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Analog board

A/D Board
Rev G,H,J

Analog board
Rev J

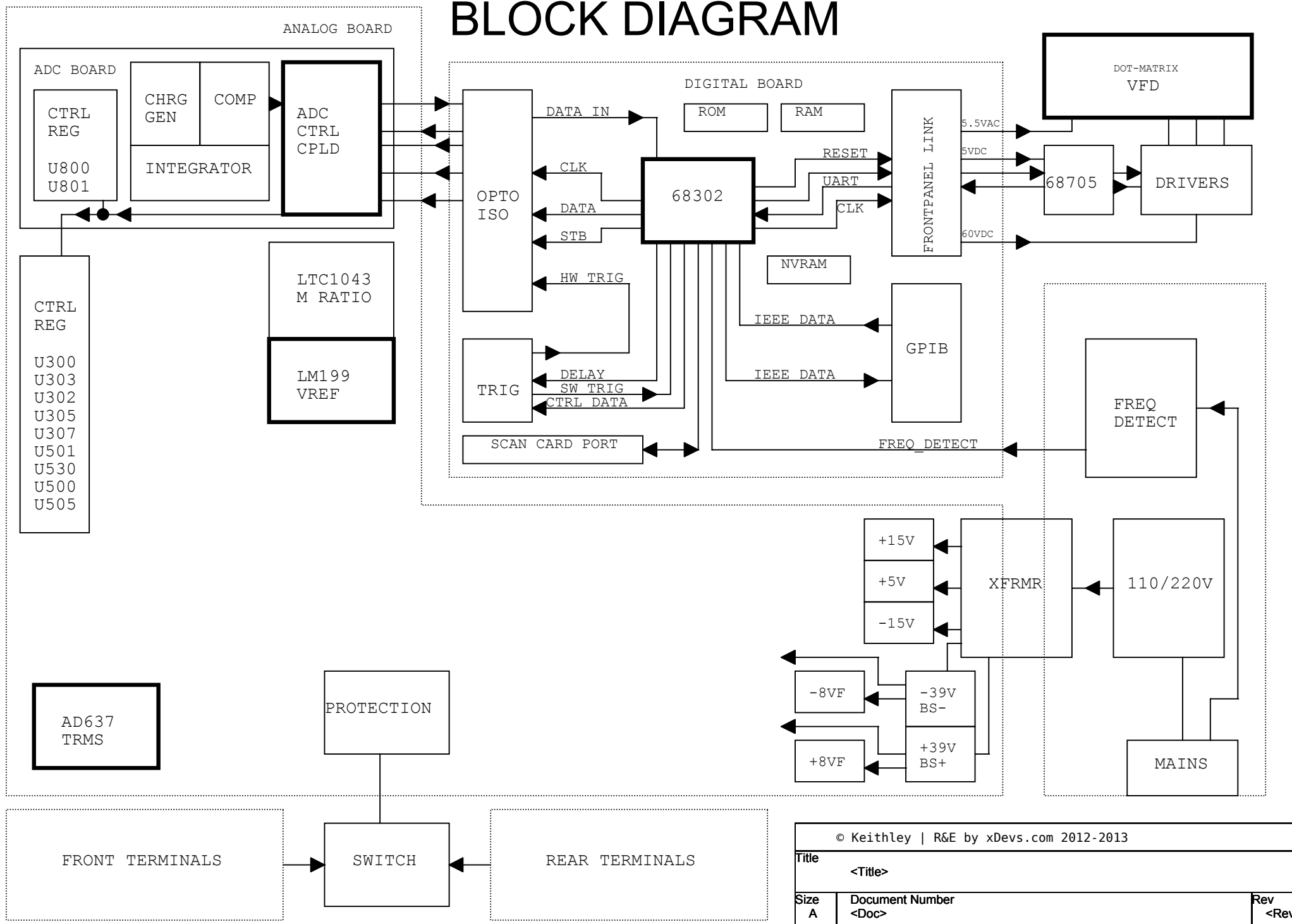
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Analog board

Digital board

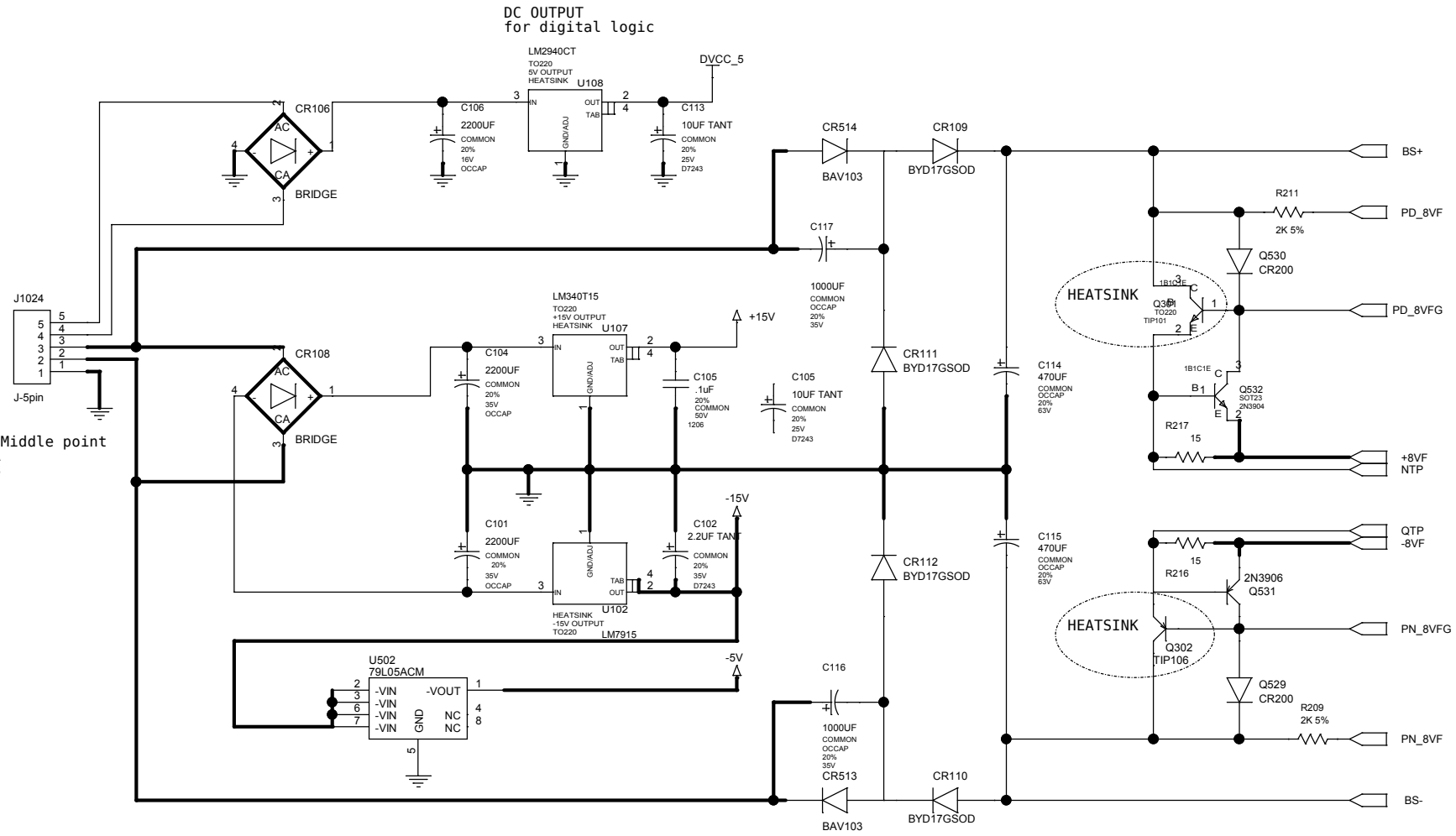
Front panel board

BLOCK DIAGRAM

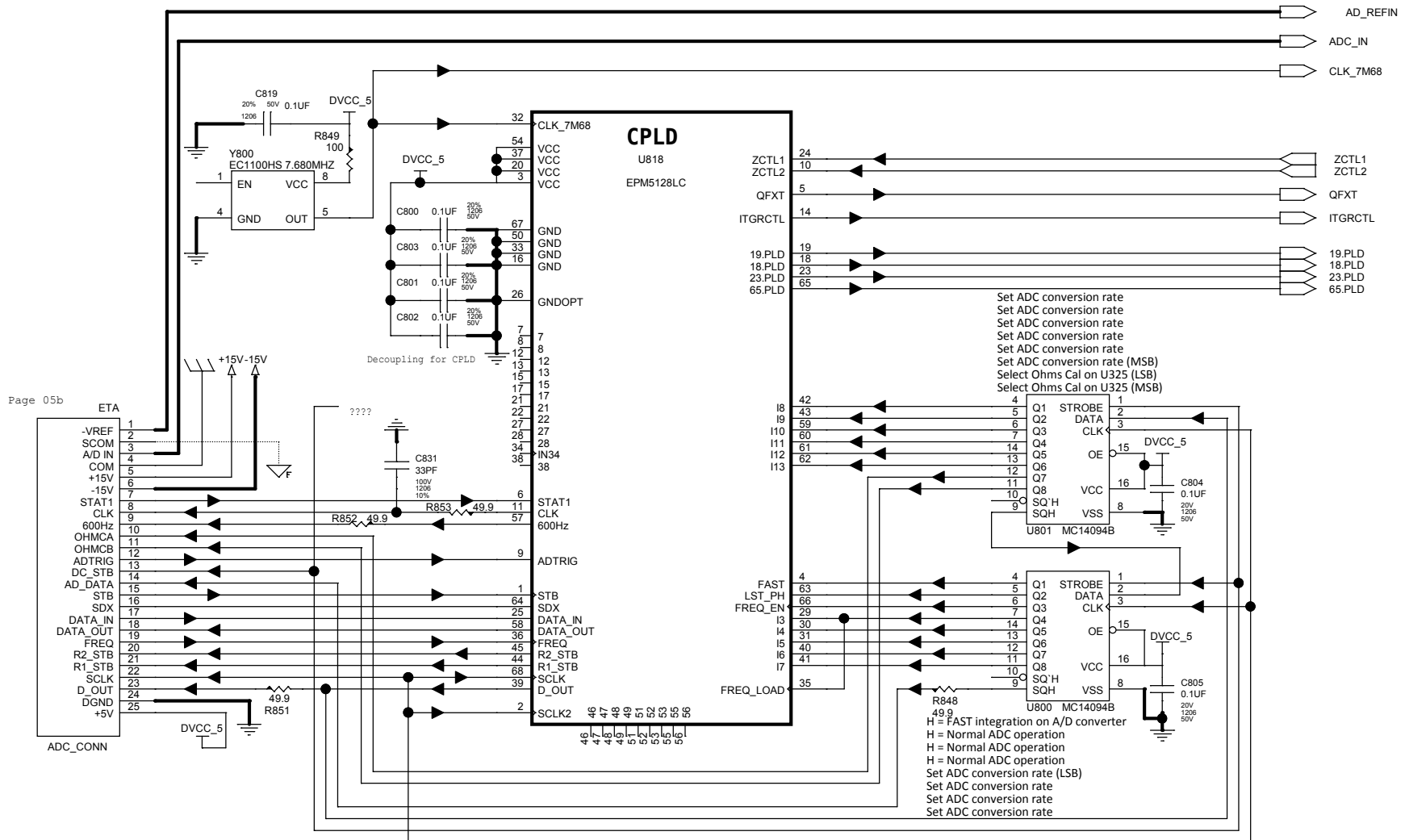


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- 1 - Coil 1 Middle point
- 2 - Coil 1A
- 3 - Coil 1B
- 4 - Coil 2
- 5 - Coil 2

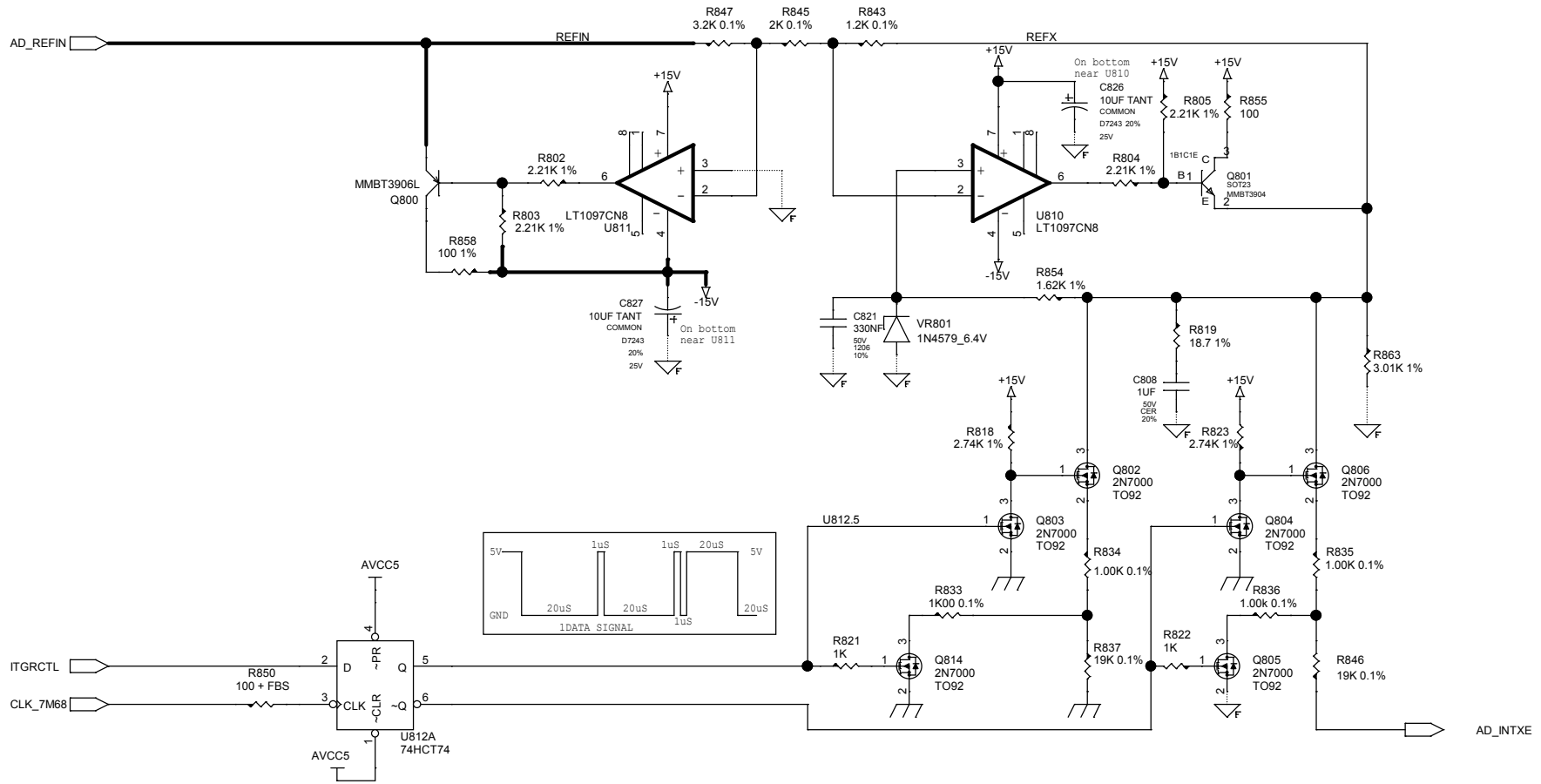


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Keithley 2001 Analog board Front end bias section		
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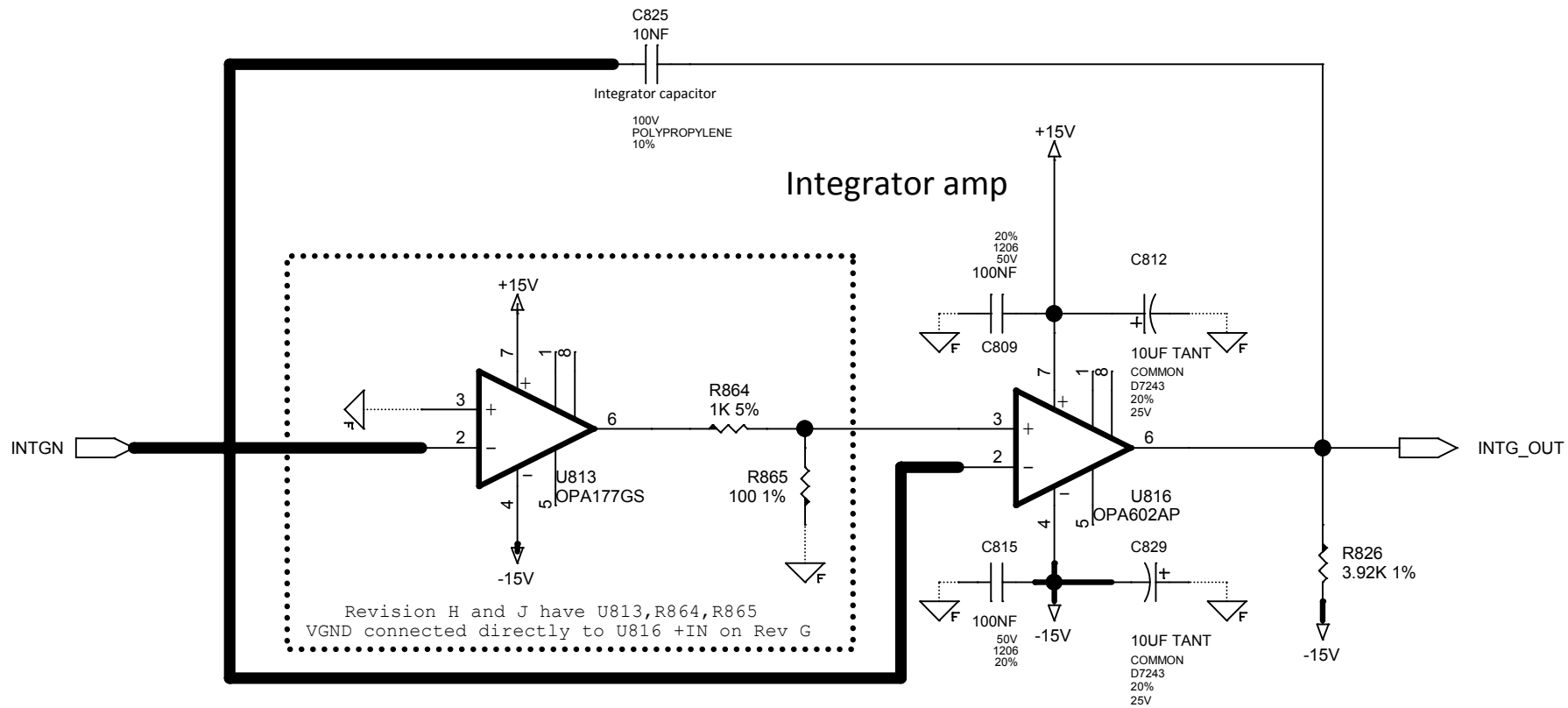


CPLD Programmed Keithley 2001-802-A05
 CPLD can be ALTERA EPM5128JC or Cypress CY7C342B-35JC

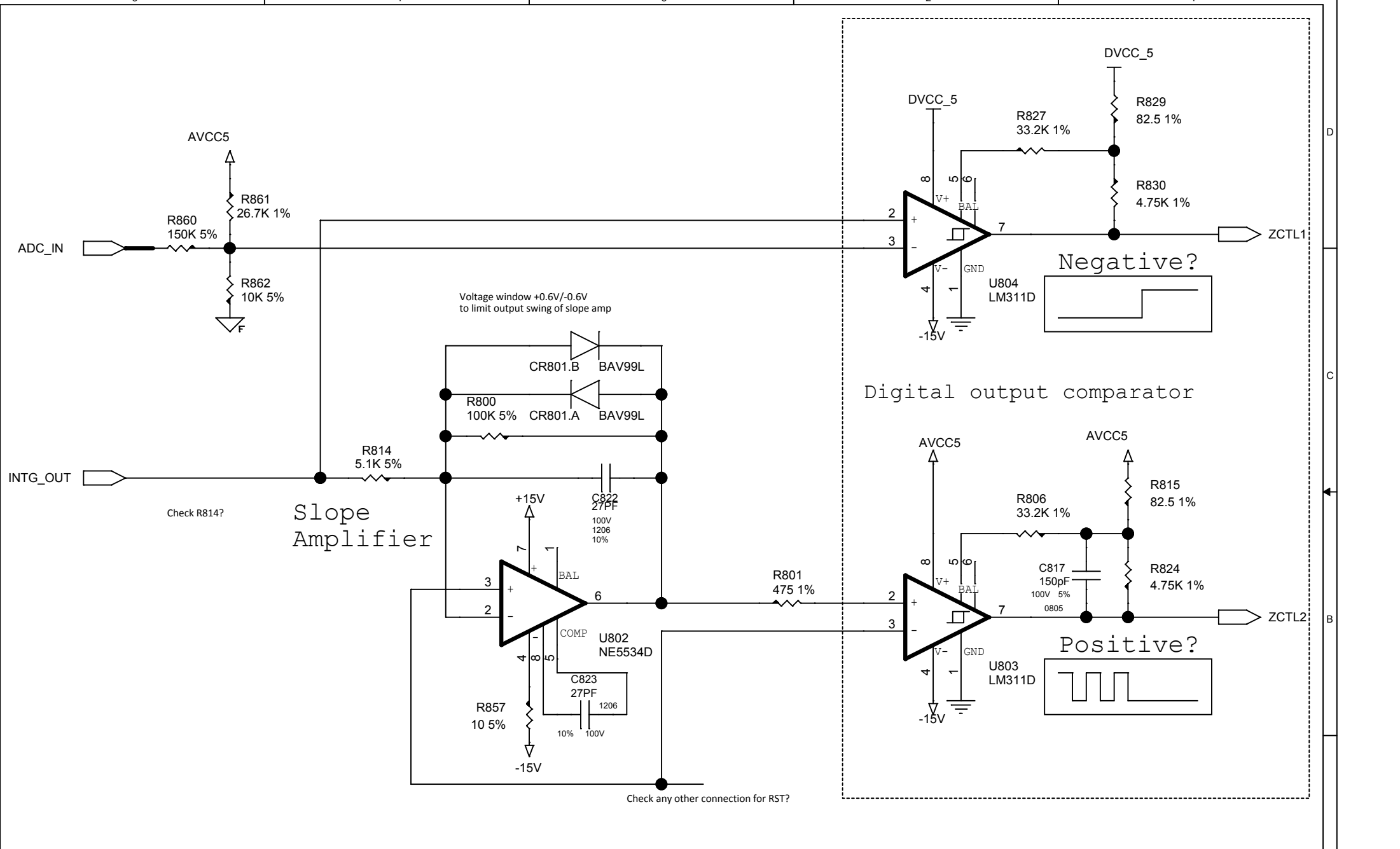
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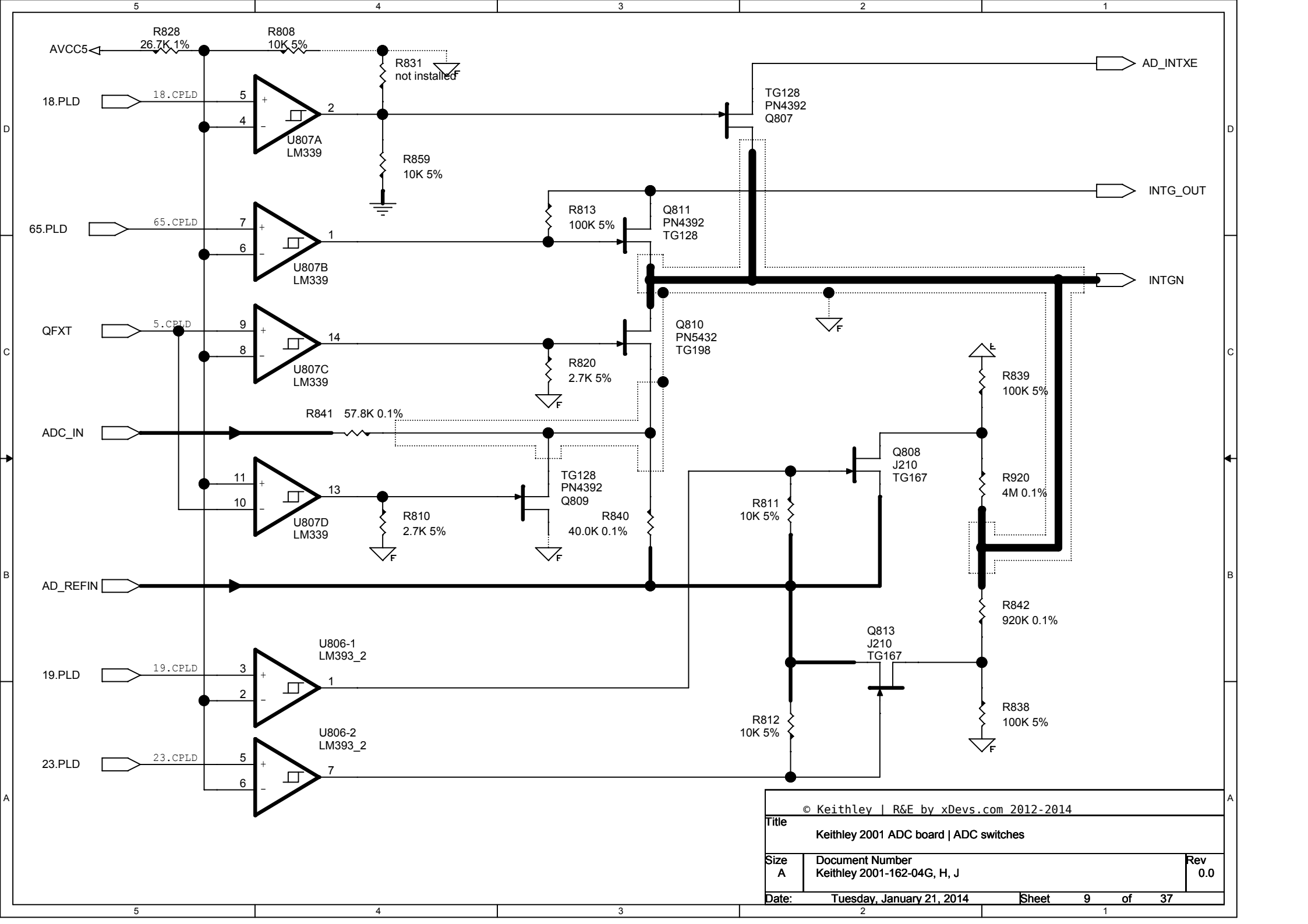
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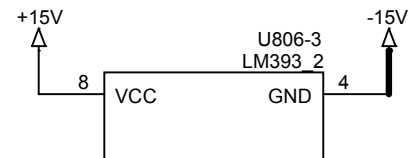
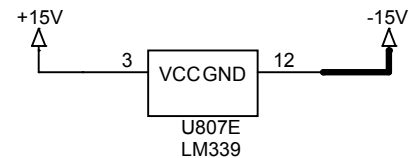
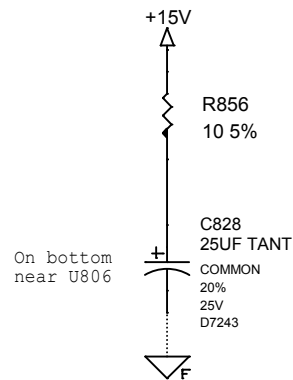
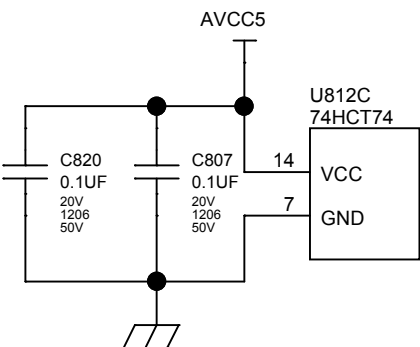
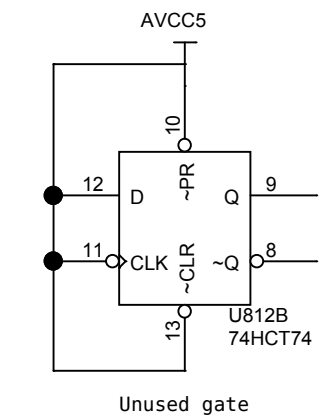
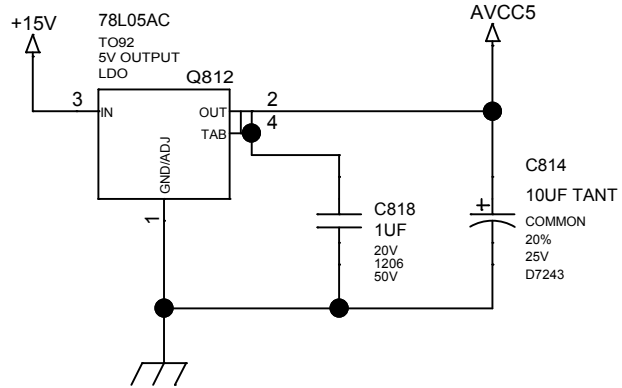
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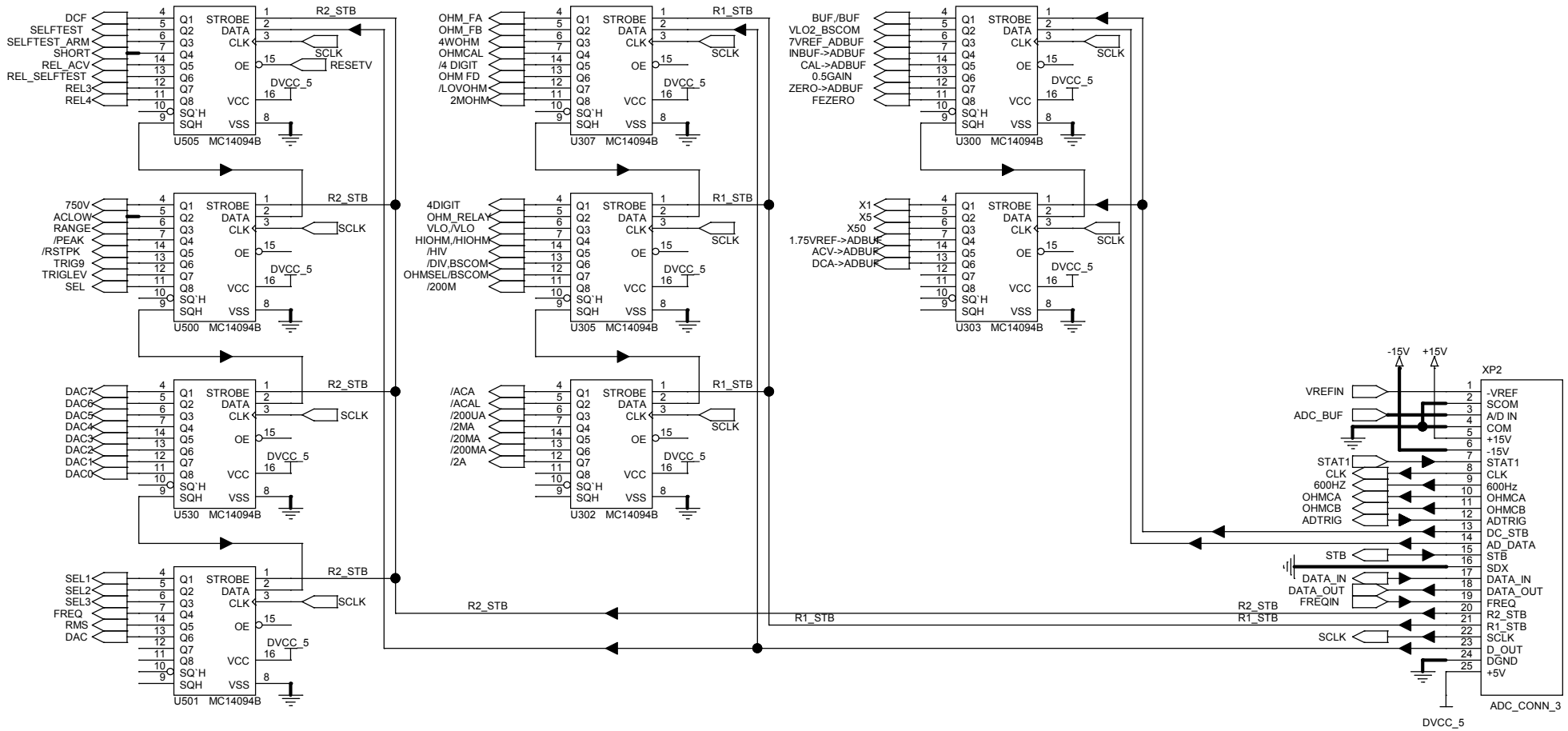
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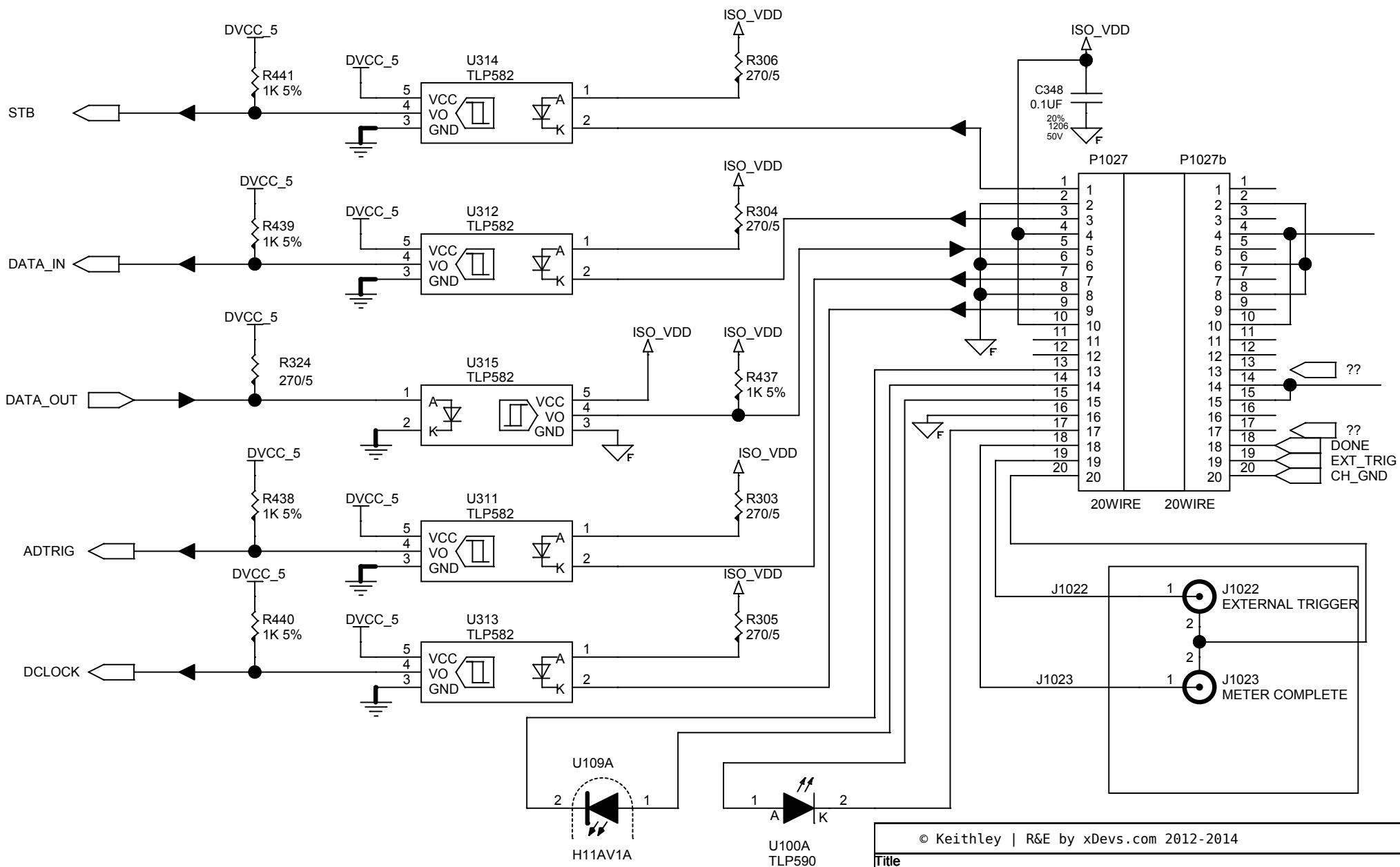
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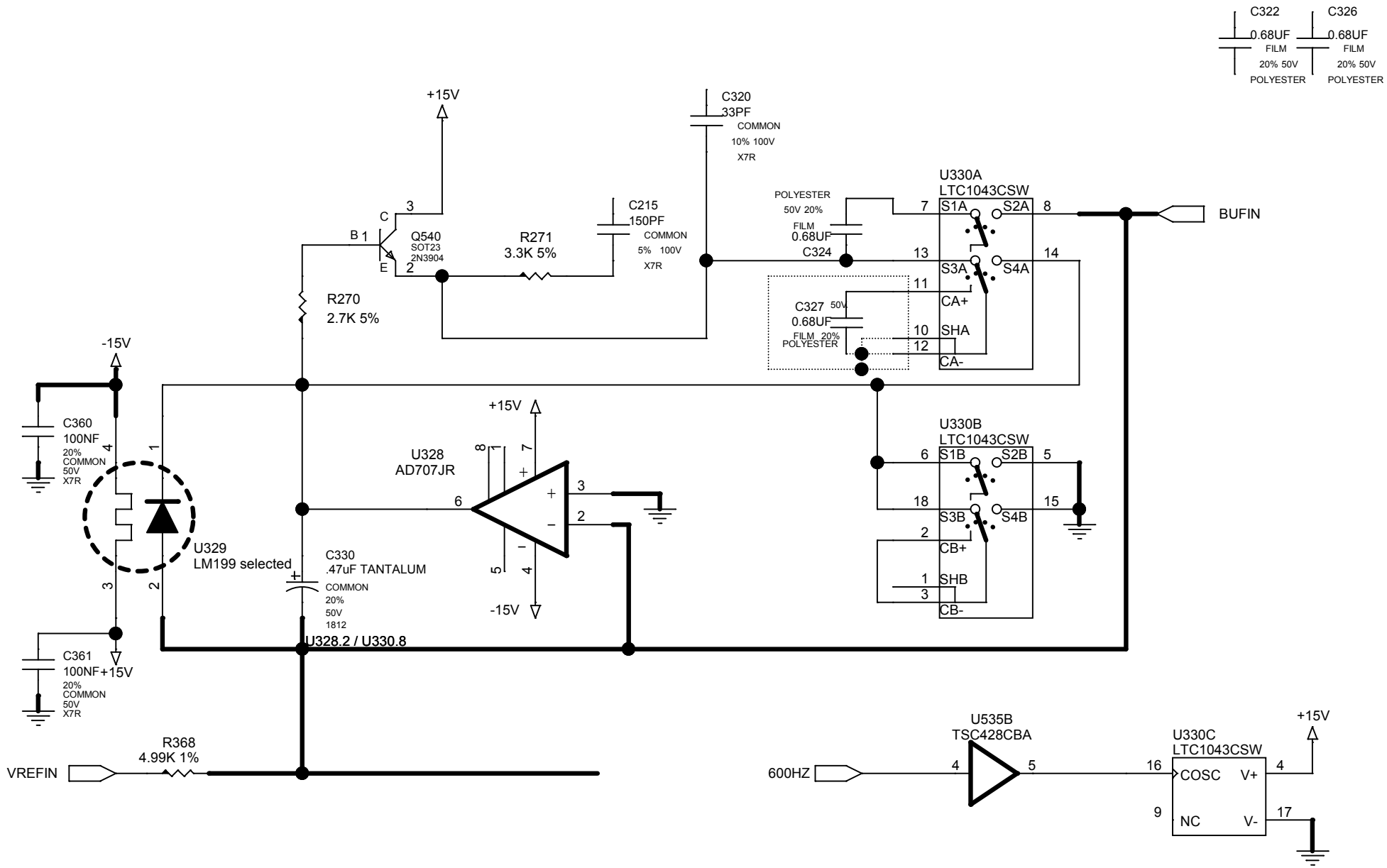
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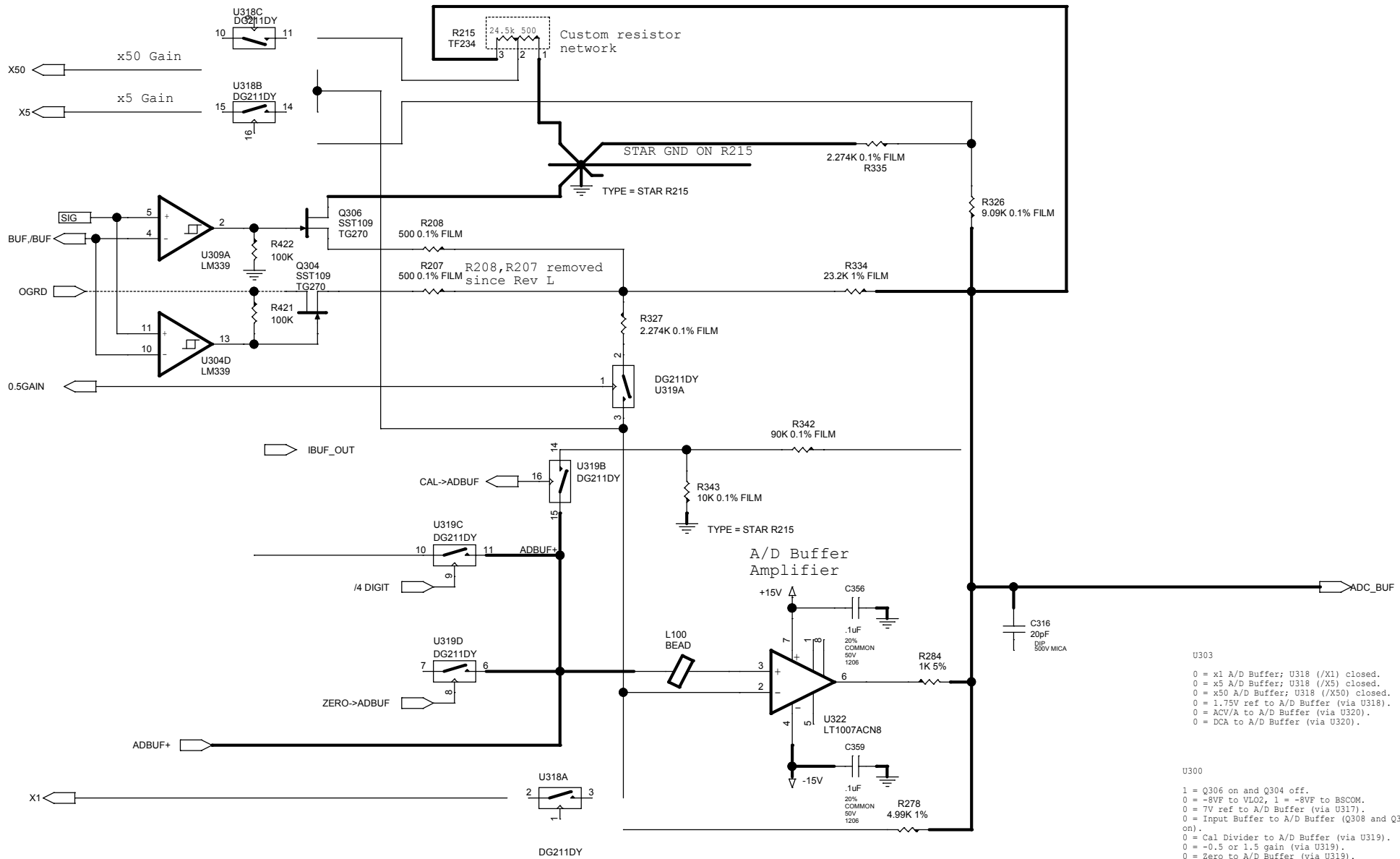
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Title Keithley 2001 Analog board ADC connector and registers		
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Title Keithley 2001 Analog board Digital board isolation		
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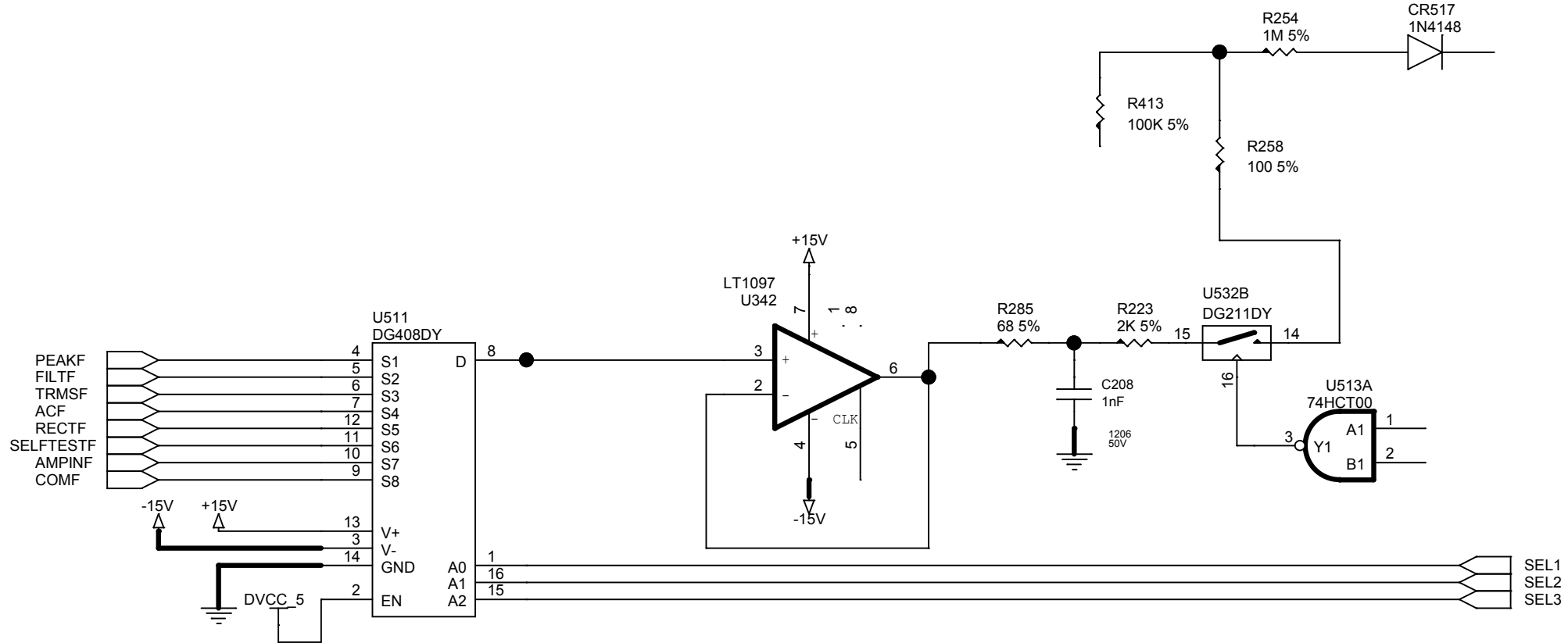


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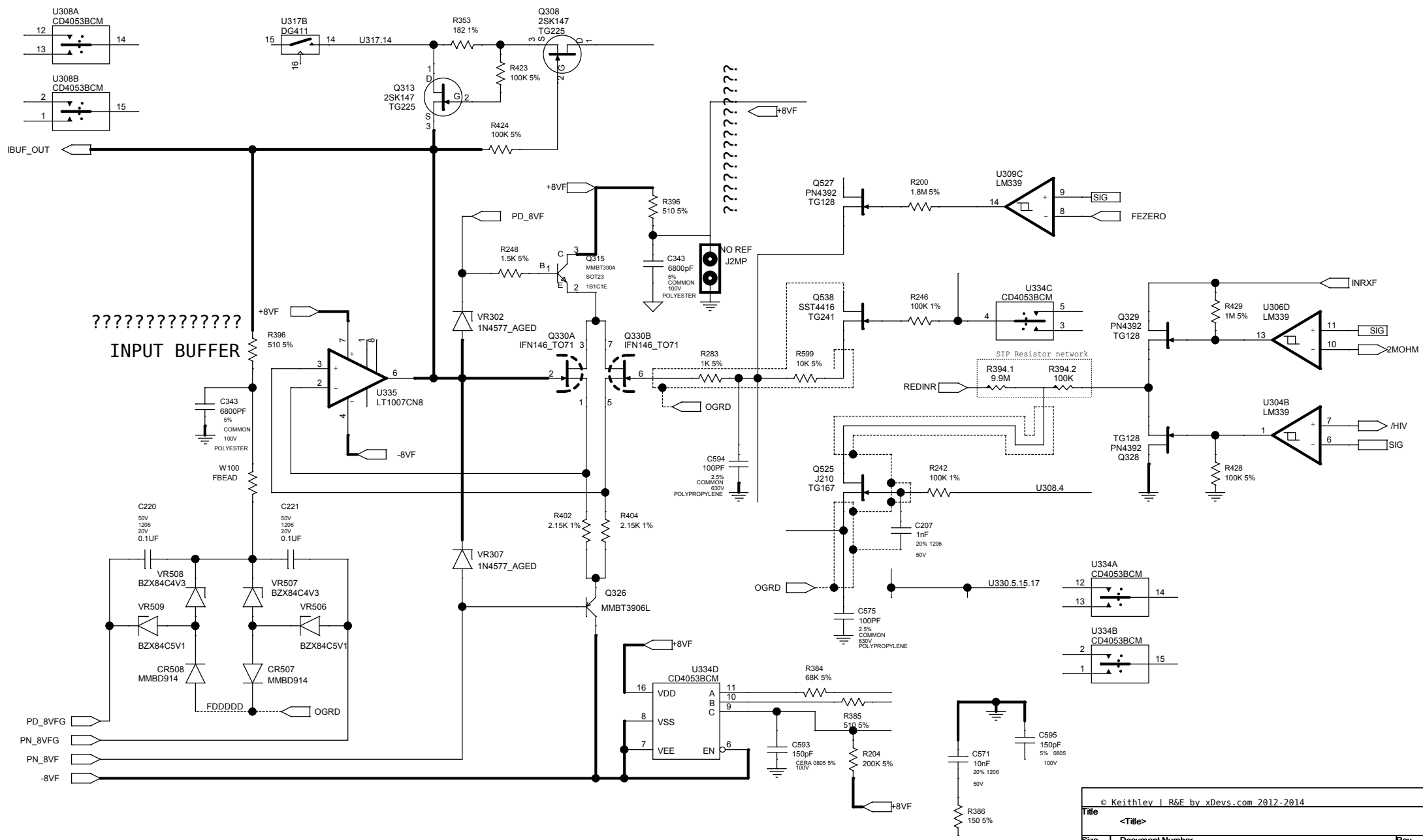
- U303
- 0 = x1 A/D Buffer; U318 (/X1) closed.
 - 0 = x5 A/D Buffer; U318 (/X5) closed.
 - 0 = x50 A/D Buffer; U318 (/X50) closed.
 - 0 = 1.75V ref to A/D Buffer (via U318).
 - 0 = ACV/A to A/D Buffer (via U320).
 - 0 = DCA to A/D Buffer (via U320).
- U300
- 1 = Q306 on and Q304 off.
 - 0 = -8VP to VLO2, 1 = -8VP to BSCOM.
 - 0 = 7V ref to A/D Buffer (via U317).
 - 0 = Input Buffer to A/D Buffer (Q308 and Q313 on).
 - 0 = Cal Divider to A/D Buffer (via U319).
 - 0 = -0.5 or 1.5 gain (via U319).
 - 0 = Zero to A/D Buffer (via U319).

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Title Keithley 2001 Analog board schematics A/D Buffer		
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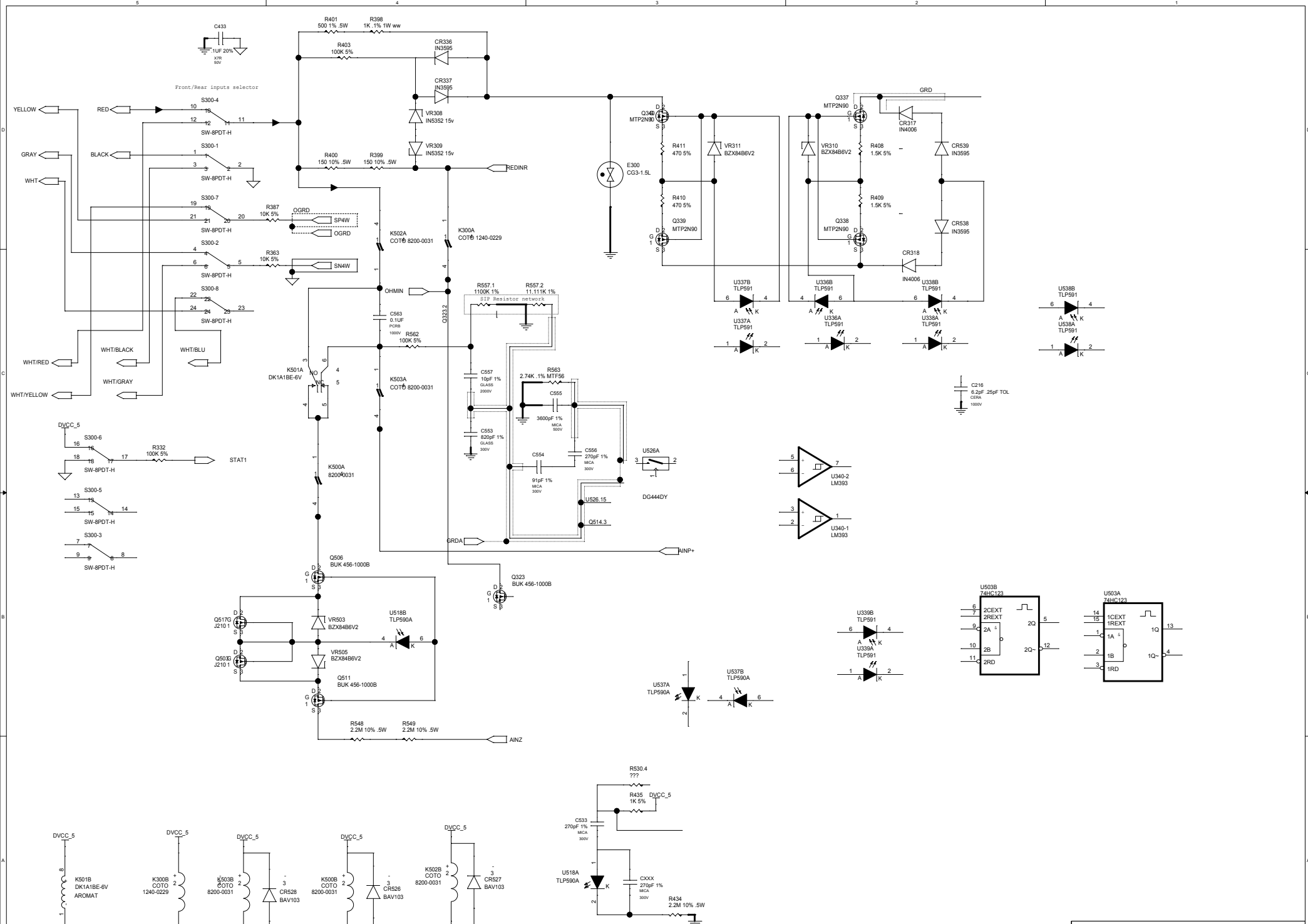
Truth table

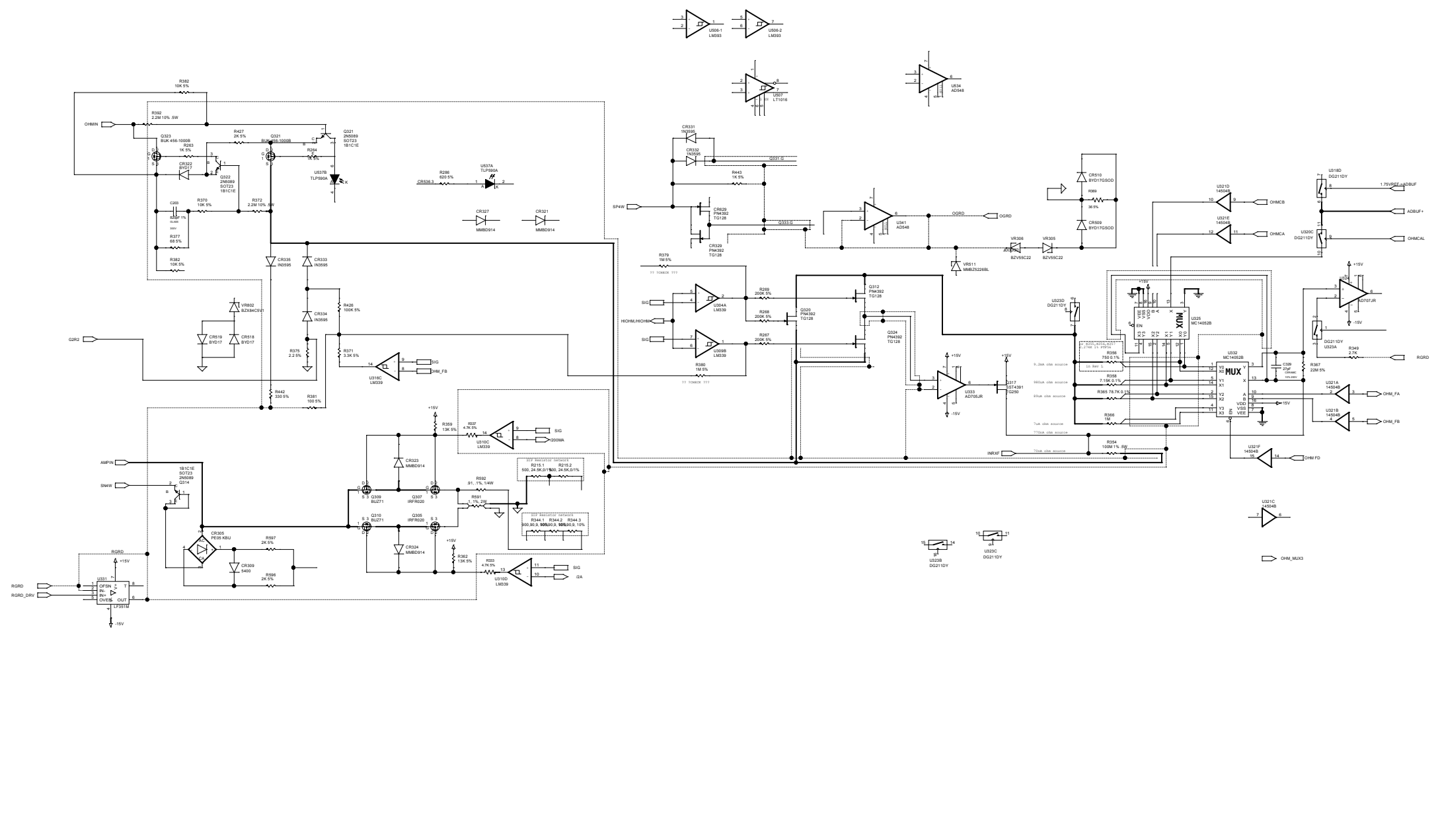
A[2..0]	ON SWITCH
0b000	S1 - Peak output
0b001	S2 - Filter output
0b010	S3 - TRMS output
0b011	S4 - ACF output
0b100	S5 - Rectifier output
0b101	S6 - SELFTTEST output
0b110	S7 - AMP IN output
0b111	S8 - Common



????????????????
INPUT BUFFER

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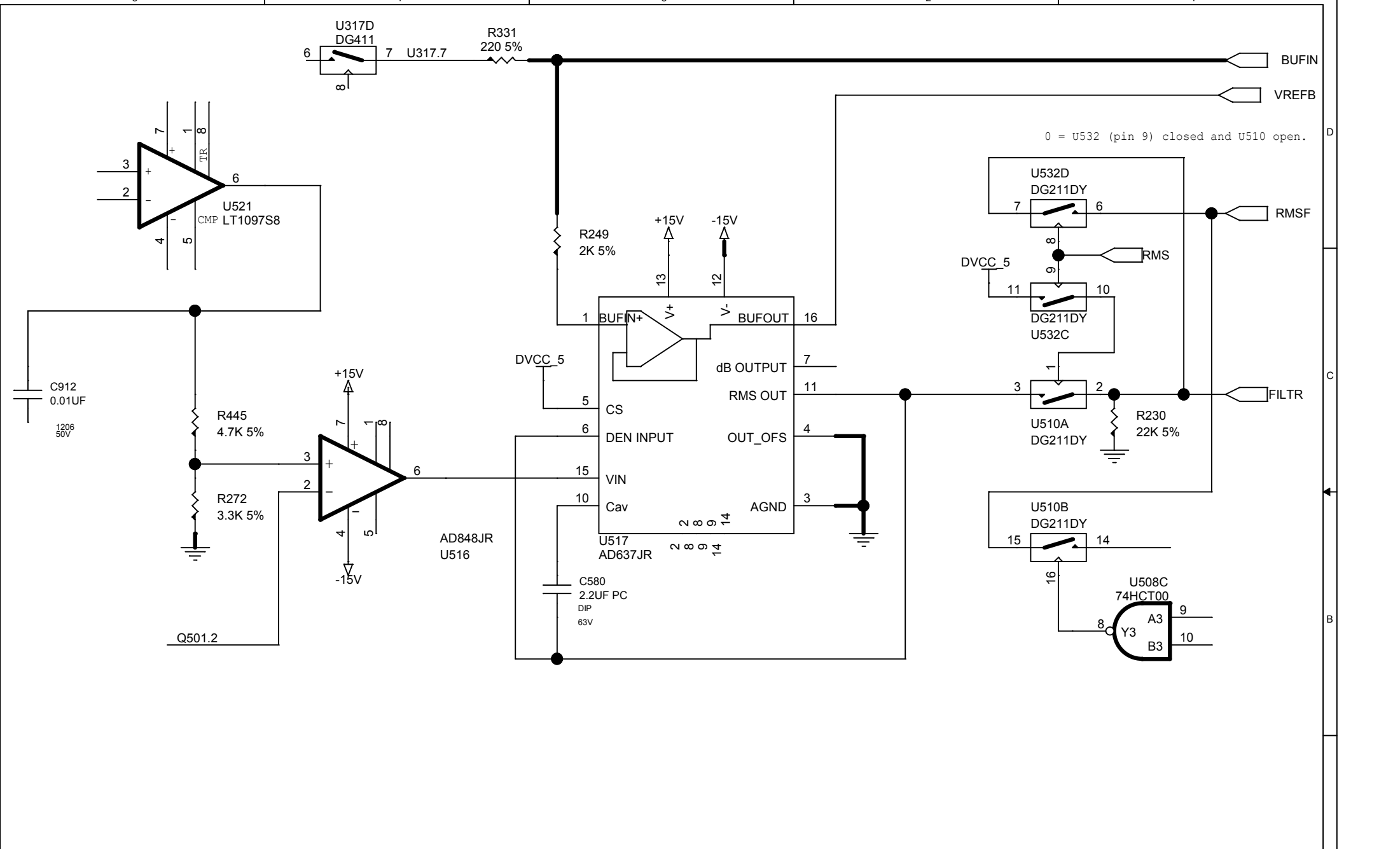
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0 = U532 (pin 9) closed and U510 open.

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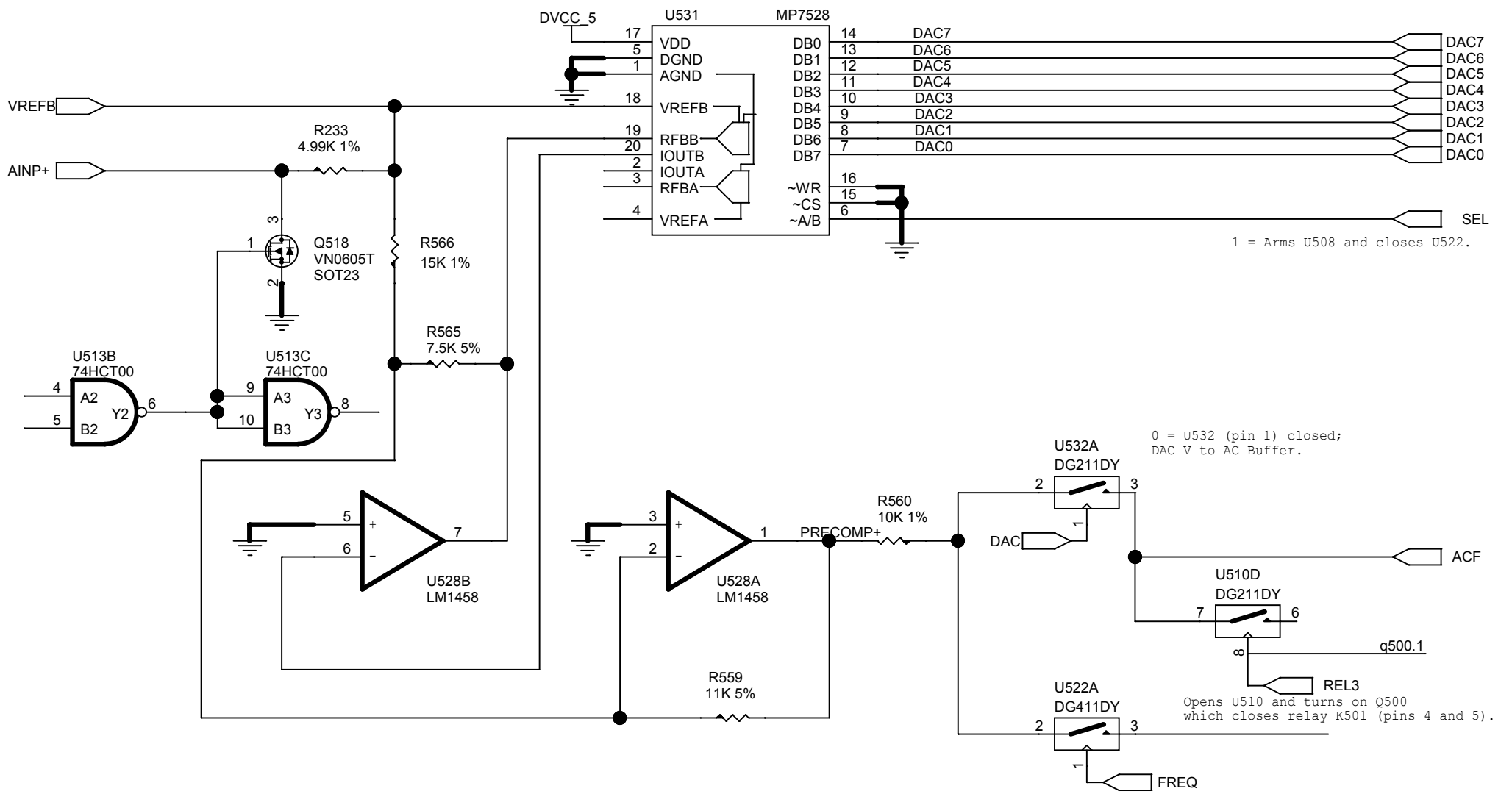
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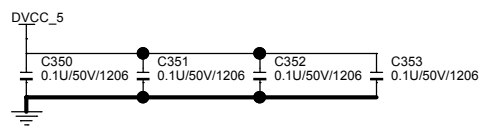
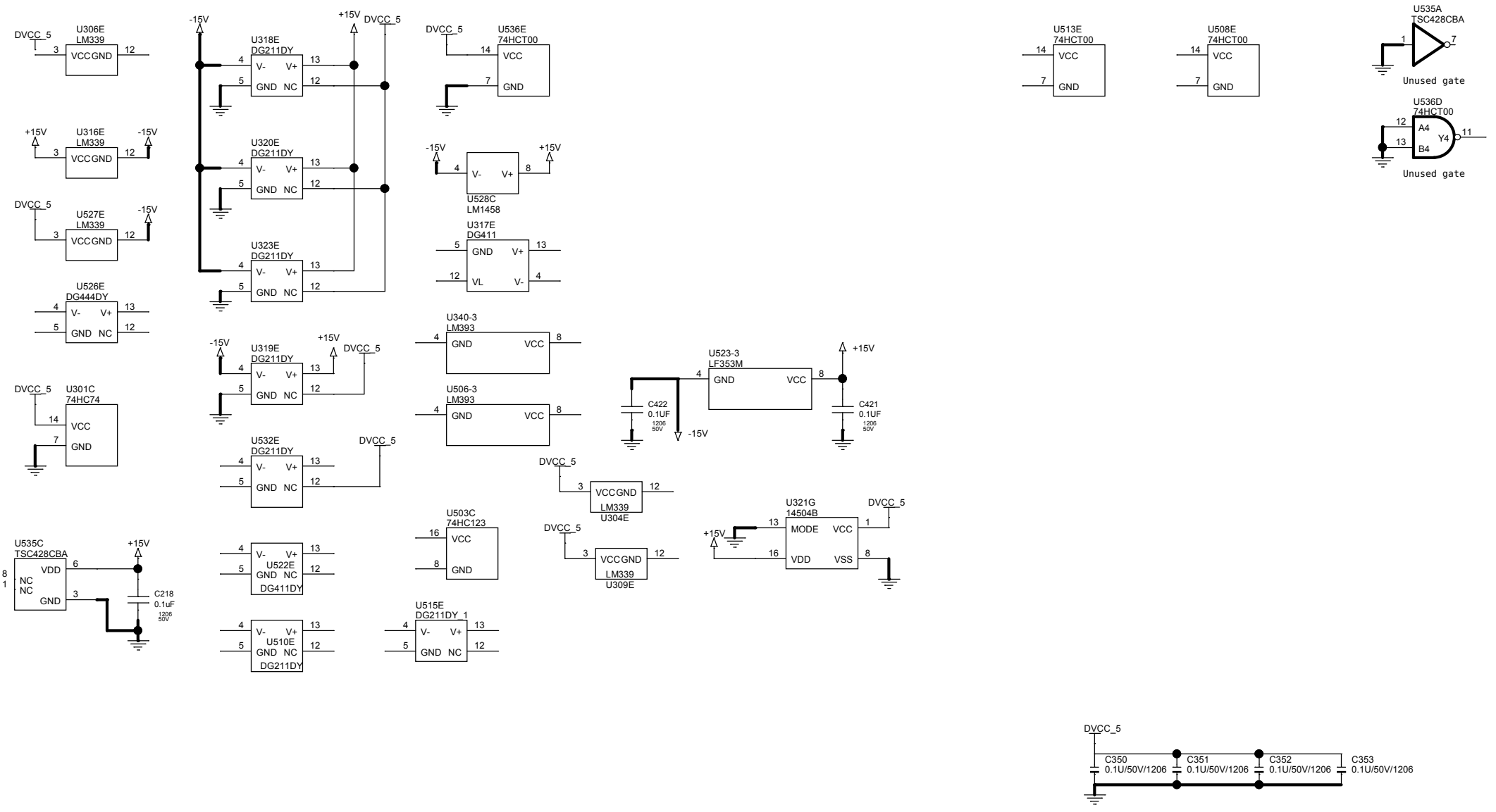


1 = Arms U508 and closes U522.

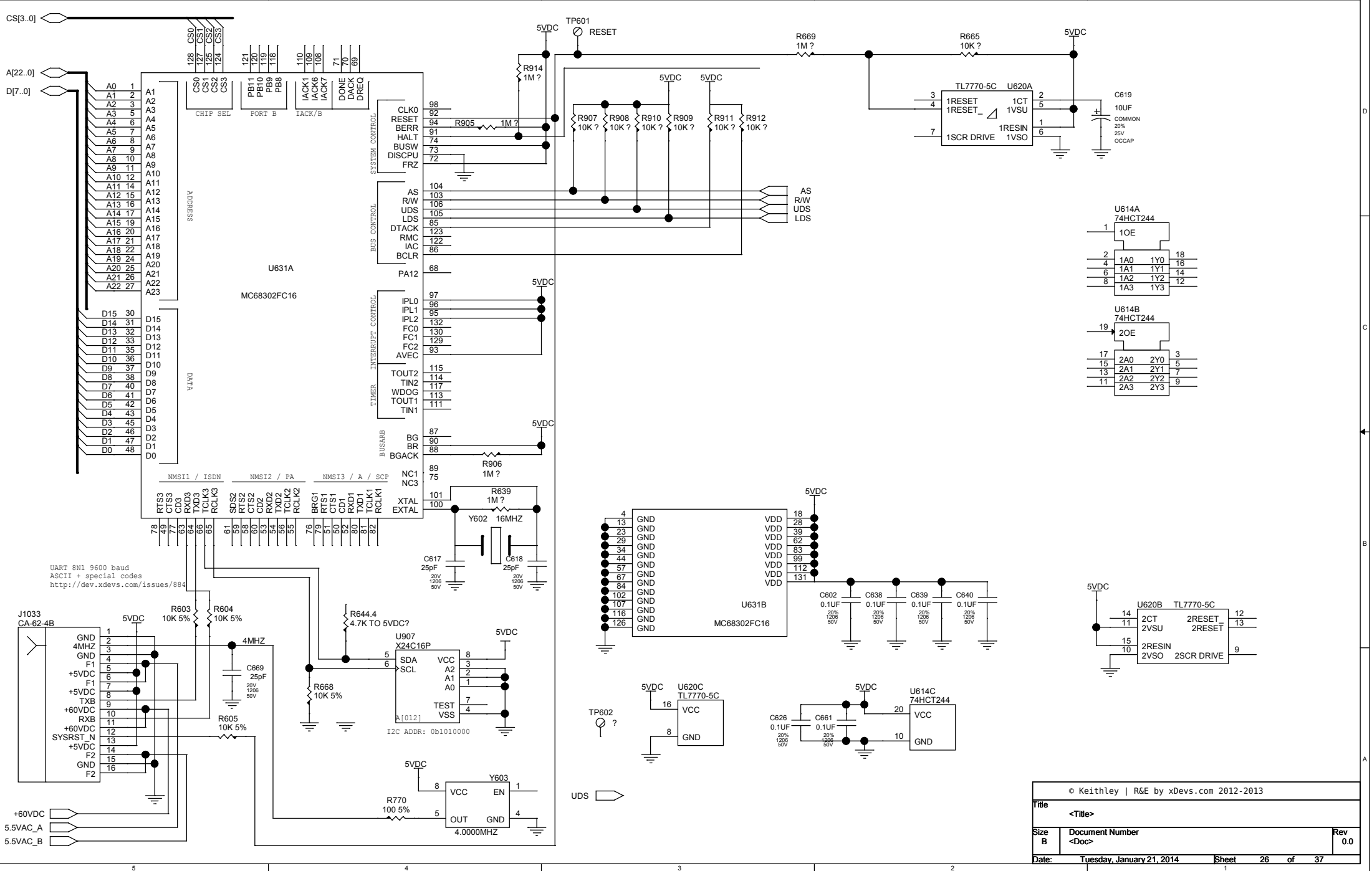
0 = U532 (pin 1) closed;
DAC V to AC Buffer.

Opens U510 and turns on Q500
which closes relay K501 (pins 4 and 5).

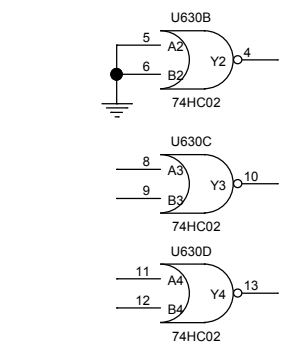
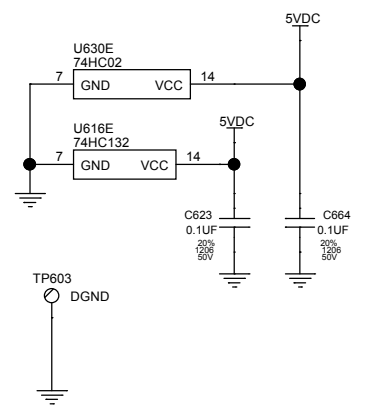
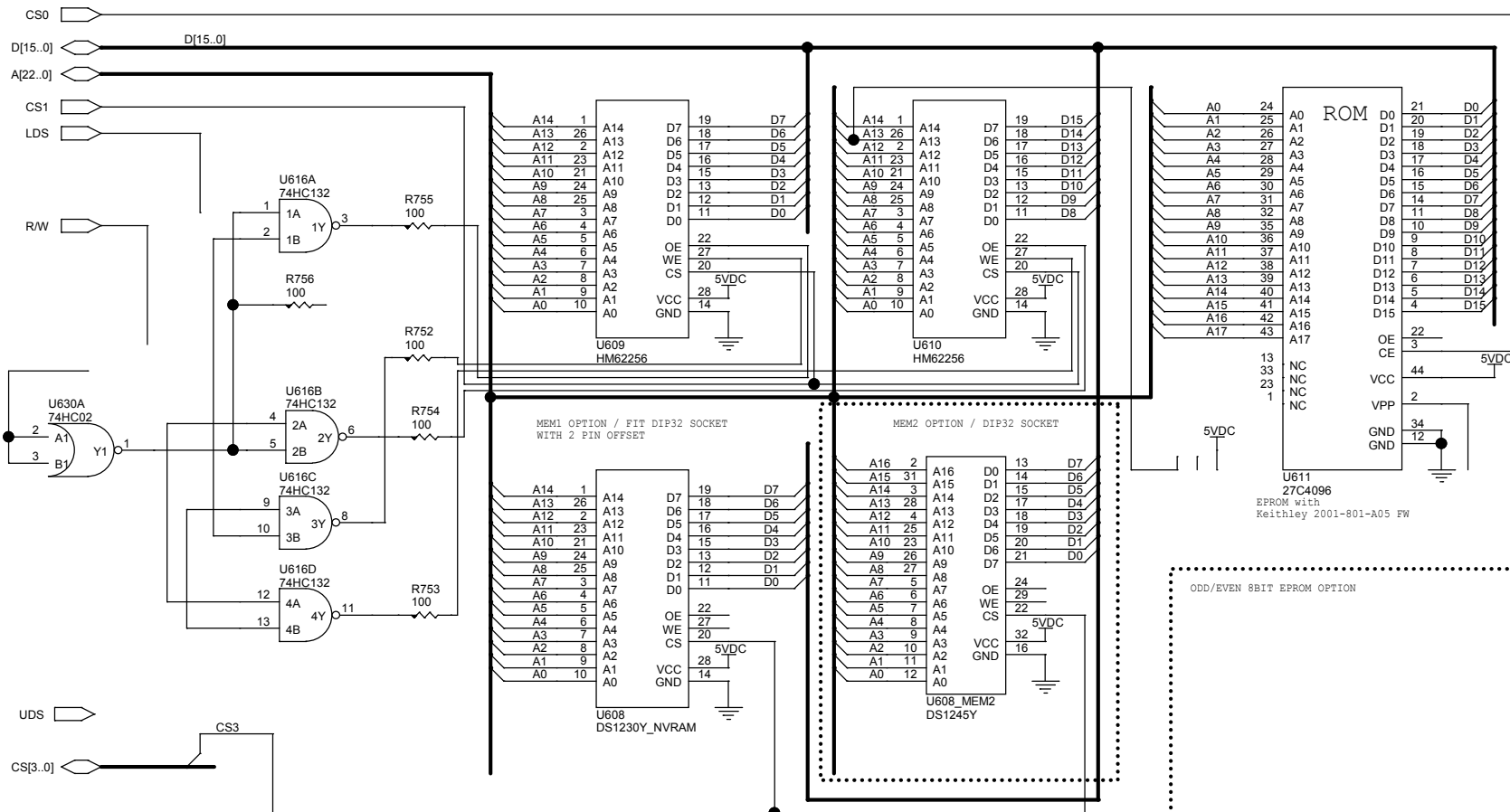
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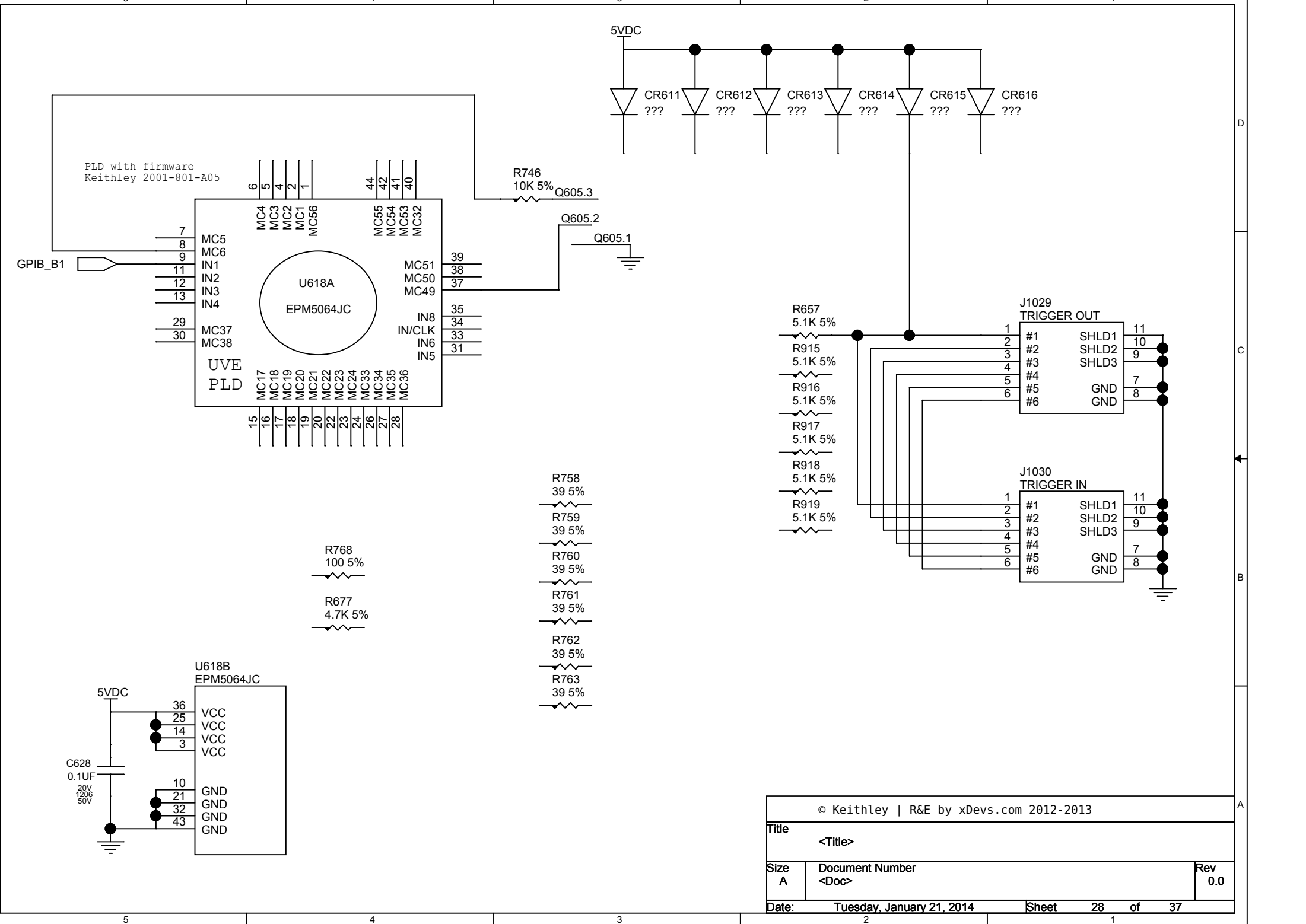
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Подключение памяти не проверял,
нарисовал согласно требованиям даташита на
процессор, руководствуясь здравой логикой

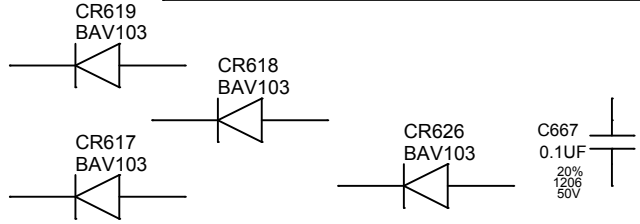
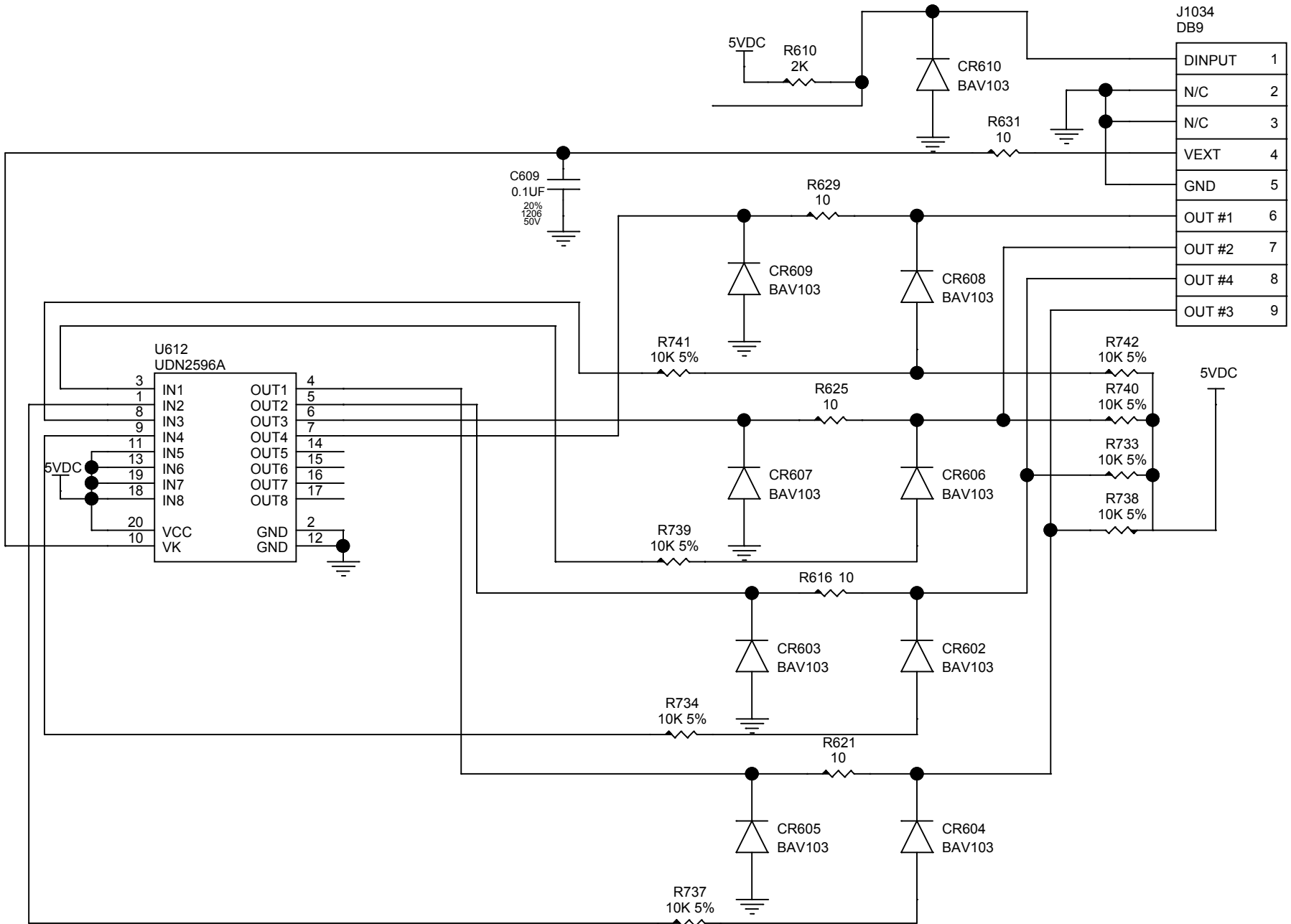


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Title Keithley 2001 Digital board SRAM/NVRAM and ROM		
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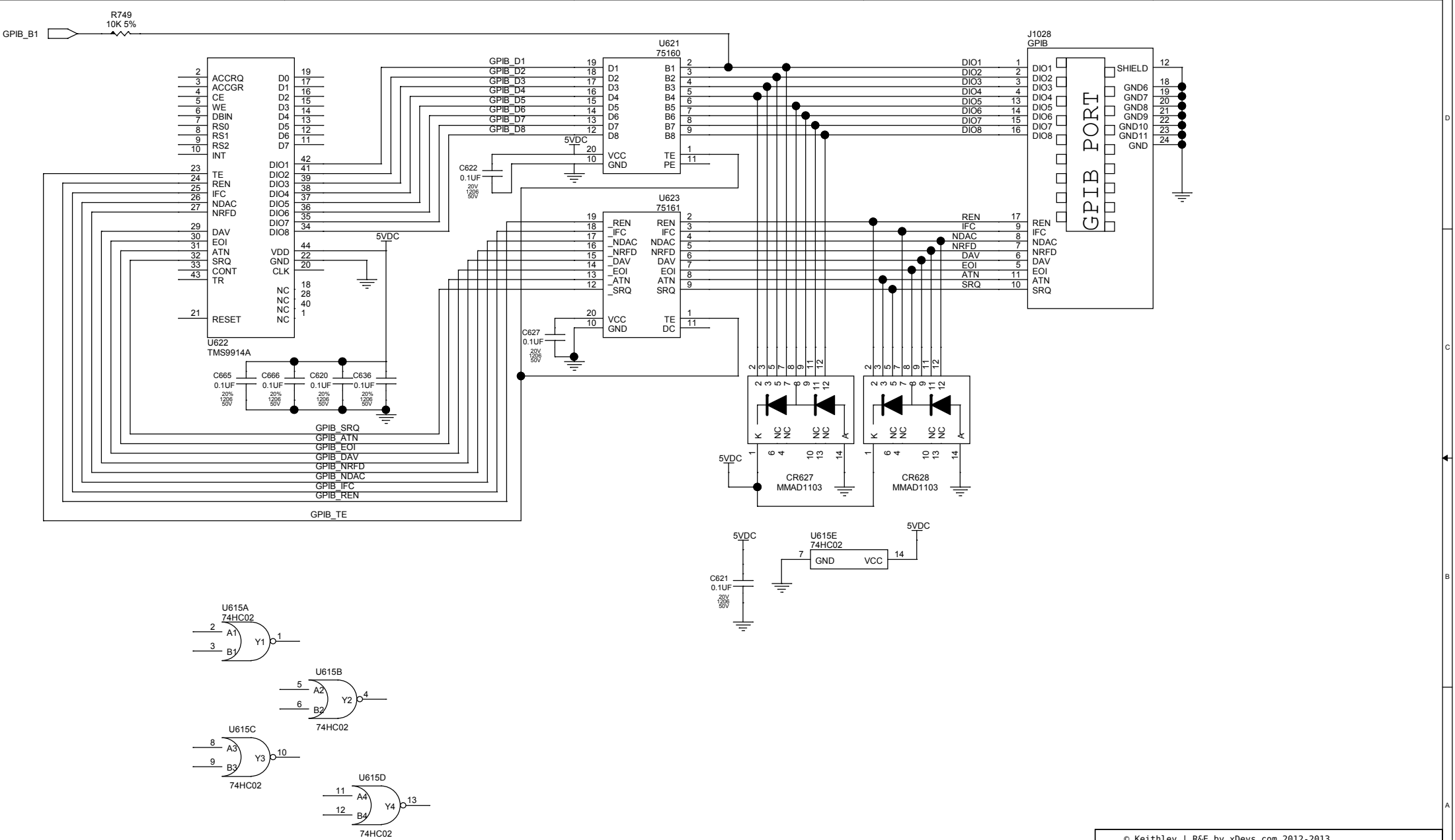


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J1034 DB9	
DINPUT	1
N/C	2
N/C	3
VEXT	4
GND	5
OUT #1	6
OUT #2	7
OUT #4	8
OUT #3	9

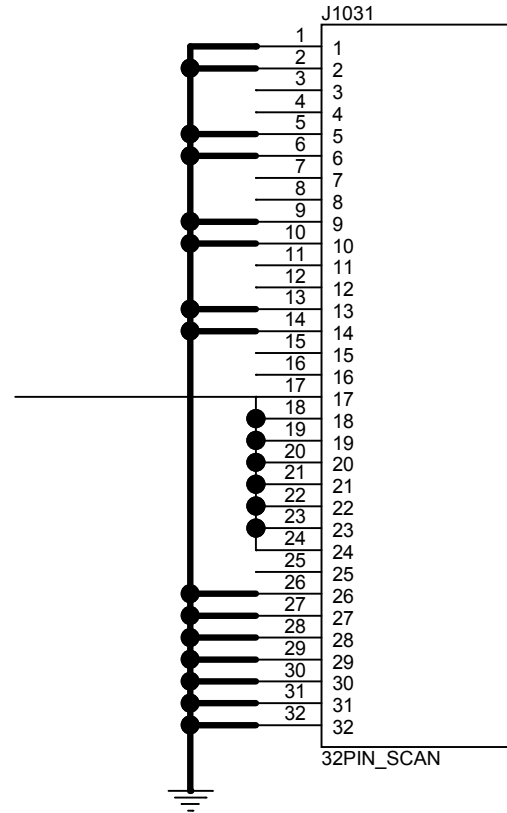


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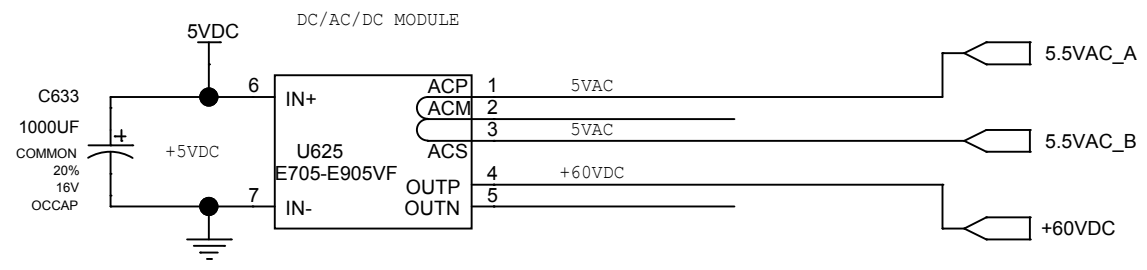
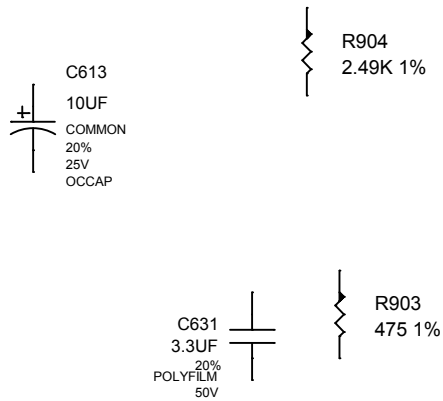
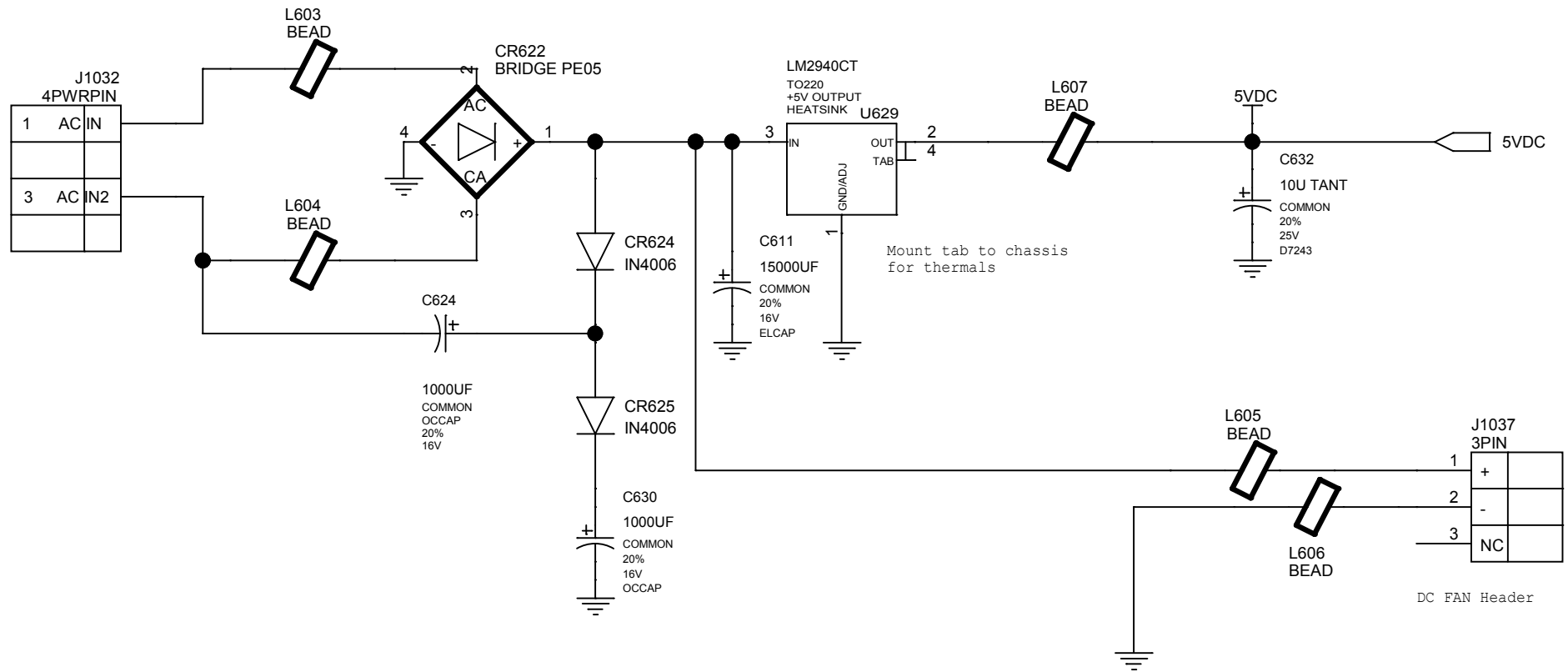


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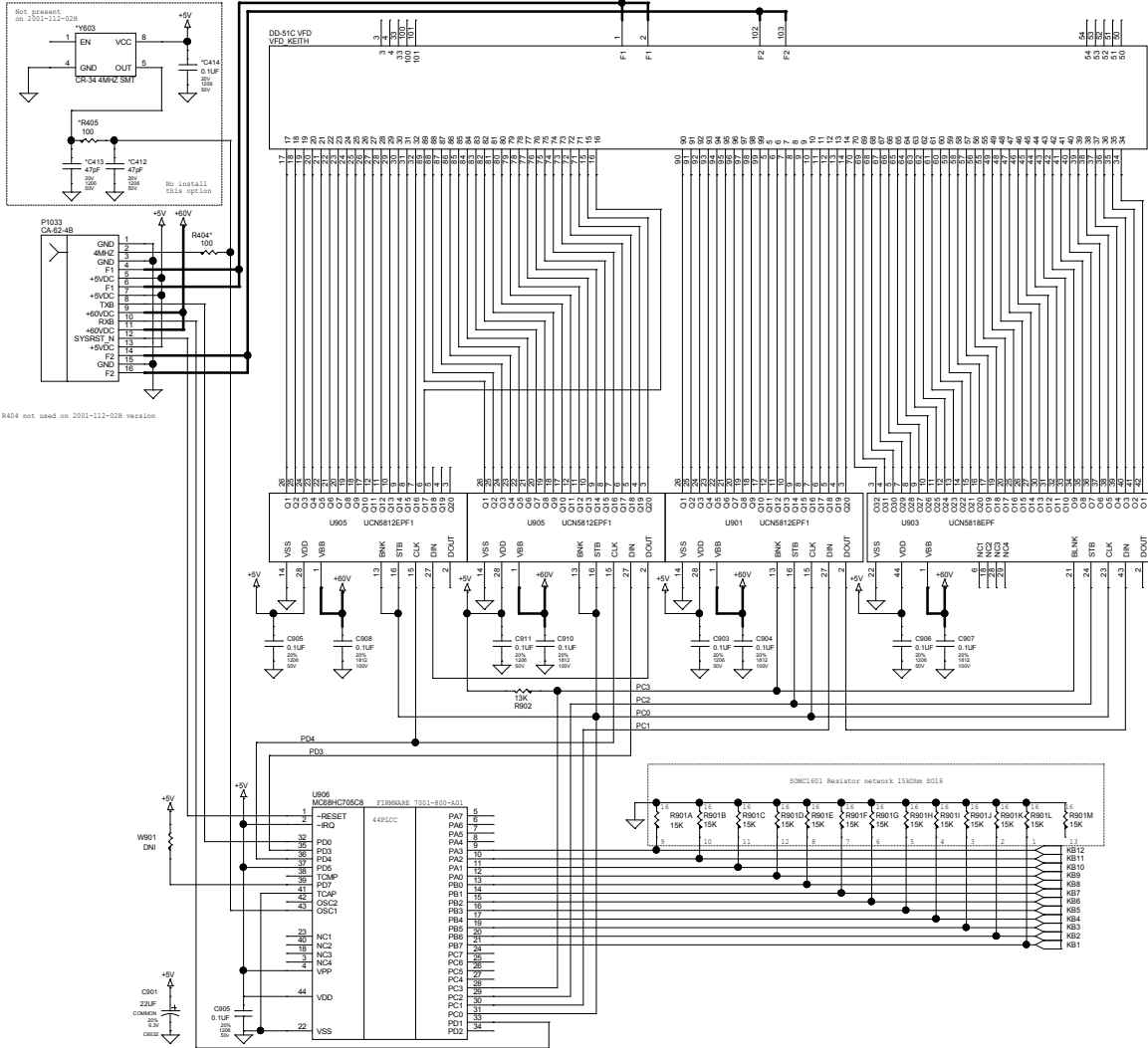
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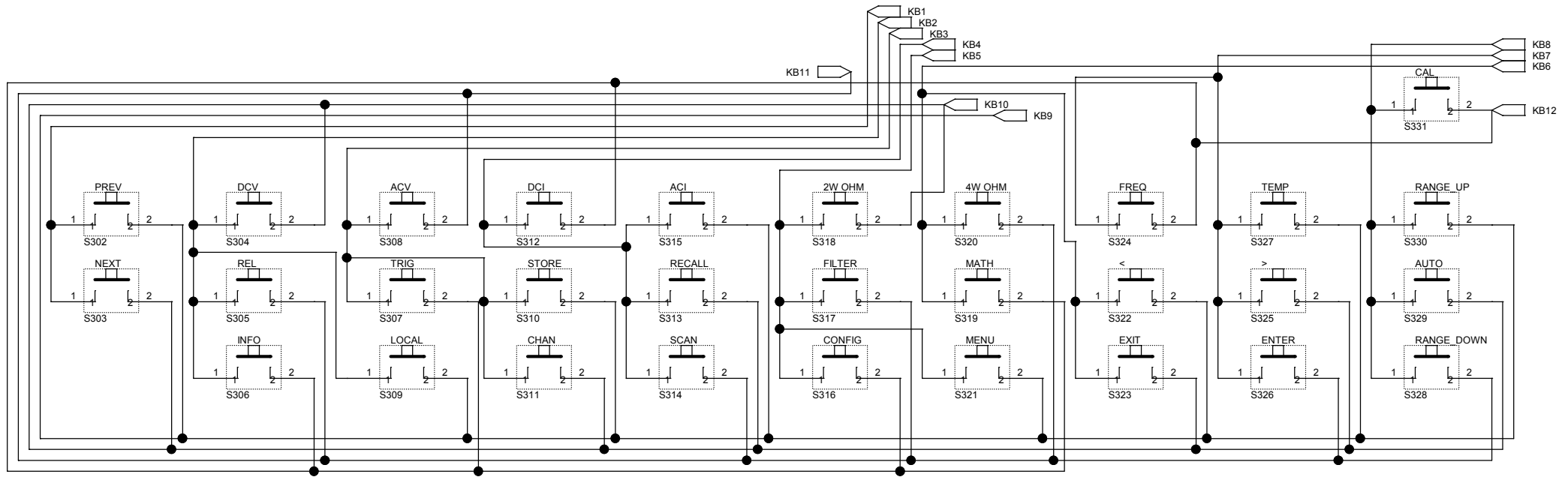
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Title digital board power supply		
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* R404 not used on 2001-112-028 version



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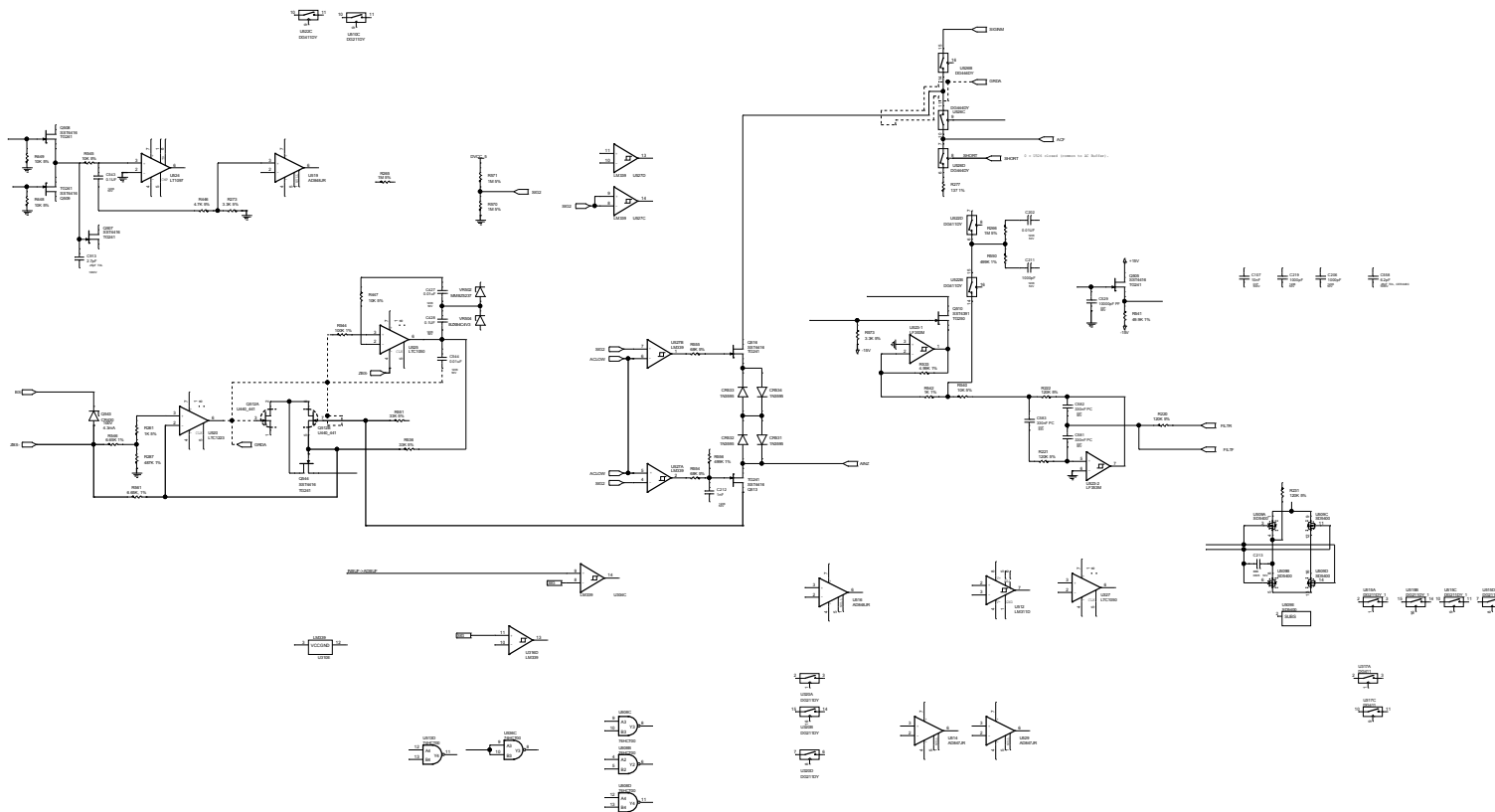
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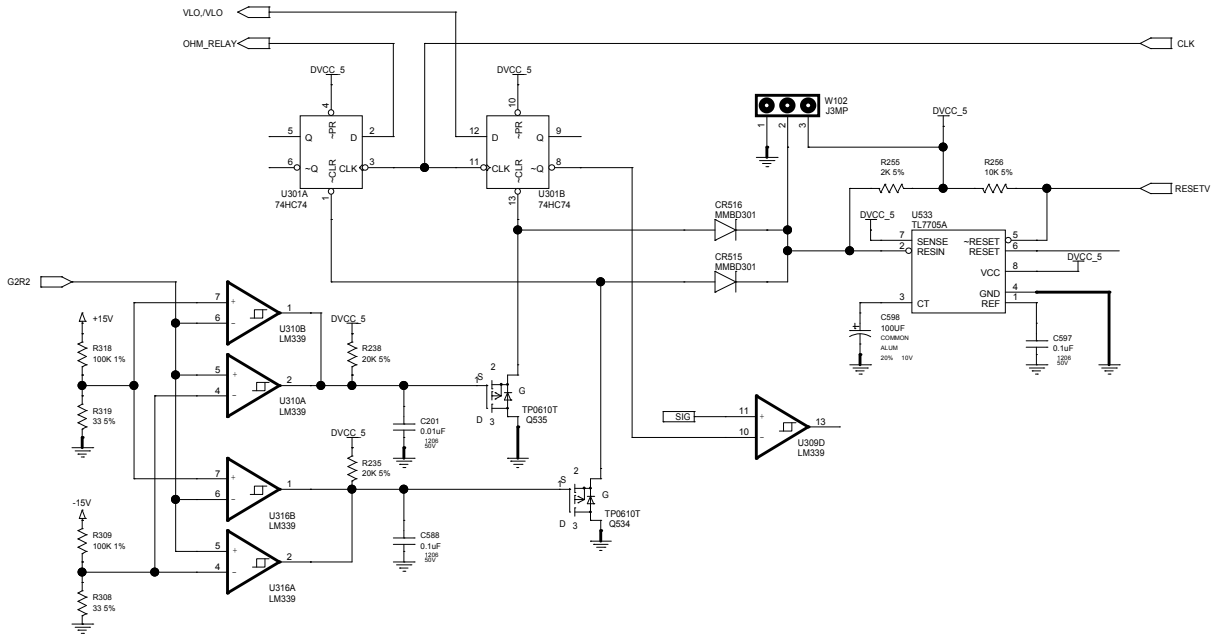
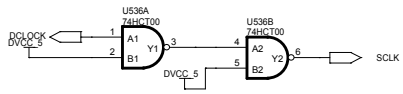
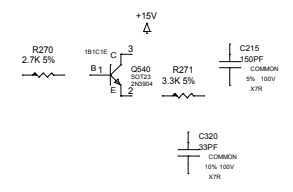
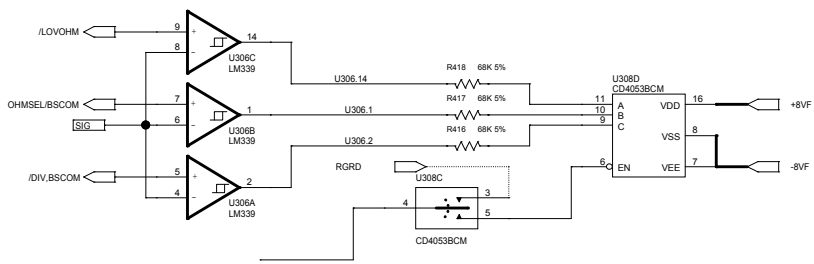
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