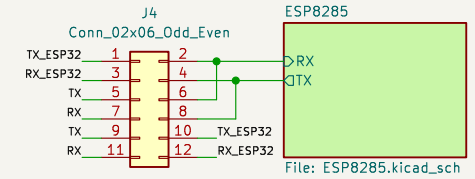
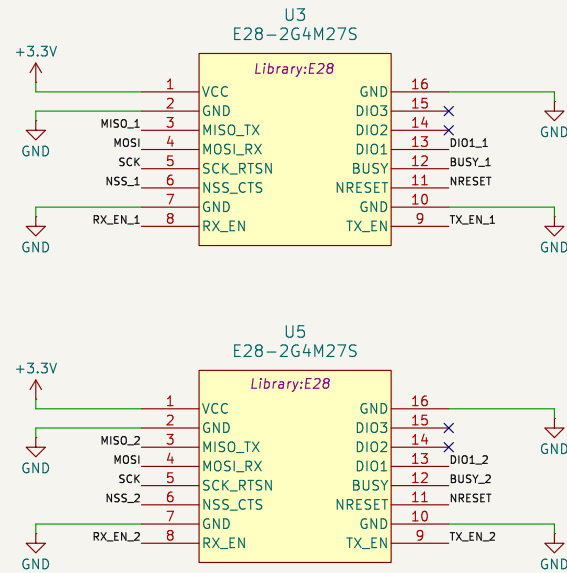
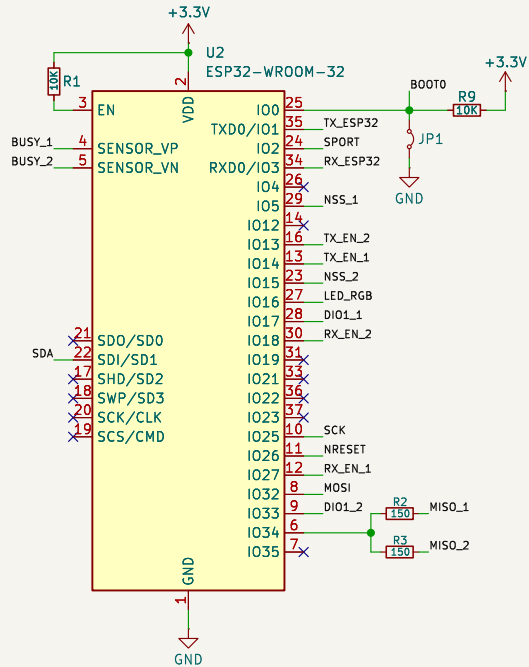
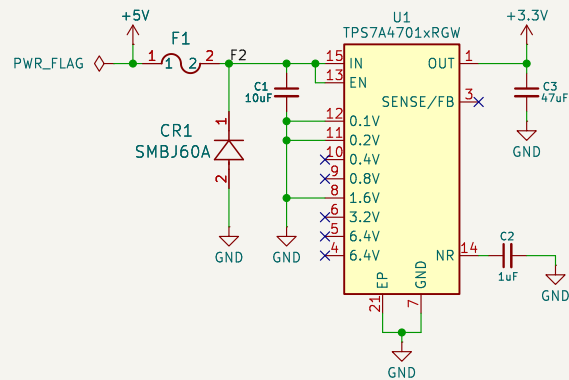


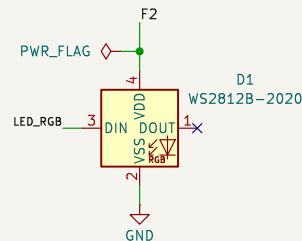
ExpressLRS_2.4GHz_TX



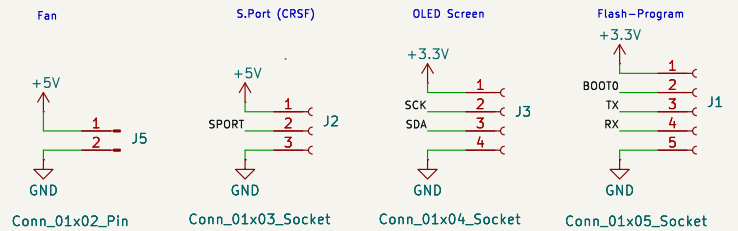
Low-Noise RF LDO Regulator with TVS and Fuse Input Protection



Led Indicator



Pads, Headers and Connectors



The G_TX1 features an integrated SSD1306 OLED display for on-screen telemetry and a WS2812B LED indicator to show ExpressLRS status.

<https://github.com/Paschalis>

Created and Drawn	Name	Date
Checked and Approved	Paschalis M.	2025-08-02
		2025-08-02

Title: G_TX1_2.4G

Size: A4 Date: 2025-08-02 KiCad E.D.A. 9.0.0 Rev: 1.0

File: G_TX1.kicad_sch Sheet 1 of 2



The diagram shows a vertical circuit. At the top is a green line labeled '5V'. Below it are two resistors in series, labeled 'R5 0' and 'R6 1K'. Below the resistors is an LED component labeled 'D2 LED', represented by a triangle pointing down with two arrows. At the bottom is a green line labeled 'GND'.

The schematic diagram illustrates the electrical connections for the ESP8265 module (U4, ESP8285H16). Key components and their connections are as follows:

- Power and Grounding:**
 - VDDA:** Connected to pin 1. A 10kΩ resistor (R7) is connected between VDDA and +3.3V. A 0.1μF capacitor (C31) and a 10μF capacitor (C32) are connected between VDDA and GND.
 - VDD3P3:** Connected to pin 4. A 10kΩ resistor (R8) is connected between VDD3P3 and +3.3V.
 - VDDPST:** Connected to pin 11. A 10kΩ resistor (R8) is connected between VDDPST and +3.3V.
 - Grounding:** Pins 33, 32, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, and 17 are connected to GND.
- Antenna:** An antenna (AE1, W3008) is connected to pin 1.
- LED:** Connected to pin 8.
- Reset:** A 12kΩ resistor (R4) is connected between pin 31 and GND. A note indicates: "+3.3V --> External reset signal (Low voltage level: active)".
- Crystal:** A 12MHz crystal (Y2) is connected between pins 28 and 27. A 10pF capacitor (C21) is connected between pin 28 and GND. A 10pF capacitor (C22) is connected between pin 27 and GND.
- Other Connections:**
 - TX:** Connected to pin 26.
 - RX:** Connected to pin 25.
 - GPIO5:** Connected to pin 24.
 - SD_DATA_1:** Connected to pin 23.
 - SD_DATA_0:** Connected to pin 22.
 - SD_CLK:** Connected to pin 21.
 - SD_CMD:** Connected to pin 20.
 - SD_DATA_3:** Connected to pin 19.
 - SD_DATA_2:** Connected to pin 18.
 - VDDPST:** Connected to pin 17.

	Name	Date
Created and Drawn	Paschalis M.	2025-03-30
Checked and Approved		2025-03-30



File: ESP8285.kicad_sch Sheet 2 of 2

File: ESP8285.kicad_sch Sheet 2 of 2