

openKeyboard Chatpad360

Note: baudrate appears to be 5340 bps (not 4800 as expected)

development blog

[Open Keyboard Project](#)

Configuration keys

Holding [people] button (that at this point should be called [user settings]) and pres

- 1) [user settings]+[right] increase backlight luminosity
- 2) [user settings]+[left] decrease backlight luminosity
- 3) [user settings]+[s] put keyboard into serial mode
- 4) [user settings]+[a] put keyboard into scan/advanced mode (still no ps2 mode...not o
- 5) [user settings]+[0-9] set backlight duration (0 = no light, 1 = on 2sec...9 = always
- 6) other settings yet coded but not interfaced

minipro commands

[Minipro Manual](#)

[Minipro Gitlab](#)

check programmer

```
david@I7MINT:~/Github/sdcc-examples/test$ minipro -p "PIC16F883@DIP28" -I -D
Found TL866II+ 04.2.132 (0x284)
Device code: 19351299
Serial code: XV8HRFZBRYN6UM0A7RKQ
Activating ICSP...
Chip ID: 0x0101, Rev.0x2000 OK
david@I7MINT:~/Github/sdcc-examples/test$
```

read contents

- minipro -p "PIC16F883@DIP28" -I -r junk.hex

write test program

- minipro -I -d PIC16F883@SOIC28 -w blink_led.hex

program device

- minipro -p "PIC16F883@DIP28" -I -c code -e -w openKeyboard.hex
- minipro -p "PIC16F883@DIP28" -I -m openKeyboard.hex
- minipro -p "PIC16F883@DIP28" -I -e -c data -w openKeyboard.eeprom.bin
- minipro -p "PIC16F883@DIP28" -I -e -c config -w openKeyboard.fuses.conf

eeprom contents

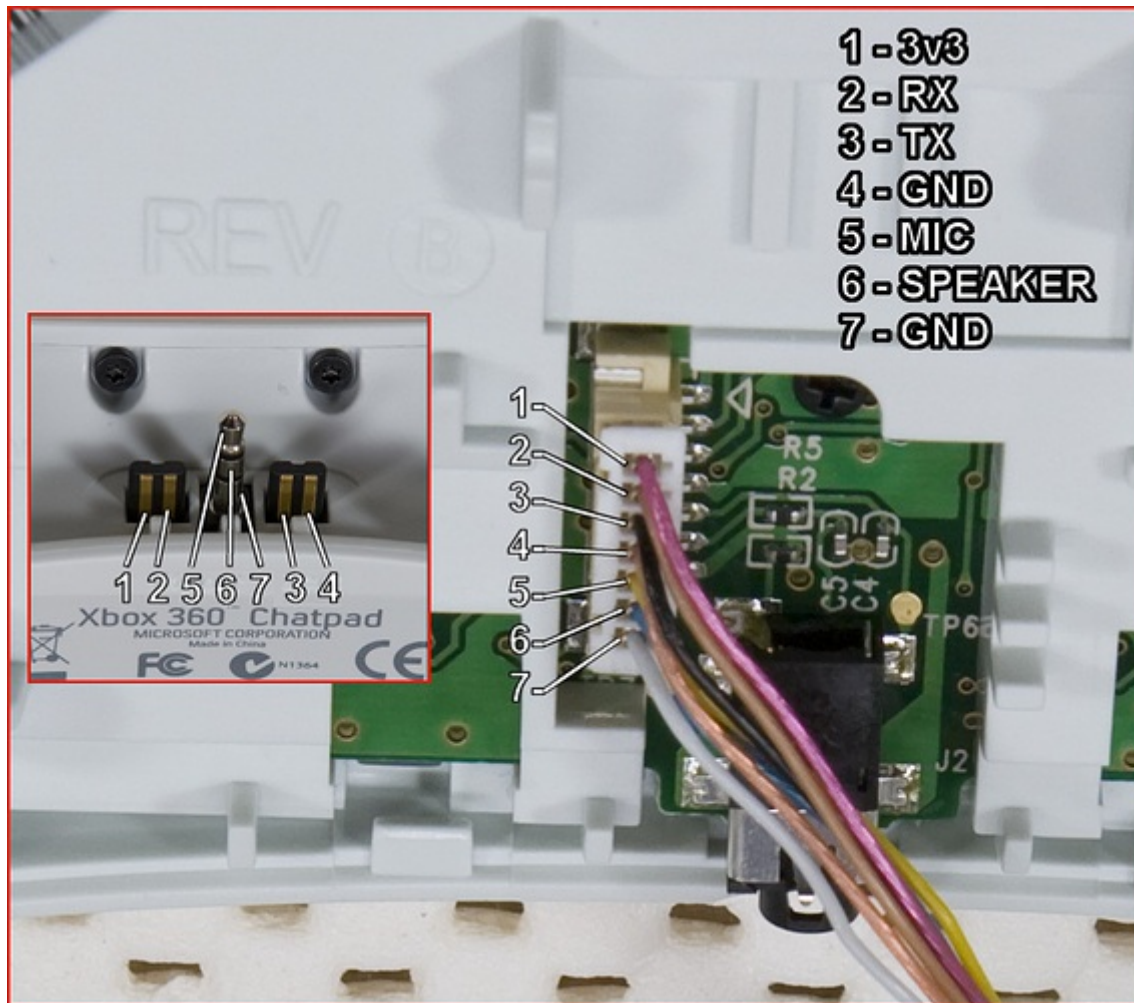
0000: FF 04 00 01 80 80

Config fuses

```
word1 = 0x20C4
word2 = 0x3fff
user_id0 = 0x3fff
user_id1 = 0x3fff
user_id2 = 0x3fff
user_id3 = 0x3fff
```

[Pic16f883 datasheet](#)





The pinout for the 28pin SSOP gives the SSI interface on:

pin 14 - SCLK/SCL

pin 15 - SDI/SDA

pin 16 - SDO

And the UART on:

pin 17 - TX/CK

pin 18 - RX/DT

Tracing the tracks from the J1 header should easily tell you which one they are using

The device supports ISP (in-circuit programming via JP1 header?) on:

pin 24 - PGM

pin 27 - ICSPCLK

pin 28 - ICSPDAT

pin 1 - _MLCR/VPP

Controlling leds from pic's PORTC...bit 0 is for general backlight, subsequent (in an order i did not wrote down and don't remember) are to independantly control shift, green, people and red backlights.And, of course, i could half-power each of them in PWM fashion...