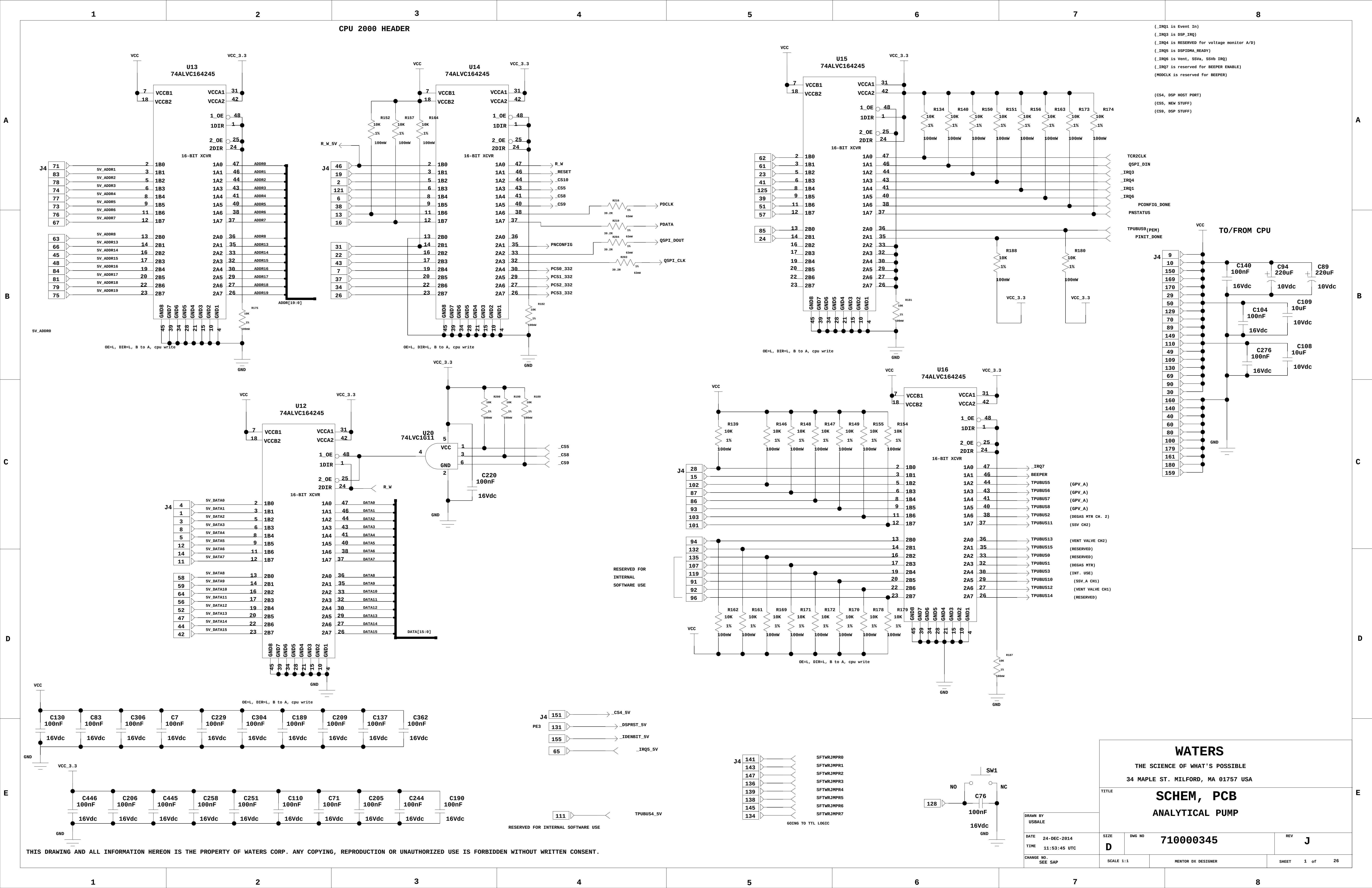
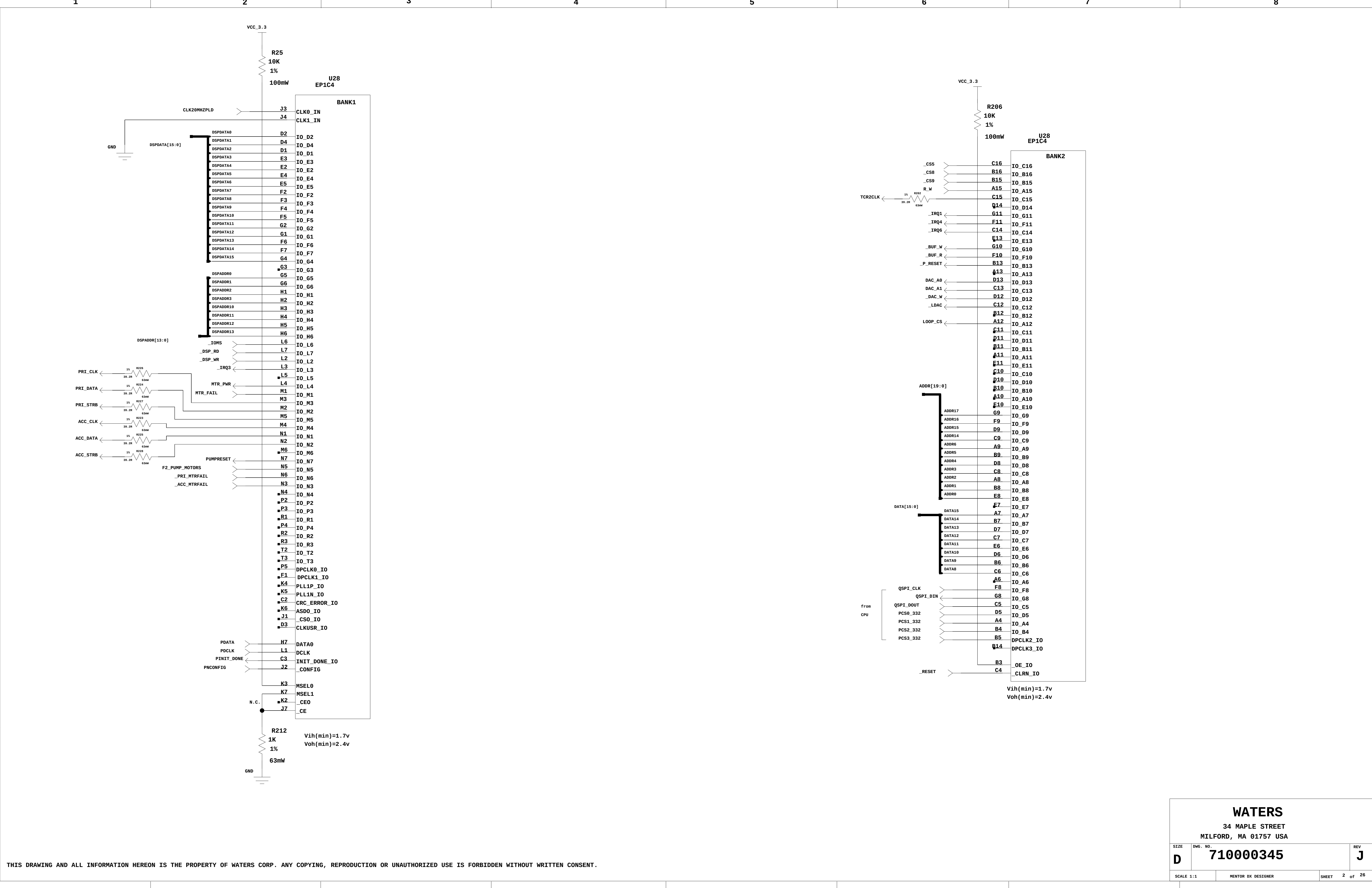
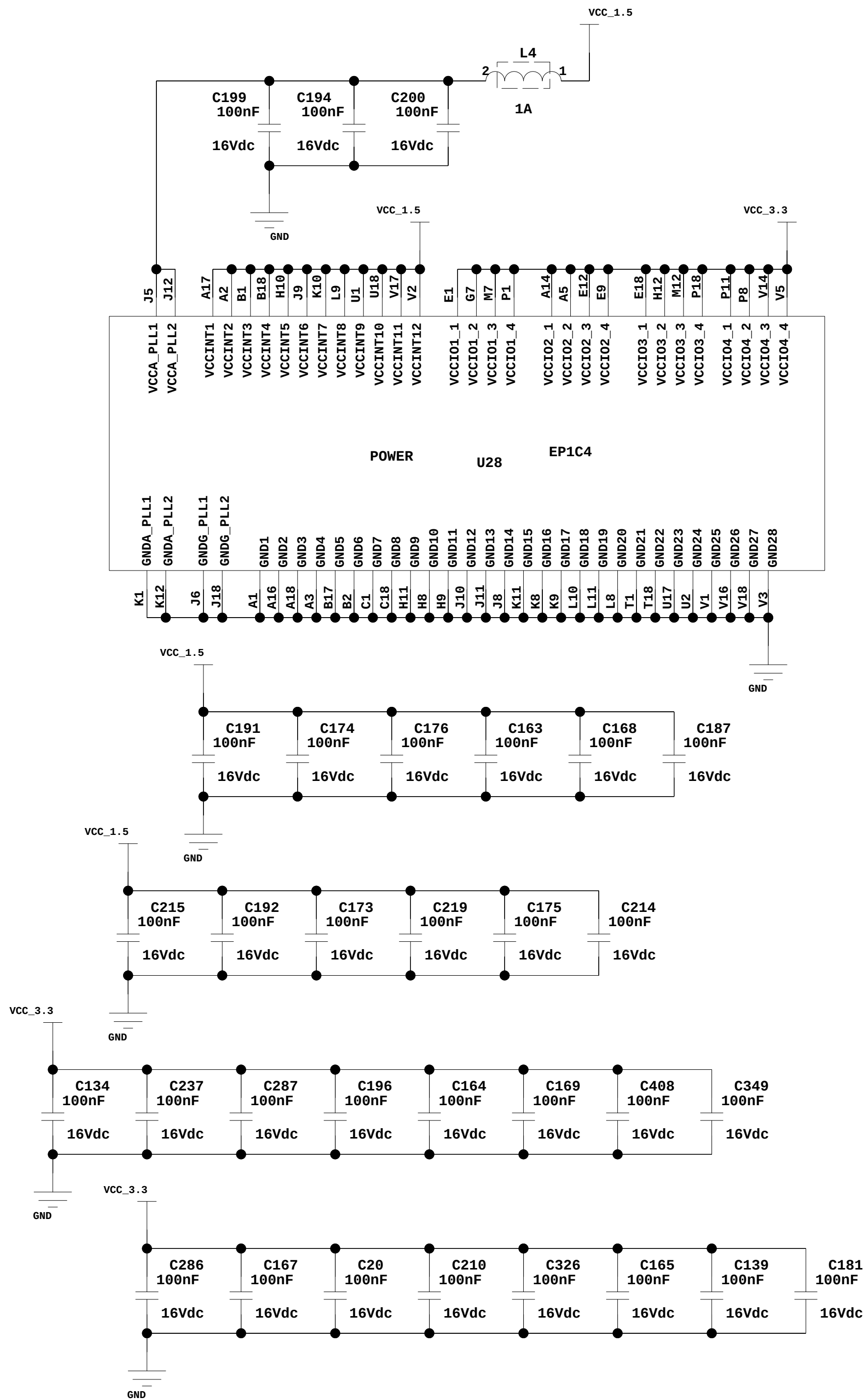




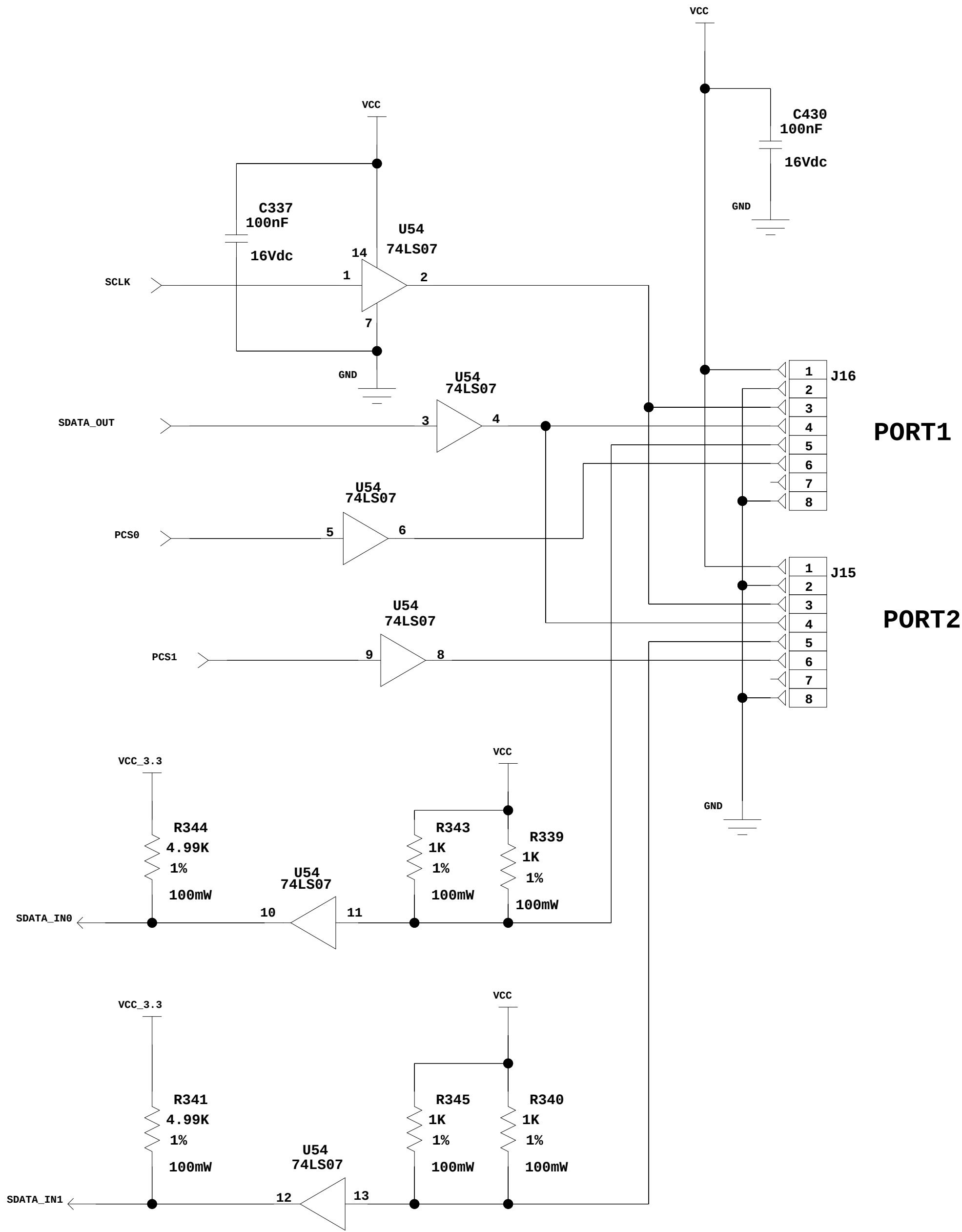


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CYCLONE POWER CONNECTIONS



QSPI STUFF



A

B

C

D

E

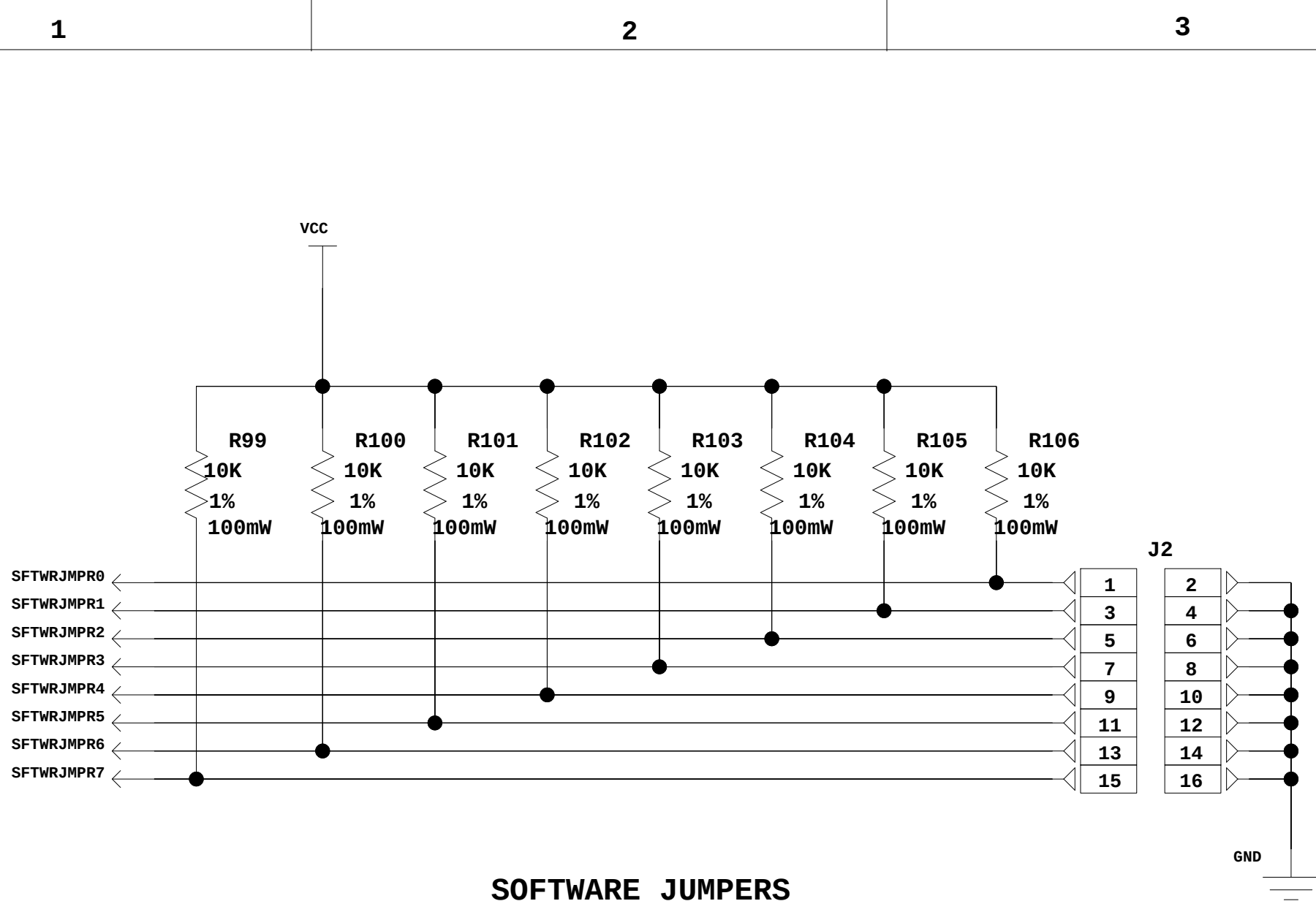
A

B

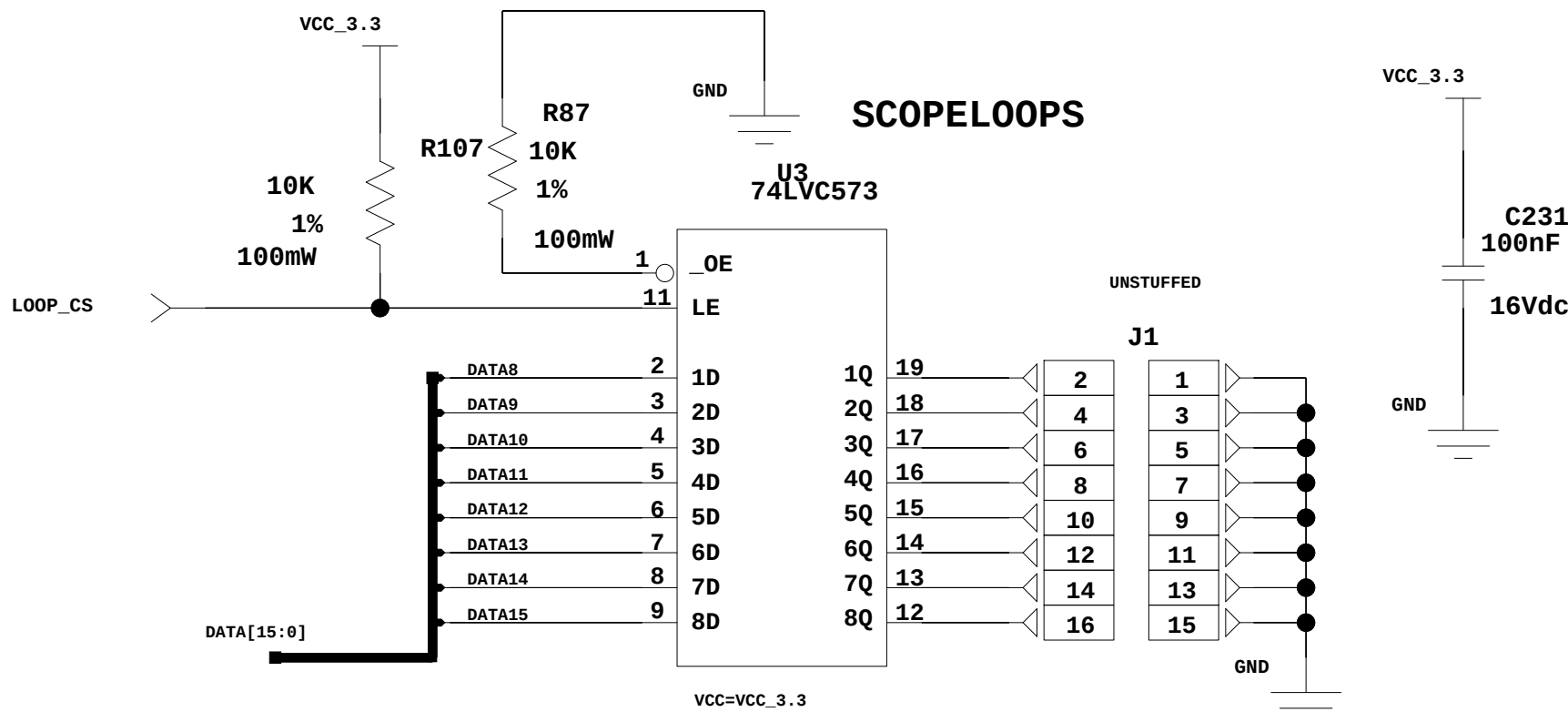
C

D

E

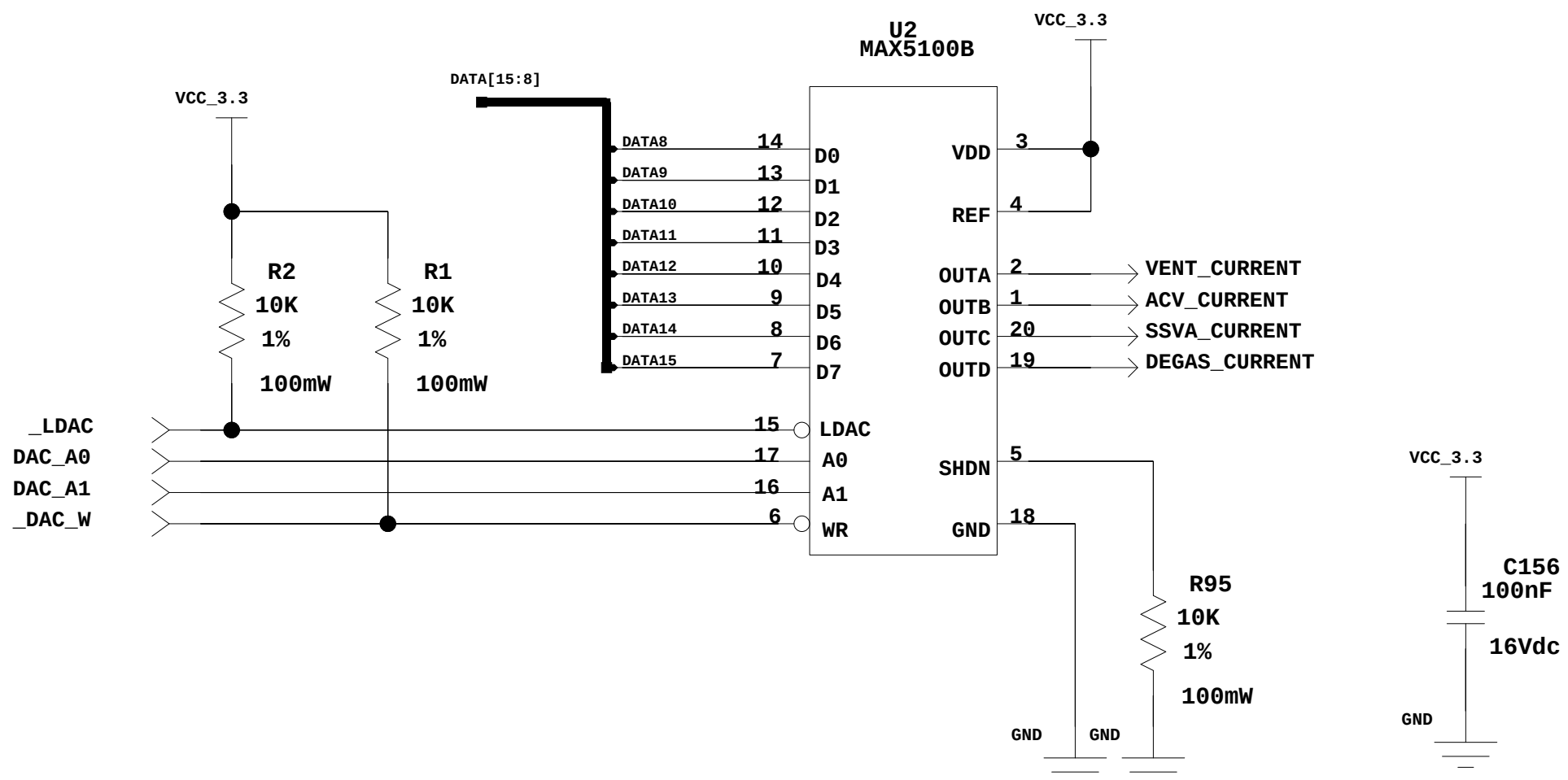


SOFTWARE JUMPERS

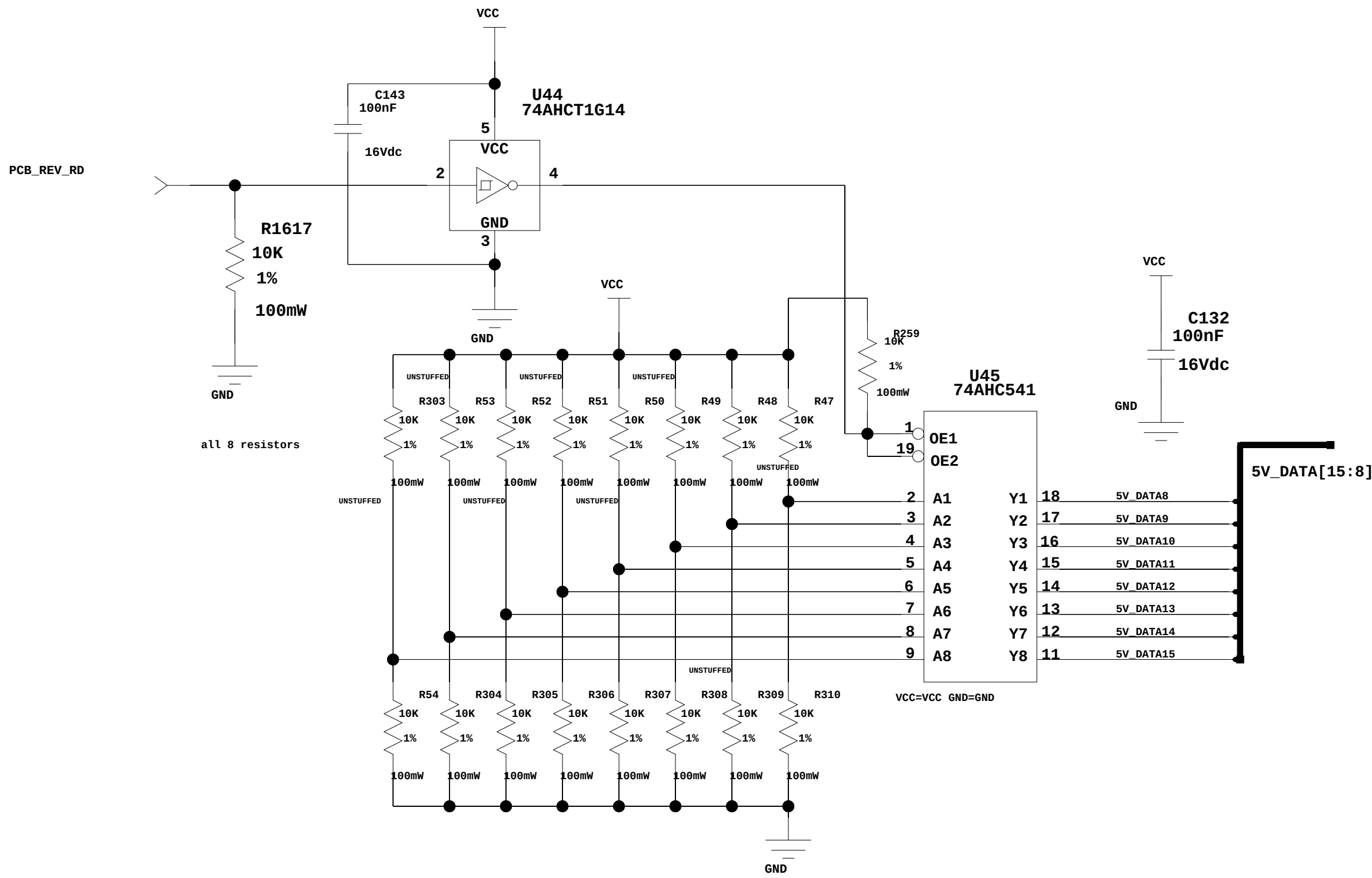


SCOPELOOPS

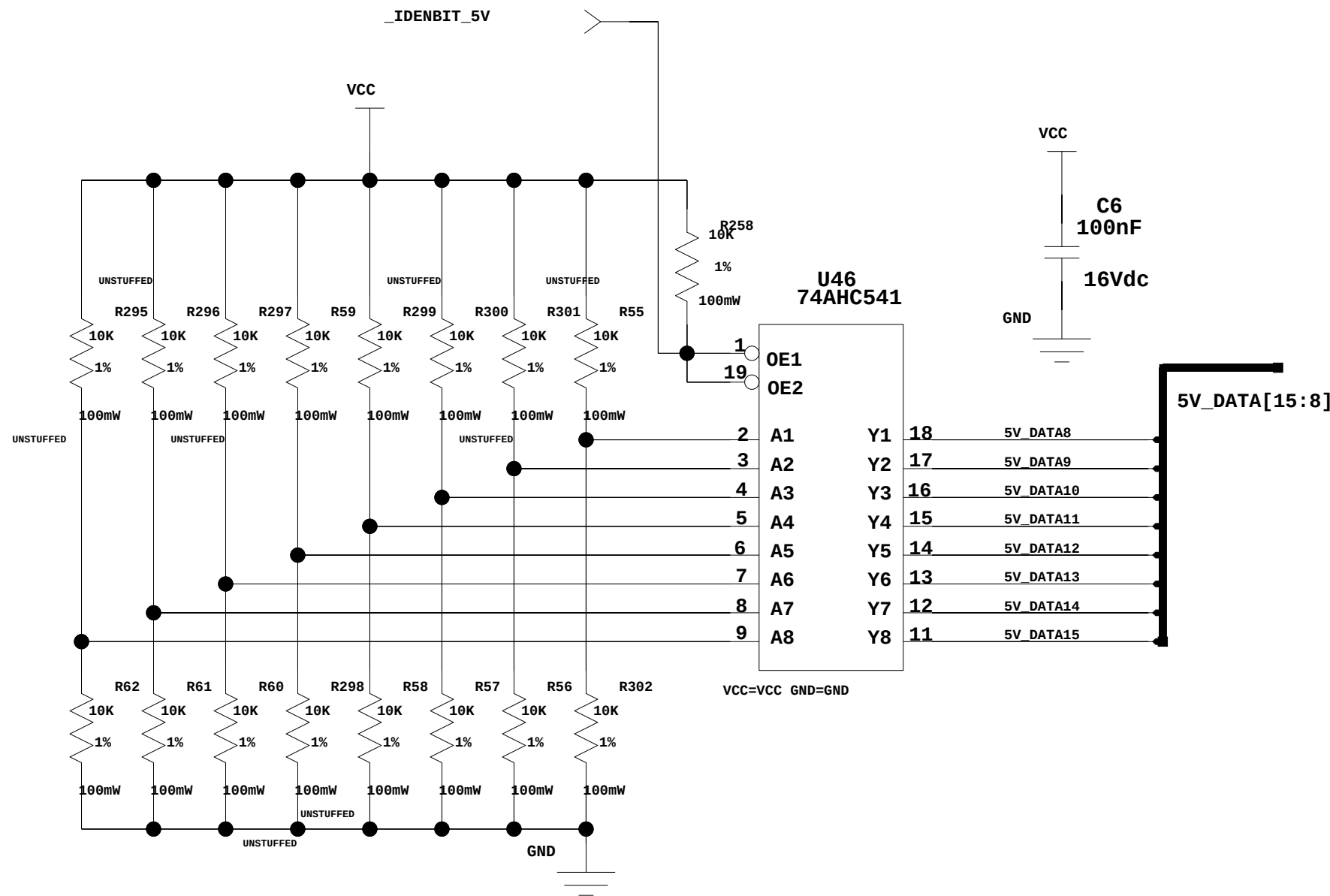
need to scale currents with new 3.3v ref. voltage



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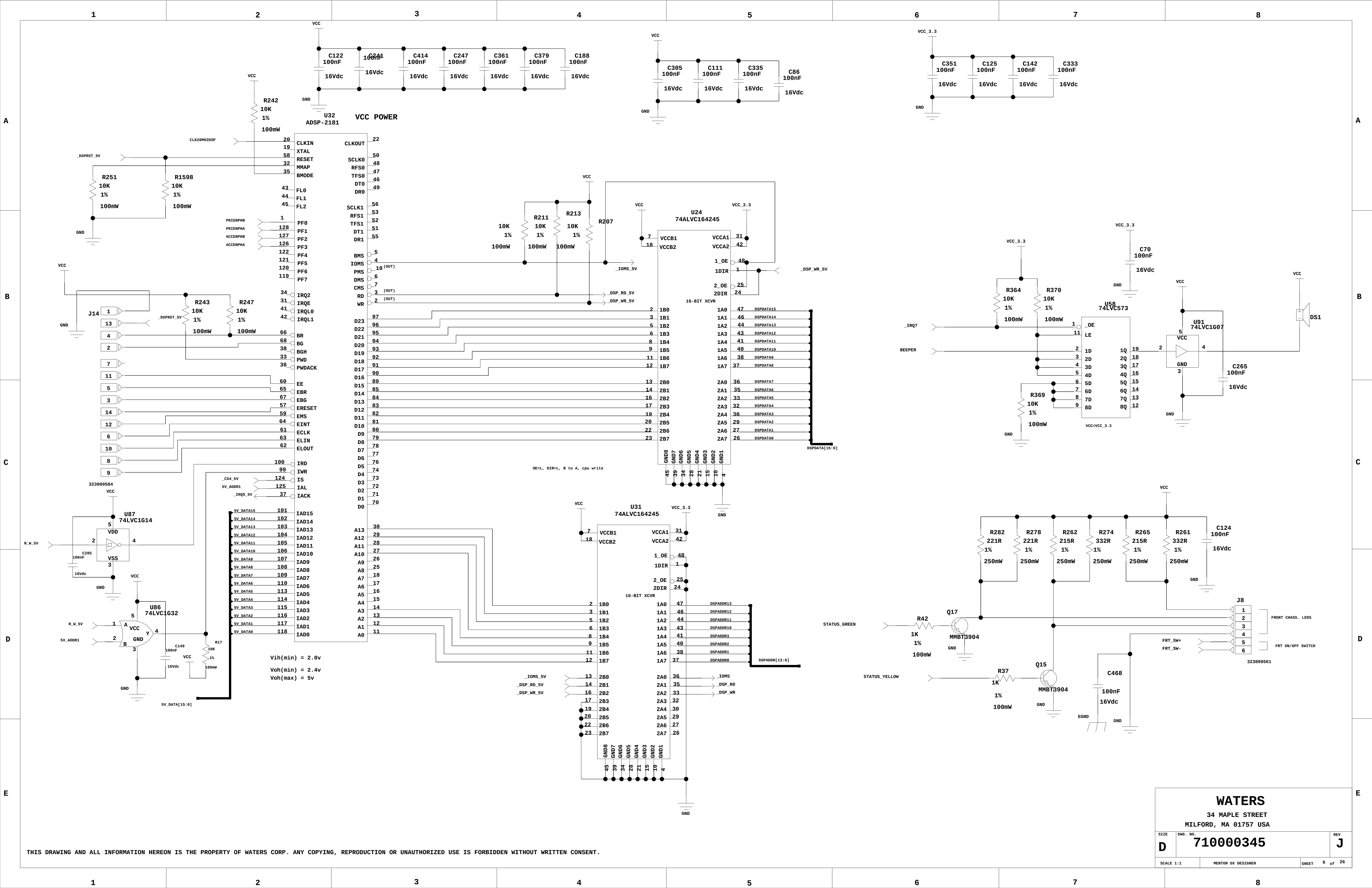


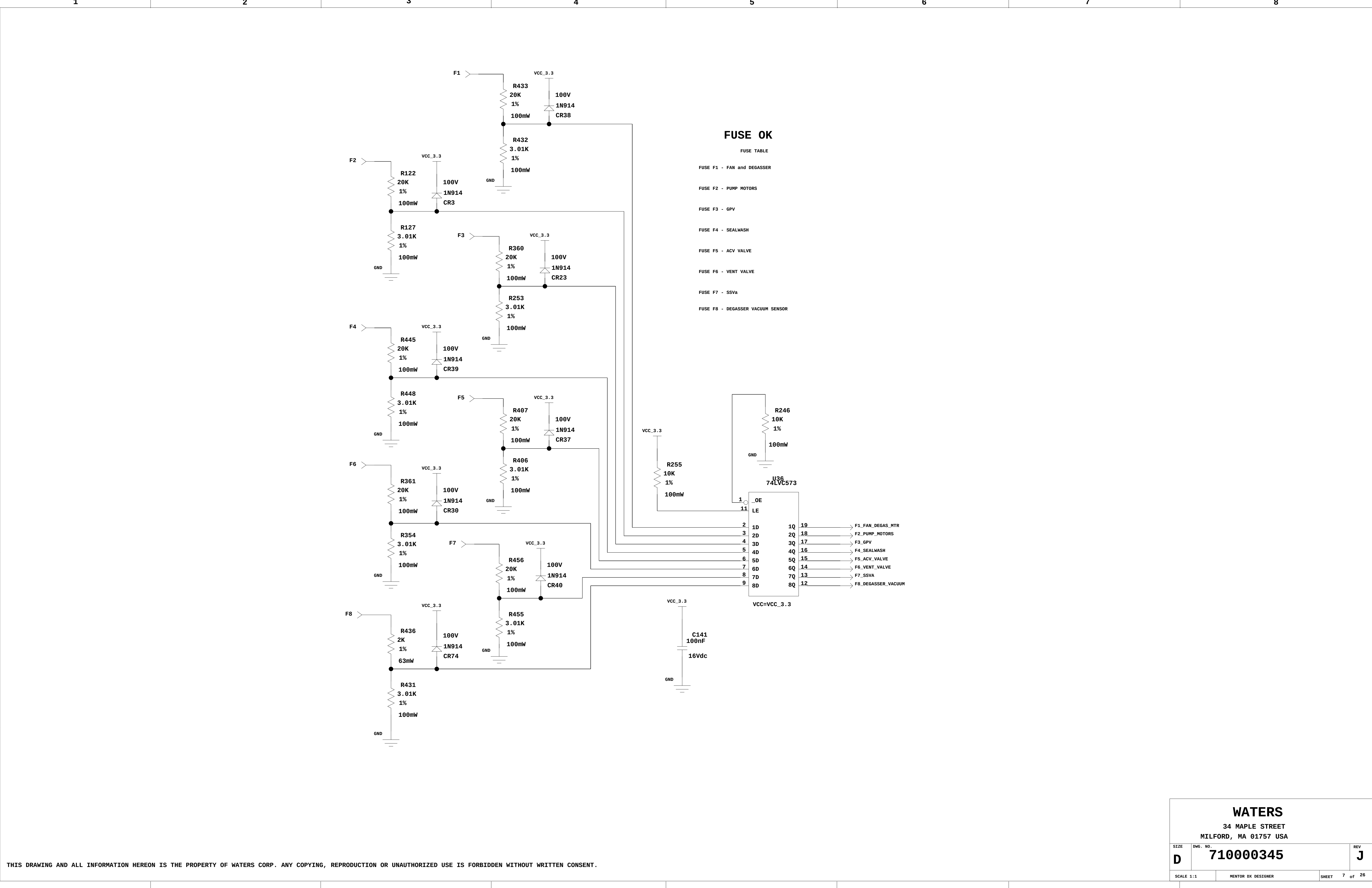
PCB_REV REGISTER IS 0X02



ID REGISTER IS 0X18, 11000

WATERS		
34 MAPLE STREET		
MILFORD, MA 01757 USA		
SIZE	DWG. NO.	REV
D	710000345	J
SCALE 1:1		SHEET 5 of 26

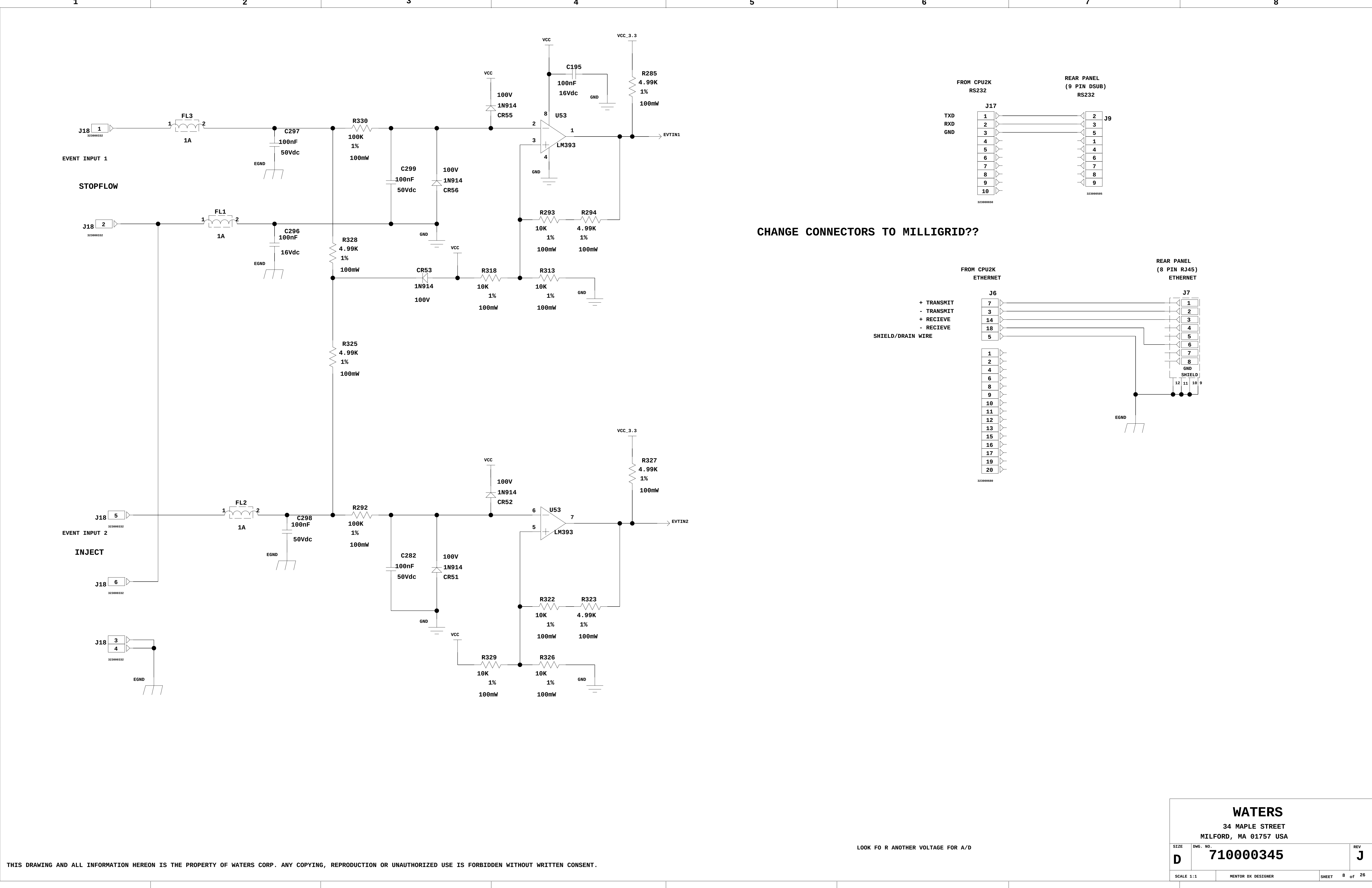




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D	710000345	J
SCALE 1:1		SHEET 7 of 26



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LOOK FO R ANOTHER VOLTAGE FOR A/D

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SIZE

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REV

D

710000345

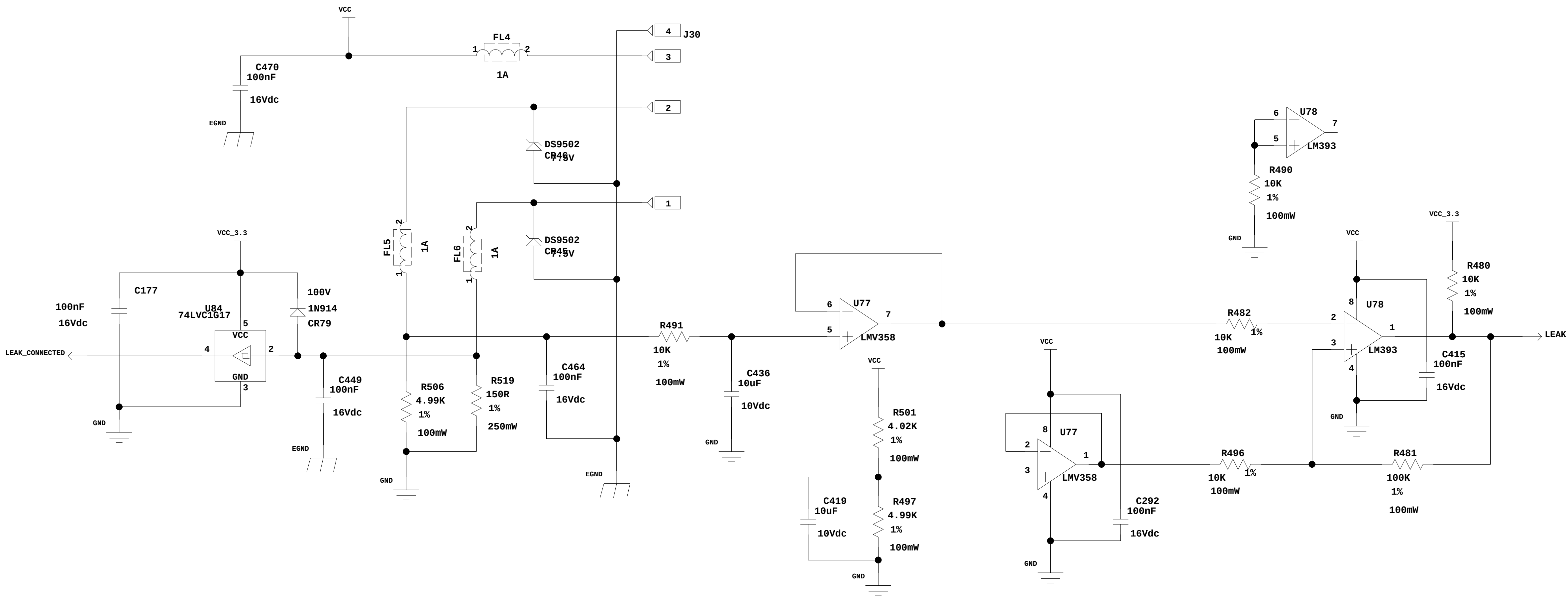
J

SCALE 1:1

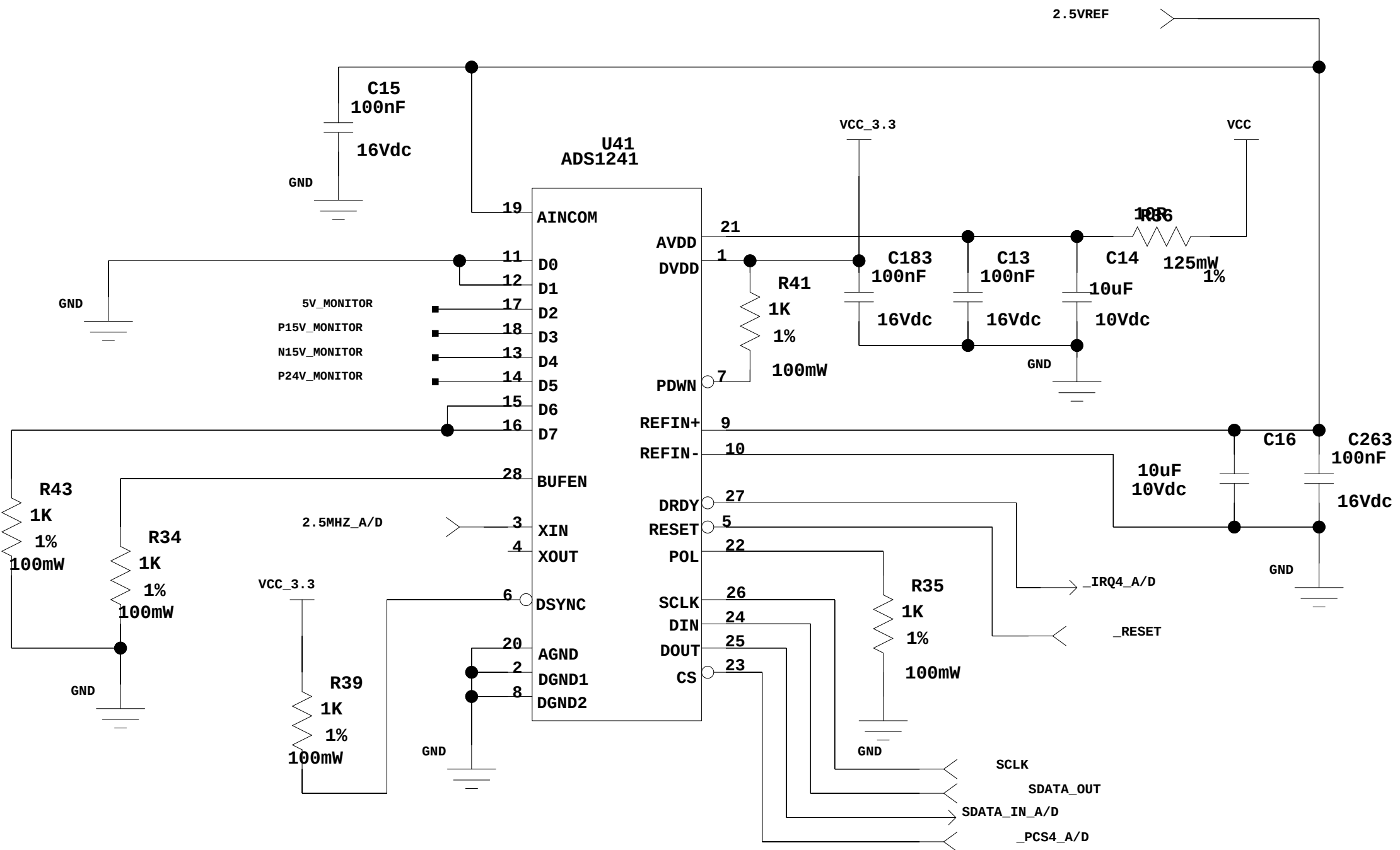
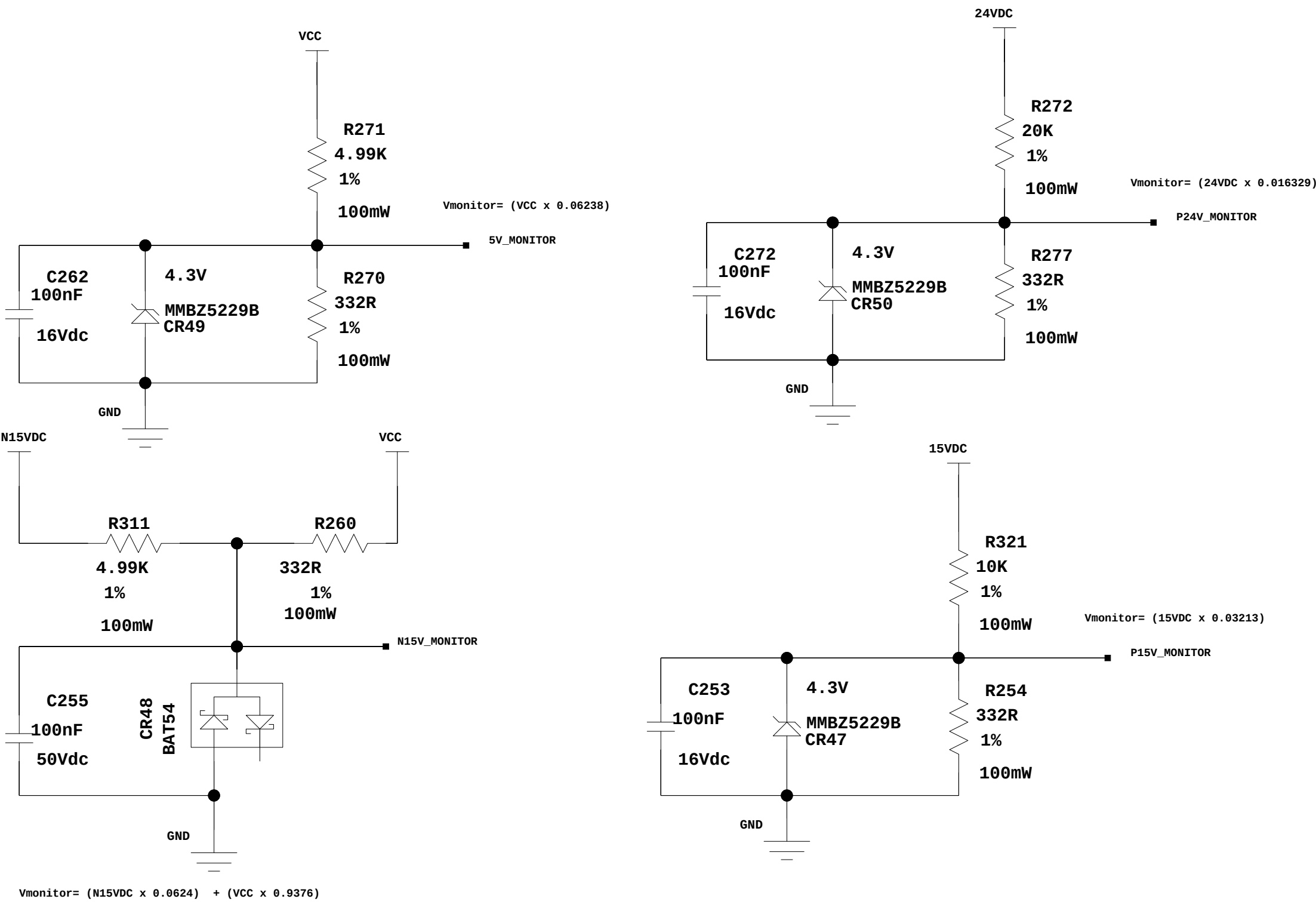
MENTOR DX DESIGNER

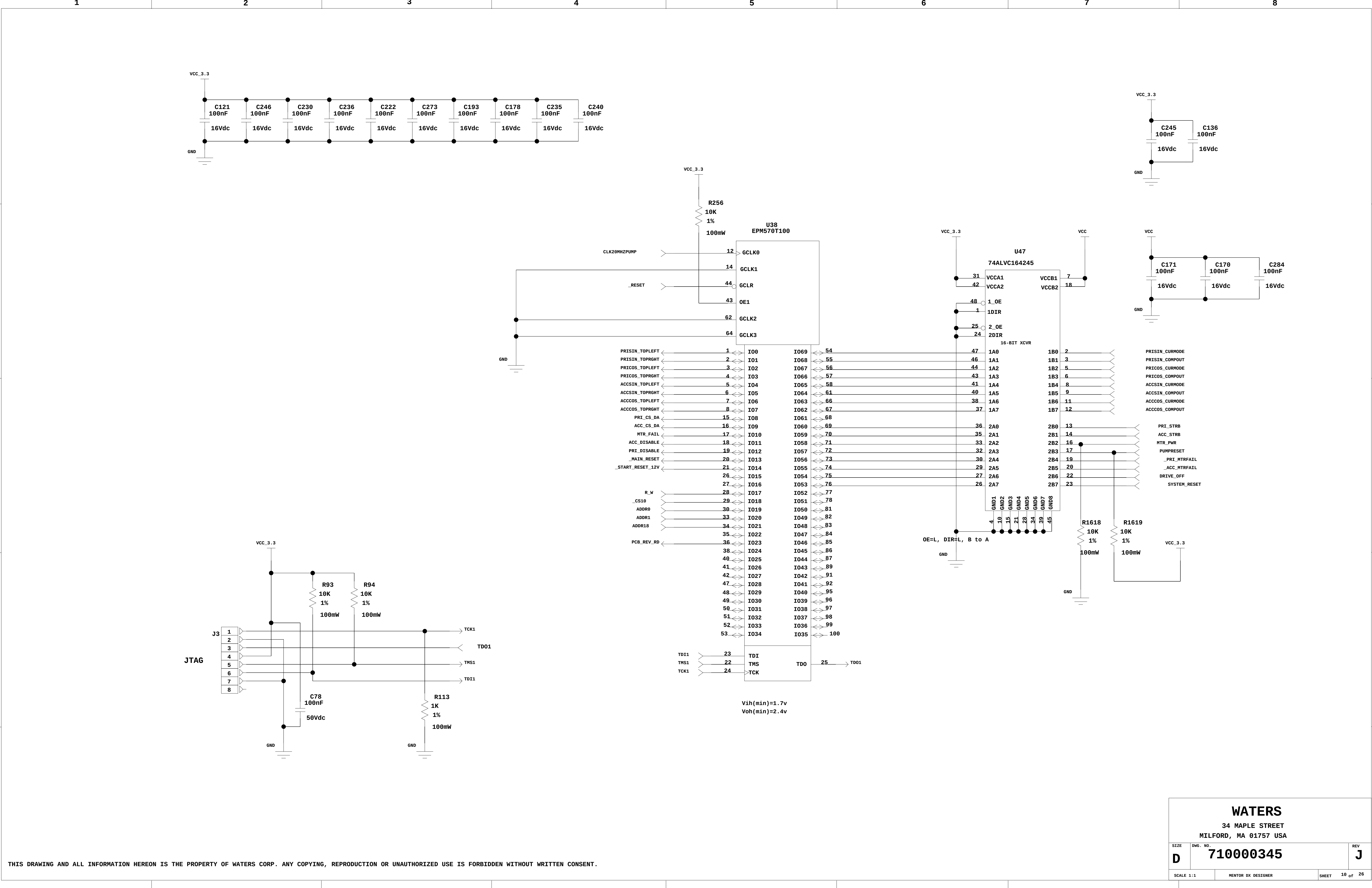
SHEET 8 of 26

LEAK DETECTOR CIRCUIT



LEAK SENSOR STATUS	LEAK_OUT
LEAK DETECTED	= 0 TO 2.5V
NO LEAK	= 2.5V TO VCC





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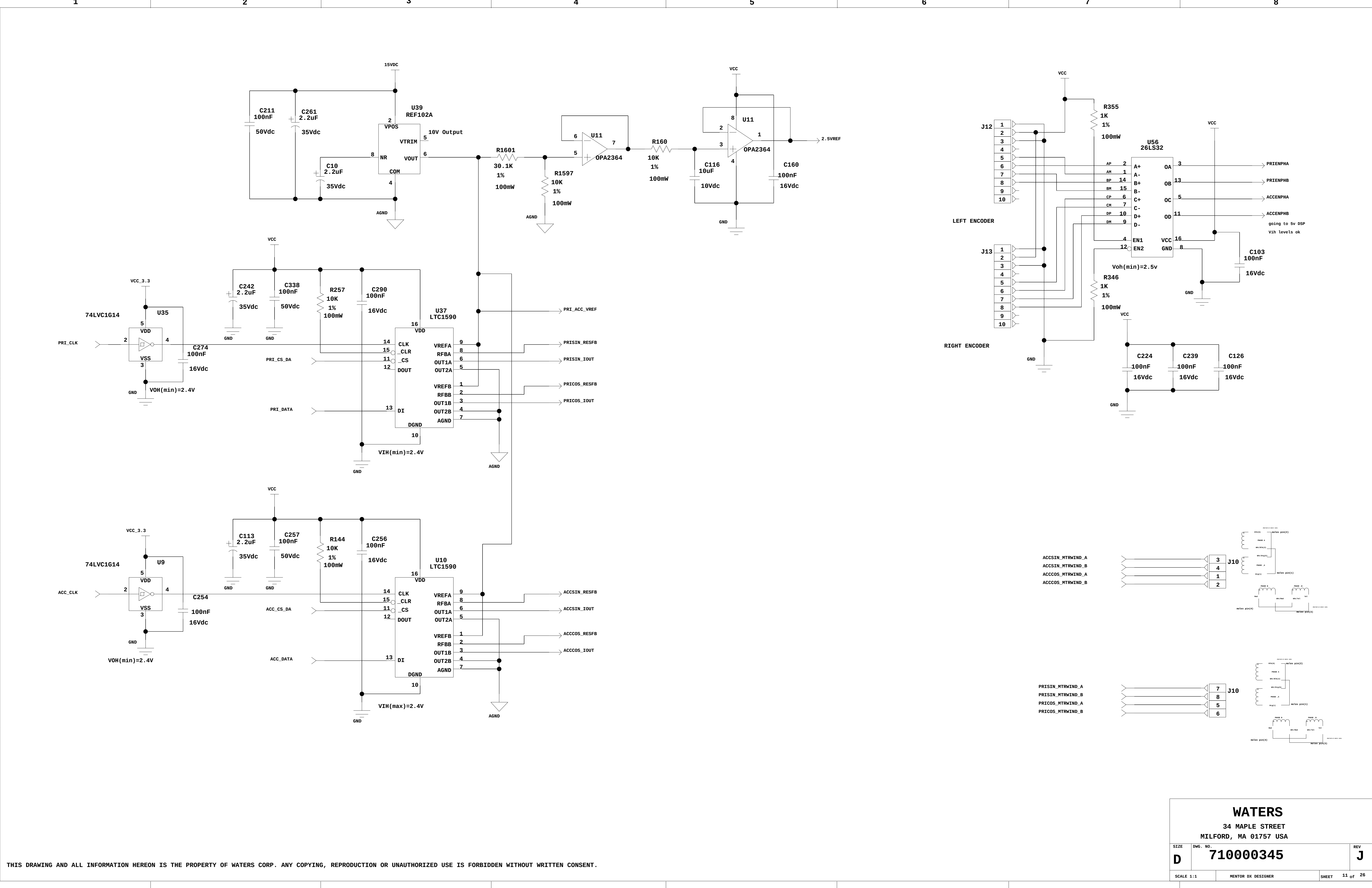
REV

J

SCALE 1:1

MENTOR DX DESIGNER

SHEET 19 of 26



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WATERS

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SIZE

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710000345

REV

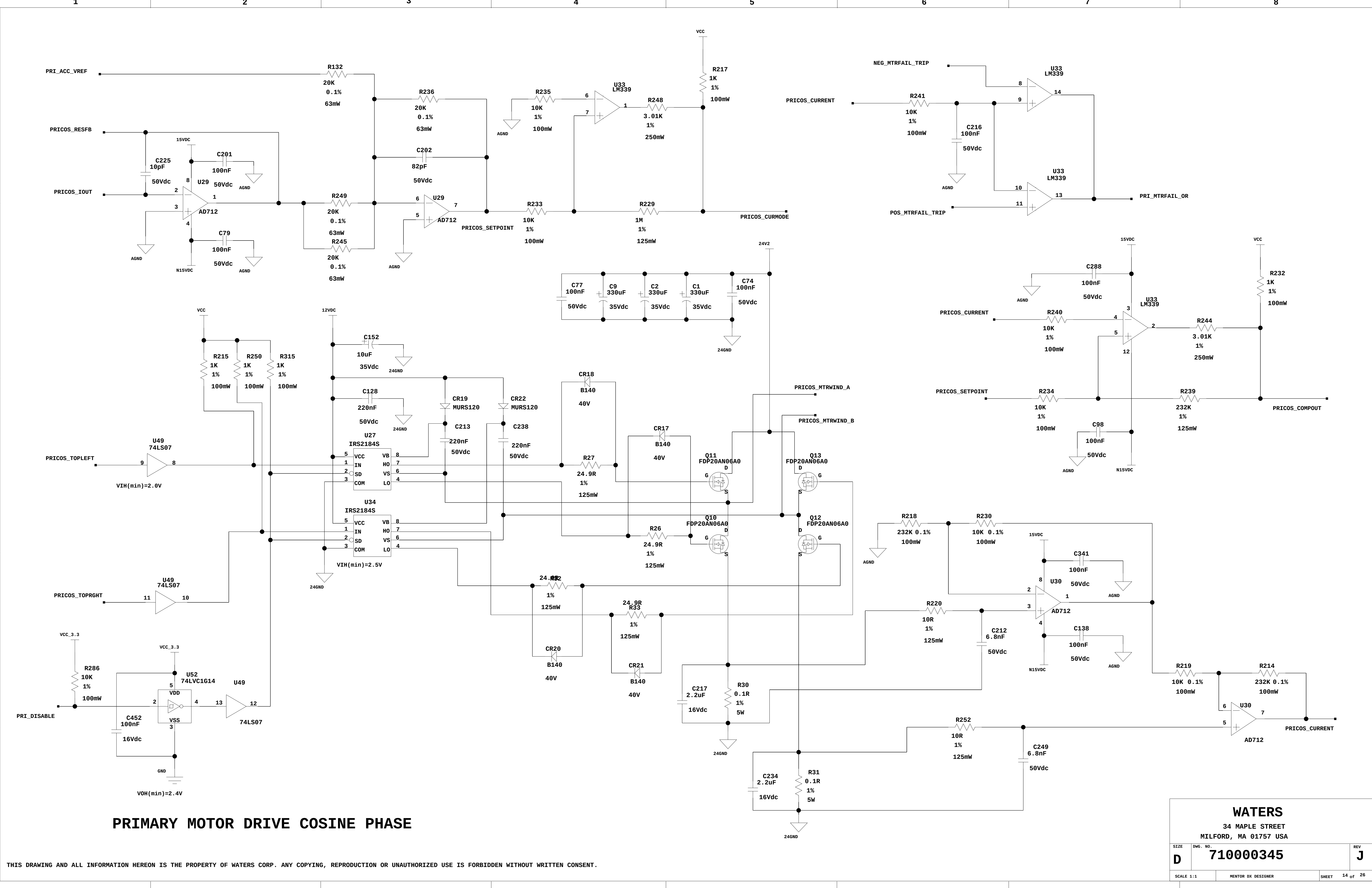
J

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PRIMARY MOTOR DRIVE COSINE PHASE

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SIZE D

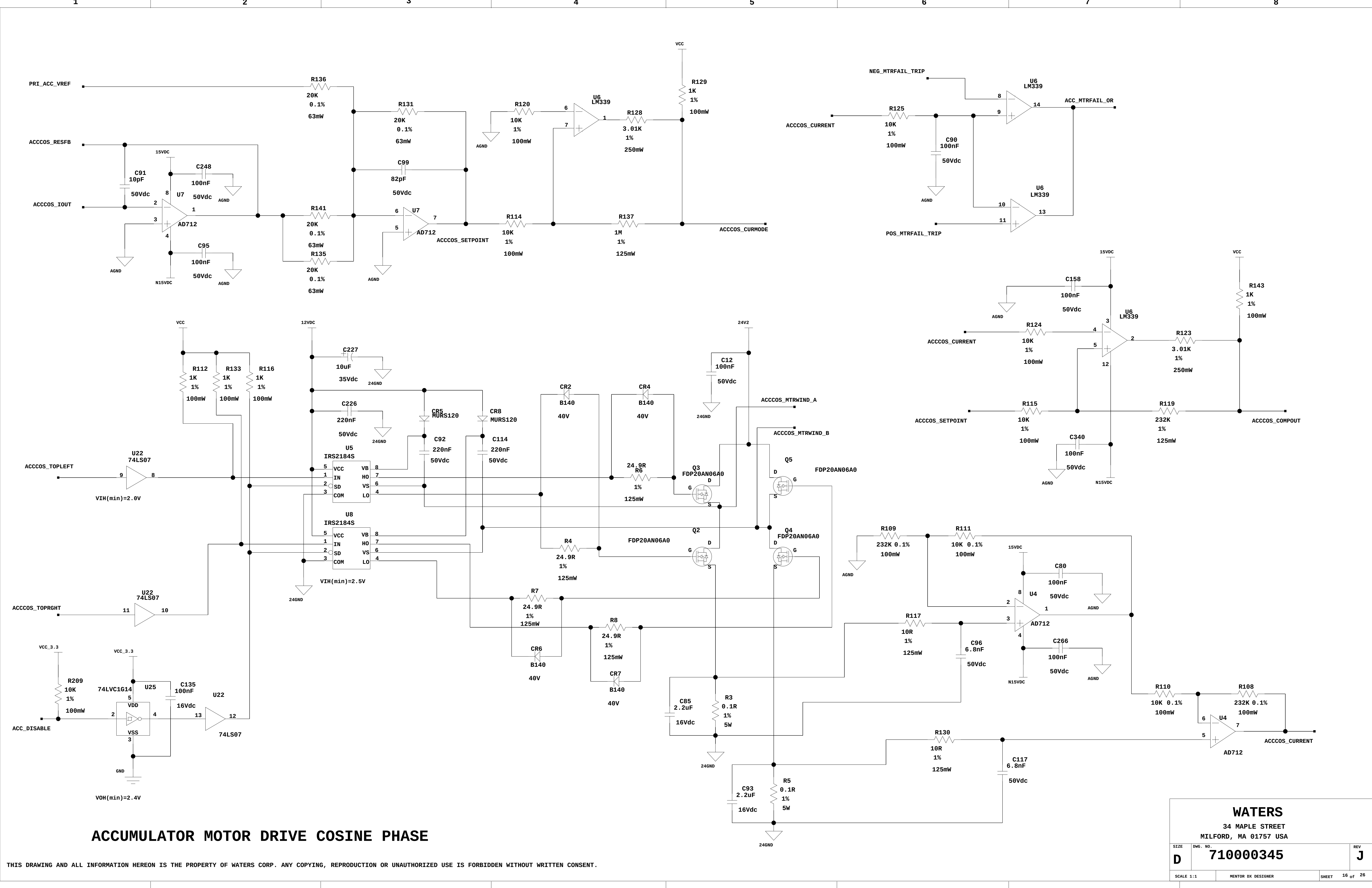
DWG. NO. 710000345

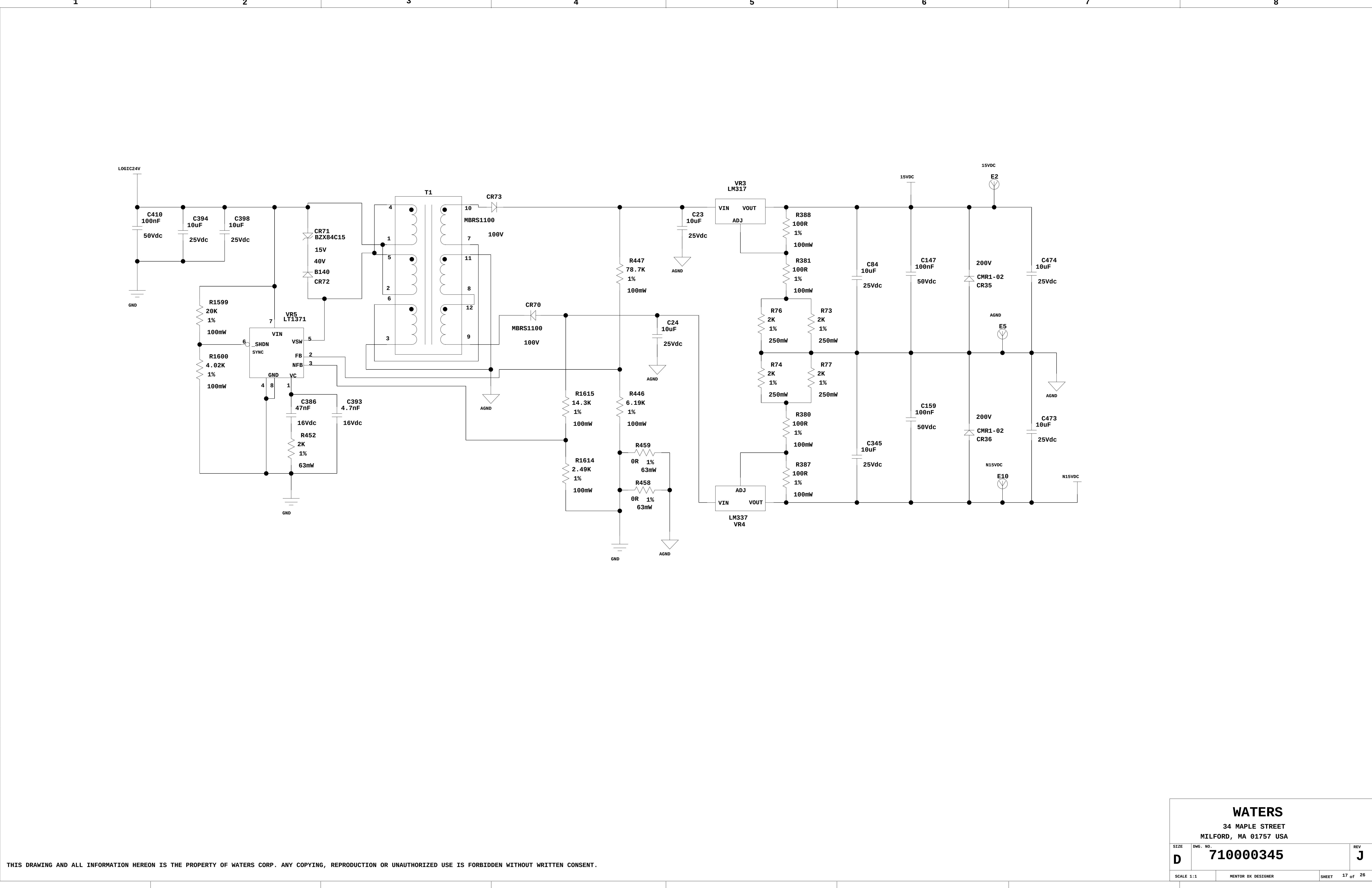
REV J

SCALE 1:1

MENTOR DX DESIGNER

SHEET 14 of 26

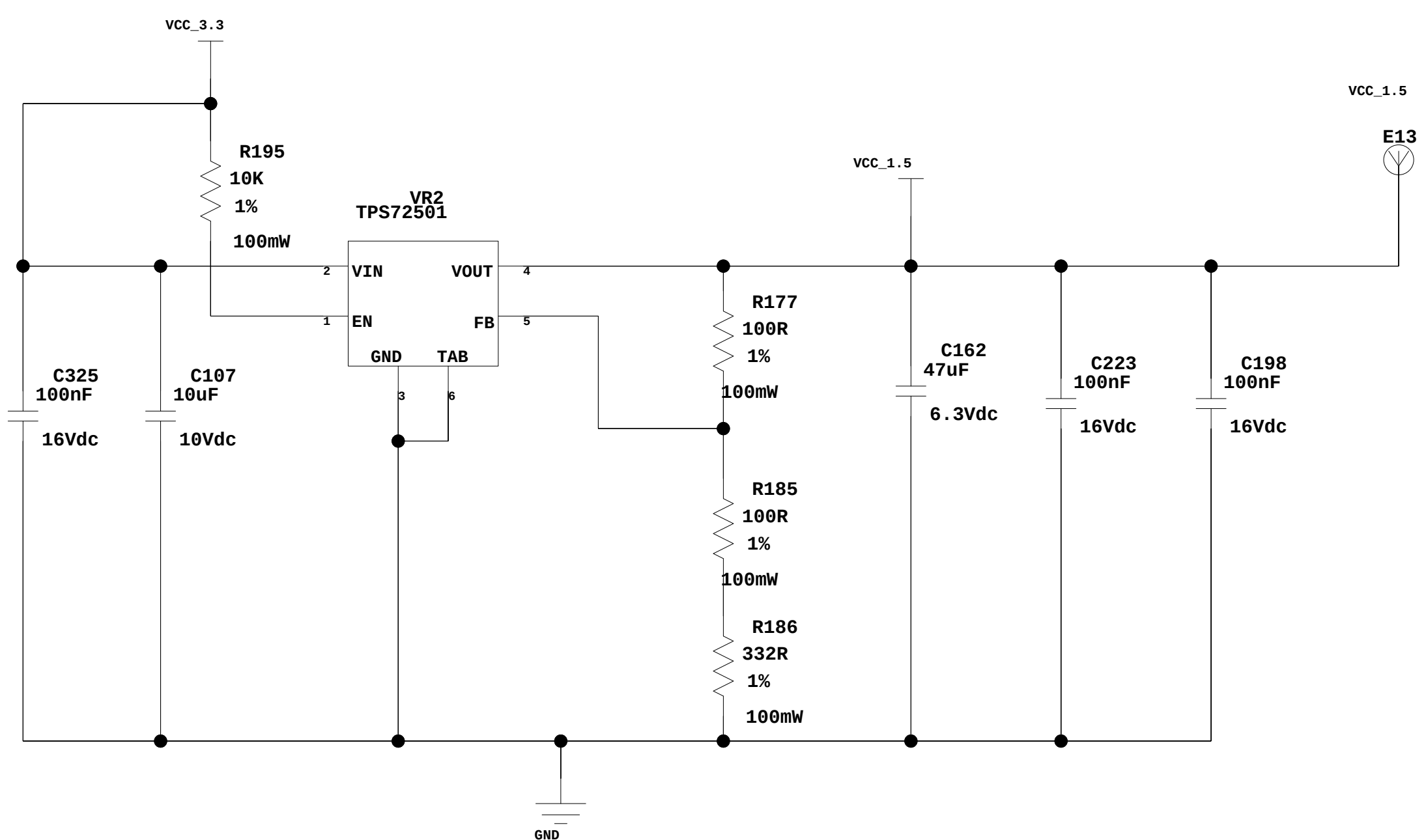
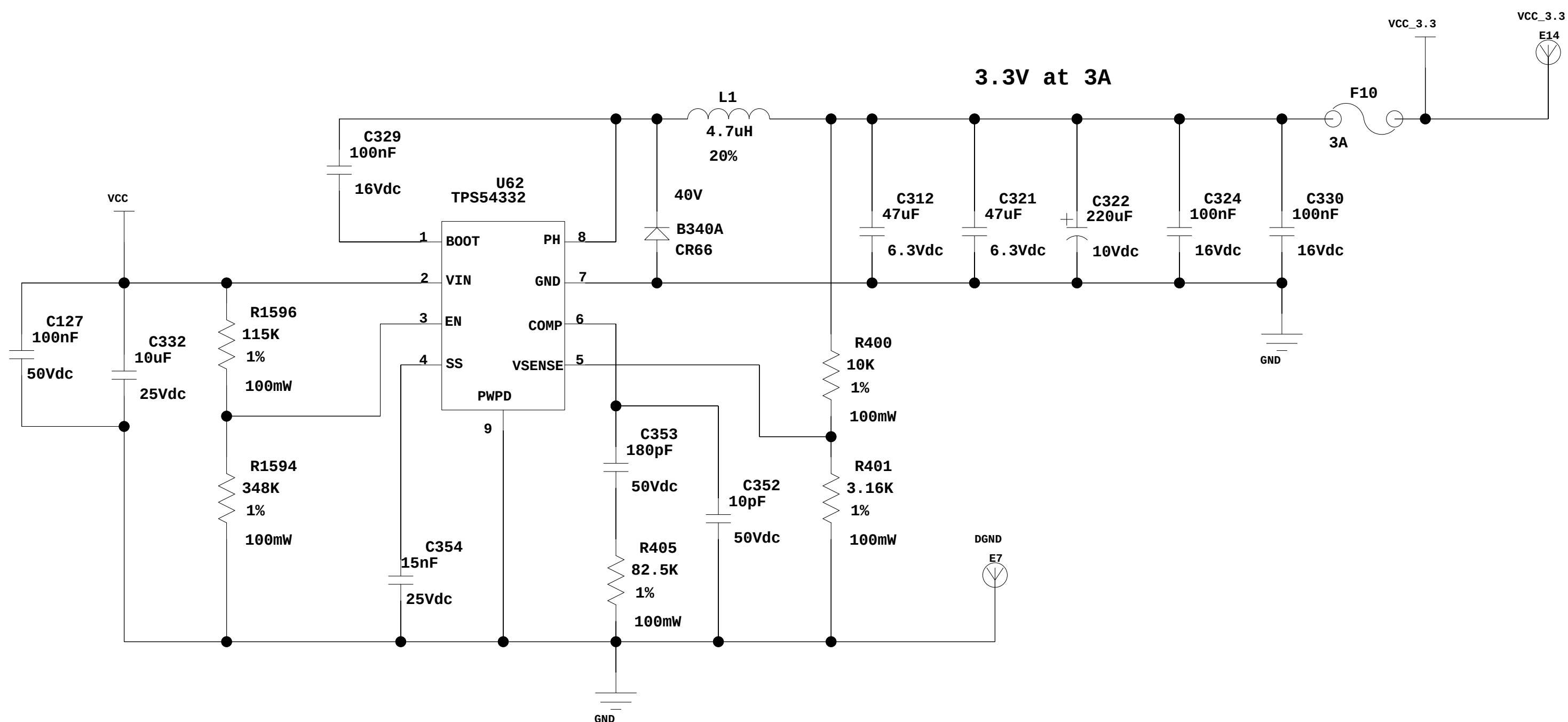
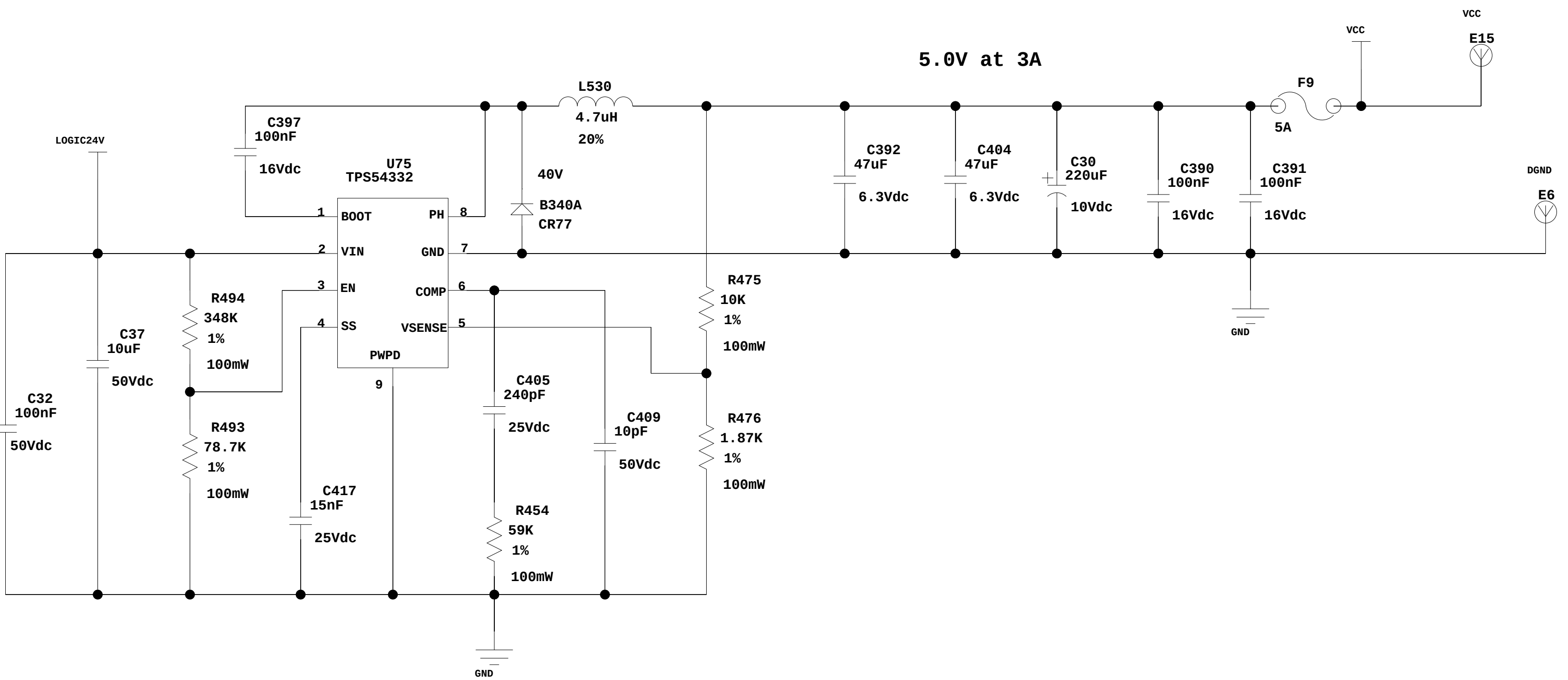




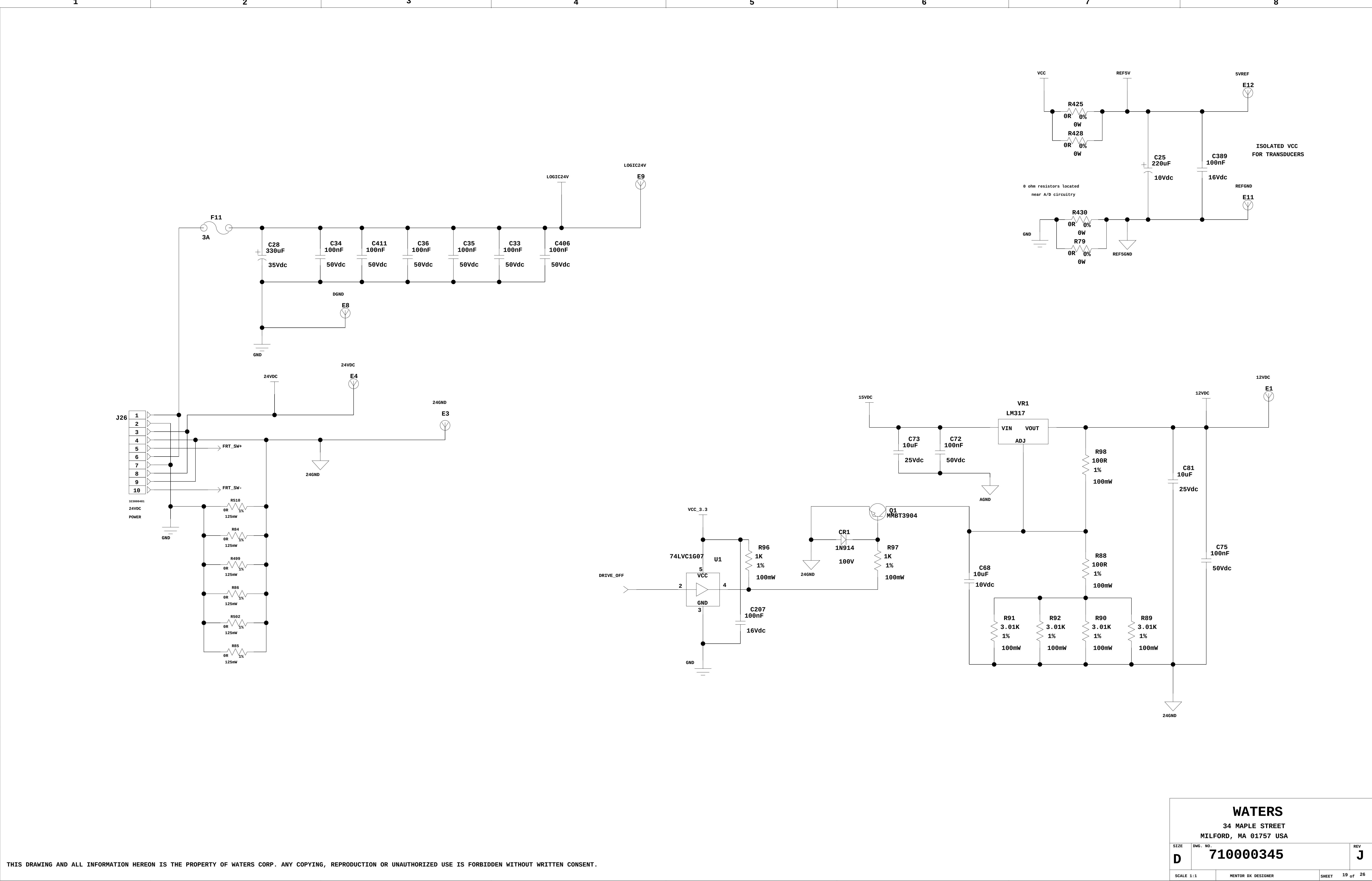
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WATERS 34 MAPLE STREET MILFORD, MA 01757 USA			
SIZE D	DWG. NO. 710000345	REV J	
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5v, 3.3v, and 1.5v regulators



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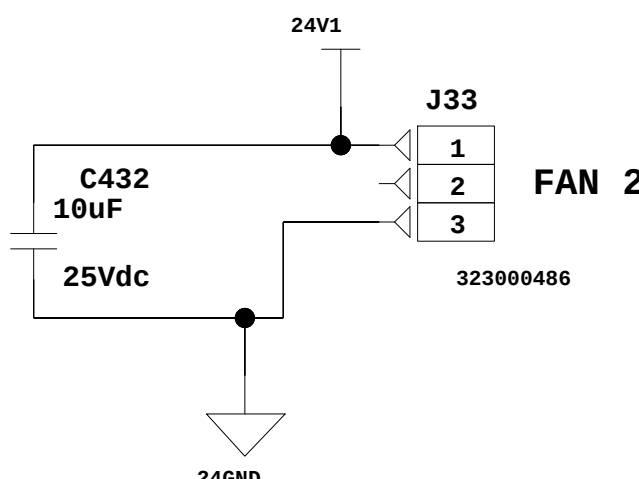
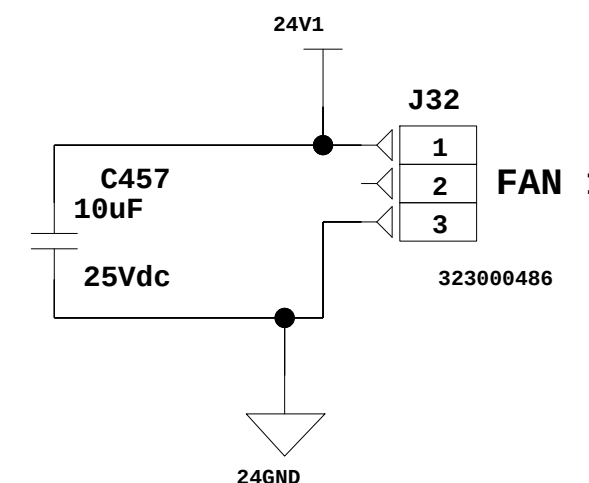
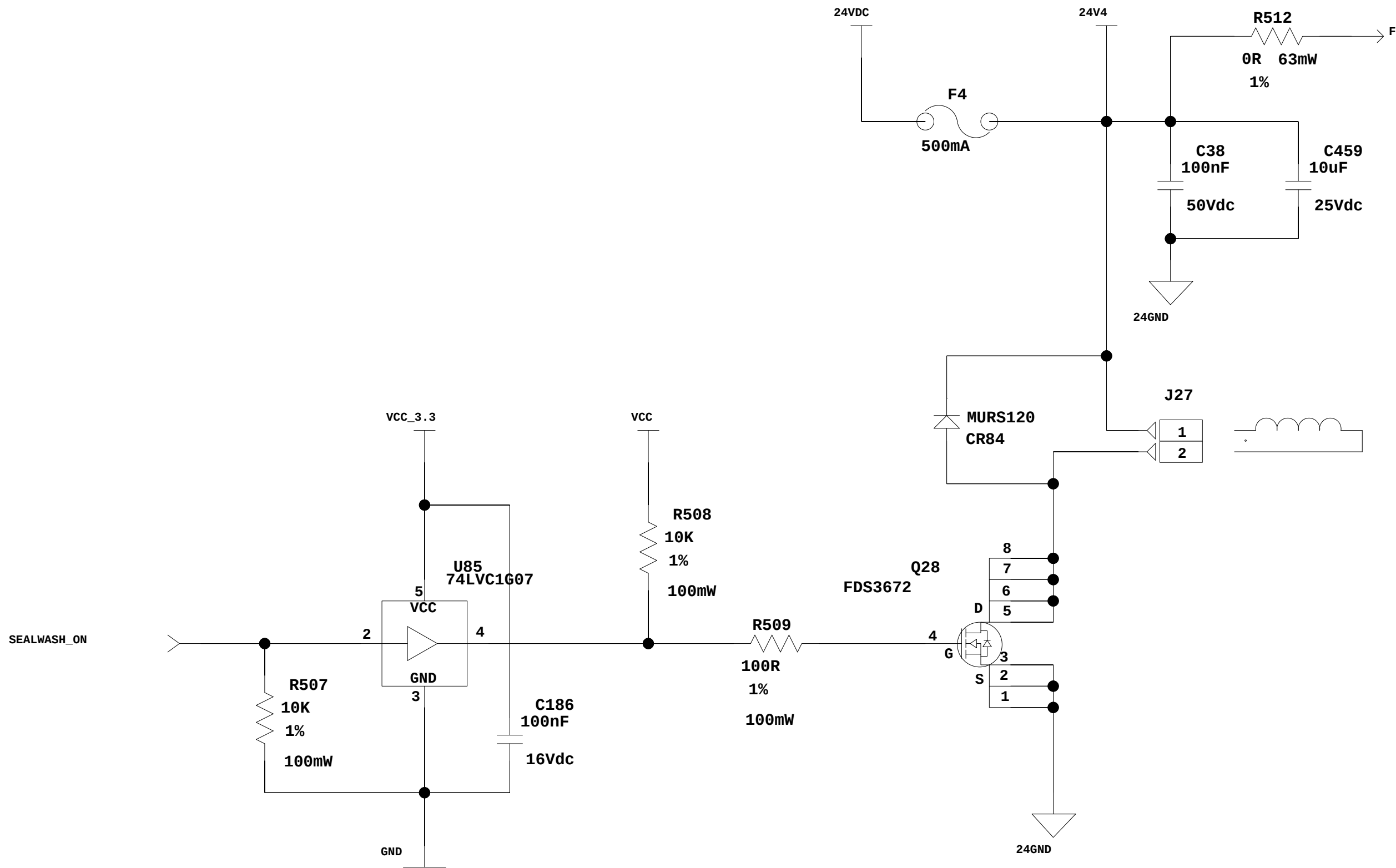


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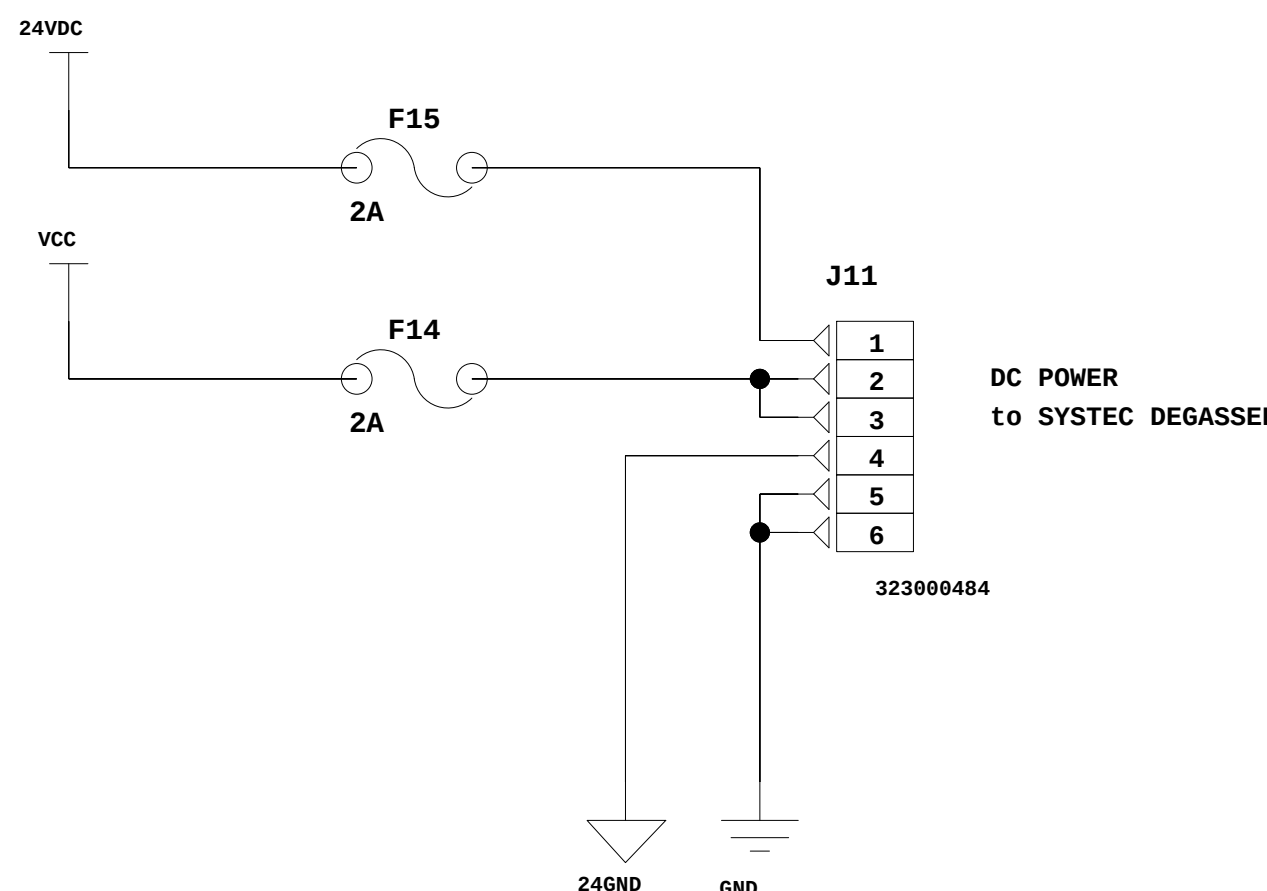
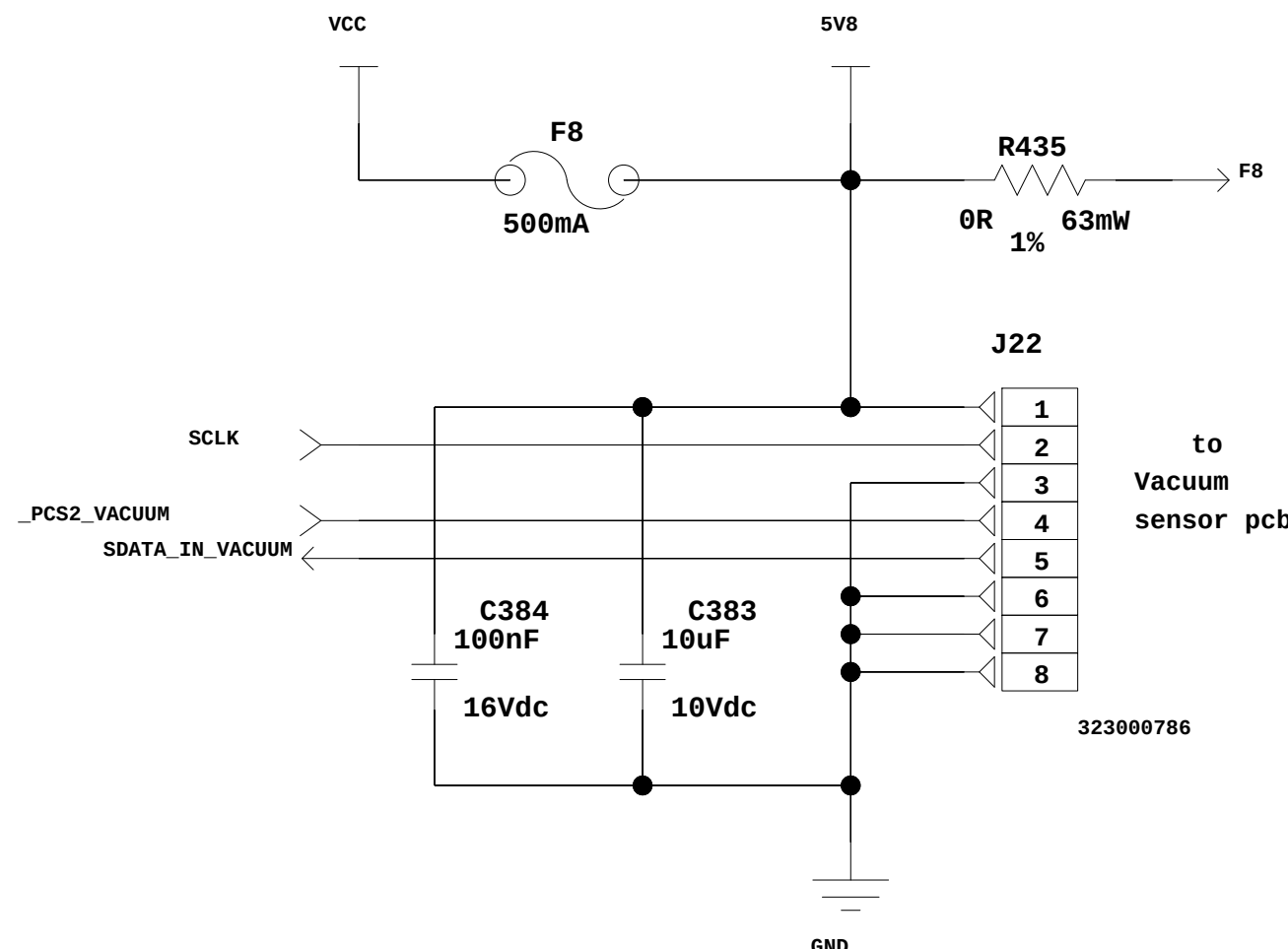
WATERS 34 MAPLE STREET MILFORD, MA 01757 USA		
SIZE D	DWG. NO. 710000345	REV J
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SeaLwash Pump



Vacuum Degasser Sensor



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WATERS

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DWG. NO. **710000345**

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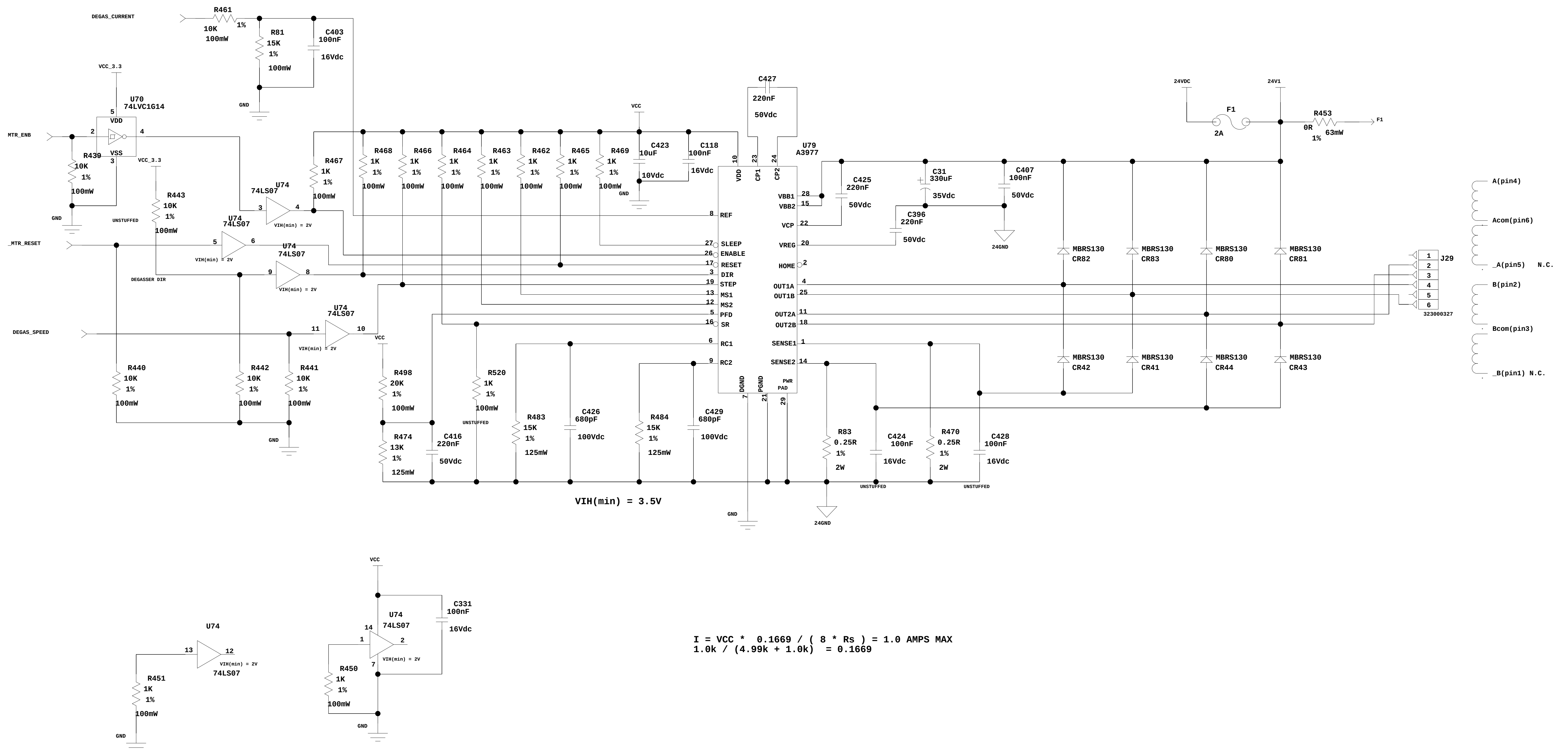
SHEET 21 of 26

$I = V_{ref} * 0.2273 / R_s$
 $2.94k / (10k + 2.94k) = 0.2273$



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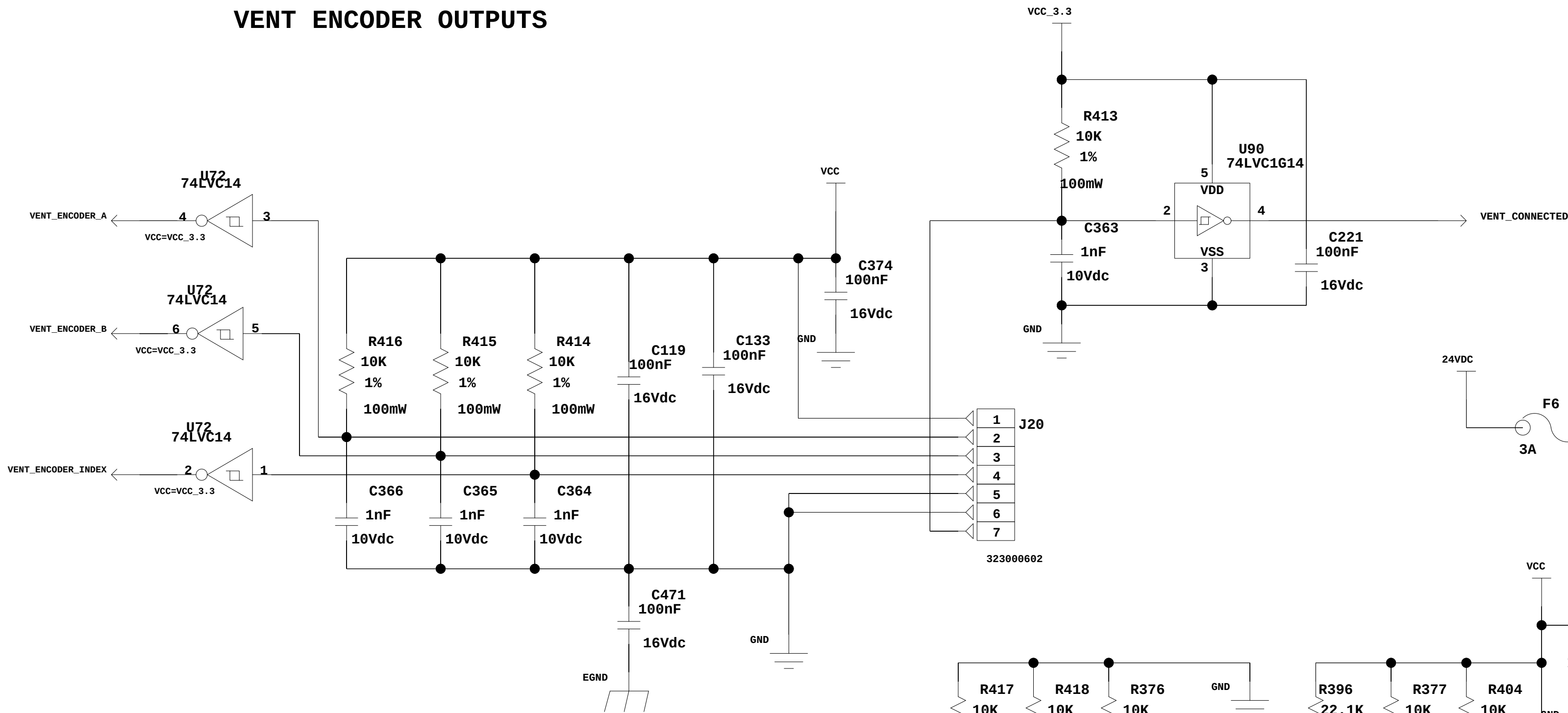
DEGASSER MOTOR DRIVE


$$I = V_{CC} * 0.1669 / (8 * R_s) = 1.0 \text{ AMPS MAX}$$

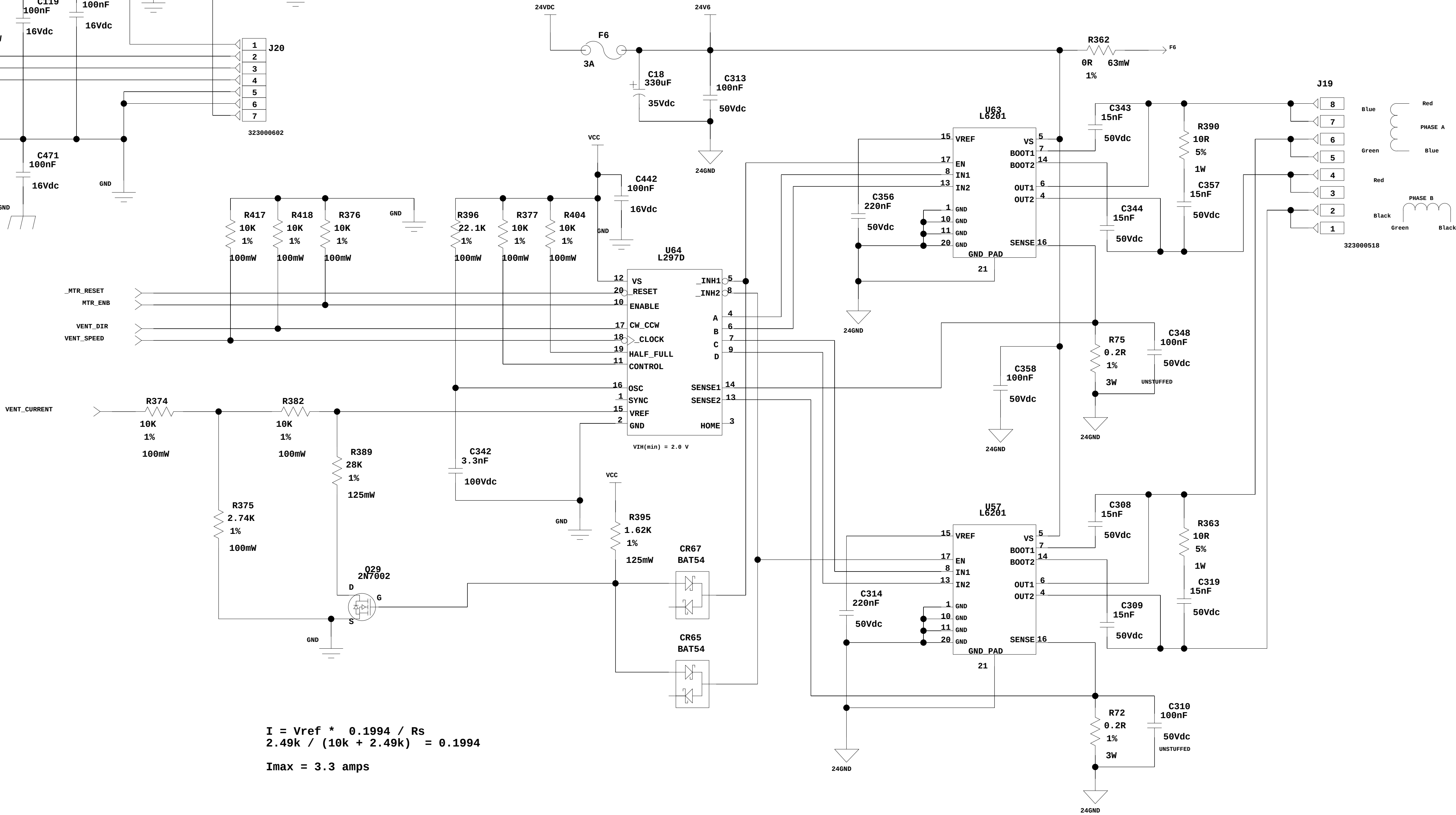
$$1.0k / (4.99k + 1.0k) = 0.1669$$

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VENT ENCODER OUTPUTS

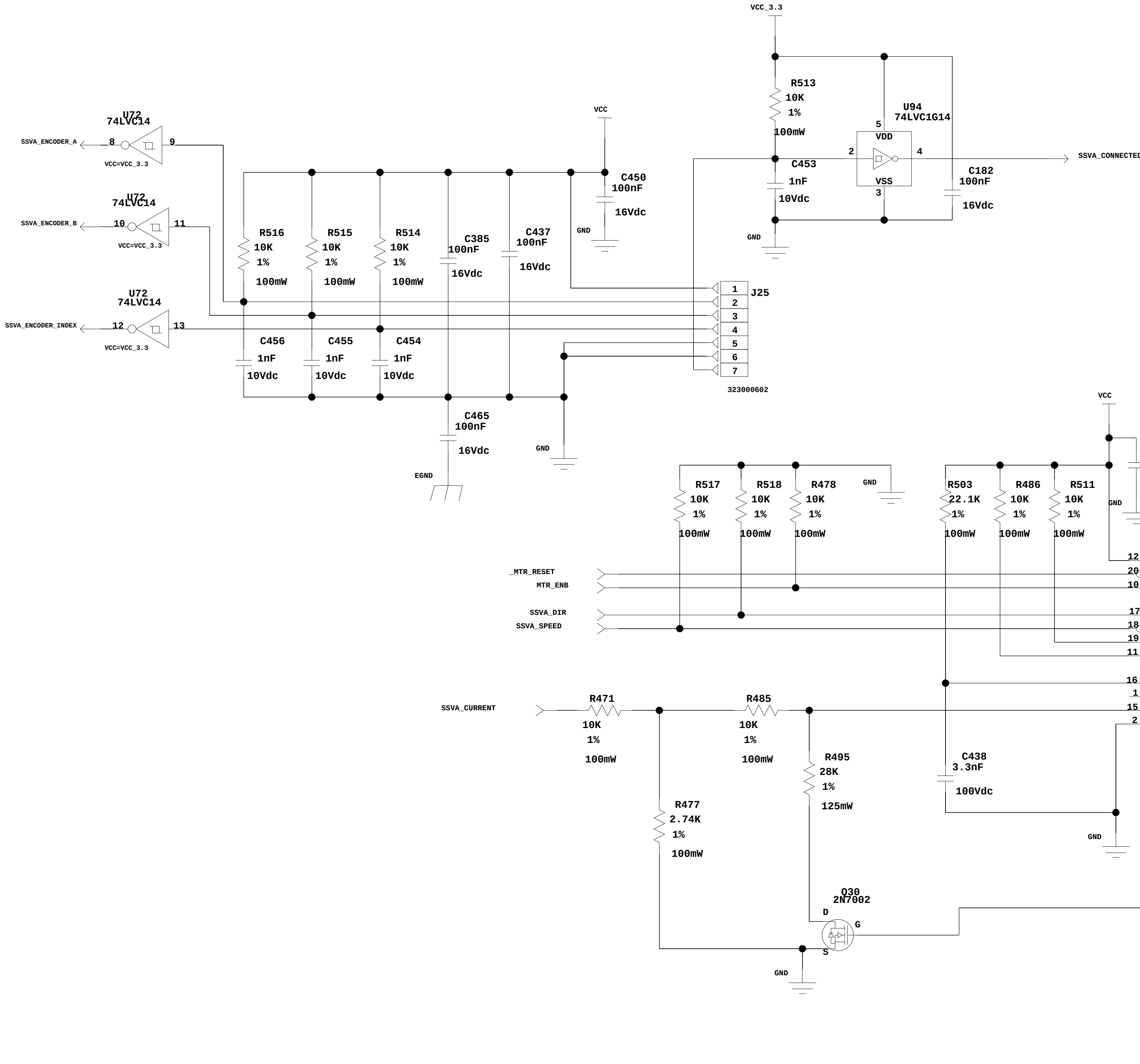


VENT MOTOR DRIVE



$$I = V_{ref} * 0.1994 / R_s$$
$$2.49k / (10k + 2.49k) = 0.1994$$
$$I_{max} = 3.3 \text{ amps}$$

SIX PORT SSVa ENCODER OUTPUTS



SIX PORT SSVa MOTOR DRIVE

$$I = V_{ref} * 0.1994 / R_s$$
$$2.49k / (10k + 2.49k) = 0.1994$$

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SIZE

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DWG. NO.

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REV

J

SCALE 1:1

MENTOR DX DESIGNER

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De-Coupling Capacitors for ESD protection

