

SqueezeAmpToo V2

by David Viberg, Aug 6, 2020

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In collaboration with Chuck Rohs / Zethus Information Systems

This is fork of philippe44 /SqueezeAMP to reduce cost, reduce heat and add functionality

The 16V/3 cell option does not make sense, imho, for a battery powered amplifier as it increases power at the cost of battery life so this version is 16V-12V/2 cell only

The board has been increased in size from 5x4cm to 7.5x4cm to add a better performing heat sink for 16V operation, the board is the size of a dual 18650 battery pack

This has a cost reduced charger and buck regulator and adds a USB to serial interface for easy initial programming and JTAG port as well as an IR remote control

V2 fixes charger wiring error, low voltage cutoff for 3.3V buck, headphone jack footprint and power jack footprint

V2 adds optional spi display and adds encoder and buttons (manual volume is important imho) and a board that bucks battery to 5V to drive WS2812 light show

18Vmax !!!

12V power barrel connector

alt. screw terminals for power

Daughterboards

i2c expand

push buttons and encoder are hardware debounced

rotary encoder

WS2812 driver

CP2102 serial

with boot and reset on connect for easy initial programming

USB

i2c expand

SH1106 i2c OLED display

IR remote control receiver

Speakers 4 or 8 ohm

Headphone

SPDIF TX

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