

SCHMATIC CONTENTS

- SHEET01 - TITLE
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- SHEET03 - THS8200
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- SHEET05 - VIDEO CLOCKS
- SHEET06 - POWER SUPPLIES
- SHEET07 - LAYOUT

I2C ADDRESS MAP		
BASE	I2C ADDRESS TABLE	SHEET
0x21	THS8200 - VIDEO ENCODER	3
0x2C	THS7303 - VIDEO OUTPUT AMPLIFIER	4
0x6C	CDCE949 CLOCK GENERATOR	5

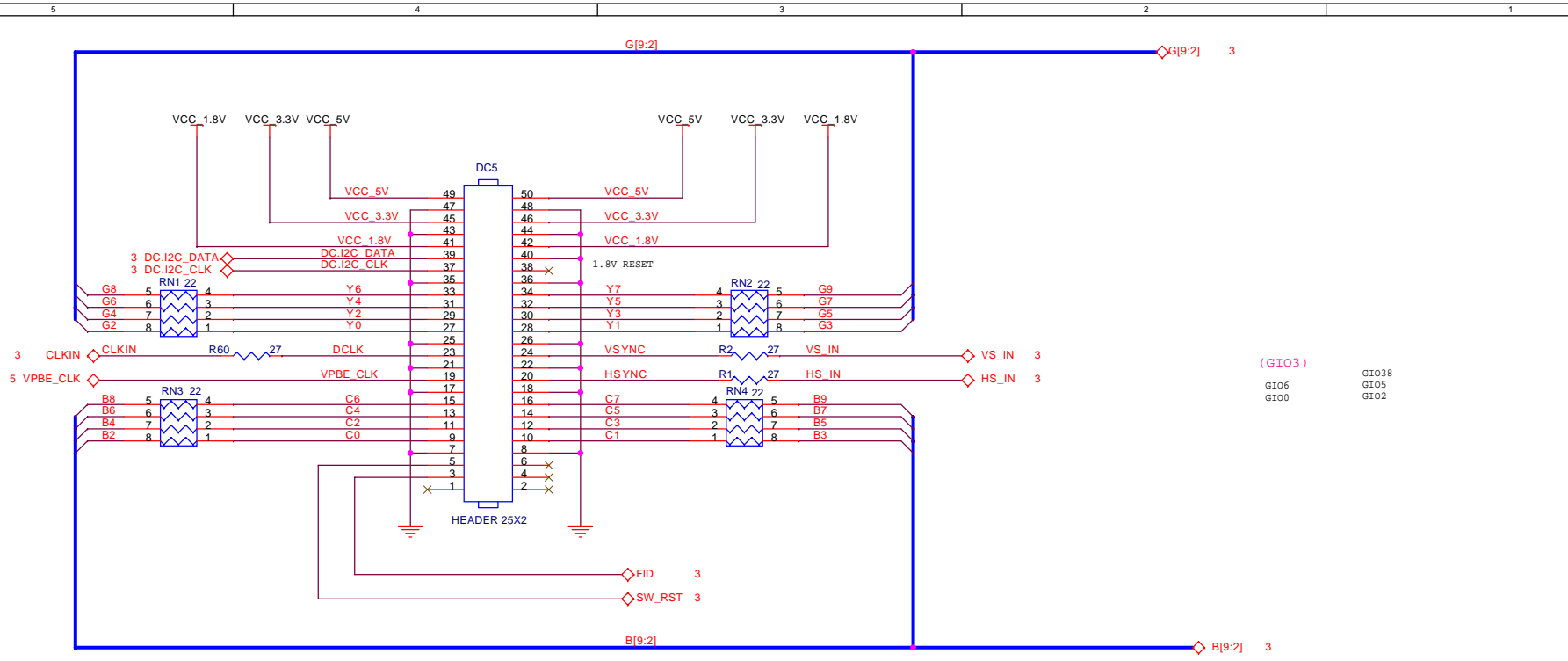
REVISION STATUS OF SHEETS

REV	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
SH															
REV	C	C	C	C	C	C	C								

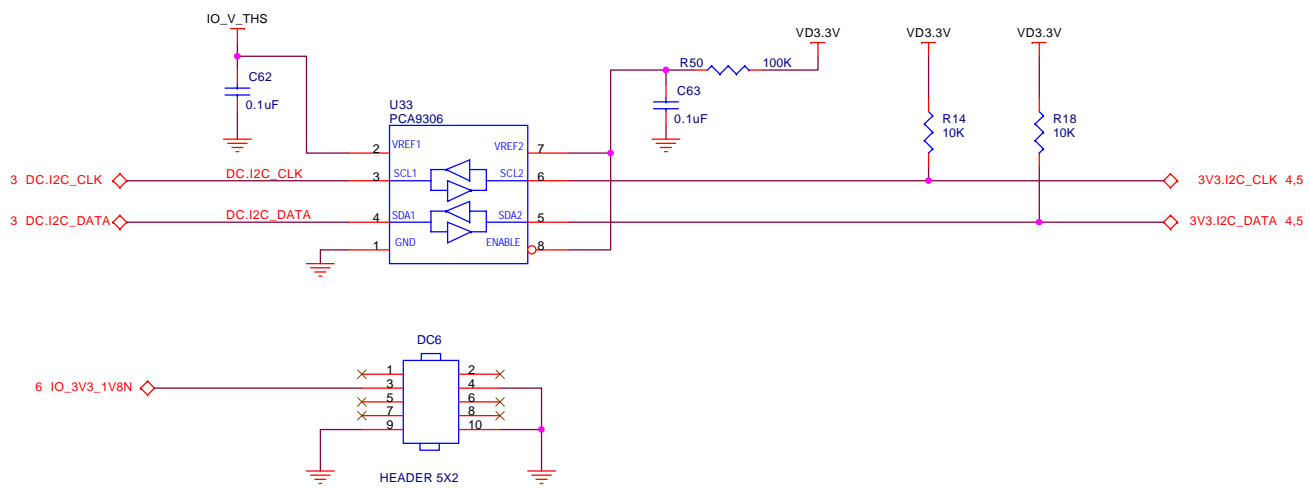
DATE	BY	DESCRIPTION	APPROVED
07/10/2007	R.R.P.	DWN	
07/10/2007	T.W.K.	CHK	
07/10/2007	R.R.P.	ENGR	
07/10/2007	R.R.P.	ENGR-MGR	
07/10/2007	C.M.D.	QA	
07/10/2007	R.R.P.	MFG	
07/10/2007	R.R.P.	RLSE	

SPECTRUM DIGITAL INCORPORATED			
Title: THS8200 Daughter-Card			
Page Contents: TITLE SHEET			
Size: B	DWG NO	509982-0001	Revision: C
Date:	Friday, August 17, 2007	Sheet 1 of 7	7

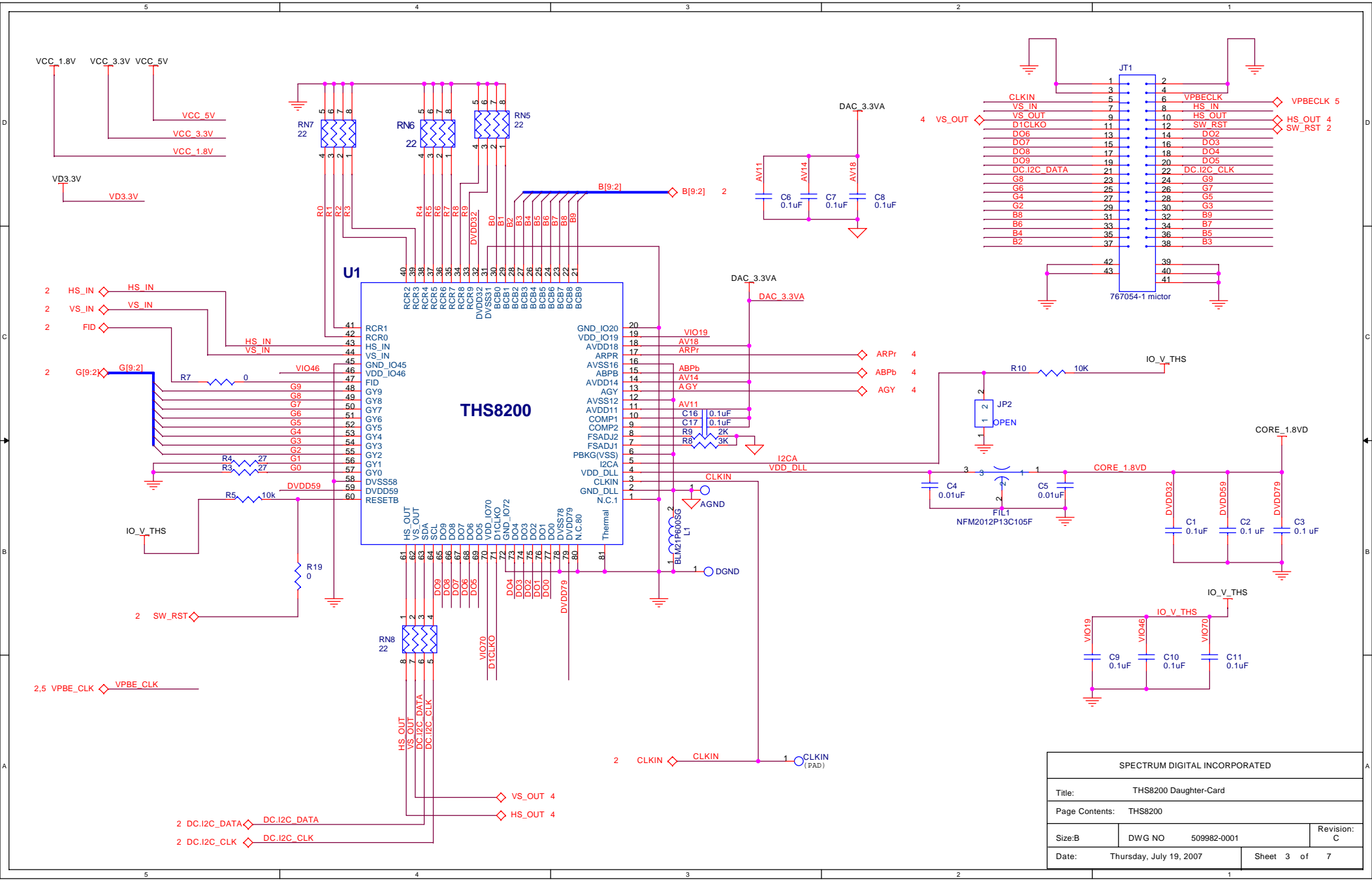
5 4 3 2 1



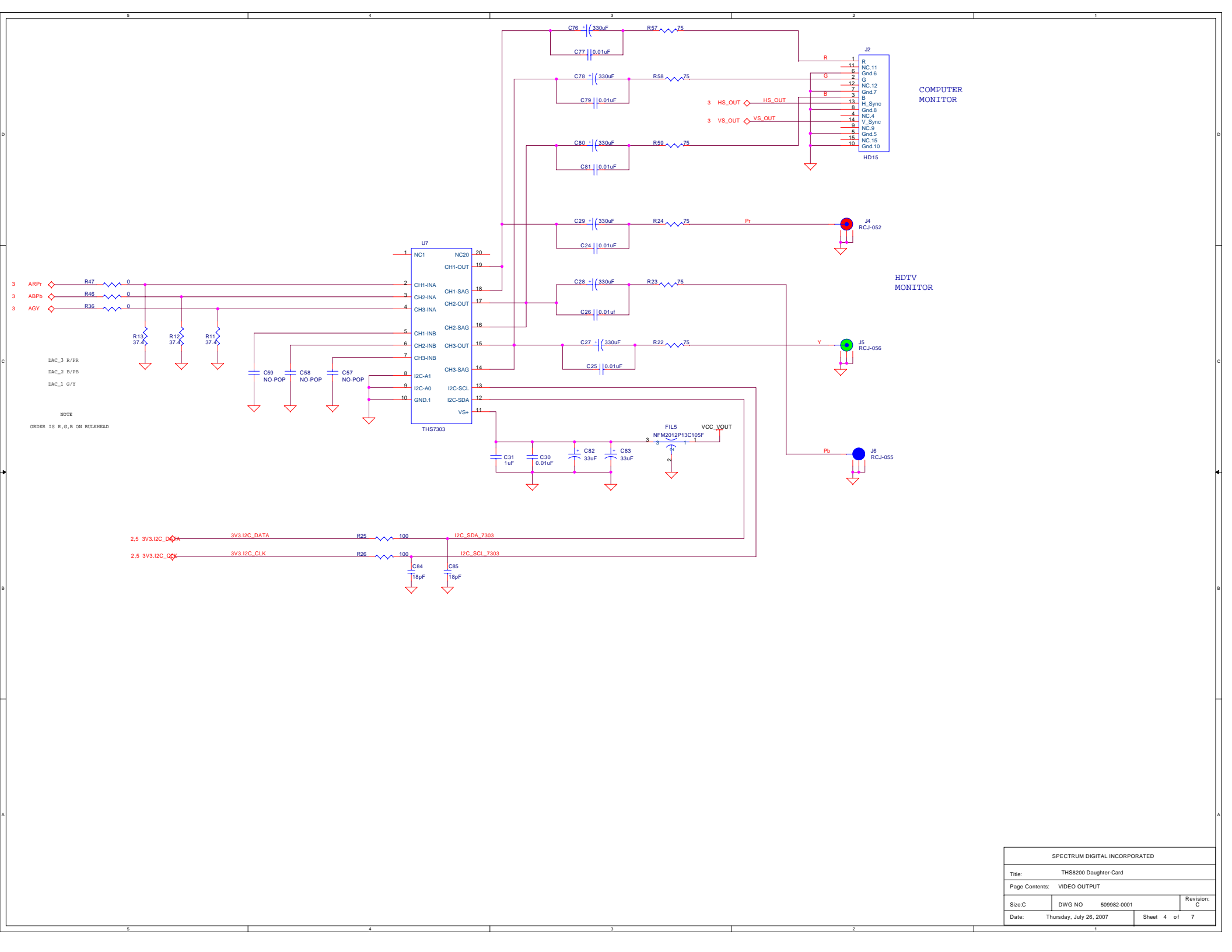
(GIO3)  
 GIO6  
 GIO10  
 GIO38  
 GIO5  
 GIO2



SPECTRUM DIGITAL INCORPORATED			
Title: THS8200 Daughter-Card			
Page Contents: Daughter Card Interface			
Size: B	DWG NO	509982-0001	Revision: C
Date:	Thursday, July 19, 2007		Sheet 2 of 7



SPECTRUM DIGITAL INCORPORATED			
Title: THS8200 Daughter-Card			
Page Contents: THS8200			
Size: B	DWG NO	509982-0001	Revision: C
Date:	Thursday, July 19, 2007	Sheet 3 of 7	



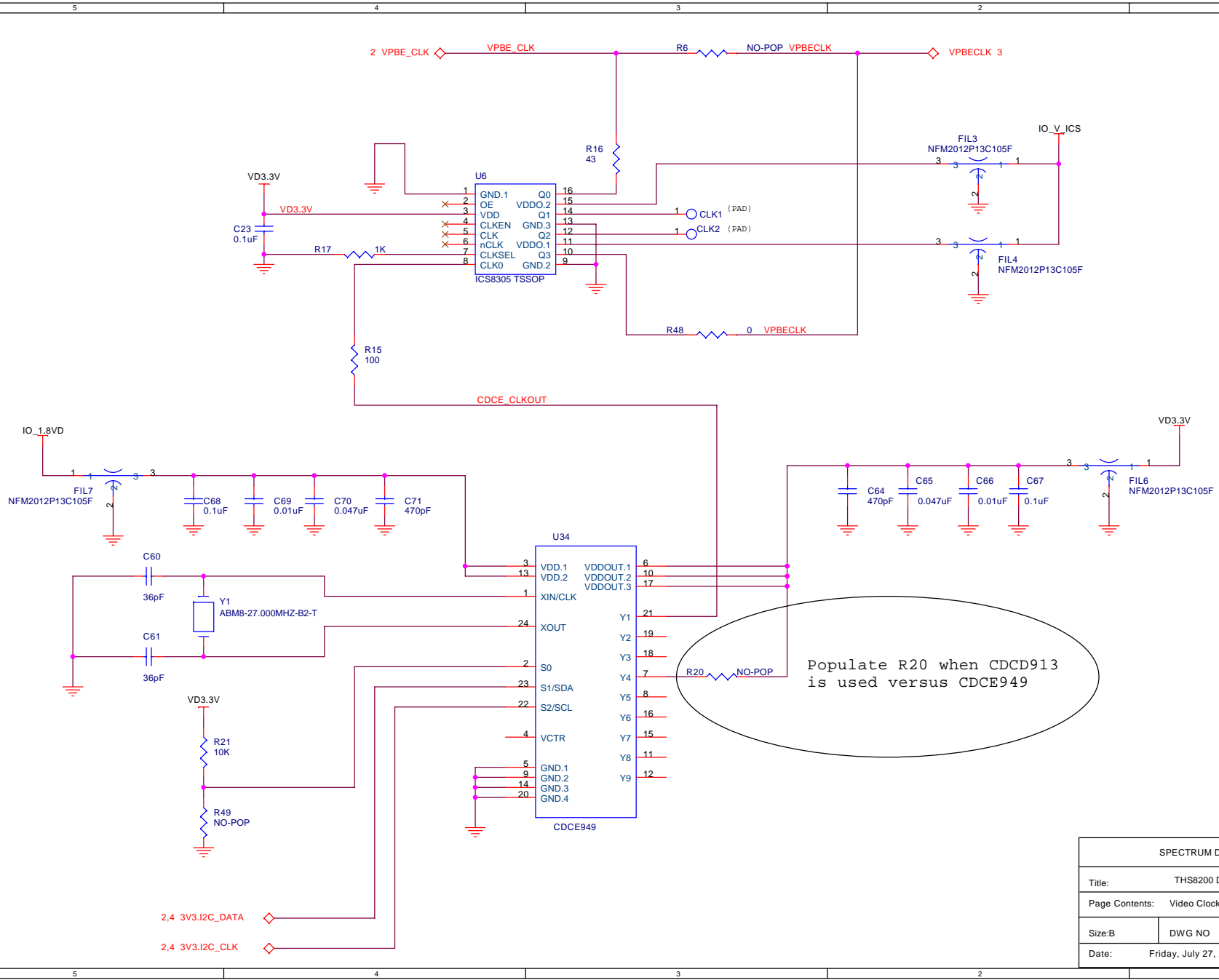
COMPUTER MONITOR

HDTV MONITOR

DAC\_3 R/PR  
DAC\_2 B/PB  
DAC\_1 G/Y

NOTE  
ORDER IS R,G,B ON BULKHEAD

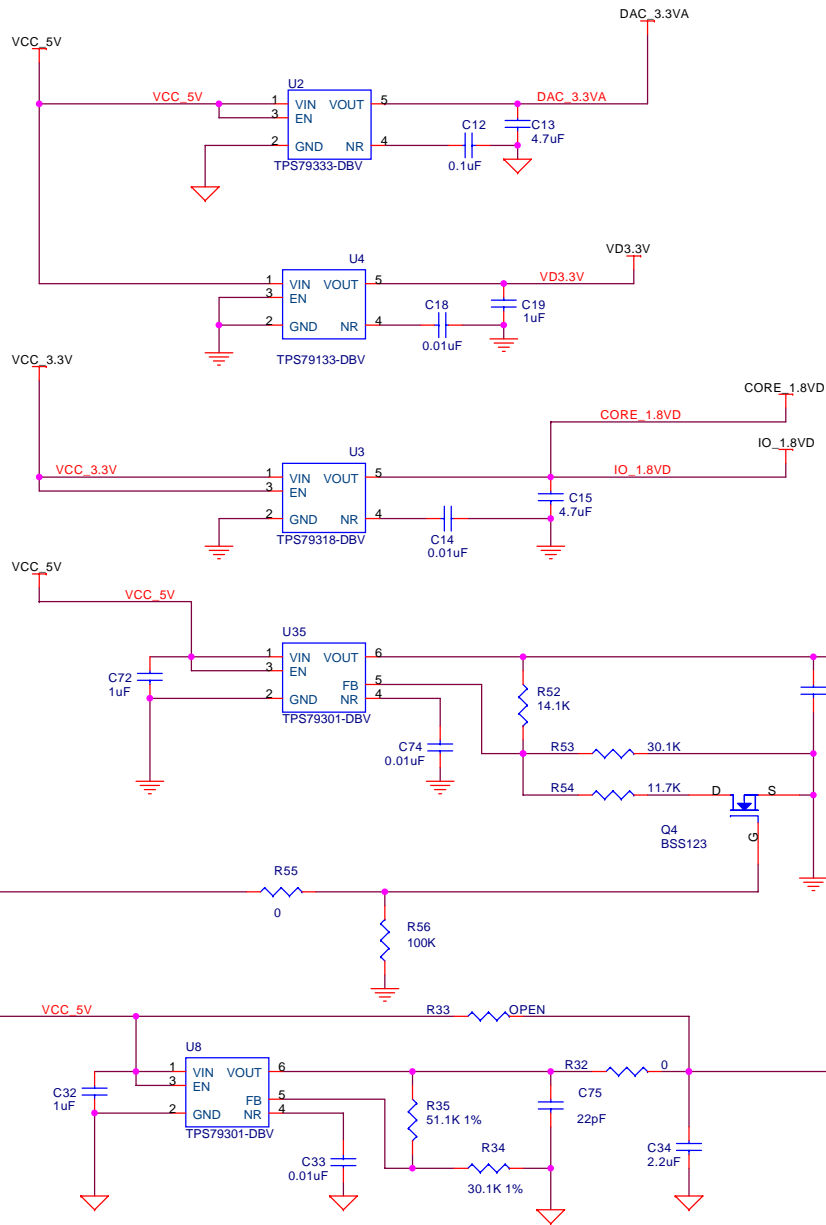
SPECTRUM DIGITAL INCORPORATED			
Title:	THS8200 Daughter-Card		
Page Contents:	VIDEO OUTPUT		
Size:	DWG NO	509982-0001	Revision: C
Date:	Thursday, July 26, 2007	Sheet	4 of 7



Populate R20 when CDCD913 is used versus CDCE949

SPECTRUM DIGITAL INCORPORATED			
Title: THS8200 Daughter-Card			
Page Contents: Video Clocks			
Size: B	DWG NO	509982-0001	Revision: C
Date: Friday, July 27, 2007		Sheet 5 of 7	

HIGH = 3.3V - LOW = 1.8V



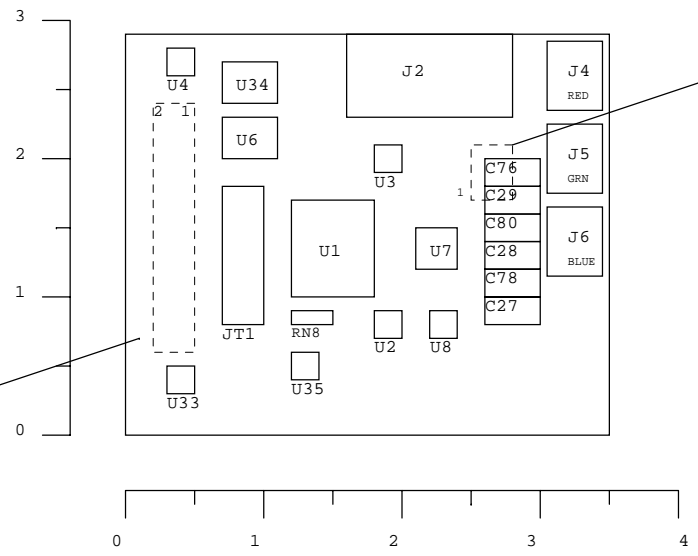
$V_{OUT} = V_{REF} * ( 1 + R_{X1} / R_{X2} )$   
 $V_{REF} = 1.2246$

$V_{OUT} = 1.8V$	$V_{OUT} = 3.3V$	TYPICAL IS TO CHOSE RX2 AS 30.1K
$1.47 = ( 1 + R_{X1} / R_{X2} )$	$2.65 = ( 1 + R_{X1} / R_{X2} )$	
$0.47 = R_{X1} / R_{X2}$	$1.65 = R_{X1} / R_{X2}$	
$0.47 R_{X2} = R_{X1}$	$1.65 R_{X2} = R_{X1}$	
$R_{X2} = 30.1K$	$R_{X2} = 8.54K$	
$R_{X1} = 14.1K$	$R_{X1} = 14.1K$	
	$R_{FB1} * R_{FB2} / (R_{FB1} + R_{FB2}) = 0.45K$	
	$(30.1K * R_{FB2}) / (30.1K + R_{FB2}) = 0.45K$	
	$R_{FB2} = 11.7K$	

SPECTRUM DIGITAL INCORPORATED			
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5 4 3 2 1

TOP VIEW



DC5 BOTTOM SIDE

DC6 BOTTOM SIDE

APPROXIMATE SIZE 3.5 BY 2.9 INCHES

NOTE: THIS DRAWING IS NOT TO SCALE  
IT IS JUST FOR REFERENCE PURPOSES  
FOR LAYOUT PLACEMENT

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SPECTRUM DIGITAL INCORPORATED			
Title: THS8200 Daughter-Card			
Page Contents: Layout			
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Date:	Thursday, July 19, 2007		Sheet 7 of 7

5 4 3 2 1