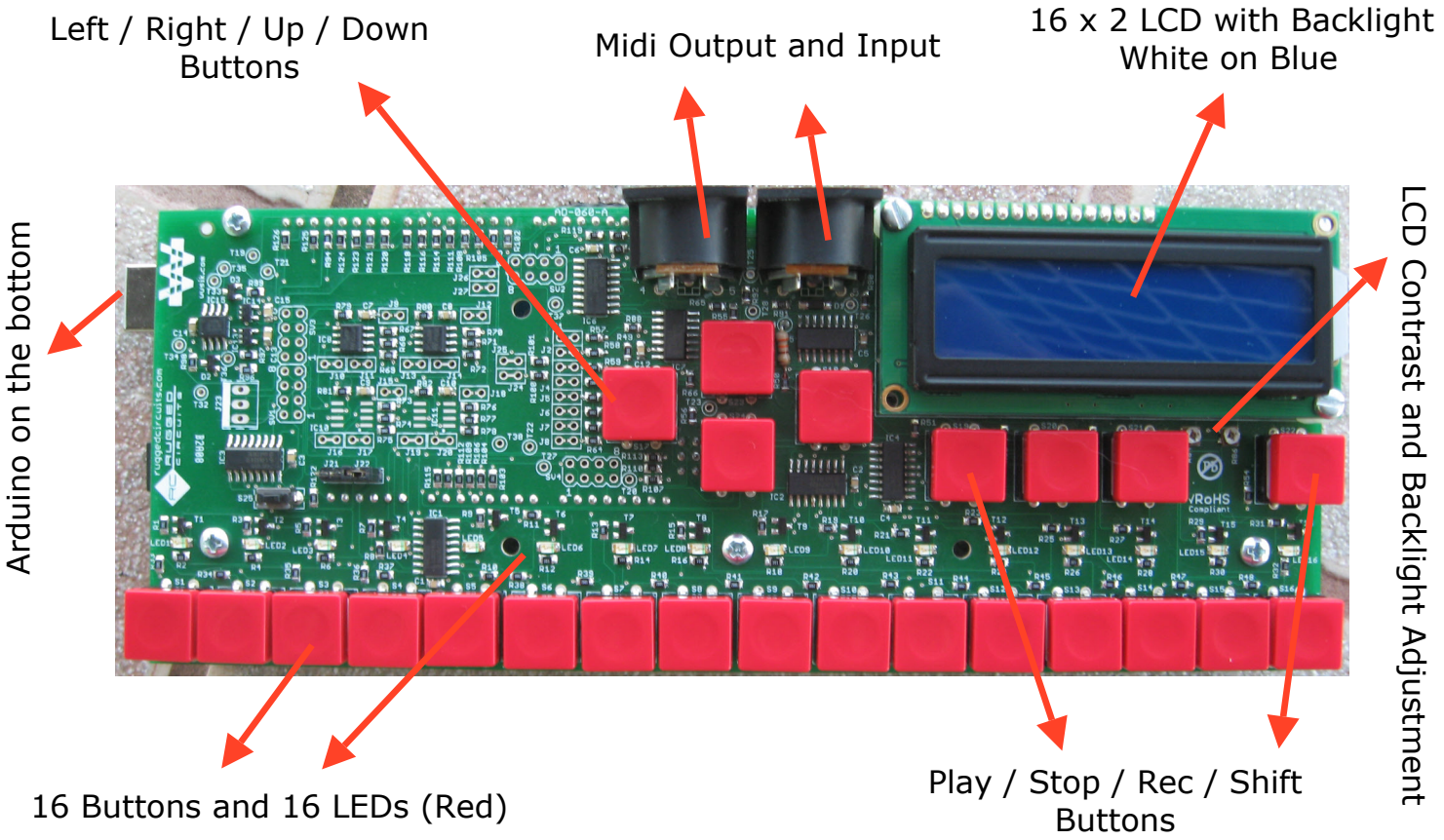
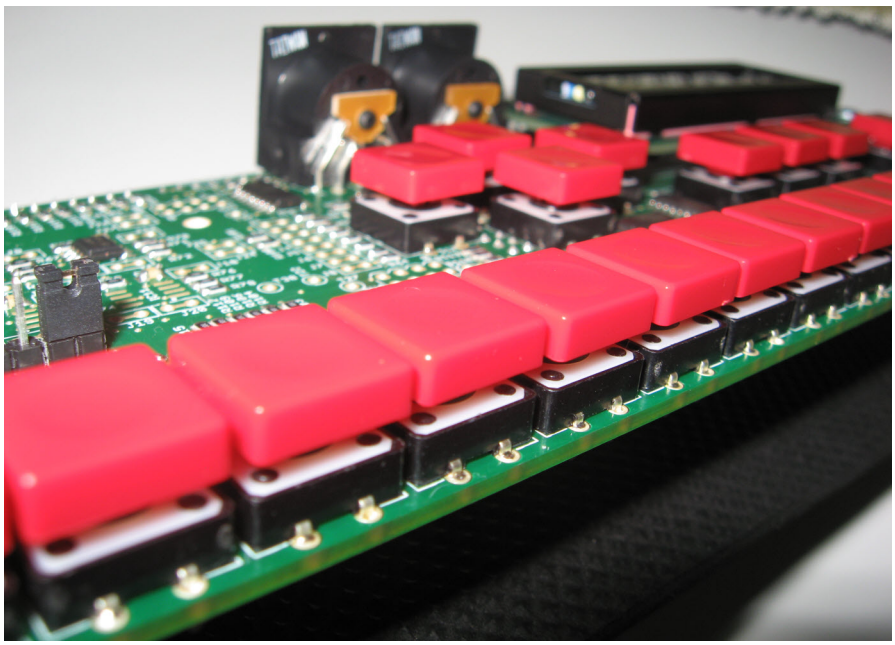
Board Details

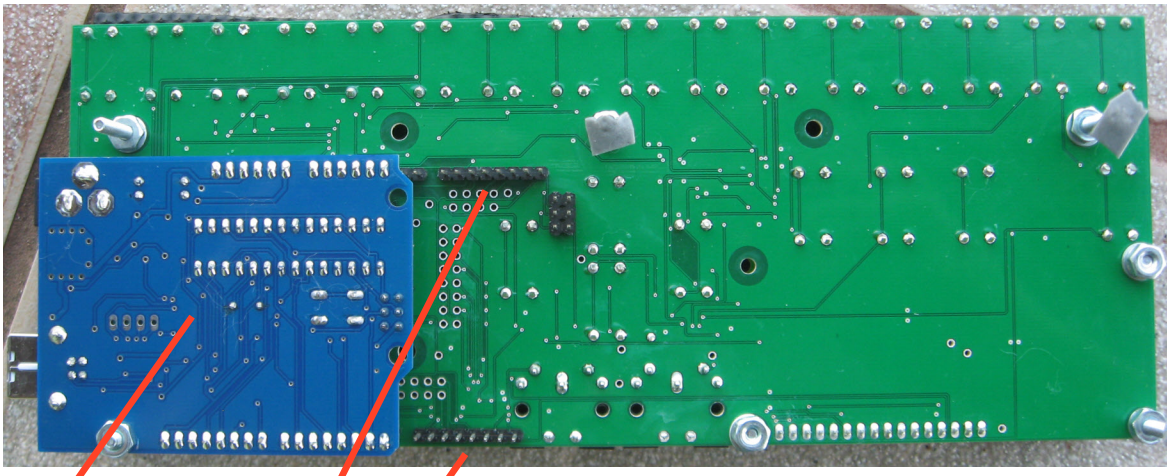
Welcome to Beat707 Board Details

Here we will describe what are the features of the Beat707 Board. (the PCB with all components added to it) Below are the basic and most obvious options.





Closeup on the Buttons - you can change the caps



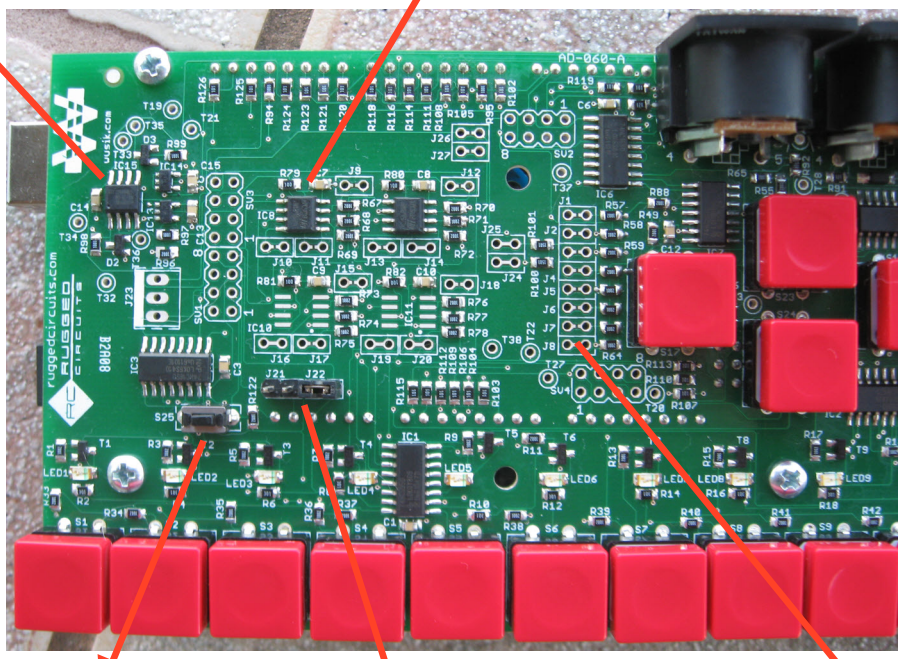
Arduino 2009
(not included)

Arduino Mega
Connectors

Beat707 Bottom

EEPROM(s) (I2C-TWI-2Wire)
(32KBytes - 256Kbit)
The default is 1 chip
But there's room for 4

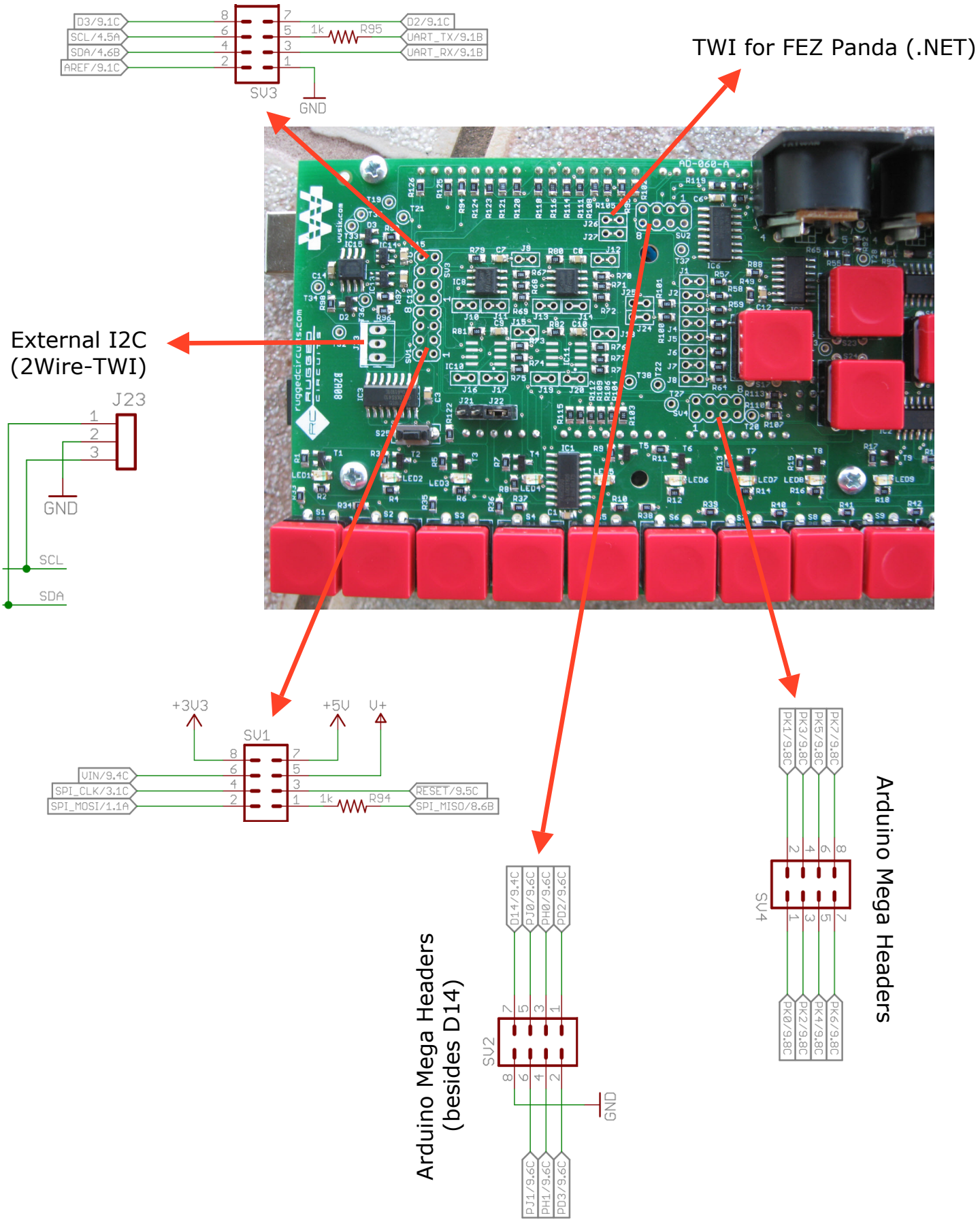
Nand Flash Memory (SPI)
(512KBytes - 4MBit)



Arduino Reset

System Voltage
J22 for Arduino (5V)
! never set both jumpers !

8 Button Expansion
Includes Pull-Up Resistors


SV3
D3/9.1C
SCL/4.5A
SDA/4.6B
AREF/9.1C
1k
R95
D2/9.1C
UART_TX/9.1B
UART_RX/9.1B
GND
TWI for FEZ Panda (.NET)
External I2C
(2Wire-TWI)
J23
GND
SCL
SDA
SV1
+3V3
+5V
V+
VIN/9.4C
SPI_CLK/3.1C
SPI_MOSI/1.1A
1k
R94
RESET/9.5C
SPI_MISO/8.6B
SV2
D14/9.4C
PJ0/9.6C
PH0/9.6C
PD2/9.6C
GND
PJ1/9.6C
PH1/9.6C
PD3/9.6C
Arduino Mega Headers
(besides D14)
SV4
PK1/9.8C
PK3/9.8C
PK5/9.8C
PK7/9.8C
PK0/9.8C
PK2/9.8C
PK4/9.8C
PK6/9.8C
Arduino Mega Headers

Arduino 2009 / Uno Free Pins

The following pins are not used by Beat707 Shield when using an Arduino 2009 / Uno (or any other ATmega328 based board)

- Analog A0 (D14 on the Beat707 headers)
- Digital 2 (D2 on the Beat707 Headers)
- Digital 3 (D3 on the Beat707 Headers - with PWM support)

Arduino 2009 / Uno - ATmega328 - Pin Description

- UART_RX = Digital 0 (Serial In)
- UART_TX = Digital 1 (Serial Out)
- D2 = Digital 2 (Free Pin)
- D3 = Digital 3 (Free Pin)
- LCD_D4 = Digital 4
- LCD_D5 = Digital 5
- LCD_D6 = Digital 6
- LCD_D7 = Digital 7
- LATCHOUT = Digital 8
- LCD_RS = Digital 9
- LCD_E = Digital 10
- SPI_MOSI = Digital 11 (Output)
- SPI_MISO = Digital 12 (Input)
- SPI_CLK = Digital 13 (LED too)
- SCL = Analog 5 (2Wire/TWI/I2C)
- SDA = Analog 4 (2Wire/TWI/I2C)
- MIDI_EN = Analog 3
- SWITCH_SS = Analog 2
- FLASH_SS = Analog 1
- D14 = Analog 0 (Free Pin)