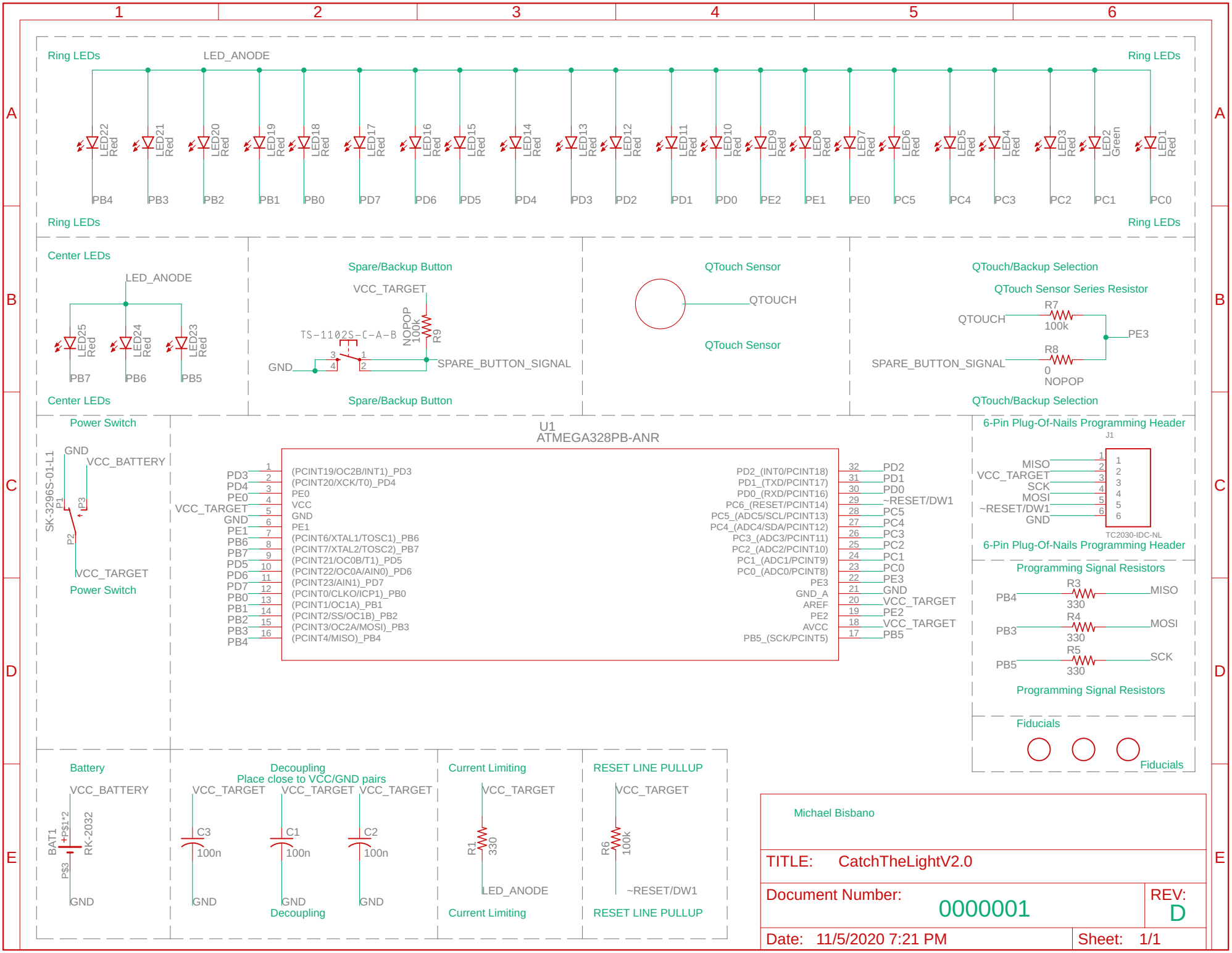
Ring LEDs
LED_ANODE
LED22 Red PB4
LED21 Red PB3
LED20 Red PB2
LED19 Red PB1
LED18 Red PB0
LED17 Red PD7
LED16 Red PD6
LED15 Red PD5
LED14 Red PD4
LED13 Red PD3
LED12 Red PD2
LED11 Red PD1
LED10 Red PD0
LED9 Red PE2
LED8 Red PE1
LED7 Red PE0
LED6 Red PC5
LED5 Red PC4
LED4 Red PC3
LED3 Red PC2
LED2 Green PC1
LED1 Red PC0
Center LEDs
LED25 Red PB7
LED24 Red PB6
LED23 Red PB5
Spare/Backup Button
VCC_TARGET
TS-1102S-C-A-B
NOPOP 100k R9
GND
SPARE_BUTTON_SIGNAL
QTouch Sensor
QTOUCH
QTouch/Backup Selection
QTouch Sensor Series Resistor
R7 100k
R8 0 NOPOP
PE3
Power Switch
SK-3296S-01-L1
GND
VCC_BATTERY
VCC_TARGET
U1
ATMEGA328PB-ANR
PD3 (PCINT19/OC2B/INT1)_PD3
PD4 (PCINT20/XCK/T0)_PD4
PE0
VCC_TARGET VCC
GND GND
PE1 PE1
PB6 (PCINT6/XTAL1/TOSC1)_PB6
PB7 (PCINT7/XTAL2/TOSC2)_PB7
PD5 (PCINT21/OC0B/T1)_PD5
PD6 (PCINT22/OC0A/AIN0)_PD6
PD7 (PCINT23/AIN1)_PD7
PB0 (PCINT0/CLKO/ICP1)_PB0
PB1 (PCINT1/OC1A)_PB1
PB2 (PCINT2/SS/OC1B)_PB2
PB3 (PCINT3/OC2A/MOSI)_PB3
PB4 (PCINT4/MISO)_PB4
PD2_(INT0/PCINT18) PD2
PD1_(TXD/PCINT17) PD1
PD0_(RXD/PCINT16) PD0
PC6_(RESET/PCINT14) ~RESET/DW1
PC5_(ADC5/SCL/PCINT13) PC5
PC4_(ADC4/SDA/PCINT12) PC4
PC3_(ADC3/PCINT11) PC3
PC2_(ADC2/PCINT10) PC2
PC1_(ADC1/PCINT9) PC1
PC0_(ADC0/PCINT8) PC0
PE3 PE3
GND_A GND
AREF VCC_TARGET
PE2 PE2
AVCC VCC_TARGET
PB5_(SCK/PCINT5) PB5
6-Pin Plug-Of-Nails Programming Header
J1
MISO
VCC_TARGET
SCK
MOSI
~RESET/DW1
GND
TC2030-IDC-NL
Programming Signal Resistors
PB4 R3 330 MISO
PB3 R4 330 MOSI
PB5 R5 330 SCK
Fiducials
Battery
VCC_BATTERY
BAT1
RK-2032
GND
Decoupling
Place close to VCC/GND pairs
VCC_TARGET VCC_TARGET VCC_TARGET
C3 100n
C1 100n
C2 100n
GND GND GND
Current Limiting
VCC_TARGET
R1 330
LED_ANODE
RESET LINE PULLUP
VCC_TARGET
R6 100k
~RESET/DW1
Michael Bisbano
TITLE: CatchTheLightV2.0
Document Number: 0000001
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Date: 11/5/2020 7:21 PM
Sheet: 1/1