Changes in Rev PG2.0

- High Power outputs (33-36) have their enabled pulled high.
(was low, AW21036 does open collector, so it was never going high.)
Consequence is that in code, 255=0
- LAYOUTUPDATEDONE

- 5V Header changed for 2.54mm spacing. LAYOUTDONE

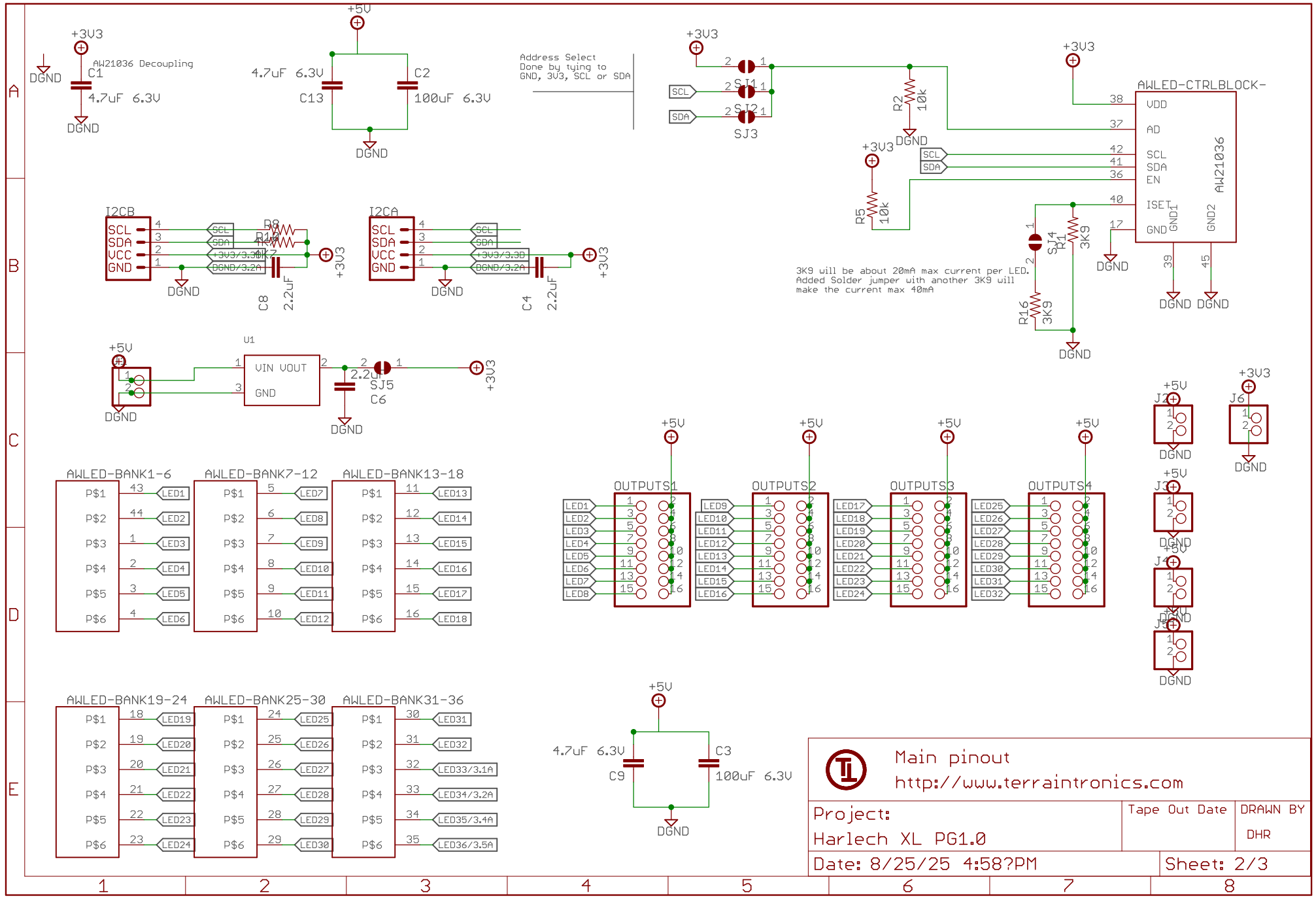
- Updated Silkscreen: PG2.0, I2C addresses, white box on box for notes - LAYOUTDONE

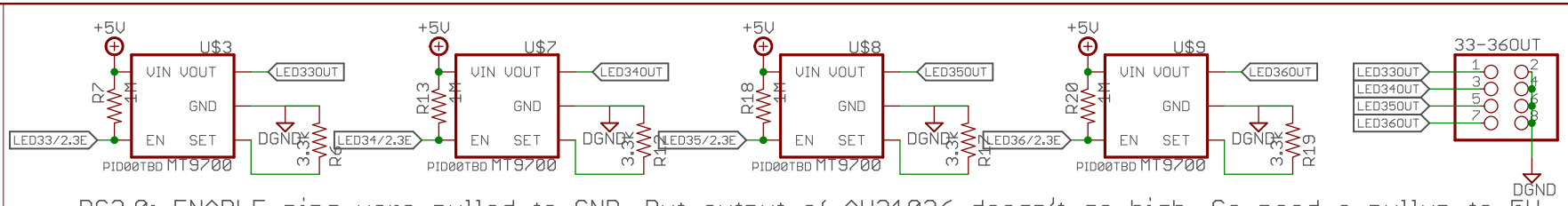
- Added numbers next to the LED's. LED 1 through 36. Software knows them as 0-35. - LAYOUTDONE

- Added a small regulator just in case to make 3V3

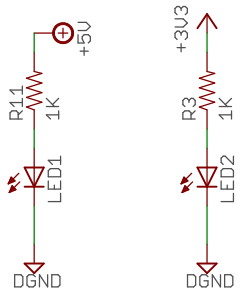
CHOOSE FRAME ATTRIBUTES
http://www.terraintronics.com

Project:	Tape Out Date	DRAWN BY
Harlech XL PG1.0		DHR
Date: 8/25/25 4:58?PM		Sheet: 1/3


+3V3
DGND
AW21036 Decoupling
C1
4.7uF 6.3V
+5V
4.7uF 6.3V
C13
C2
100uF 6.3V
Address Select
Done by tying to
GND, 3V3, SCL or SDA
SCL
SDA
SJ1
SJ2
SJ3
R2
10k
R5
10k
AWLED-CTRLBLOCK-
AW21036
VDD
AD
SCL
SDA
EN
ISET
GND
GND1
GND2
38
37
42
41
36
40
17
39
45
SJ4
R1
3K9
R16
3K9
3K9 will be about 20mA max current per LED.
Added Solder jumper with another 3K9 will
make the current max 40mA
I2CB
I2CA
R8
R9
4K7
C8
2.2uF
C4
2.2uF
U1
VIN VOUT
GND
SJ5
C6
2.2uF
J1
J2
J3
J4
J5
J6
OUTPUTS1
OUTPUTS2
OUTPUTS3
OUTPUTS4
AWLED-BANK1-6
AWLED-BANK7-12
AWLED-BANK13-18
AWLED-BANK19-24
AWLED-BANK25-30
AWLED-BANK31-36
C9
C3
Main pinout
http://www.terraintronics.com
Project:
Harlech XL PG1.0
Tape Out Date
DRAWN BY
DHR
Date: 8/25/25 4:58?PM
Sheet: 2/3



PG2.0: ENABLE pins were pulled to GND. But output of AW21036 doesn't go high. So need a pullup to 5V.



High Current Outputs
http://www.terraintronics.com

Project:	Tape Out Date	DRAWN BY
Harlech XL PG1.0		DHR
Date: 8/25/25 4:58?PM	Sheet: 3/3	