```
1
2  #ifndef _AT45DB161_H_
3  #define _AT45DB161_H_
4
5  #define     DataFlashEn()       CLR(PORTC,0)
6  #define     DataFlashDis()      SET(PORTC,0)
7  #define     DF_CS()             SET(DDRC,0)
8
9  #define     DF_WPEN             CLR(PORTB,2)
10 #define     DF_WPDIS            SET(PORTB,2)
11 #define     DF_WP()             SET(DDRB,2)
12
13 #define     SD_SCK()            SET(DDRB,5)
14 #define     SD_MOSI()           SET(DDRB,3)
15 #define     SD_MISO()           CLR(DDRB,4)
16
17 #define     FOSCdiv4            0
18 #define     FOSCdiv16           1
19 #define     FOSCdiv64           2
20 #define     FOSCdiv128          3
21
22 #define     BUFFER_1_WRITE                  0x84        // 写入第一缓冲区
23 #define     BUFFER_2_WRITE                  0x87        // 写入第二缓冲区
24 #define     BUFFER_1_READ                   0xD4        // 读取第一缓冲区
25 #define     BUFFER_2_READ                   0xD6        // 读取第二缓冲区
26 #define     B1_TO_MM_PAGE_PROG_WITH_ERASE   0x83        // 将第一缓冲区的数据写入主存储器（擦除
27 #define     B2_TO_MM_PAGE_PROG_WITH_ERASE   0x86        // 将第二缓冲区的数据写入主存储器（擦除
28 #define     MM_PAGE_TO_B1_XFER              0x53        // 将主存储器的指定页数据加载到第一缓冲
29 #define     MM_PAGE_TO_B2_XFER              0x55        // 将主存储器的指定页数据加载到第二缓冲
30 #define     PAGE_ERASE                      0x81        // 页删除（每页512/528字节）
31 #define     SECTOR_ERASE                    0x7C        // 扇区擦除（每扇区128K字节）
32 #define     READ_STATE_REGISTER             0xD7        // 读取状态寄存器
33
34 void SPI_Init(unsigned char SPI_Freq,unsigned char HignOrLow);
35 void SPI_Write_Byte(unsigned char data);
36 unsigned char SPI_Read_Byte(void);
37 void FormatDataFlash(void);
38 void DataFlashPageEarse(unsigned int page);
39 void DataFlashWritePage(unsigned int page);
40 void DataFlashReadPage(unsigned int page);
41 void DataFlashReadMainMemoryPage(unsigned int page);
42 unsigned char DataFlashReadReg(void);
43 void DataFlashWaitBusy(void);
44 void DataFlashMainMemoryToBuffer(unsigned char buffer,unsigned int page);
45 unsigned char DataFlashReadBuffer(unsigned char buffer,unsigned int start_address,unsigned int
46 unsigned char DataFlashWriteBuffer(unsigned char buffer,unsigned int start_address,unsigned in
47 void DataFlashBufferToMainMemory(unsigned char buffer,unsigned int page);
48
49 #endif
50
```