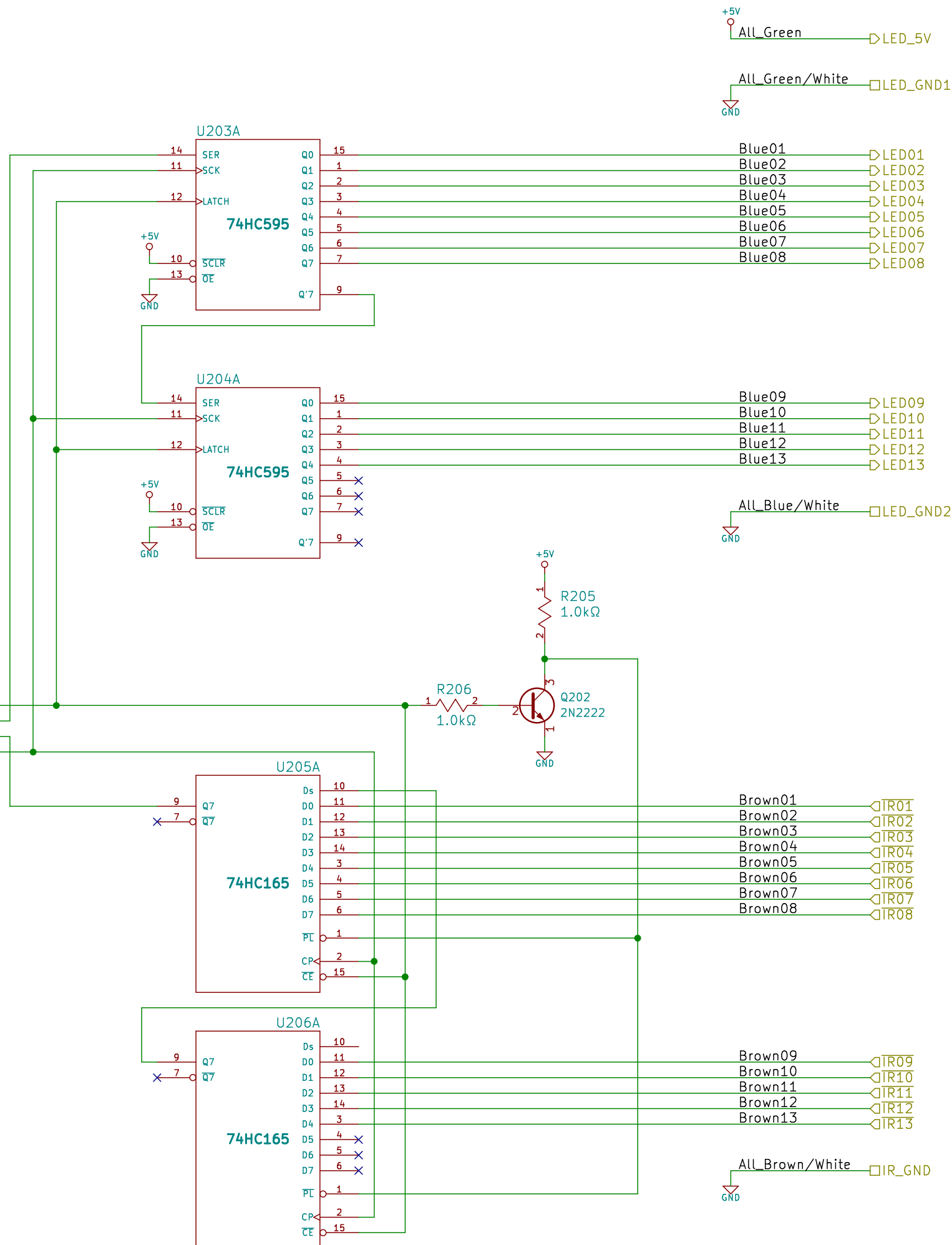
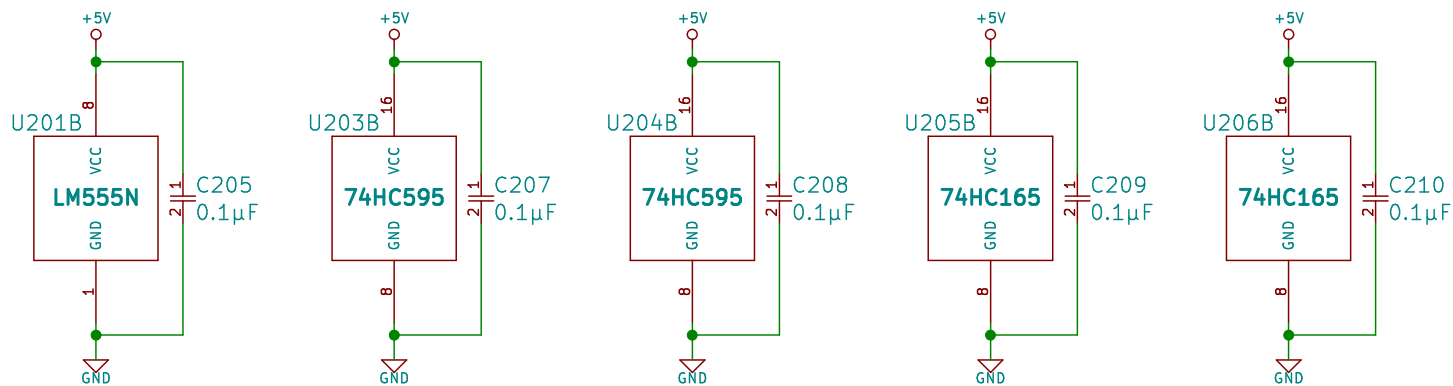
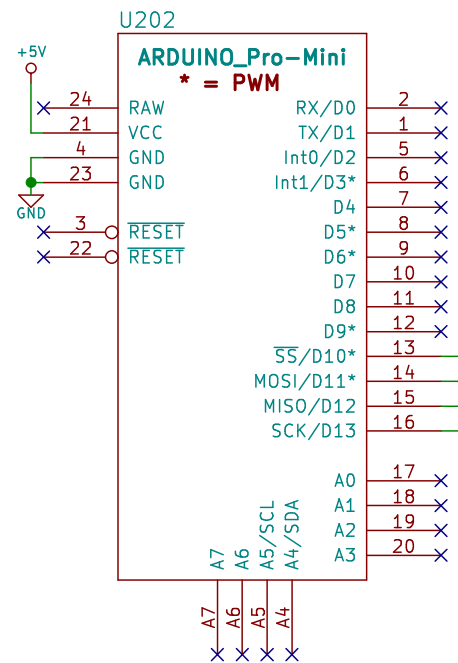


Sembazuru  
Circuits



1.2.0 Change design to use LEDs with integrated flashing. Simpler design.		
1.1.1 Change TIP120 to TIP31C (on-hand stock), change Cap Ref'ds on LED Groups		
1.1.0 TLC5940 isn't actually SPI. Removed SPI cleverness and change I/O expander to I2C		
1.0.0 Initial Circuit		
Sheet: /		
File: Schematic.sch		
Title: Interactive Rainbow		
Size: C	Date: 2015-12-05	Rev: 1.2.0
KiCad E.D.A. kicad (2015-11-15 BZR 6316)-product		Id: 1/15



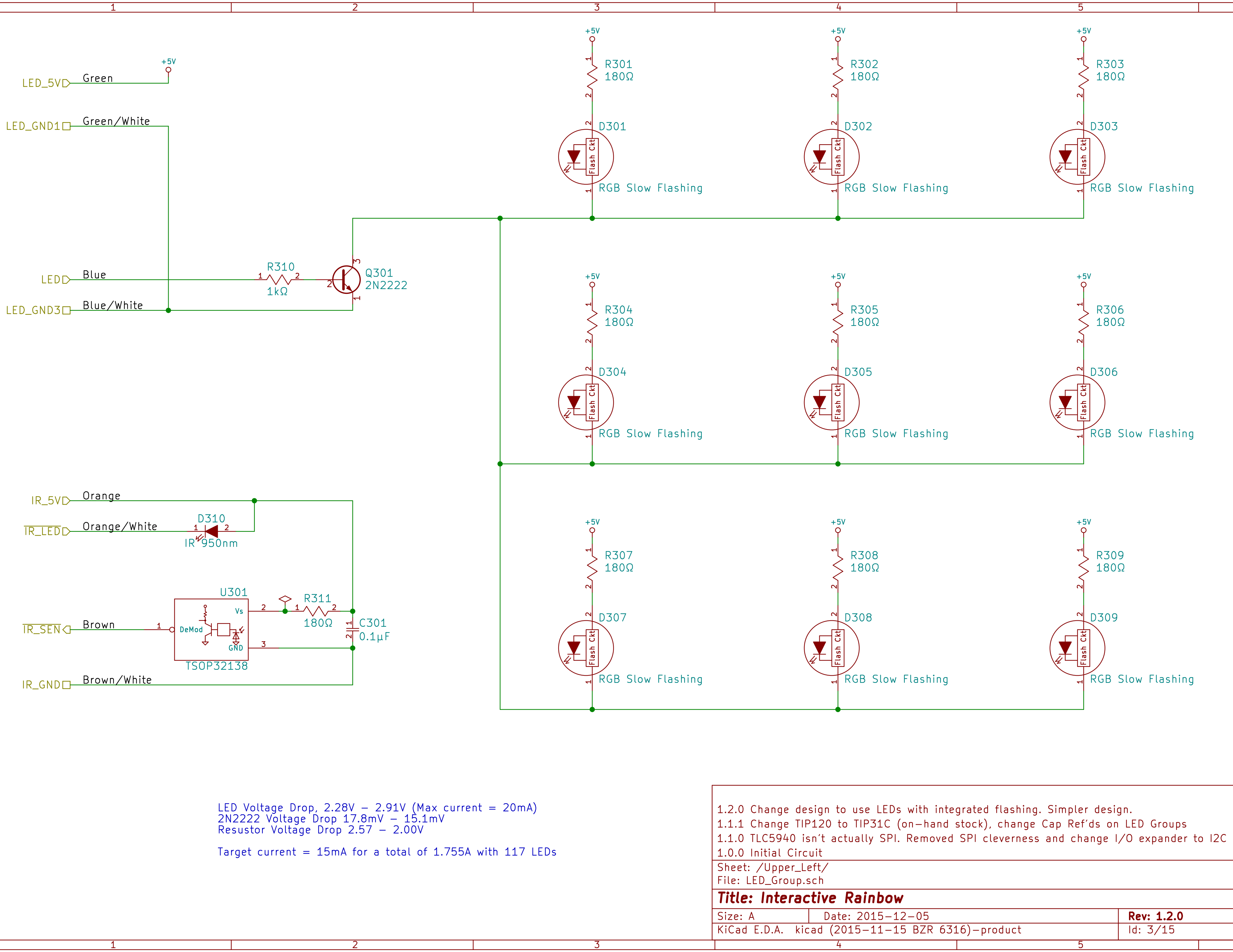
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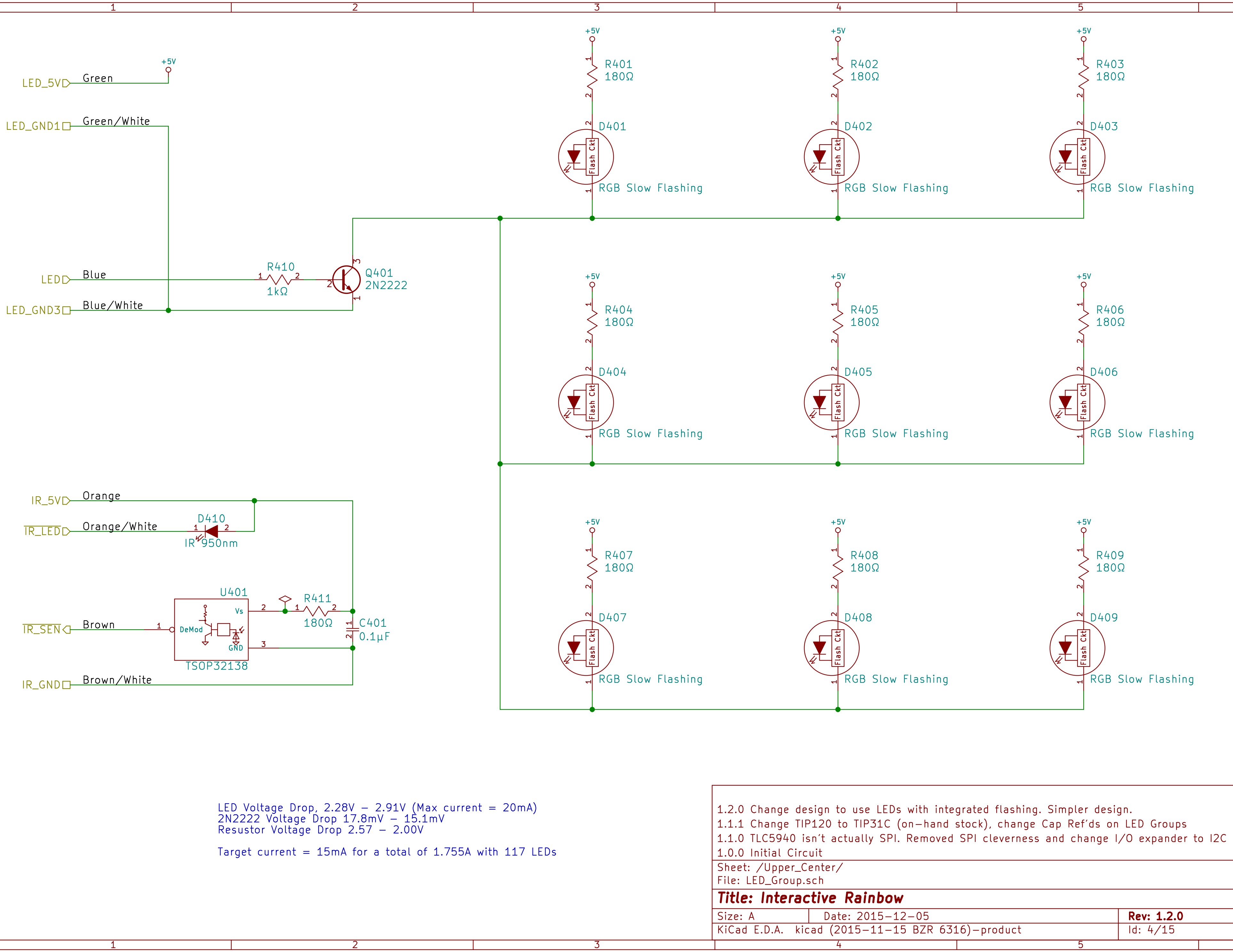
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Sheet: /ControlCircuit/  
File: ControlCircuit.sch

**Title:** *Interactive Rainbow*

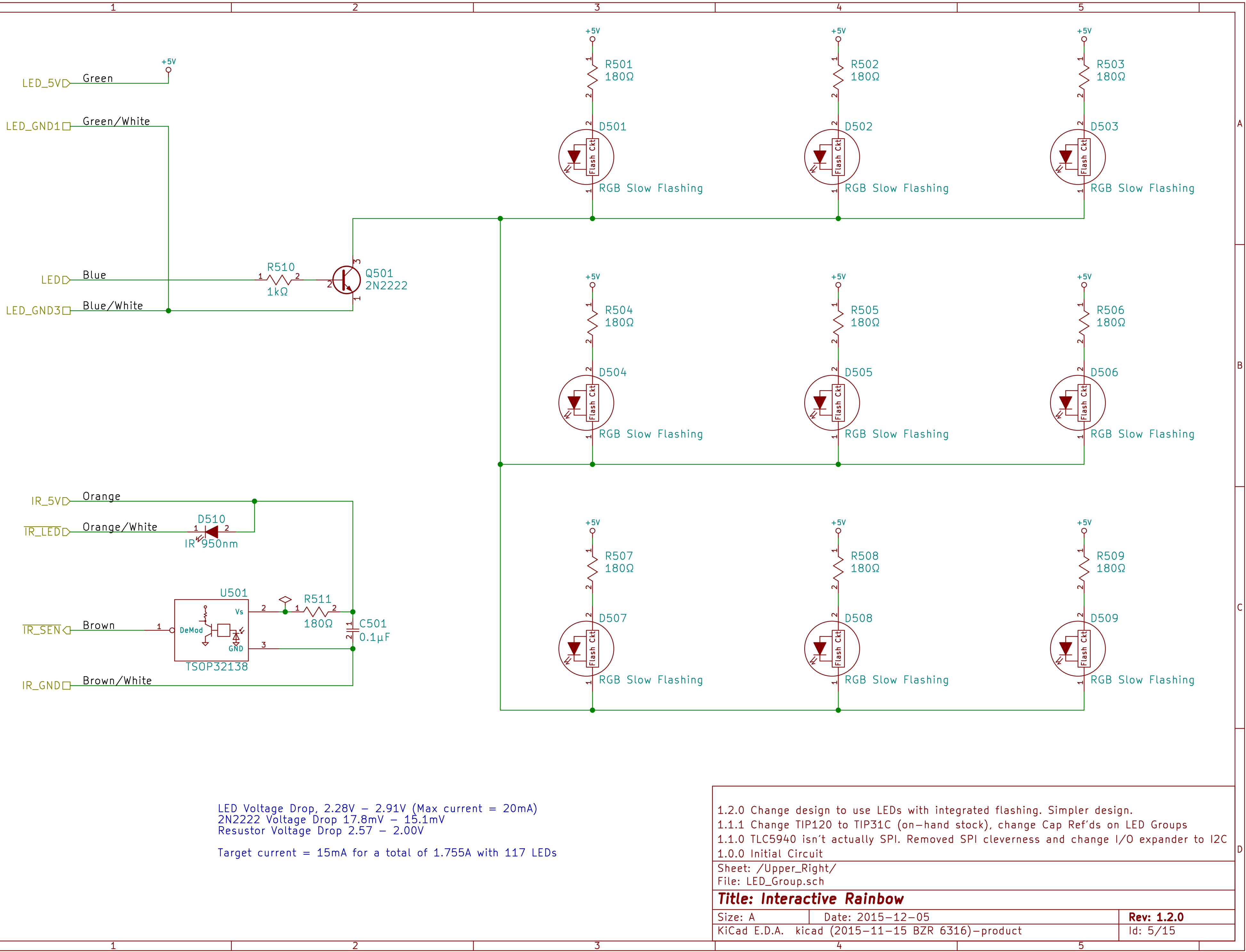
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KiCad E.D.A.	kiCad (2015-11-15 BZR 6316)-product	Id: 2/15

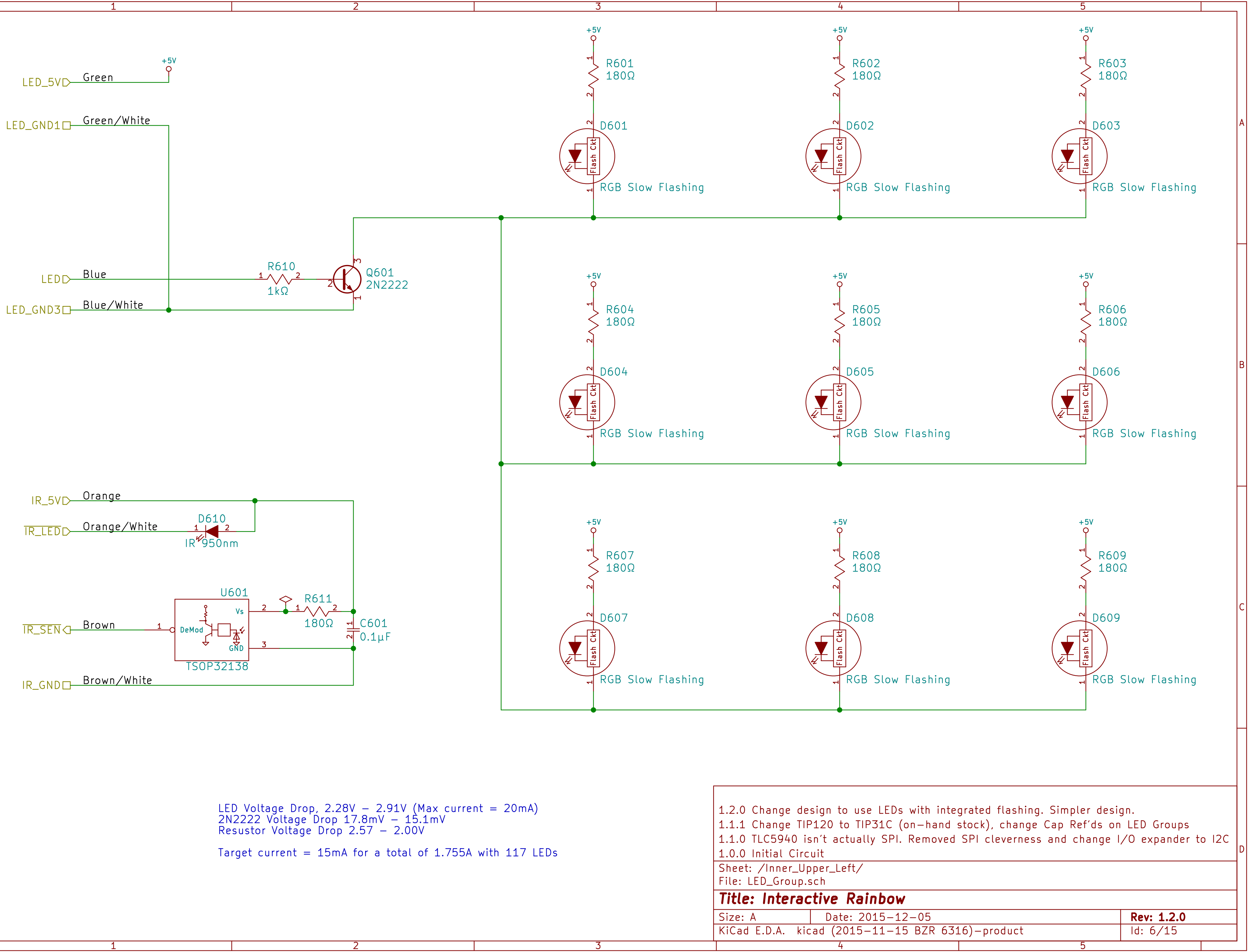




LED Voltage Drop, 2.28V – 2.91V (Max current = 20mA)  
2N2222 Voltage Drop 17.8mV – 15.1mV  
Resustor Voltage Drop 2.57 – 2.00V  
Target current = 15mA for a total of 1.755A with 117 LEDs

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1.0.0 Initial Circuit		
Sheet: /Upper_Center/ File: LED_Group.sch		
Title: Interactive Rainbow		
Size: A	Date: 2015-12-05	Rev: 1.2.0
KiCad E.D.A. kicad (2015-11-15 BZR 6316)-product		Id: 4/15





LED Voltage Drop, 2.28V – 2.91V (Max current = 20mA)  
2N2222 Voltage Drop 17.8mV – 15.1mV  
Resustor Voltage Drop 2.57 – 2.00V  
Target current = 15mA for a total of 1.755A with 117 LEDs

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Sheet: /Inner_Upper_Left/ File: LED_Group.sch		
Title: Interactive Rainbow		
Size: A	Date: 2015-12-05	Rev: 1.2.0
KiCad E.D.A.    kicad (2015-11-15 BZR 6316)-product		Id: 6/15

