

GlowCore Mini

v3.1

ESP32

LED Power

USB-C

Battery

Battery IC

3.3V converter

Gyroscope

Microphone

Status LED

Buttons

LED strips

Pads

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Title:

Size: A4 Date:
KiCad E.D.A. kicad (7.0.0-rc2-138-g8aa225bd1e)

Rev:
Id: 1/13

ESP32

The ESP32 is the microcontroller used in GlowCore Mini.
It comes preinstalled with GlowOS, a customized fork of
the open source software vLED.



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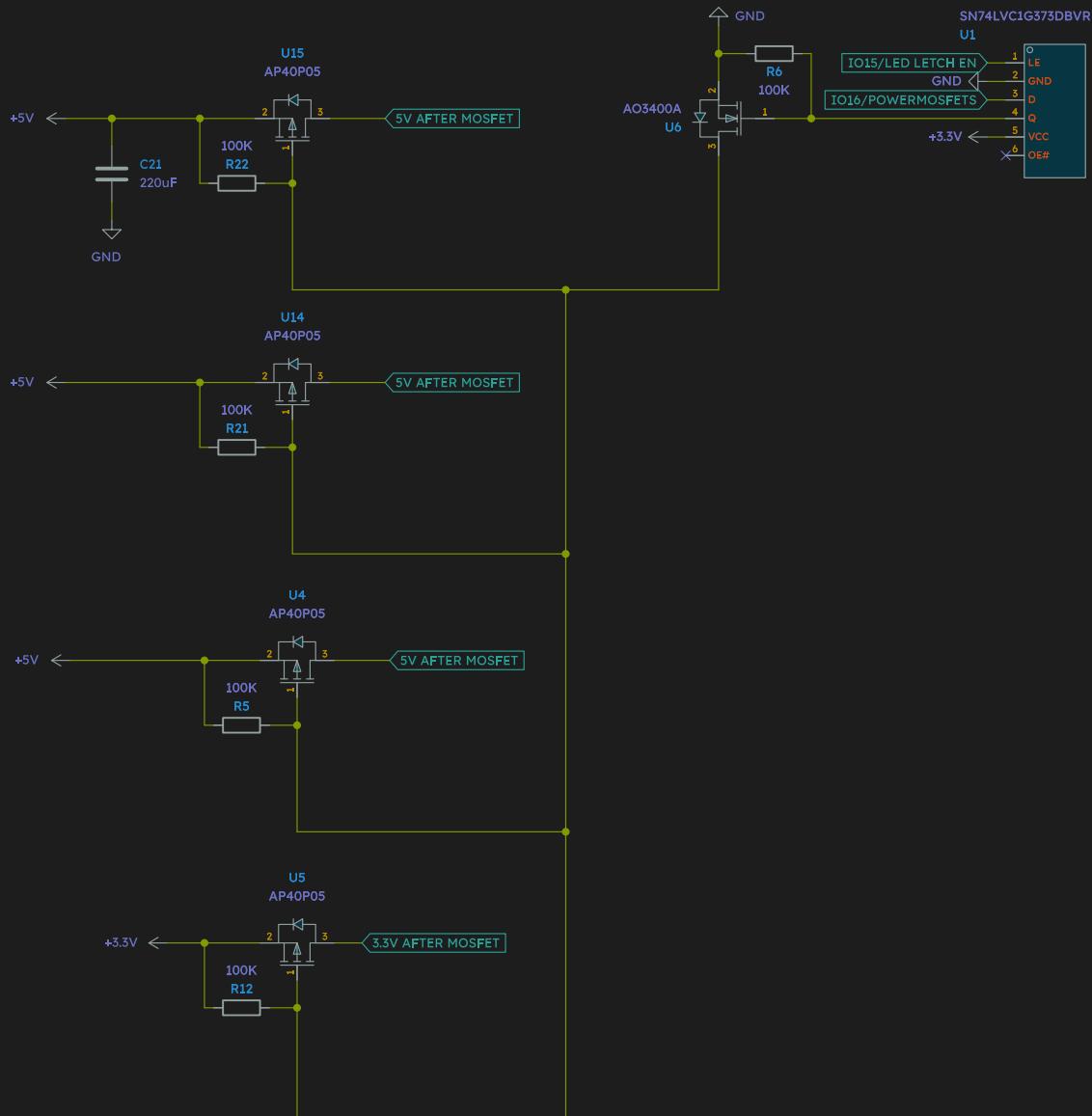
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LED power

GlowCore Mini has the ability to completely turn off power for the connected LEDs, to reduce power consumption when the LEDs are not used. Multiple MOSFETs (U15, U14 and so on) are used for that purpose. A single WS2812B LED for example would otherwise still consume 1mA, even when off.

But to also enable a power saving mode, where the ESP32 goes to sleep, while the LEDs stay on - GlowCore Mini also includes a latch circuit (U1), that controls the state of the power MOSFETs.

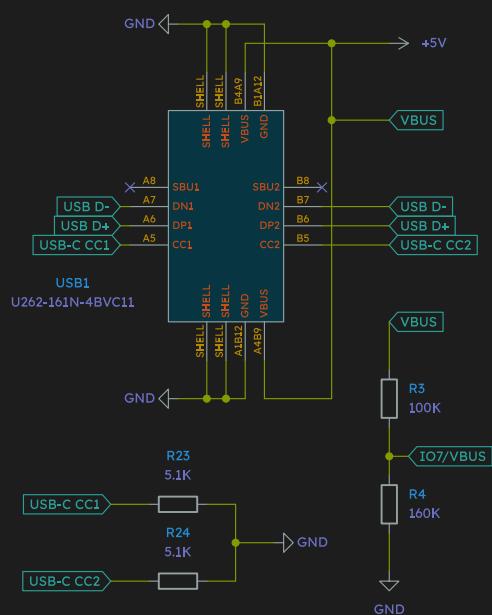


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USB-C port



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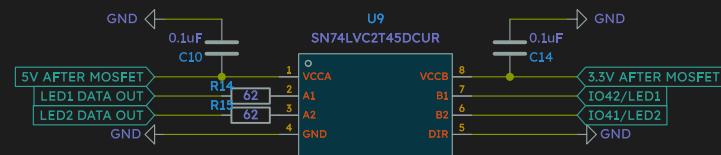
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LED strip pads

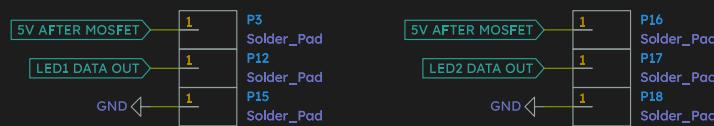
A

A



B

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C

C

D

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E

E

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KiCad E.D.A. kicad (7.0.0-rc2-138-g8aa225bd1e)

Rev:

Id: 12/13

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