MMT – MiniMultiTool

V1.0 2014_11_23

http://www.forth-ev.de/wiki/doku.php/projects:mmt4ue2:start

Commands Goup A – using the 3 switches only

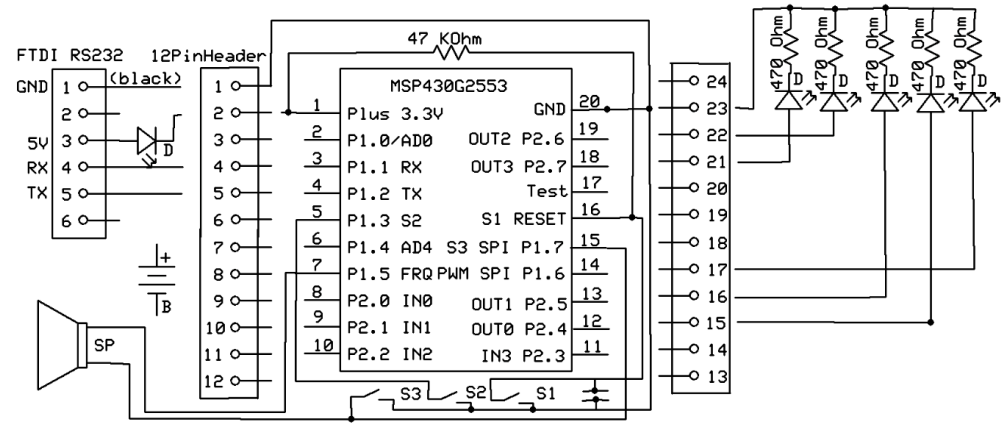
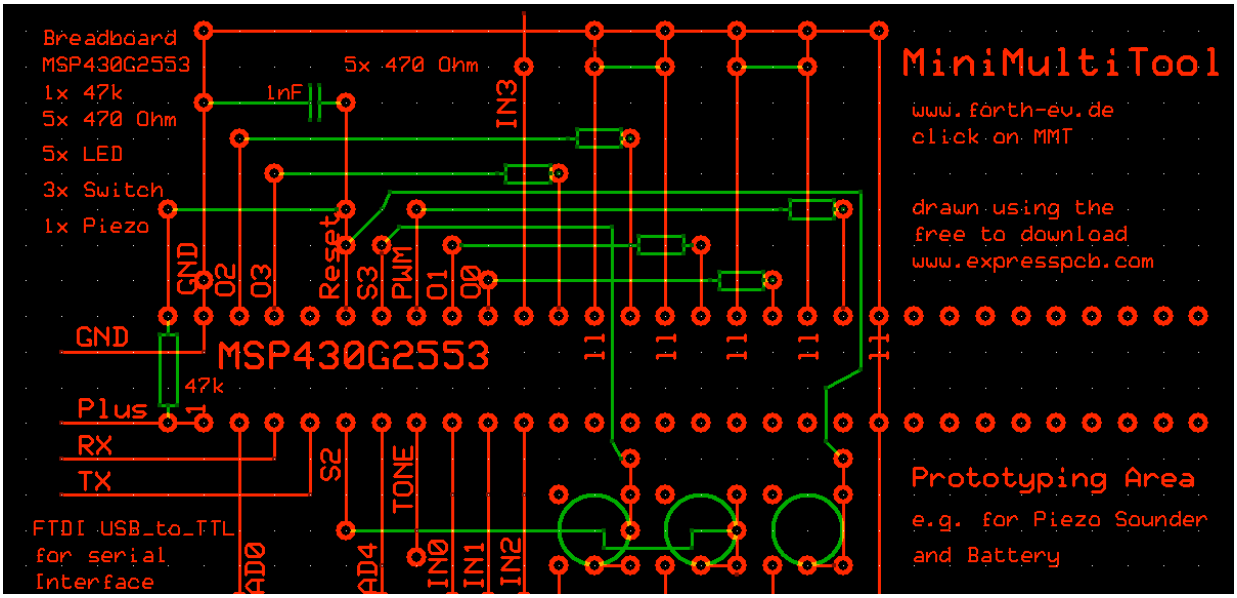
- EX0 - Leave demo loop, run Forth
- EX1 - Display IN at OUT LEDs
- EX2 - Display IN at OUT, plus PWM-LED
- EX3 - Falling edge detector (1)
- EX4 - Falling edge detector with tone (2)
- EX5 - Dance of 4 servos (test servos)
- EX6 - Servo follows analog input on pin ADC4
- EX7 - Get analog input from ADC channel 4
- EX8 - Audio visual display of ADC4 value
- EX9 - Play demo song
- DEMOLOOP - Select an example programm by its nummber.

Commands Group B – using the Terminal function via Serial Interface

- EX11 - Echo any key
- EX12 - Toggle OUT bits manually

Device Pinout: MSP430G2553 20-Pin PDIP

(TOP VIEW)

```
VCC-----------------[01   20]---------------------VSS
(LED1 LP) AD0 P1.0--[02   19]--P2.6 OUT2 ------------
RXD-----------P1.1--[03   18]--P2.7 OUT3 ------------
TXD-----------P1.2--[04   17]--test -----------------
-----------S2 P1.3--[05   16]--RST  S1 --------------
..........AD4 P1.4--[06   15]--P1.7 S3 ---------SPI*
_-_-_-_-_-FRQ P1.5--[07   14]--P1.6 PWM LED2-LP SPI*
----------IN0 P2.0--[08   13]--P2.5 OUT1-------------
----------IN1 P2.1--[09   12]--P2.4 OUT0-------------
----------IN2 P2.2--[10   11]--P2.3 IN3--------------
```

- SPI optional – will e looked at later n