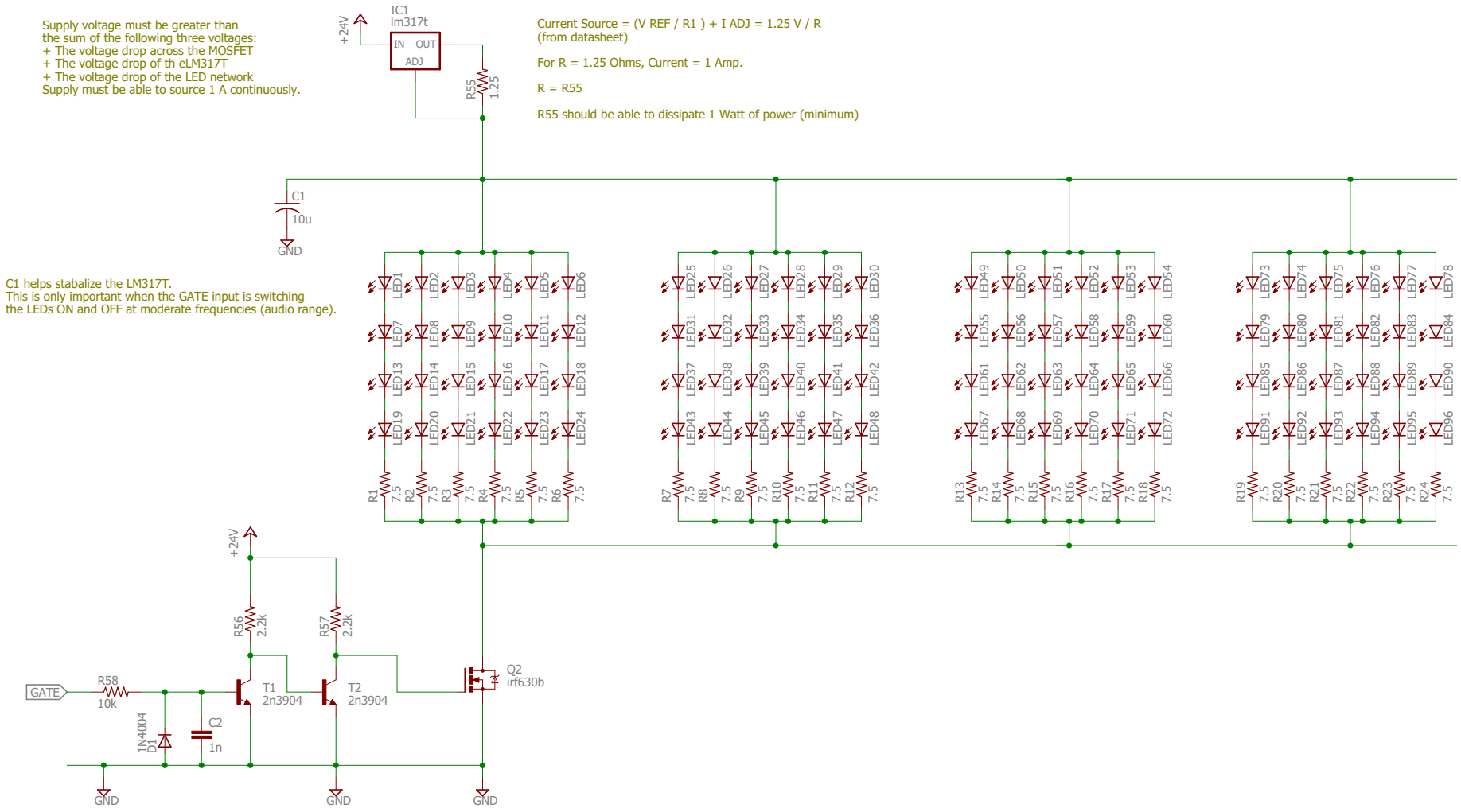
Supply voltage must be greater than
the sum of the following three voltages:
+ The voltage drop across the MOSFET
+ The voltage drop of th eLM317T
+ The voltage drop of the LED network
Supply must be able to source 1 A continuously.
+24V
IC1
lm317t
IN
OUT
ADJ
R55
1.25
Current Source = (V REF / R1 ) + I ADJ = 1.25 V / R
(from datasheet)
For R = 1.25 Ohms, Current = 1 Amp.
R = R55
R55 should be able to dissipate 1 Watt of power (minimum)
C1
10u
GND
C1 helps stabalize the LM317T.
This is only important when the GATE input is switching
the LEDs ON and OFF at moderate frequencies (audio range).
LED1
LED2
LED3
LED4
LED5
LED6
LED7
LED8
LED9
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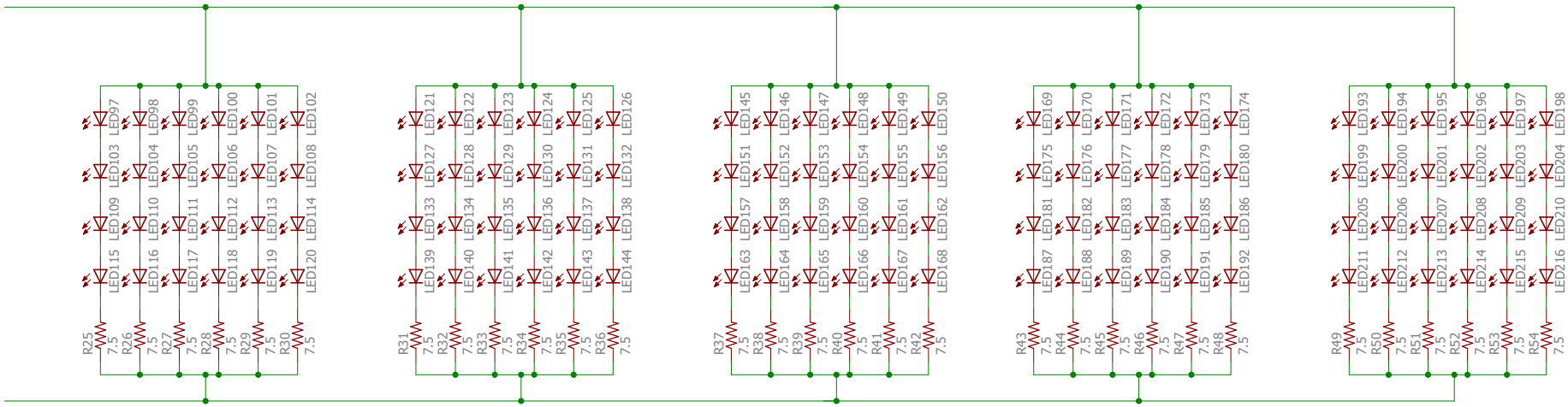
R3
R4
R5
R6
R7
R8
R9
R10
R11
R12
R13
R14
R15
R16
R17
R18
R19
R20
R21
R22
R23
R24
7.5
+24V
R56
2.2k
R57
2.2k
GATE
R58
10k
T1
2n3904
T2
2n3904
Q2
irf630b
1N4004
D1
C2
1n
GND
GND
GND
I was having issues with high-freq oscillation in the T1, T2, Q2 input stage.
I put C2 in the circuit to reduce the gain at higher frequencies.
This seemed to fix the oscillation problem.


LED97 LED103 LED109 LED115
LED98 LED104 LED110 LED116
LED99 LED105 LED111 LED117
LED100 LED106 LED112 LED118
LED101 LED107 LED113 LED119
LED102 LED108 LED114 LED120
R25 7.5 R26 7.5 R27 7.5 R28 7.5 R29 7.5 R30 7.5
LED121 LED127 LED133 LED139
LED122 LED128 LED134 LED140
LED123 LED129 LED135 LED141
LED124 LED130 LED136 LED142
LED125 LED131 LED137 LED143
LED126 LED132 LED138 LED144
R31 7.5 R32 7.5 R33 7.5 R34 7.5 R35 7.5 R36 7.5
LED145 LED151 LED157 LED163
LED146 LED152 LED158 LED164
LED147 LED153 LED159 LED165
LED148 LED154 LED160 LED166
LED149 LED155 LED161 LED167
LED150 LED156 LED162 LED168
R37 7.5 R38 7.5 R39 7.5 R40 7.5 R41 7.5 R42 7.5
LED169 LED175 LED181 LED187
LED170 LED176 LED182 LED188
LED171 LED177 LED183 LED189
LED172 LED178 LED184 LED190
LED173 LED179 LED185 LED191
LED174 LED180 LED186 LED192
R43 7.5 R44 7.5 R45 7.5 R46 7.5 R47 7.5 R48 7.5
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LED194 LED200 LED206 LED212
LED195 LED201 LED207 LED213
LED196 LED202 LED208 LED214
LED197 LED203 LED209 LED215
LED198 LED204 LED210 LED216
R49 7.5 R50 7.5 R51 7.5 R52 7.5 R53 7.5 R54 7.5