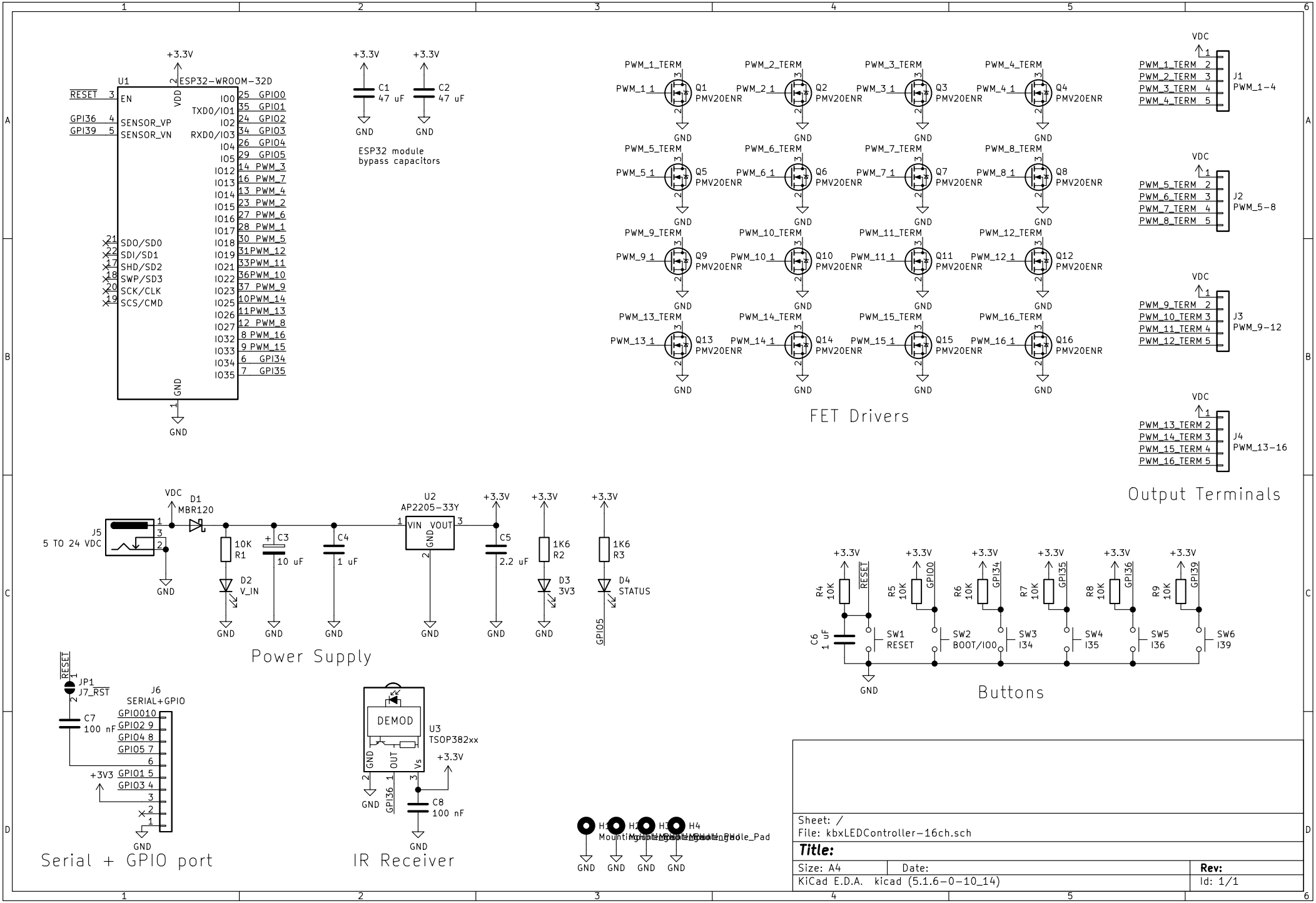
U1
ESP32-WROOM-32D
+3.3V
RESET
EN
GPI36
SENSOR_VP
GPI39
SENSOR_VN
VDD
GND
SDO/SD0
SDI/SD1
SHD/SD2
SWP/SD3
SCK/CLK
SCS/CMD
IO0 GPIO0
TXD0/IO1 GPIO1
IO2 GPIO2
RXD0/IO3 GPIO3
IO4 GPIO4
IO5 GPIO5
IO12 PWM_3
IO13 PWM_7
IO14 PWM_4
IO15 PWM_2
IO16 PWM_6
IO17 PWM_1
IO18 PWM_5
IO19 PWM_12
IO21 PWM_11
IO22 PWM_10
IO23 PWM_9
IO25 PWM_14
IO26 PWM_13
IO27 PWM_8
IO32 PWM_16
IO33 PWM_15
IO34 GPI34
IO35 GPI35
C1 47 uF
C2 47 uF
ESP32 module bypass capacitors
PWM_1_TERM
PWM_2_TERM
PWM_3_TERM
PWM_4_TERM
PWM_5_TERM
PWM_6_TERM
PWM_7_TERM
PWM_8_TERM
PWM_9_TERM
PWM_10_TERM
PWM_11_TERM
PWM_12_TERM
PWM_13_TERM
PWM_14_TERM
PWM_15_TERM
PWM_16_TERM
Q1 PMV20ENR
Q2 PMV20ENR
Q3 PMV20ENR
Q4 PMV20ENR
Q5 PMV20ENR
Q6 PMV20ENR
Q7 PMV20ENR
Q8 PMV20ENR
Q9 PMV20ENR
Q10 PMV20ENR
Q11 PMV20ENR
Q12 PMV20ENR
Q13 PMV20ENR
Q14 PMV20ENR
Q15 PMV20ENR
Q16 PMV20ENR
FET Drivers
VDC
J1 PWM_1-4
J2 PWM_5-8
J3 PWM_9-12
J4 PWM_13-16
Output Terminals
J5 5 TO 24 VDC
D1 MBR120
10K R1
D2 V_IN
C3 10 uF
C4 1 uF
U2 AP2205-33Y
VIN VOUT
C5 2.2 uF
1K6 R2
D3 3V3
1K6 R3
D4 STATUS
GPIO5
Power Supply
R4 10K
R5 10K
R6 10K
R7 10K
R8 10K
R9 10K
C6 1 uF
SW1 RESET
SW2 BOOT/IO0
SW3 I34
SW4 I35
SW5 I36
SW6 I39
Buttons
JP1 J7_RST
C7 100 nF
J6 SERIAL+GPIO
GPIO0 10
GPIO2 9
GPIO4 8
GPIO5 7
GPIO1 5
GPIO3 4
+3V3
Serial + GPIO port
DEMOD
U3 TSOP382xx
GND
OUT
Vs
GPI36
C8 100 nF
IR Receiver
H1 H2 H3 H4
Mounting Hole_Pad
Sheet: /
File: kbxLEDController-16ch.sch
Title:
Size: A4
Date:
Rev:
KiCad E.D.A. kicad (5.1.6-0-10_14)
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