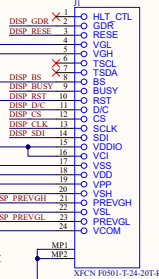


Layout considerations:
- keep C2 close to inductor
- keep switch node (2 of L1) small
- keep inverting node (1 of C1) small
- keep C10 close to D3
- keep C12 close to D1

ENK ~ -12V (approx)
converter:
- lower part is classic non-synchronous boost converter
- upper part is a clamper (transforms 0-12V switching of boost switchnode to ~-12.0V levels. D1 with a cap is a peak detector to get ~-12V rail



GPIO17 goes HIGH when in bootloader (LED 3 glows in bootloader mode)

Connect to hardware LED PWM channels on MCU (can be any GPIO)