TWRPS-LBS-M LiFePo4 batteries power supply main board

It's part of the new LiFePo4 batteries power supply system. This is the main board intended to supply oscillators, frequency doublers, FIFO buffer and DAC. It provides the control for the whole system.

Output rails:

- 3V3 to 16V5, typically for oscillators

- 2 x 3V3 to 6V6, typically for DAC

- 3V3, auxiliary devices (for example the clock section of the FIFO)

5V/500 mA linear regulator to supply other devices like USB to I2S and so on

Remote power off

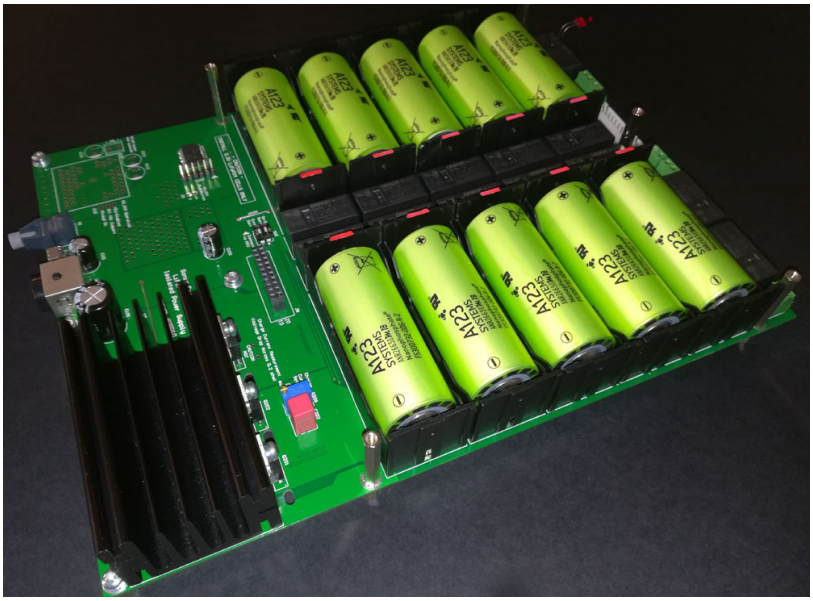
No switching devices or active oscillators during listening

No RF at all (no multiplexed display and microcontroller in stand-by mode)

Board size: 260mm x 195mm

Board options: finished and semi-finished

Note: without batteries and battery holders



There are 2 available options for this board:

- finished boards (fully assembled and tested)

- semi-finished boards (users have to solder a few parts, mostly TH)

The BOM for semi-finished board is available at post #164 on the diyaudio.com thread: The Well Regulated Power Supply.

TWRPS-LBS-D LiFePo4 batteries power supply daughter board

It's part of the new LiFePo4 batteries power supply system. This is an optional board intended to add more rails to the main board. It's controlled by the main board.

Output rails:

- 2 x 3V3 to 13V2, typically for DAC output stage

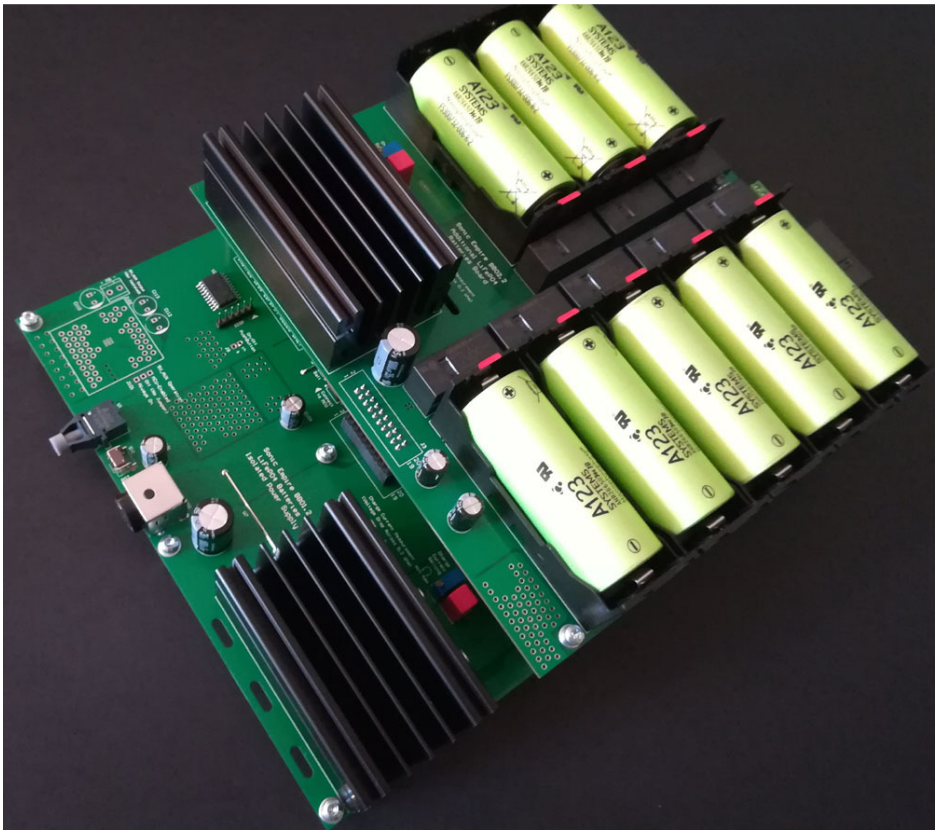
Fits the main board with a single connector

Controlled by the main board

Board size: 184mm x 195mm

Board options: finished and semi-finished

Note: without batteries, battery holders and connectors to stack onto the main board



There are 2 available options for this board:

- finished boards (fully assembled and tested)

- semi-finished boards (users have to solder a few parts, mostly TH)

The BOM for semi-finished board is available at post #165 on the diyaudio.com thread: The Well Regulated Power Supply.

TWRPS-LBS-P LiFePo4 batteries power supply PSU

It's part of the new LiFePo4 batteries power supply system. This is the PSU board intended to recharge the batteries of the main and the extra boards. It's controlled by the main board.

Output rails:

- linear supply to recharge the batteries of the main and extra board

- linear supply to power the FIFO board

- regulated supply to power the oscillators while recharging the batteries, to never shut down the oscillators

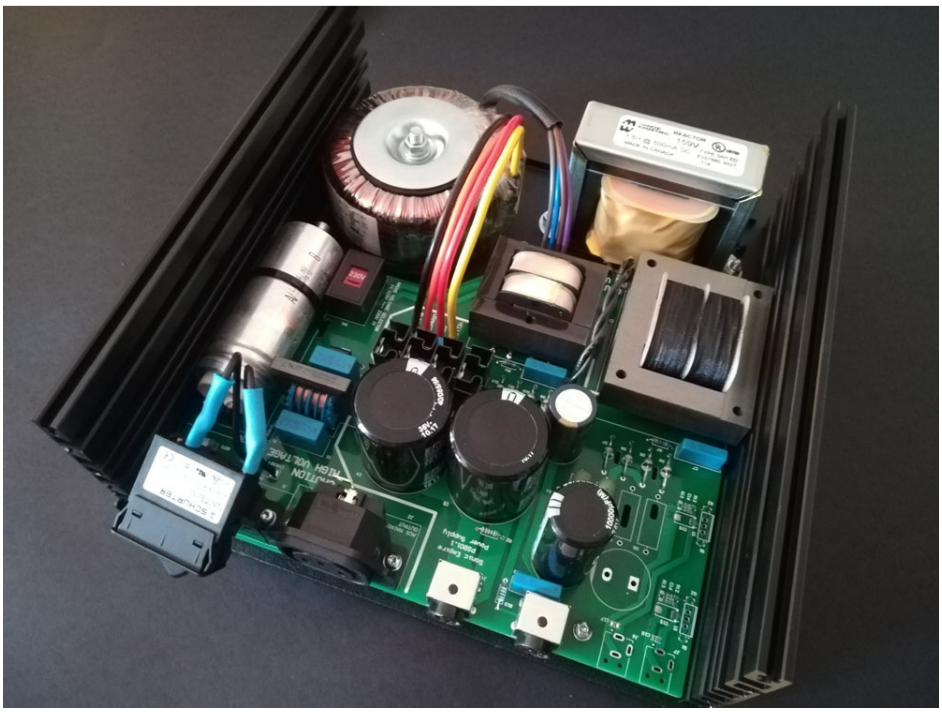
Fita the main board with a single connector

Controlled by the main board

Board size: 208mm x 170mm

Board options: bare PCB only

Note: almost all parts are through hole, a few SMD parts only



There is 1 available option for this board:

- bare PCB (almost all parts are through hole)

The BOM is available at post #166 on the diyaudio.com thread: The Well Regulated Power Supply.