DIYBMS CONTROLLER V4.4

ESP32 DEVKIT C

ESP USB SOCKET

RE4 · RE3 · RE2 · J3 · GND · input · +5Volt · J2 · RE1

I2C Debug · R16 · R13 · D4

J11 · R5 · U12 · U9 · 5V PWR · R15 · F1

SCK SDA GND · R25 · R18 · J12 · J5 · R12

R29 · K2 · Q2 · Q3 · U6 · K1 · R11 Q1

D5 · R14 · D7 · C3 · C4 · D2 R10

K · C8 · C9 · R23

Jumpers

VCC
GND
CS
RESET
DC
MOSI
SCK
LED
MISO
T_CLK
T_CS
T_DIN
T_DO
T_IRQ

[JP1] 120ohm CANBUS
     Terminator [not connected]

[JP4] 120ohm RS485
     Terminator [not connected]

[JP5] CANBUS voltage [5v default]
     Track needs to be broken
     to change

J9 · J6 · J15 · SD CARD

ATtiny841-SSU

Watchdog micro
controller (optional)

JP3 · D6 · R22 · JP2 · C10

SD_CS
SD_MOSI
SD_MISO
SD_SCK

C1 · JP5 · 5V — 3.3V · R3 · **Revision**
SN65HVD75DR · TJA1057GT/3 · **BETA−d8a9ee8**
U5 · C6 · R6 R20 · U2
R21 · R19 · JP1 · Q4 · C7 · C11
C2 · 120ohm · R26 R7 · R28 R27
R17 · D1 · C5 · D8 · SW1 · SW2
R4 · U1 · R2 · J14
R1 · R24 · U3 · JLC · JLC JLC JLC
R9 JP4 · TCA6416APWR
J1 · J8 · J4 · J7
+5V A B GND · E.Stop · A B C D · +5V GND CANH CANL

122.500 mm

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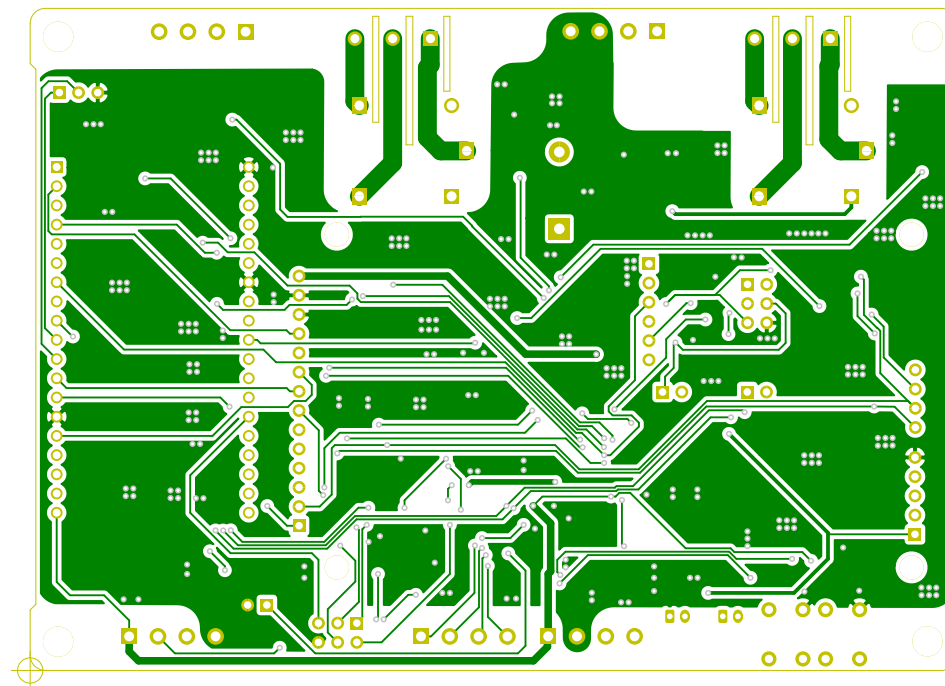
Title: DIYBMS ESP32 Controller

Size: A4	Date: 2021−02−21	Rev:
KiCad E.D.A. pcbnew 5.1.9+dfsg1−1bpo10+1		Id: 1/1

RE4
RE3

RE2
Norm. Open
Common

POWER INPUT
+5Volt
+5Volt
GND
GND
DC INPUT 5V REGULATED
SUPPLY @ 2AMP MIN

RE1
Norm. Open
Common

github.com/stuartpittaway/diyBMSv4

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this project wouldn't exist.
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