```cpp
#include <SPIFlash.h>
#define SERIAL_BAUD 115200
#define SS_FLASHMEM PA4
char input = 0;
long lastPeriod = -1;
uint32_t memAddress;
#define PTT PA5

uint16_t expectedDeviceID=0xC220;
SPIFlash flash(SS_FLASHMEM, expectedDeviceID);
//HardwareSerial Serial2(USART2);
void setup(){

  Serial2.begin(SERIAL_BAUD);
  delay(1000);
  Serial2.println("Start...");
  pinMode(PTT,OUTPUT);
  digitalWrite(PTT,0);
  delay(10);
  digitalWrite(PTT,1);

  /*SPI.setMOSI(PB15);
  SPI.setMISO(PB14);
  SPI.setSCLK(PB13);
  SPI.begin(PB12);*/

  if (flash.initialize())
    Serial2.println("Init OK!");
  else
    Serial2.println("Init FAIL");
  delay(1000);

  Serial2.println("Erasing Flash chip ... ");
```

```
  flash.chipErase();
  while(flash.busy());
  Serial2.println("DONE");
}


void loop(){
  memAddress = 0x4E0000;
  Serial2.flush();
  while(1)
  {
    while(!Serial2.available());
    input = Serial2.read();
    flash.writeByte(memAddress, input);
    //Serial2.println(memAddress);
    //Serial2.write(0x55);
    memAddress++;
  }
}
```