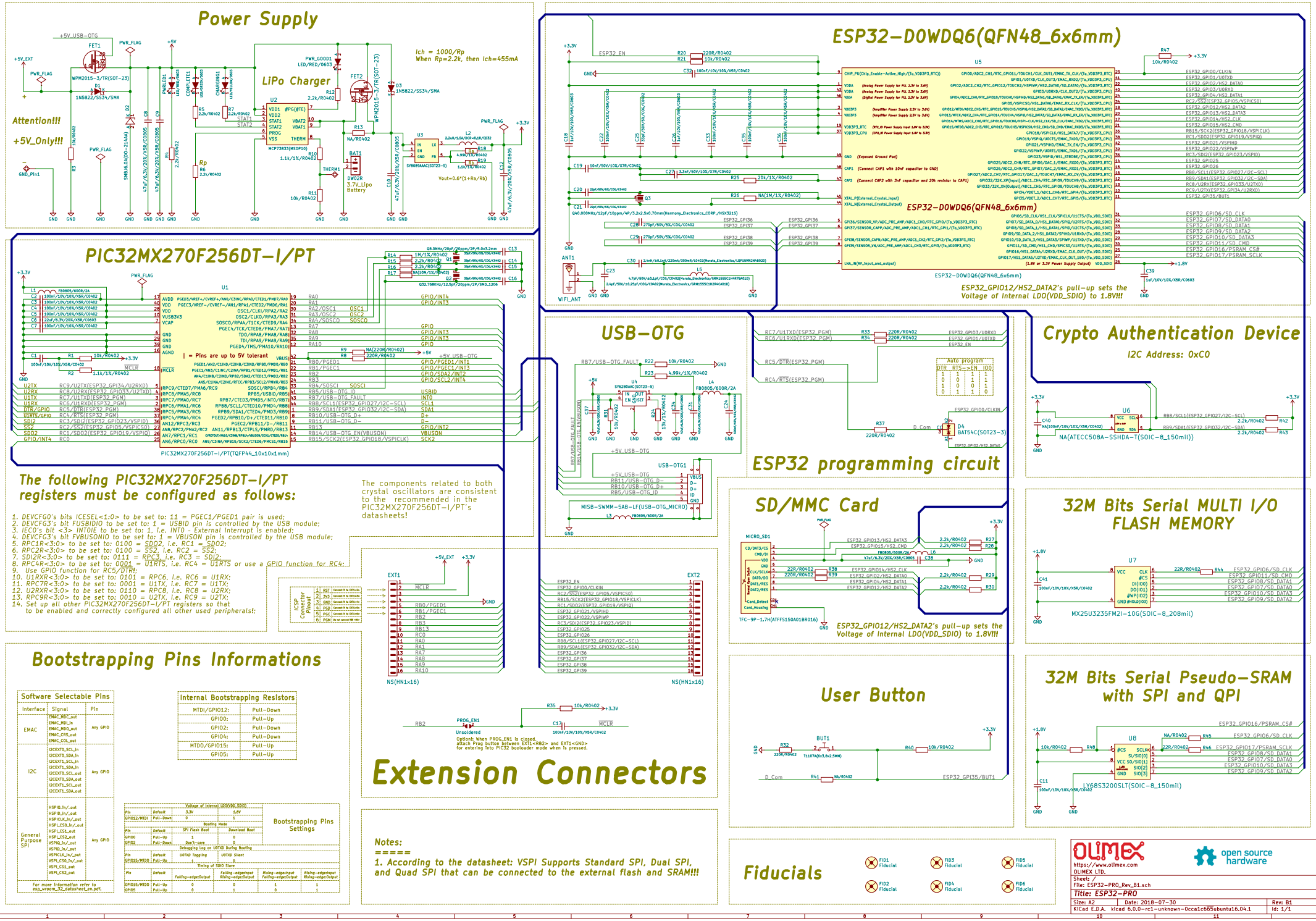
Power Supply
LiPo Charger
Ich = 1000/Rp
When Rp=2.2k, then Ich=455mA
Attention!!!
+5V_Only!!!
ESP32-D0WDQ6(QFN48_6x6mm)
ESP32_GPIO12/HS2_DATA2's pull-up sets the Voltage of Internal LDO(VDD_SDIO) to 1.8V!!!
PIC32MX270F256DT-I/PT
PIC32MX270F256DT-I/PT(TQFP44_10x10x1mm)
The following PIC32MX270F256DT-I/PT registers must be configured as follows:
1. DEVCFG0's bits ICESEL<1:0> to be set to: 11 = PGEC1/PGED1 pair is used;
2. DEVCFG3's bit FUSBIDIO to be set to: 1 = USBID pin is controlled by the USB module;
3. IEC0's bit <3> INT0IE to be set to: 1, i.e. INT0 - External Interrupt is enabled;
4. DEVCFG3's bit FVBUSONIO to be set to: 1 = VBUSON pin is controlled by the USB module;
5. RPC1R<3:0> to be set to: 0100 = SDO2, i.e. RC1 = SDO2;
6. RPC2R<3:0> to be set to: 0100 = SS2, i.e. RC2 = SS2;
7. SDI2R<3:0> to be set to: 0111 = RPC3, i.e. RC3 = SDI2;
8. RPC4R<3:0> to be set to: 0001 = U1RTS, i.e. RC4 = U1RTS or use a GPIO function for RC4;
9. Use GPIO function for RC5/DTR#;
10. U1RXR<3:0> to be set to: 0101 = RPC6, i.e. RC6 = U1RX;
11. RPC7R<3:0> to be set to: 0001 = U1TX, i.e. RC7 = U1TX;
12. U2RXR<3:0> to be set to: 0110 = RPC8, i.e. RC8 = U2RX;
13. RPC9R<3:0> to be set to: 0010 = U2TX, i.e. RC9 = U2TX;
14. Set up all other PIC32MX270F256DT-I/PT registers so that to be enabled and correctly configured all other used peripherals!;
The components related to both crystal oscillators are consistent to the recommended in the PIC32MX270F256DT-I/PT's datasheets!
USB-OTG
ESP32 programming circuit
Crypto Authentication Device
I2C Address: 0xC0
NA(ATECC508A-SSHDA-T(SOIC-8_150mil))
SD/MMC Card
ESP32_GPIO12/HS2_DATA2's pull-up sets the Voltage of Internal LDO(VDD_SDIO) to 1.8V!!!
32M Bits Serial MULTI I/O FLASH MEMORY
MX25U3235FM2I-10G(SOIC-8_208mil)
User Button
32M Bits Serial Pseudo-SRAM with SPI and QPI
LY68S3200SLT(SOIC-8_150mil)
Bootstrapping Pins Informations
Software Selectable Pins
Internal Bootstrapping Resistors
Bootstrapping Pins Settings
Extension Connectors
NS(HN1x16)
Notes:
1. According to the datasheet: VSPI Supports Standard SPI, Dual SPI, and Quad SPI that can be connected to the external flash and SRAM!!!
Fiducials
OLIMEX
https://www.olimex.com
OLIMEX LTD.
Sheet: /
File: ESP32-PRO_Rev_B1.sch
Title: ESP32-PRO
Size: A2
Date: 2018-07-30
Rev: B1
KiCad E.D.A. kicad 6.0.0-rc1-unknown-0cca1c665ubuntu16.04.1
Id: 1/1
open source hardware