**Class D Audio Amp Possibilities**

<https://www.analog.com/en/products/ssm4567.html>

I2S

<https://www.maximintegrated.com/en/products/analog/audio/MAX98357A.html>

I2S

Mono

<https://www.analog.com/en/products/ssm2315.html#product-overview>

Differential

3W

Mono

<https://datasheets.maximintegrated.com/en/ds/MAX9777-MAX9778.pdf>

Differential In

I2C configurable

Headphone/ Speaker automatic detection and switching

3W speaker out

<https://www.ti.com/product/LM49450>

Headphone detection

Class D

Stereo 2.5W per channel

I2C configurable

32 step volume control

**MCU**

ATSAMD21G18

**Rotary Encoder**

<https://www.digikey.com/en/products/detail/bourns-inc/PEC11R-4220K-S0024/6164059>

4x GPIOS for each rotary encoder (2 for left/right and 2 for push switch)

**RGB LED**

<https://www.digikey.com/en/products/detail/kingbright/APTF1616SEJ3ZGGVBDC/4098491>

common cathode (for led driver)

**LED Driver**

TLC5940 - <https://www.ti.com/lit/ds/symlink/tlc5940.pdf?ts=1613148414612&ref_url=https%253A%252F%252Fwww.google.com%252F>

Sparkfun libraries

16-channel so 5 rgb leds per chip

Daisy chaineable