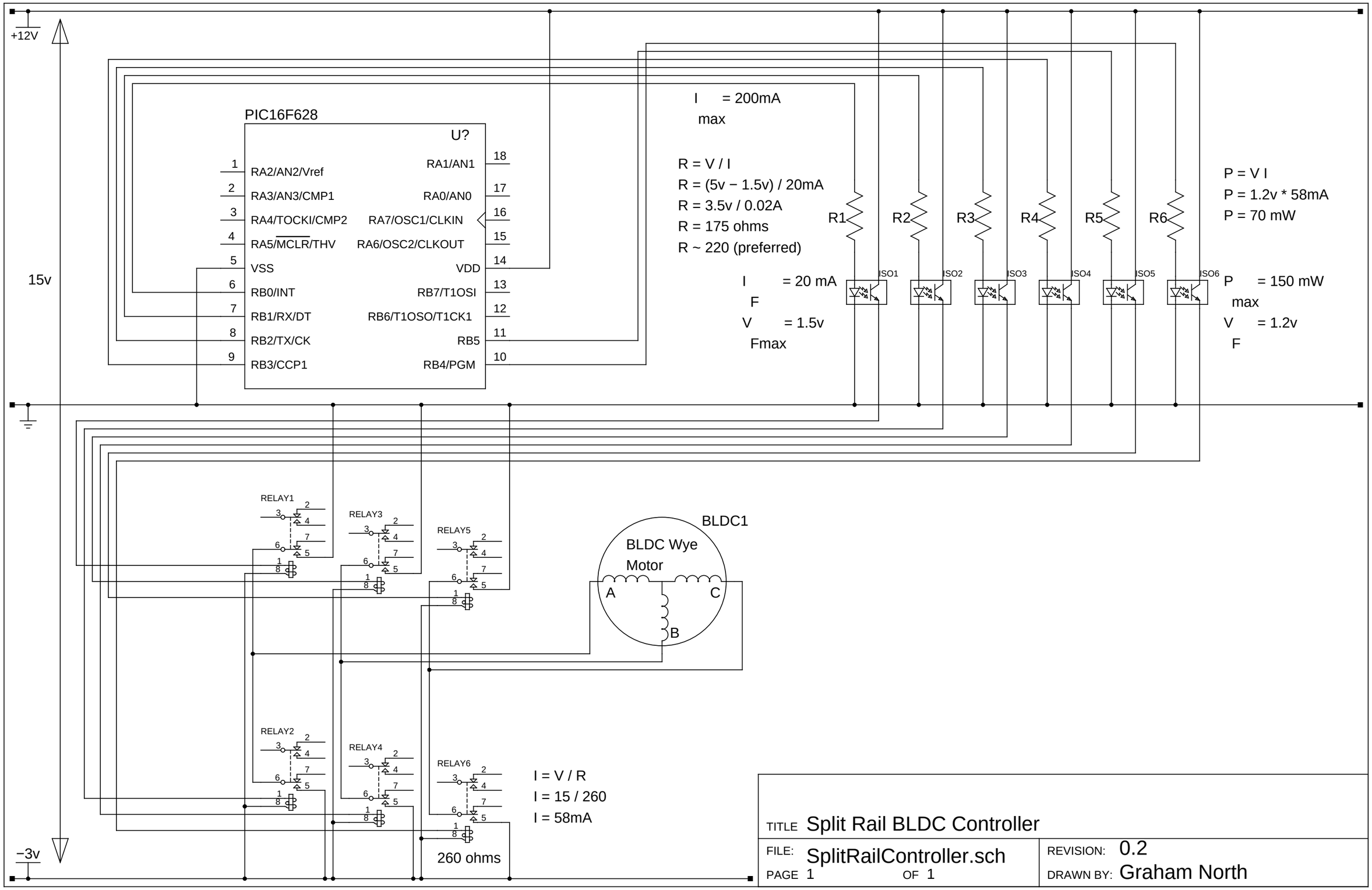
+12V
15v
−3v
PIC16F628
U?
1 RA2/AN2/Vref
2 RA3/AN3/CMP1
3 RA4/TOCKI/CMP2
4 RA5/MCLR/THV
5 VSS
6 RB0/INT
7 RB1/RX/DT
8 RB2/TX/CK
9 RB3/CCP1
18 RA1/AN1
17 RA0/AN0
16 RA7/OSC1/CLKIN
15 RA6/OSC2/CLKOUT
14 VDD
13 RB7/T1OSI
12 RB6/T1OSO/T1CK1
11 RB5
10 RB4/PGM
I max = 200mA
R = V / I
R = (5v − 1.5v) / 20mA
R = 3.5v / 0.02A
R = 175 ohms
R ~ 220 (preferred)
I F = 20 mA
V Fmax = 1.5v
R1
R2
R3
R4
R5
R6
ISO1
ISO2
ISO3
ISO4
ISO5
ISO6
P = V I
P = 1.2v * 58mA
P = 70 mW
P max = 150 mW
V F = 1.2v
RELAY1
RELAY2
RELAY3
RELAY4
RELAY5
RELAY6
BLDC1
BLDC Wye
Motor
A
B
C
I = V / R
I = 15 / 260
I = 58mA
260 ohms
TITLE Split Rail BLDC Controller
FILE: SplitRailController.sch
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REVISION: 0.2
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