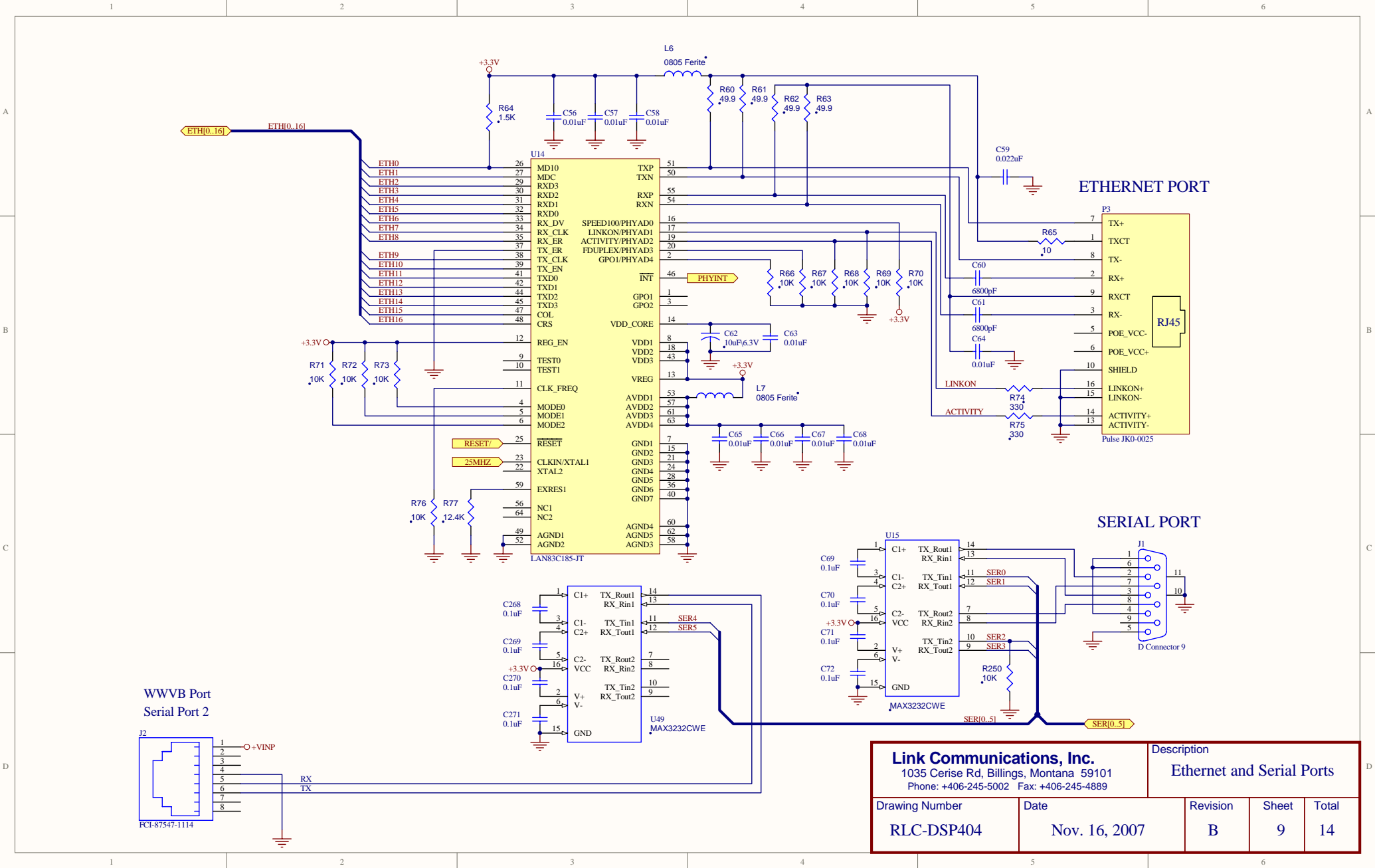
<b>Link Communications, Inc.</b> 1035 Cerise Rd, Billings, Montana 59101 Phone: +406-245-5002 Fax: +406-245-4889		Description <b>Radio Interfaces</b>		
Drawing Number	Date	Revision	Sheet	Total
RLC-DSP404	Nov. 16, 2007	B	7	14



Radio Ports RS-232

<b>Link Communications, Inc.</b> 1035 Cerise Rd, Billings, Montana 59101 Phone: +406-245-5002 Fax: +406-245-4889		Description <b>RS-232 SERIAL PORTS</b>		
Drawing Number	Date	Revision	Sheet	Total
RLC-DSP404	Nov. 16, 2007	B	8	14



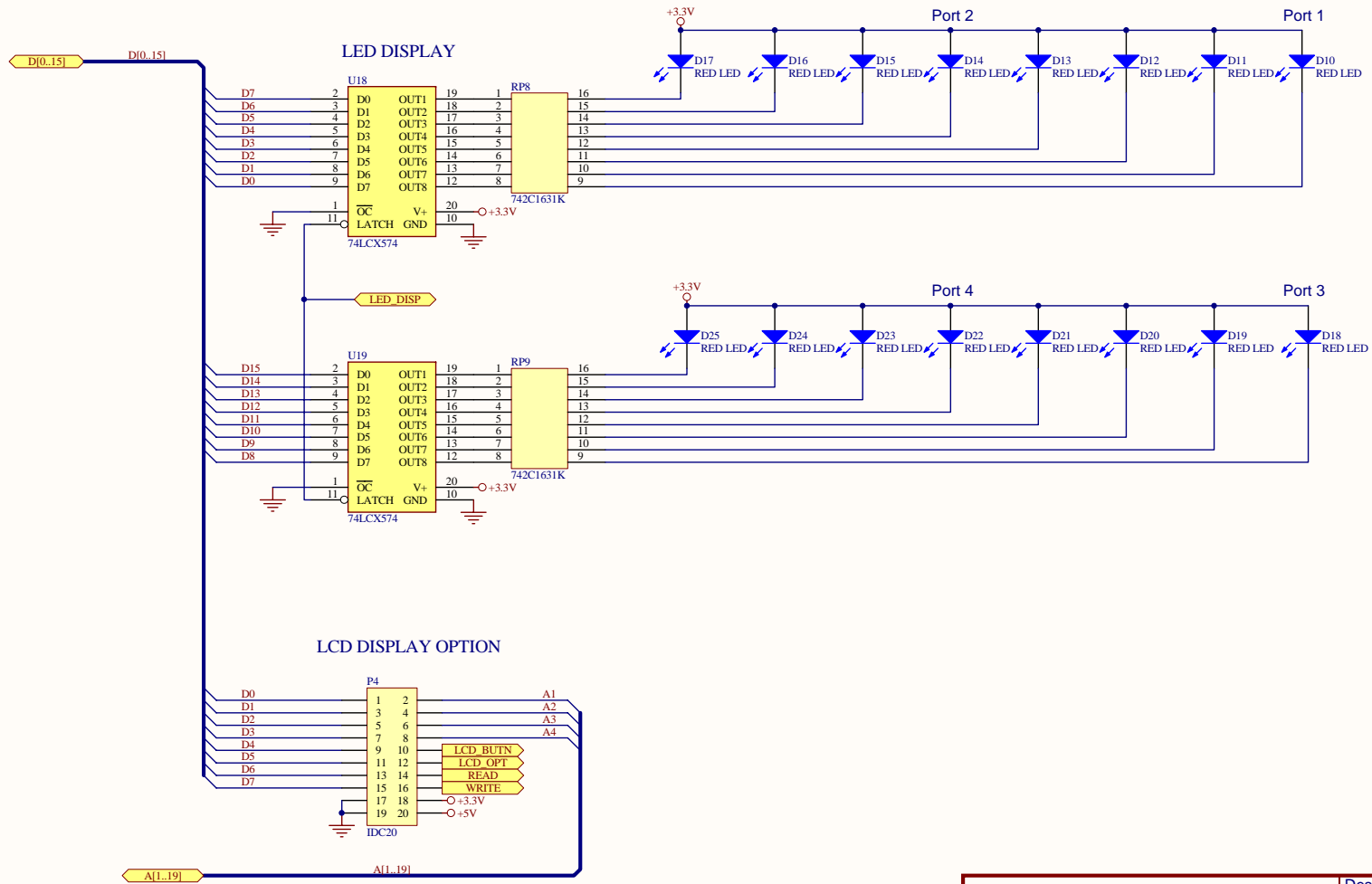


**ETHERNET PORT**

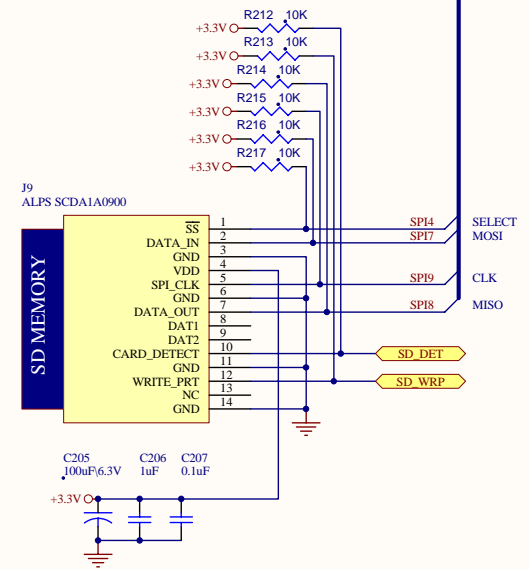
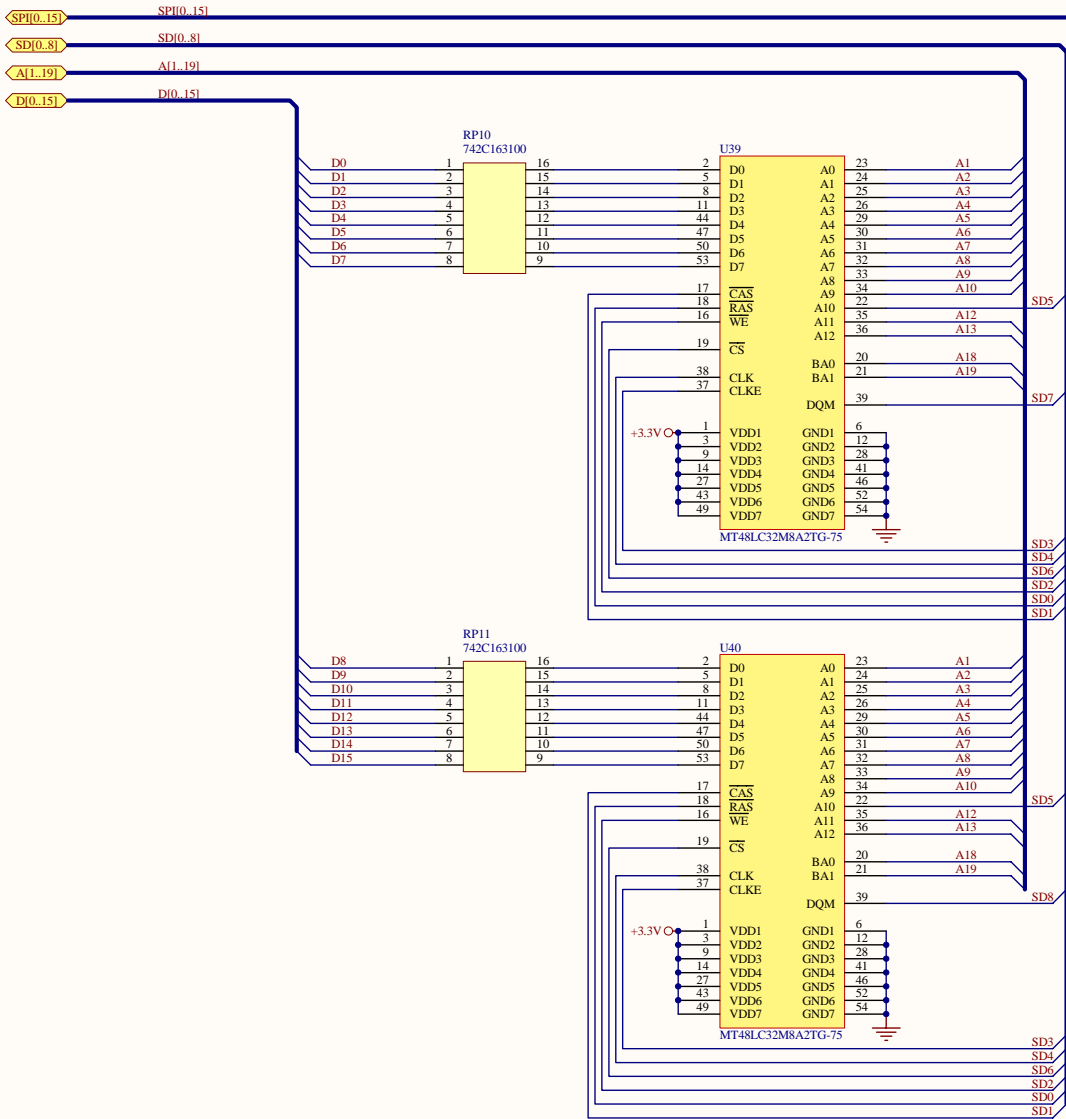
**SERIAL PORT**

**WWVB Port  
Serial Port 2**

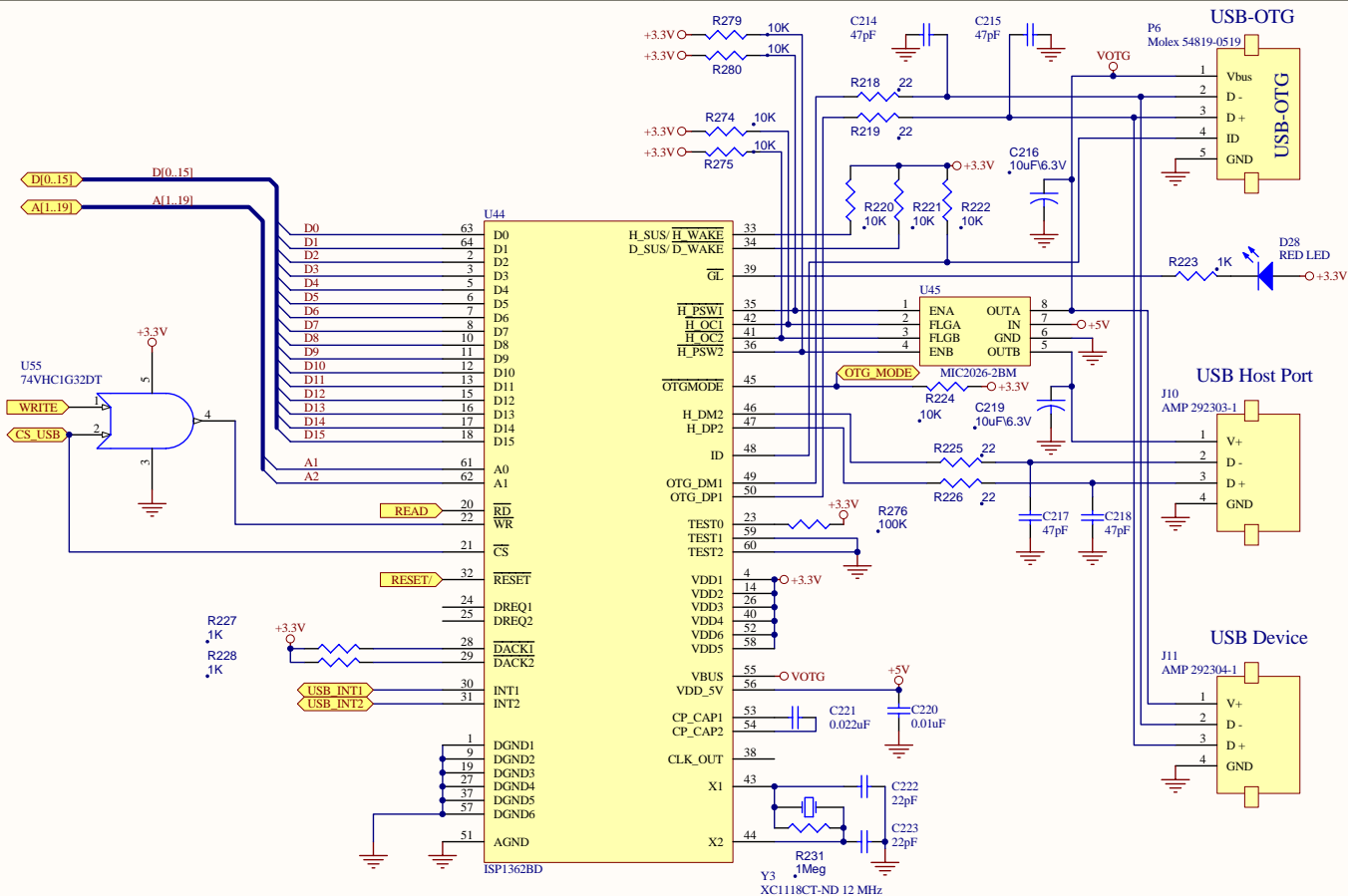
<p><b>Link Communications, Inc.</b> 1035 Cerise Rd, Billings, Montana 59101 Phone: +406-245-5002 Fax: +406-245-4889</p>		<p>Description <b>Ethernet and Serial Ports</b></p>		
<p>Drawing Number <b>RLC-DSP404</b></p>	<p>Date <b>Nov. 16, 2007</b></p>	<p>Revision <b>B</b></p>	<p>Sheet <b>9</b></p>	<p>Total <b>14</b></p>



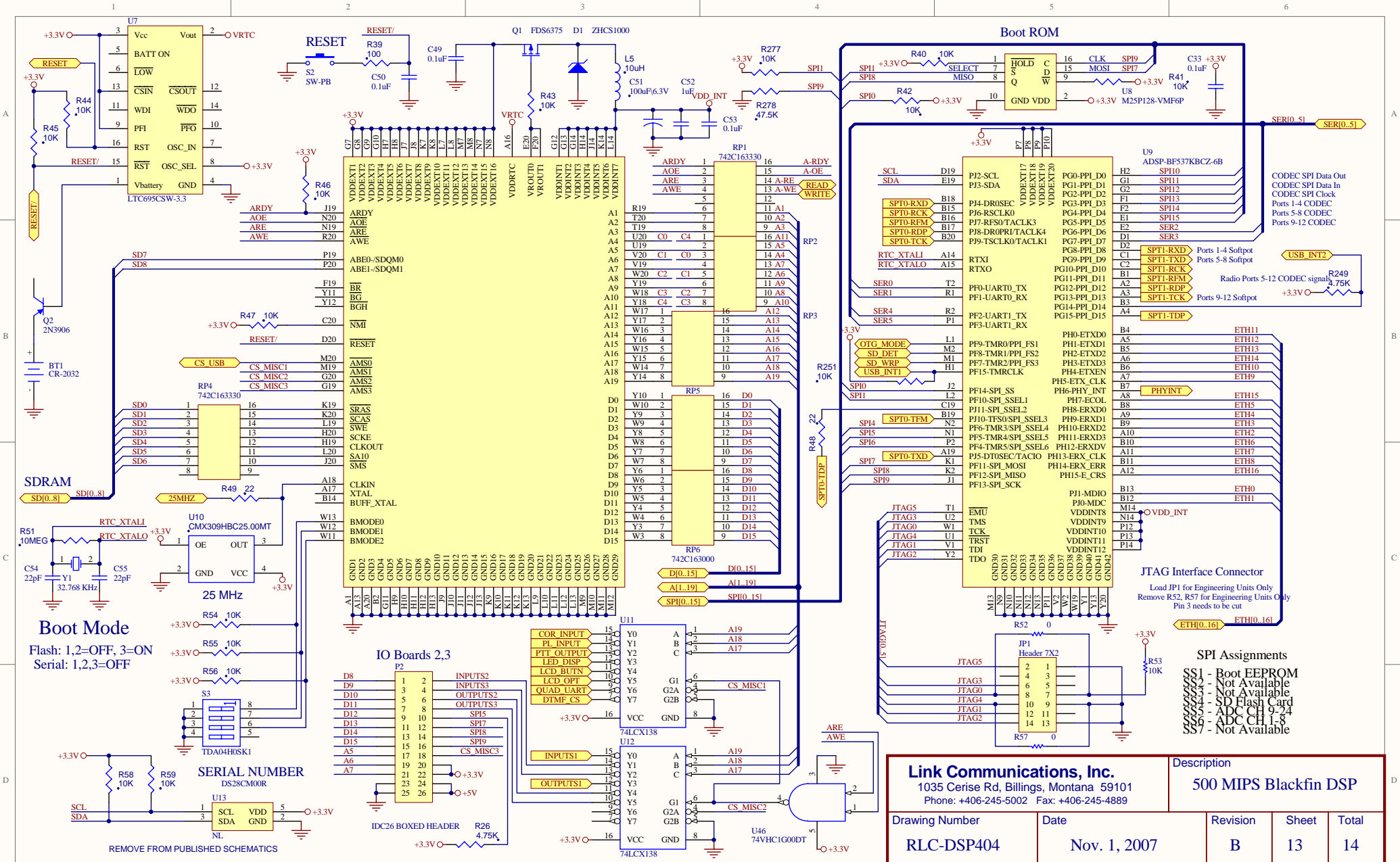
<b>Link Communications, Inc.</b> 1035 Cerise Rd, Billings, Montana 59101 Phone: +406-245-5002 Fax: +406-245-4889		Description <b>LED and LCD Parts</b>		
Drawing Number	Date	Revision	Sheet	Total
RLC-DSP404	Oct. 29, 2007	B	10	14



<b>Link Communications, Inc.</b> 1035 Cerise Rd, Billings, Montana 59101 Phone: +406-245-5002 Fax: +406-245-4889		Description <b>64MB SDRAM and SD Flash</b>		
Drawing Number	Date	Revision	Sheet	Total
RLC-DSP404	Oct. 29, 2007	B	11	14



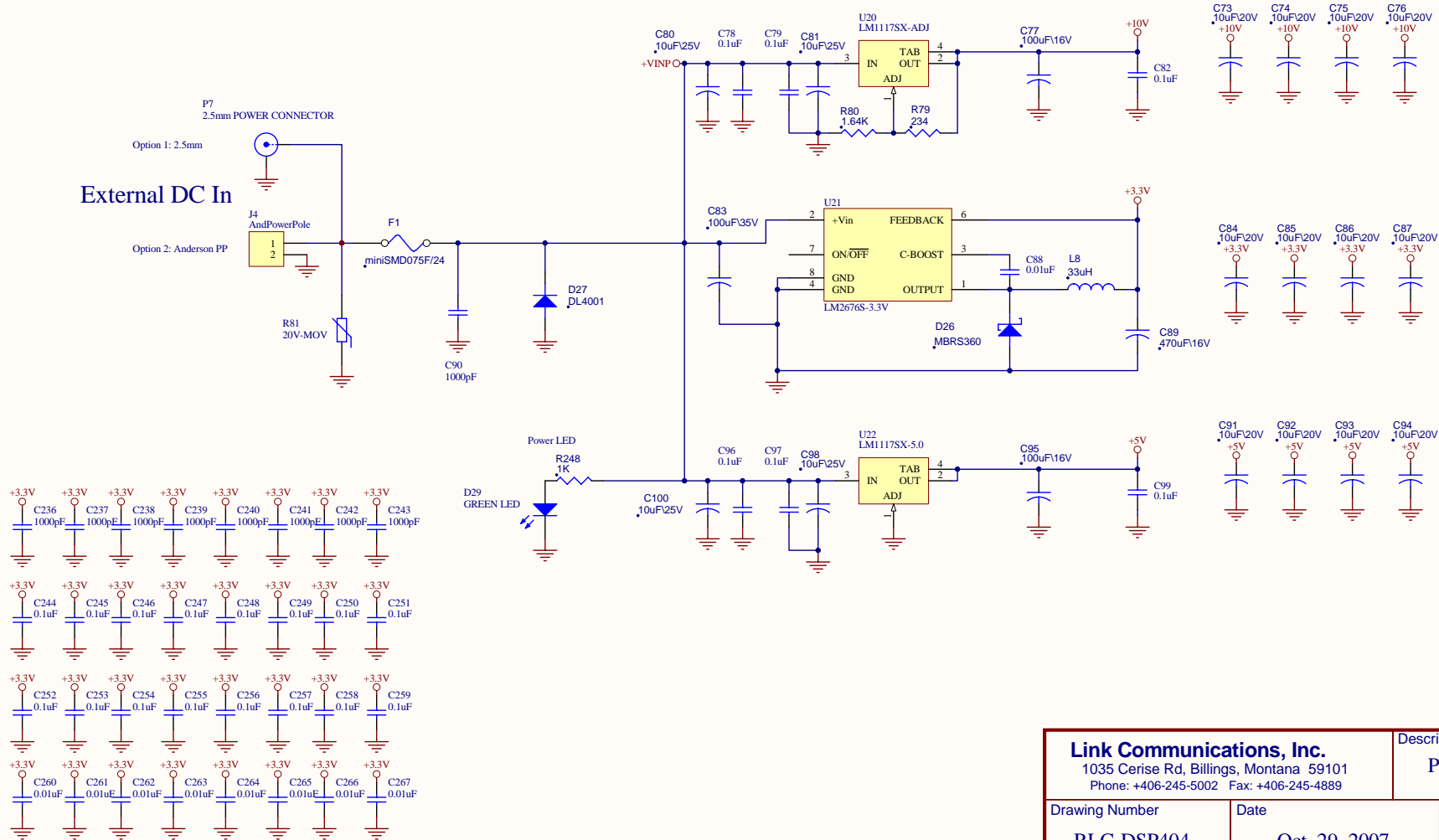
<b>Link Communications, Inc.</b> 1035 Cerise Rd, Billings, Montana 59101 Phone: +406-245-5002 Fax: +406-245-4889		Description <b>USB Interface</b>		
Drawing Number	Date	Revision	Sheet	Total
RLC-DSP404	Nov. 16, 2007	B	12	14



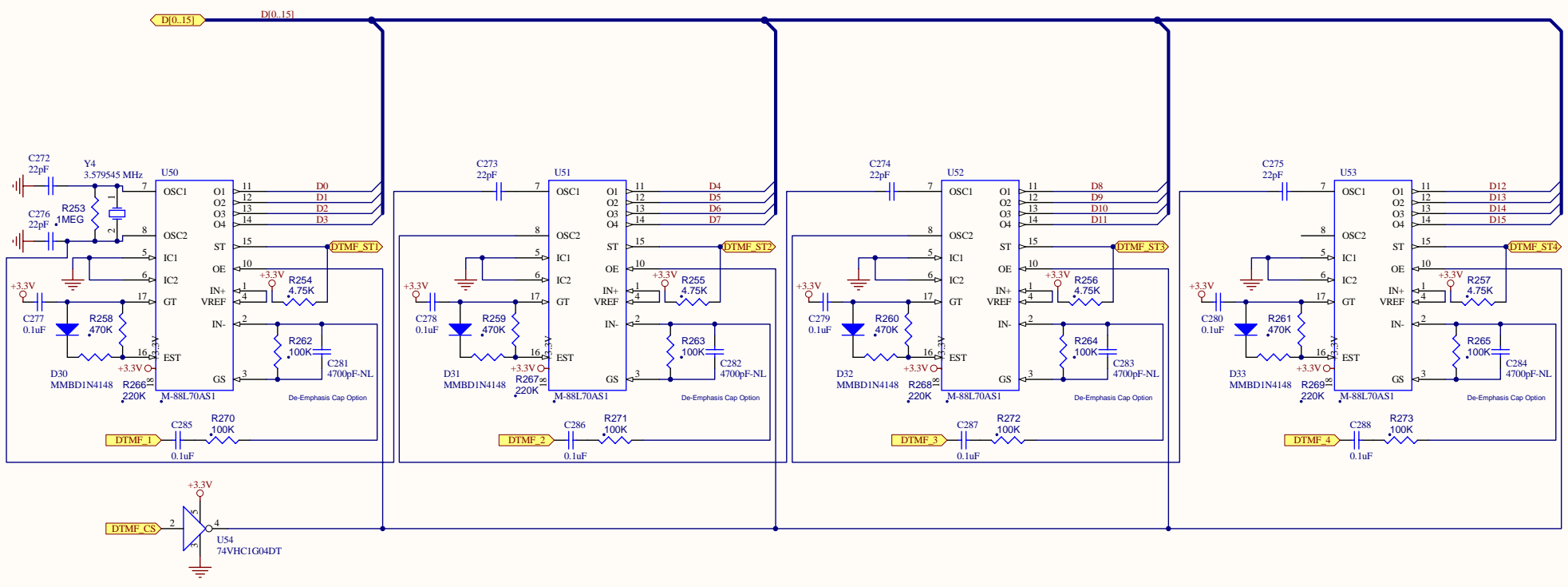
<b>Link Communications, Inc.</b> 1035 Cerise Rd, Billings, Montana 59101 Phone: +406-245-5002 Fax: +406-245-4889		<b>Description</b> <b>500 MIPS Blackfin DSP</b>		
<b>Drawing Number</b> RLC-DSP404	<b>Date</b> Nov. 1, 2007	<b>Revision</b> B	<b>Sheet</b> 13	<b>Total</b> 14

- SPI Assignments**
- SS1 - Boot EEPROM
  - SS2 - Not Available
  - SS3 - Not Available
  - SS4 - Not Available
  - SS5 - SD Flash Card
  - SS6 - ADC CH 1-8
  - SS7 - Not Available

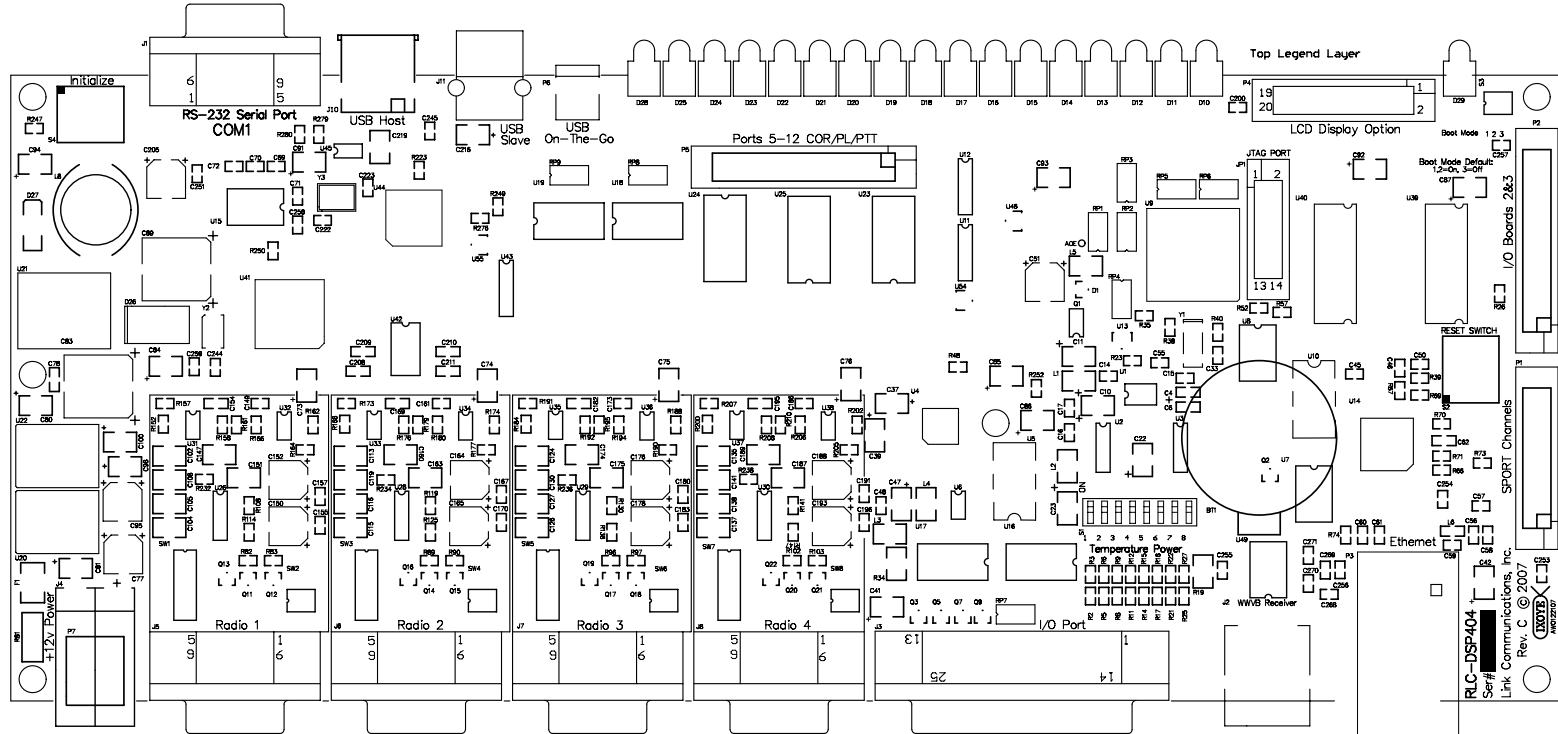
# External DC In




<b>Link Communications, Inc.</b> 1035 Cerise Rd, Billings, Montana 59101 Phone: +406-245-5002 Fax: +406-245-4889		Description <b>Power Interface</b>		
Drawing Number	Date	Revision	Sheet	Total
RLC-DSP404	Oct. 29, 2007	B	14	14



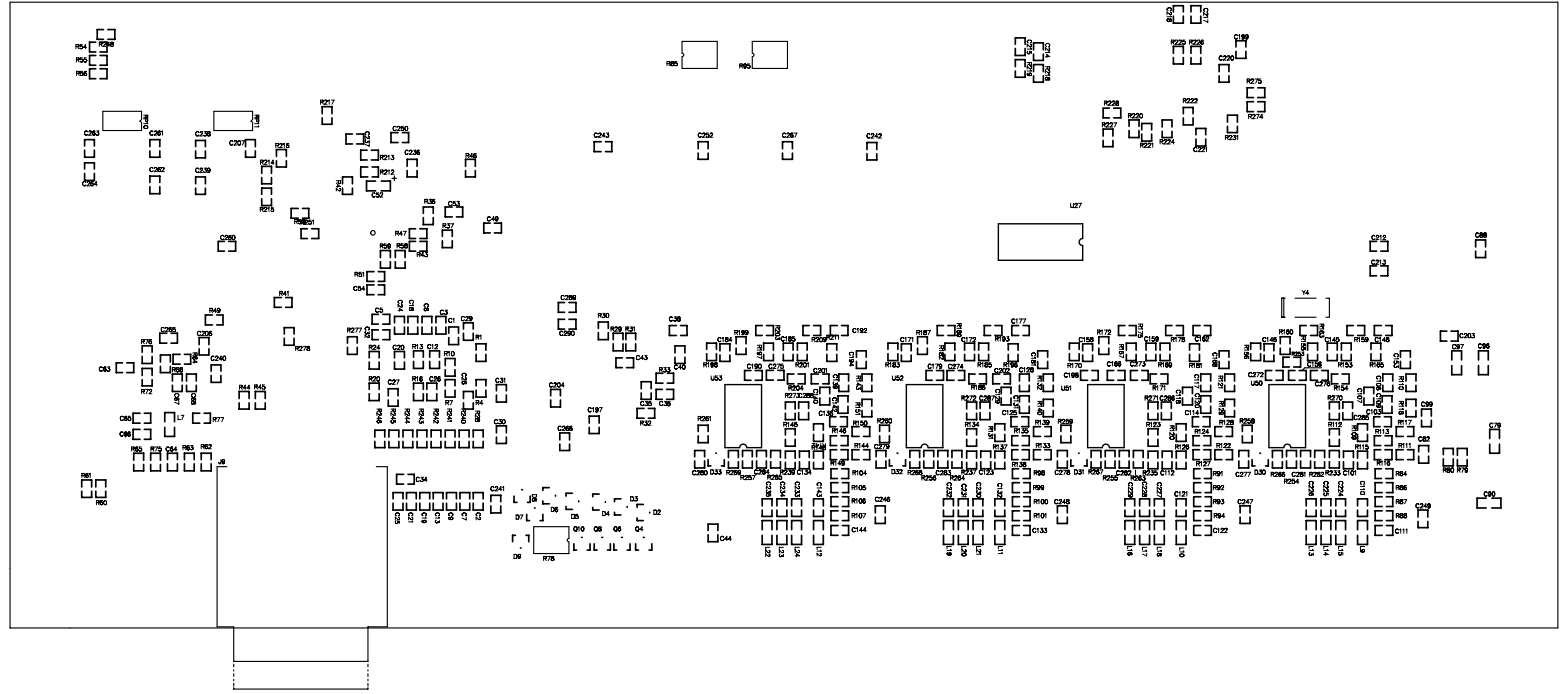
<b>Link Communications, Inc.</b> 1035 Cerise Rd, Billings, Montana 59101 Phone: +406-245-5002 Fax: +406-245-4889		Description <b>DTMF Decoding</b>		
Drawing Number <b>RLC-DSP404</b>	Date <b>Nov. 1, 2007</b>	Revision <b>A</b>	Sheet <b>15</b>	Total <b>15</b>



**RLC-DSP404**  
 Ser# [Redacted]  
 Link Communications, Inc.  
 Rev. C © 2007  


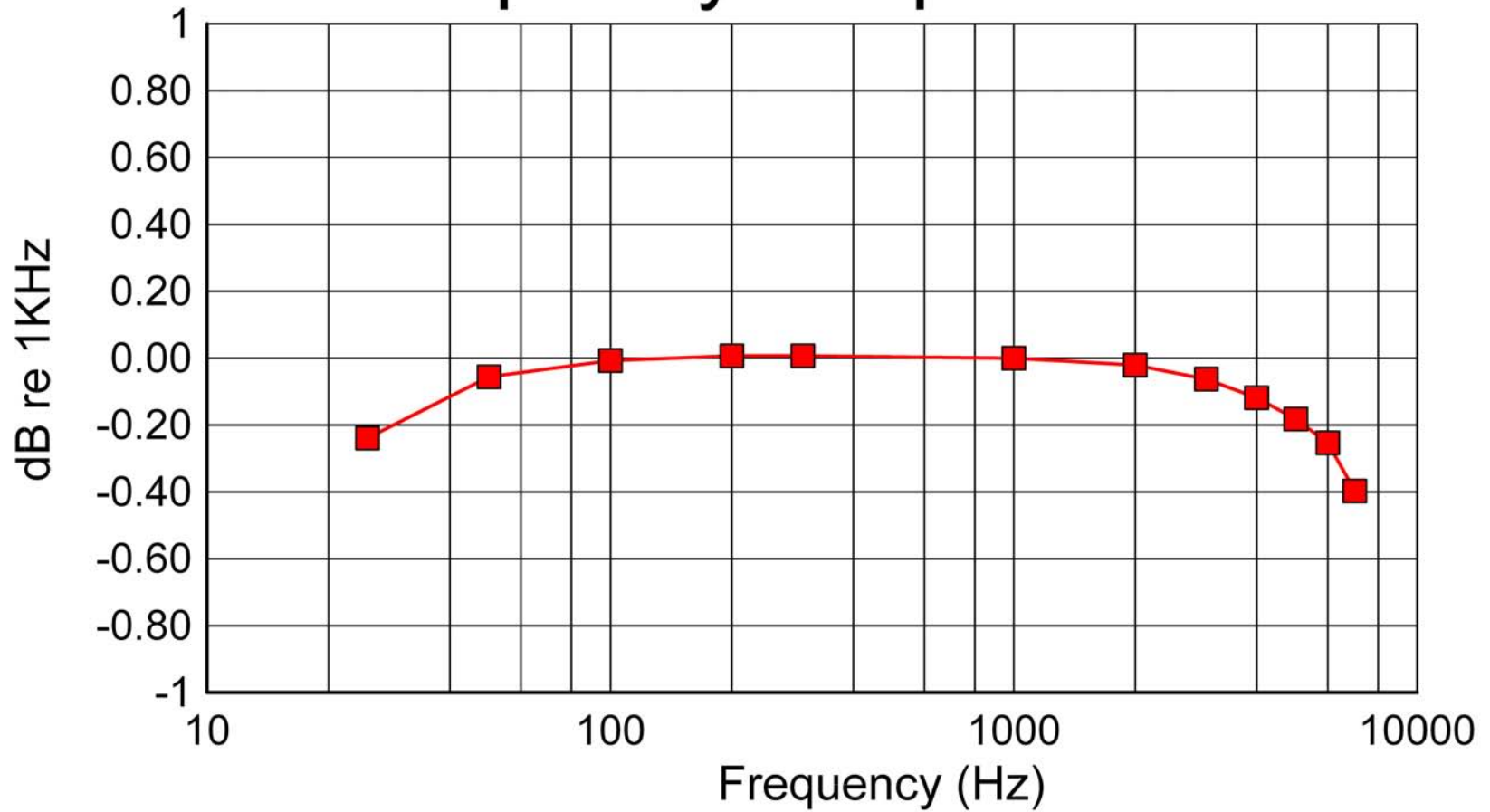


Bottom Legend Layer:

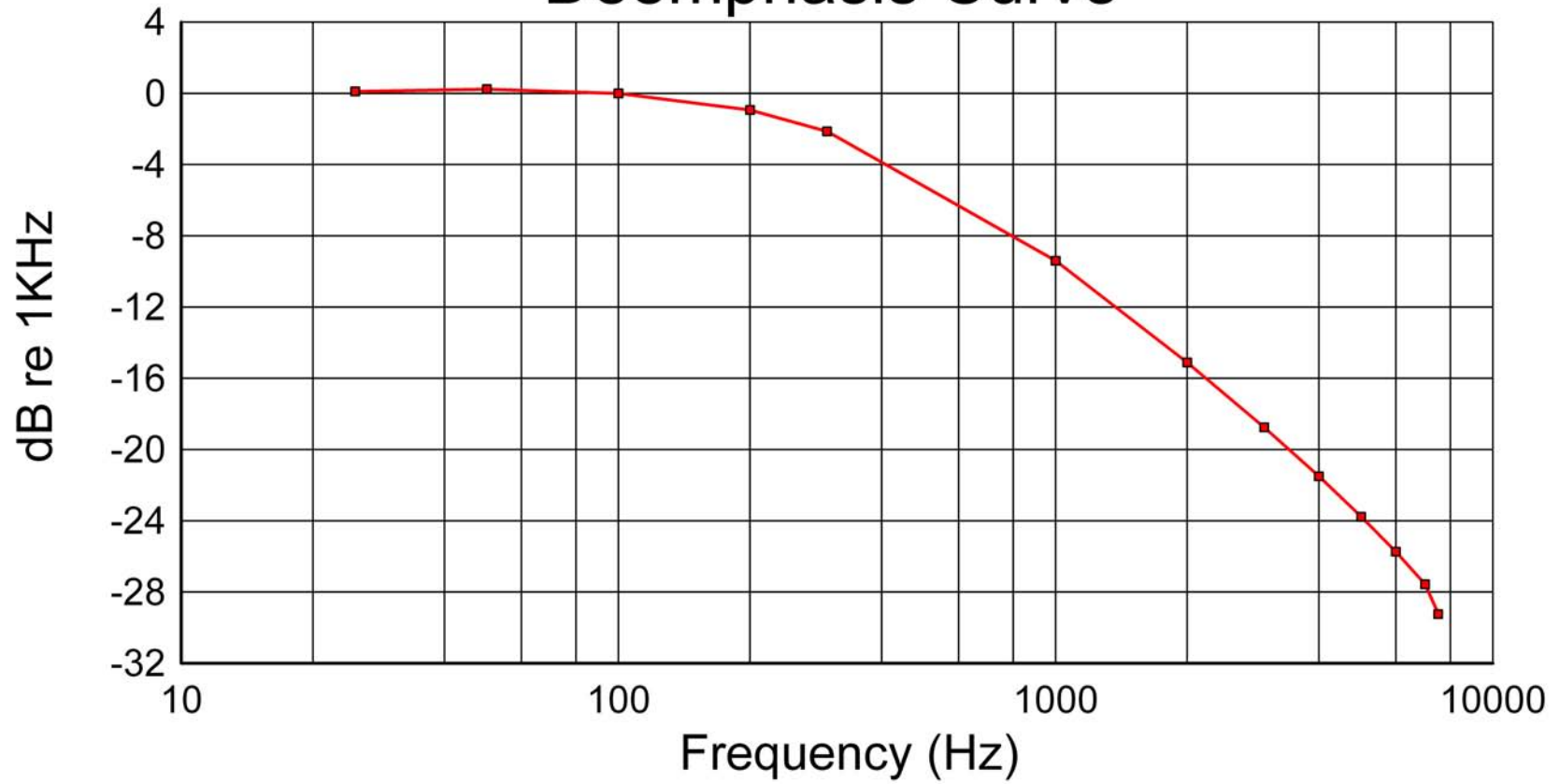




# Frequency Response



# Deemphasis Curve



# Preemphasis Curve

