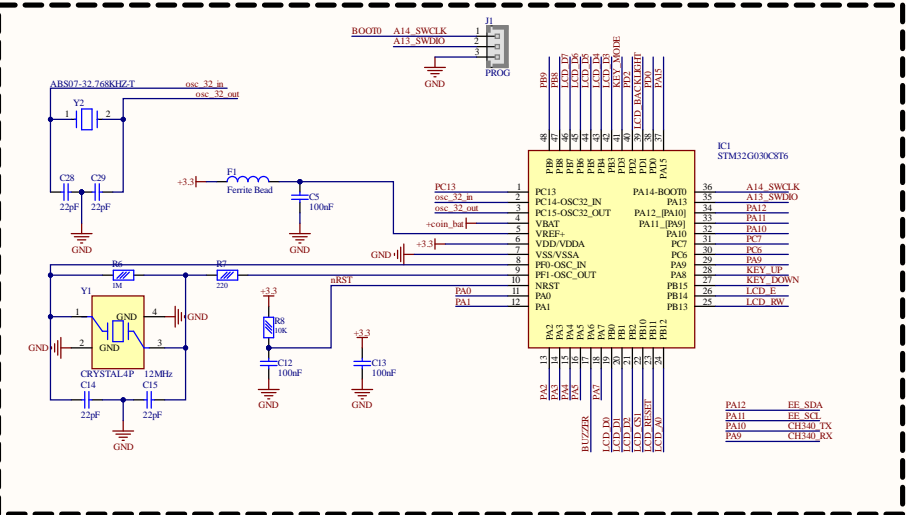


REGULATOR

The diagram illustrates a two-stage voltage regulation system. The first stage is a buck converter (TP54302DDCR) that steps down a 12V input to 5V. The second stage is an LDO (TP57303DBVT) that further regulates the 5V input to a precise 3.3V output. The circuit includes various passive components like capacitors and an inductor to ensure stable operation and reduce ripple.



USB TO SERIAL

The diagram illustrates a USB to Serial converter circuit. It features a USB4401 module (U1) connected to a CH340T chip (U4). The USB4401 module has pins for VBUS, SBU1, SBU2, and GND. The CH340T chip has pins for CKO, ACTV, TXD, RXD, V1, UD+, UD-, X0, X1, X2, and CT30. The circuit includes a 5V power supply (V1) connected to the VBUS pin of the USB4401 module. A 100nF capacitor (C34) is connected between the 5V supply and ground. The TXD pin of the CH340T chip is connected to the TX pin of the USB4401 module. The RXD pin of the CH340T chip is connected to the RX pin of the USB4401 module. The V1 pin of the CH340T chip is connected to the VBUS pin of the USB4401 module. The X0, X1, and X2 pins of the CH340T chip are connected to ground. The CT30 pin of the CH340T chip is connected to the CT30 pin of the USB4401 module. The circuit also includes a 100nF capacitor (C32) connected between the 5V supply and ground, and a 100nF capacitor (C33) connected between the 5V supply and ground.

PIN HEADERS

Title		
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