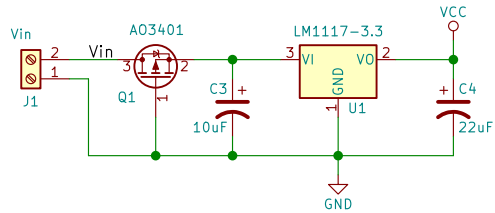
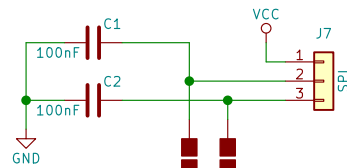


Use low R_{ds} P-Channel MOSFET for reverse polarity protection (A03401, IRLML6401, Si2323)
 Use 3.3V, 800mA-1A LDO (LM1117, AMS1117 ...)
 Use 10-22uF Tantalum capacitor (MLCC have lower ESR that may make regulator instable)

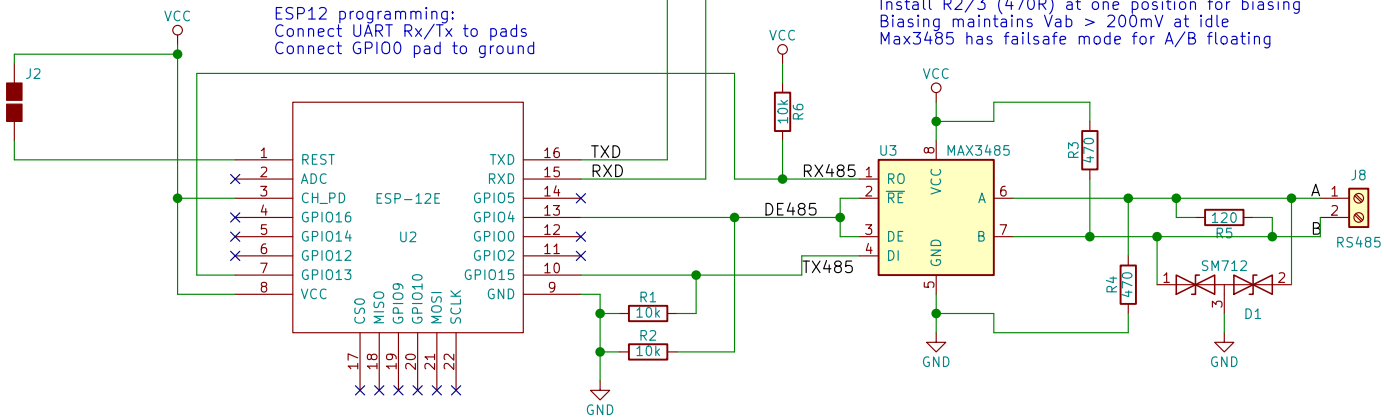


GPIO0 must be kept float or high at boot for normal operation (Boot from Flash)
 GPIO0 is set low for programing (Boot from UART)
 GPIO1 (UART TXD) must be float at boot (Boot ROM outputs to UART)
 GPIO2 should be float or pulled high for normal operation (never connect directly)
 GPIO2 is often connected to the module LED and is used as Output by bootrom.
 GPIO15 must be low at boot for normal operation
 this sets RS485 TX active, but has no effect since DE is disabled



ESP12 programming:
 Connect UART Rx/Tx to pads
 Connect GPIO0 pad to ground

ESP8266 has strong internal Pull Ups
 To prevent unwanted reset, connect RST pin to Vcc.



R1-3 : NE for low speed, short distance
 Install R1 (120R) at both ends of RS485 bus
 Install R2/3 (470R) at one position for biasing
 Biasing maintains V_{ab} > 200mV at idle
 Max3485 has failsafe mode for A/B floating



Bertrand Tognoli

Sheet: /
 File: WiSe.sch

Title: ToBe WiSe

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