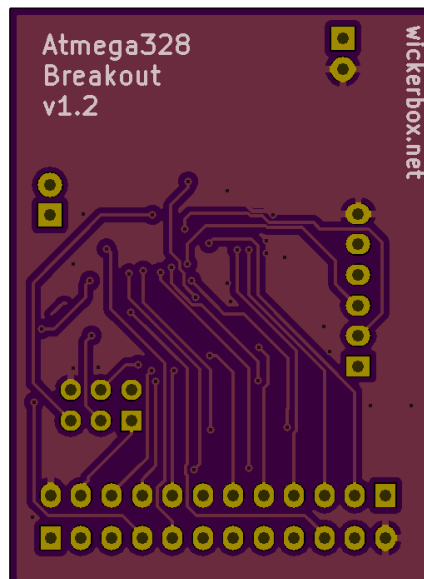
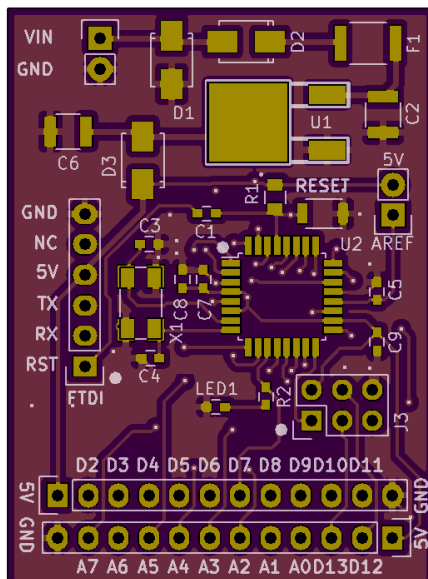
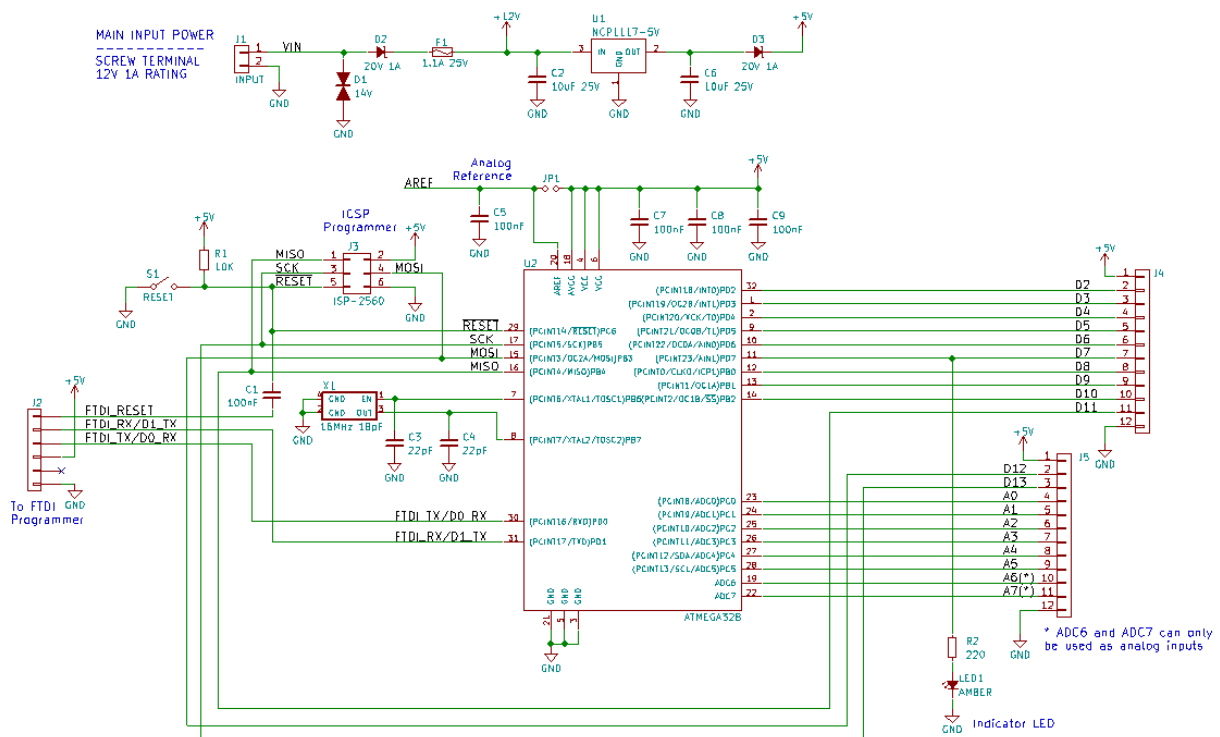


Basic Atmega328 Breakout Board v1.2

This is a breakout board for the Atmega328. It supports input voltage up to 16V, regulating down to 5V for the microcontroller. A bootloader can be loaded over ICSP and then the board can be powered and communicated with over an FTDI cable. All the input/output pins are broken out for prototyping.

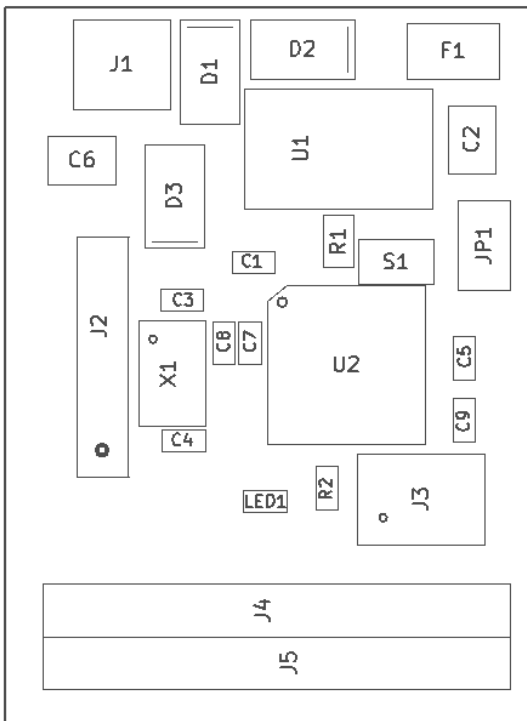
The project is released as open hardware under the CERN v1.2 Open Hardware license.



Bill of Materials

| Ref | Qty | Description | Digikey PN |
|----------------|-----|---|-----------------------|
| C2 C6 | 2 | CAP CER 10UF 25V X7R 1210 | 587-2599-1-ND |
| C3 C4 | 2 | CAP CER 22pF 100V C0G NP0 0603 | 399-11145-1-ND |
| C7 C8 C9 C1 C5 | 5 | CAP CER 0.1UF 100V X7R 0603 | 490-3285-1-ND |
| D1 | 1 | TVS DIODE 14VWM 23.2VC SMAJ14A-13-F SMA | SMAJ14A-FDICT-ND |
| D2 D3 | 2 | DIODE SCHOTTKY 20V 1A SMA | SS12-E3/61TGICT-ND |
| F1 | 1 | RESETTABLE FUSE 1.1A 25V MF-MSMF | MF-MSMF110/24X-2CT-ND |
| J1 | 1 | CONN TERM SCREW GREEN 2.54MM 2POS TH | ED10561-ND |
| J2 | 1 | HEADER MALE 6POS TH 1x06 0.1" | 952-1902-ND |
| J3 | 1 | HEADER MALE 6POS 2x3 0.1" | 952-1921-ND |
| J4 J5 | 2 | HEADER FEMALE 12POS TH 1x12 0.1" | 952-1905-ND |
| JP1 | 1 | SHUNT JUMPER 0.1IN BLACK GOLD | 3M9580-ND |
| LED1 | 1 | LED AMBER DIFFUSED 0603 SMD | 475-2712-1-ND |
| R1 | 1 | RES SMD 10K OHM 5% 1/8W 0805 | 311-10KARCT-ND |
| R2 | 1 | RES SMD 220 OHM 5% 1/10W 0603 | 311-22GRCT-ND |
| S1 | 1 | SWITCH TACTILE SPST-NO 0.05A 12V | SW1020CT-ND |
| U1 | 1 | IC REG LDO 5V 1.1A NCP1117 DPAK | NCP1117DT50GOS-ND |
| U2 | 1 | IC MCU 8BIT 32KB FLASH 32TQFP | ATMEGA328P-AU-ND |
| X1 | 1 | CRYSTAL 16MHz 18pF 40 OHM 4SMD | CTX1206CT-ND |

Atmega328 Breakout Board v1.2



12/31/16