```
#define I2C_HARDWARE 0




// constants for the I2C interface
#define I2C_TIMEOUT 100
#define I2C_PULLUP 0
#define SDA_PORT PORTB
#define SDA_PIN 0
#define SCL_PORT PORTB
#define SCL_PIN 2


#include <SoftI2CMaster.h>



/* ---------------------------- Main program ------------------------*/
void setup()
{

i2c_init();


}
int num;
void loop()
{

 if (!i2c_start((0xe0))) { // start transfer

          return;
      }
i2c_write(0x7f); //Set page register
i2c_write(0x00); //to page 0


i2c_rep_start(0xe1); // restart for reading
byte val = i2c_read(true); // read one byte and send NAK to terminate
i2c_stop(); // send stop condition

delay(1000);




i2c_start(0xe0);
i2c_write(0x0d);
i2c_write(0x00);
i2c_stop();

i2c_start(0xe0);
i2c_write(0x0e);
i2c_write(0x09); //setup pll
i2c_stop();
```

```
i2c_start(0xe0);
i2c_write(0x0f);
i2c_write(0x12);
i2c_stop();

i2c_start(0xe0);
i2c_write(0x10);
i2c_write(0x00);
i2c_stop();

i2c_start(0xe0);
i2c_write(0x11);
i2c_write(0x00);
i2c_stop();




i2c_start(0xe0);
i2c_write(0x07);
i2c_write(0x1a); //master clock divider sets output
i2c_stop();        //sample rate


i2c_start(0xe0);
i2c_write(0x08);
i2c_write(0x00);
i2c_stop();

i2c_start(0xe0);
i2c_write(0x09);
i2c_write(0x04);
i2c_stop();

i2c_start(0xe0);
i2c_write(0x2d);
i2c_write(0x42);
i2c_stop();



i2c_start(0xe0);
i2c_write(0x30);
i2c_write(0x07); //set left channel volume -3.5dB
i2c_stop();

i2c_start(0xe0);
i2c_write(0x31);
i2c_write(0x07); //set right channel volume -3.5dB
i2c_stop();


i2c_start(0xe0);
i2c_write(0x01);
i2c_write(0x3f); //enable all functions

i2c_rep_start(0xe1); // restart for reading
byte val3 = i2c_read(true); // read one byte and send NAK to terminate
```

```
delay(1000);

i2c_stop();



}

/* ---------------------------- Read line & editing ------------------------*/
```