Sheet5DEB9B6E

File: diyBMSv4-Leaf_pos.kicad_sch

Sheet5DEB9BAA

File: diyBMSv4-Leaf_neg.kicad_sch

Power and Comm

File: file5DF129FA.kicad_sch

**Joho Technology Inc**

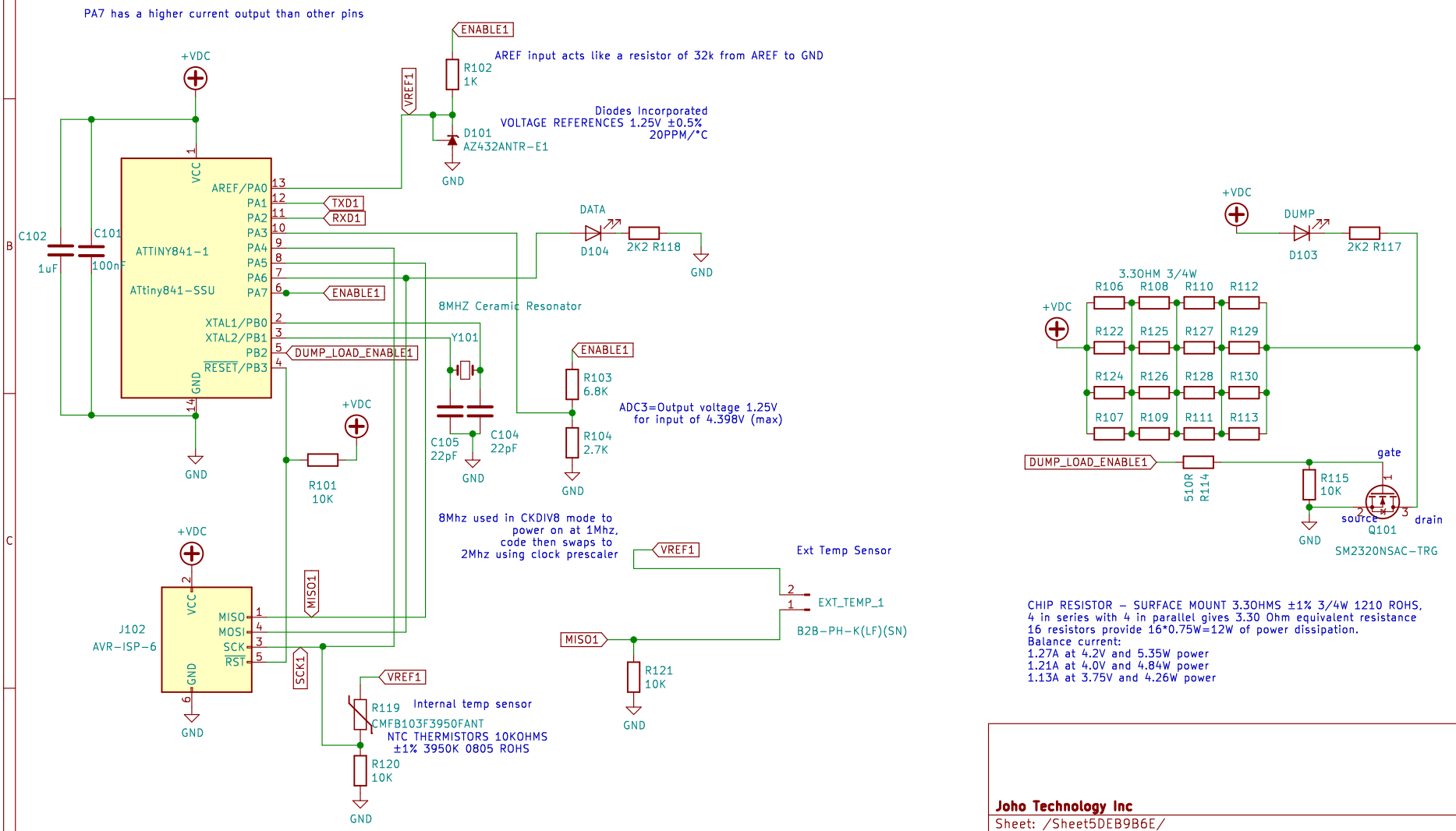
Sheet: /
File: diyBMS-Leaf.kicad_sch

**Title: diyBMSv4 - LEAF**

| Size: A4 | Date: 2021-03-07 | **Rev: 2.00** |
|---|---|---|
| KiCad E.D.A. kicad (5.99.0-8941-ge2f8b1a4b1) | | Id: 1/4 |

# DIYBMS v4 CELL MONITORING MODULE for the +ve Leaf terminal

## VERSION 4.40




CHIP RESISTOR - SURFACE MOUNT 3.3OHMS ±1% 3/4W 1210 ROHS,
4 in series with 4 in parallel gives 3.30 Ohm equivalent resistance
16 resistors provide 16*0.75W=12W of power dissipation.
Balance current:
1.27A at 4.2V and 5.35W power
1.21A at 4.0V and 4.84W power
1.13A at 3.75V and 4.26W power

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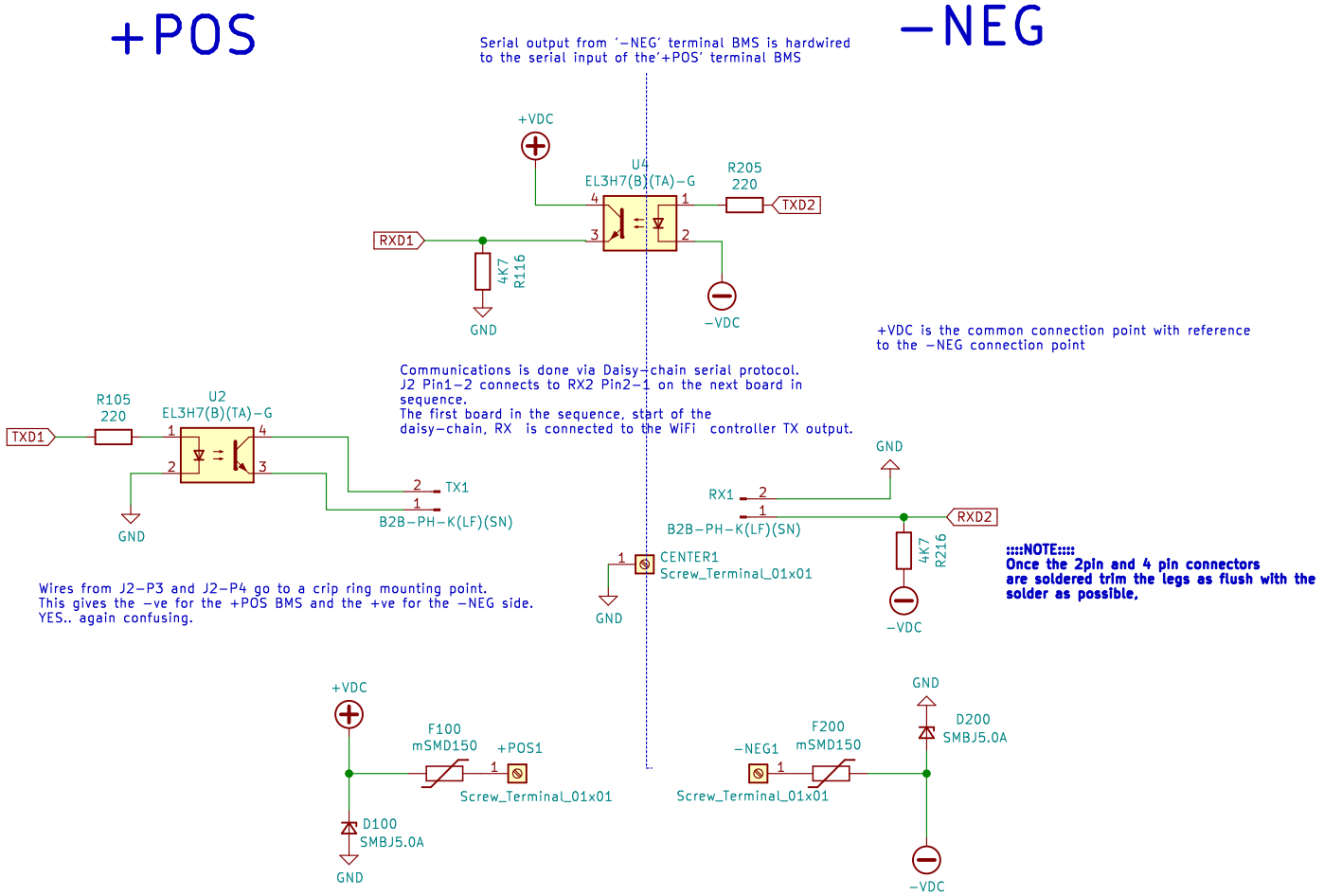
Sheet: /Sheet5DEB9B6E/
File: diyBMSv4-Leaf_pos.kicad_sch

***Title: diyBMSv4 - LEAF***

| Size: A4 | Date: 2021-03-07 | **Rev: 2.00** |
|---|---|---|
| KiCad E.D.A. kicad (5.99.0-8941-ge2f8b1a4b1) | | Id: 2/4 |




The Leaf cell is 2s2P with 3 connection terminals, +ve common −ve
Voltage on one pack is measured between the −ve terminal and common. The voltage on the second pack measures between he +ve terminal and common.
For schematic and layout purposes there are uniquely names VCC lines and GND lines for the separated BMS circuits.
YES... confusing

Each BMS is has its own supply:
+ve terminal − common (common is negative)
−ve terminal − common ( common is positive)

mSMD150, 8V MAX, FUSE HOLD @ 1.5AMP, TRIP 3A

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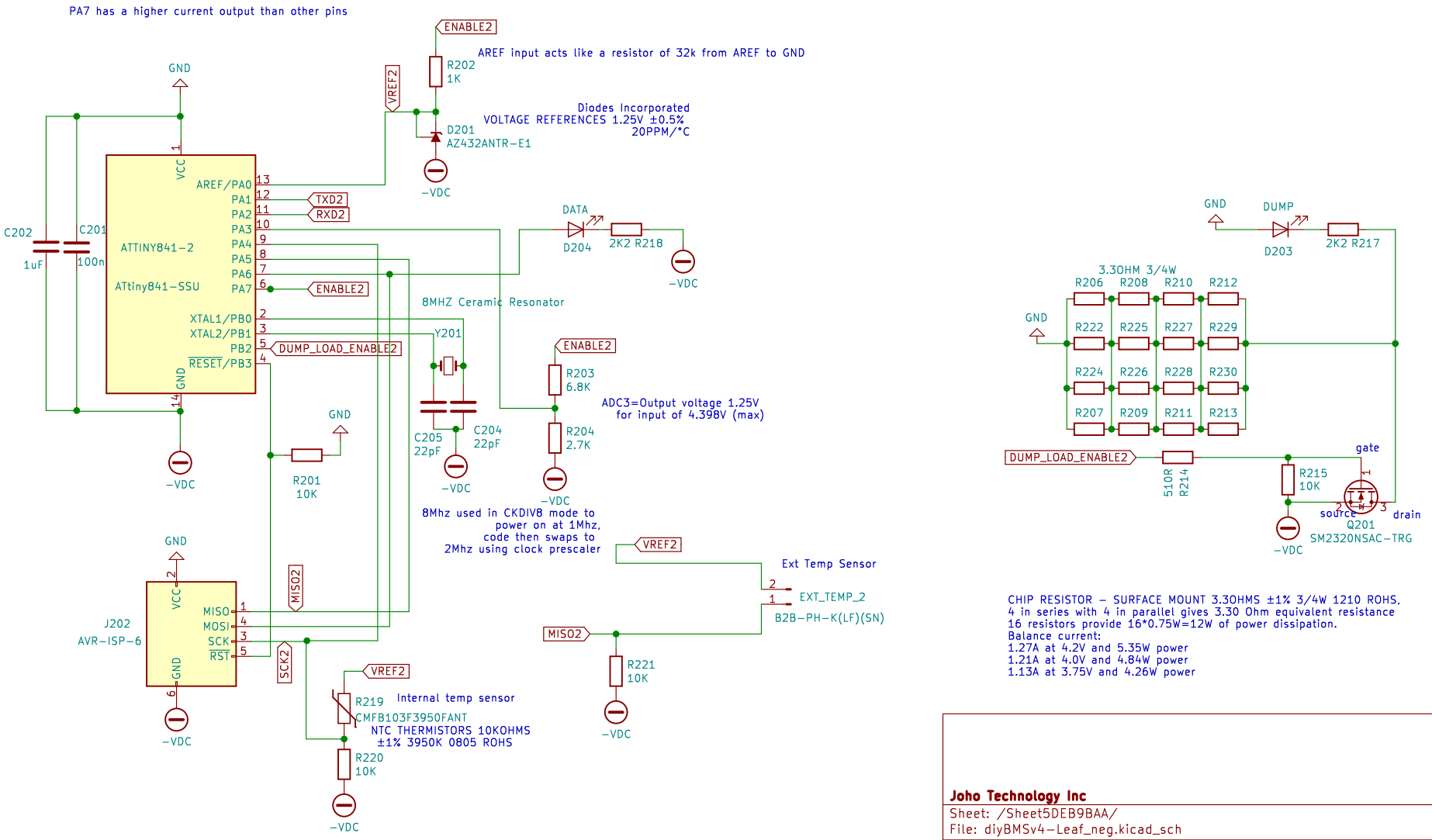
Sheet: /Power and Comm/
File: file5DF129FA.kicad_sch

***Title: diyBMSv4 − LEAF***

| Size: A4 | Date: 2021−03−07 | **Rev: 2.00** |
|---|---|---|
| KiCad E.D.A. kicad (5.99.0−8941−ge2f8b1a4b1) | | Id: 3/4 |

# DIYBMS v4 CELL MONITORING MODULE for the +ve Leaf terminal

## VERSION 4.40

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| | | |
|---|---|---|
| **Joho Technology Inc** | | |
| Sheet: /Sheet5DEB9BAA/ | | |
| File: diyBMSv4-Leaf_neg.kicad_sch | | |
| ***Title: diyBMSv4 - LEAF*** | | |
| Size: A4 | Date: 2021-03-07 | **Rev: 2.00** |
| KiCad E.D.A. kicad (5.99.0-8941-ge2f8b1a4b1) | | Id: 4/4 |