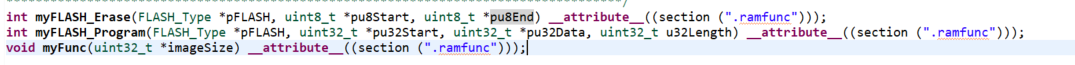
OTA的RAM flash更新

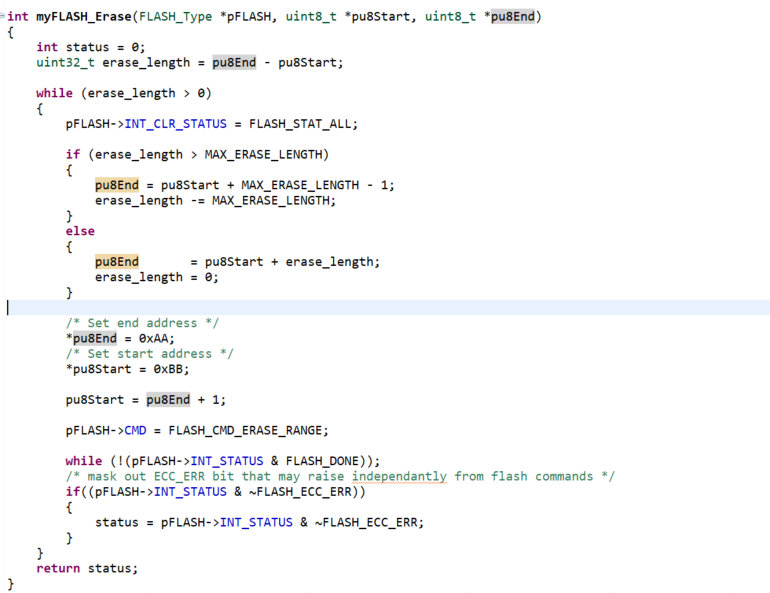
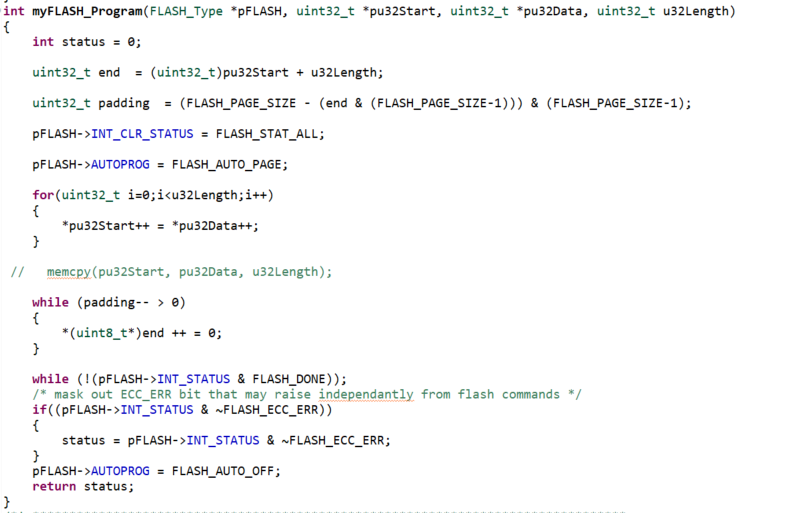
K32w061

定义函数擦写函数在ram里，



函数实现时候要避免使用任何库的函数，即使是memcpy都不可以，必须自己手动用for循环实现，在ram擦写flash时候，不能依赖任何库，否则擦写会失败

这是我在k32w061上实现的两个函数，参考了sdk的flash烧写，然后修改成没有任何调用的函数



然后写应用函数，我要将ota获得的镜像（在0x48000），烧写到0x0位置

**#define** FLASH\_START\_ADDRESS 0

**#define** FLASH\_APP\_START\_ADDRESS 0x48000

**#define** FLASH\_OTA\_START\_PAGE (FLASH\_START\_ADDRESS / FLASH\_PAGE\_SIZE) //0

**#define** FLASH\_OTA\_PAGE\_NUM (0x48000 / FLASH\_PAGE\_SIZE) //0x48000 / 512 = 576

**#define** FLASH\_APP\_START\_PAGE (FLASH\_OTA\_PAGE\_NUM) //576

**#define** FLASH\_APP\_PAGE\_NUM (0x0004dfff / FLASH\_PAGE\_SIZE) //0x0004dfff/512 = 623

**void** **myFunc**(uint32\_t \*imageSize)

{

uint8\_t tempMem[FLASH\_PAGE\_SIZE] = {0};

uint32\_t \*pu32Start = (uint32\_t \*)(FLASH\_PAGE\_SIZE \* 0);

uint8\_t \*appEraseStartAddress = (uint8\_t \*)(FLASH\_APP\_START\_ADDRESS);

uint8\_t \*appEraseEndAddress = appEraseStartAddress + FLASH\_PAGE\_SIZE \* FLASH\_APP\_PAGE\_NUM - 1;

uint8\_t boolTag = 0;

// uint8\_t wrongValue = 0;

uint32\_t imagePage = \*imageSize / FLASH\_PAGE\_SIZE;

uint8\_t \*pu8Start;

uint8\_t \*pu8End;

uint8\_t \*pageCount2address;

**if**(imagePage\*FLASH\_PAGE\_SIZE < (\*imageSize))

{

imagePage++;

}

FLASH\_Init(FLASH);

\_\_ASM **volatile** ("cpsid i" : : : "memory");

**for**(uint32\_t i=0; i<imagePage; i++)

{

pu8Start = (uint8\_t \*)(FLASH\_START\_ADDRESS + FLASH\_PAGE\_SIZE\*i);

pu8End = (pu8Start + FLASH\_PAGE\_SIZE \* 1) - 1;

pageCount2address = (uint8\_t\*)((FLASH\_APP\_START\_PAGE+i)\*FLASH\_PAGE\_SIZE);

flashAgain:

myFLASH\_Erase(FLASH,pu8Start,pu8End);

**for**(uint16\_t index=0;index<FLASH\_PAGE\_SIZE;index++)

{

tempMem[index] = \*(pageCount2address+index);

}

pu32Start = (uint32\_t \*)(FLASH\_START\_ADDRESS + i\*FLASH\_PAGE\_SIZE);

myFLASH\_Program(FLASH,pu32Start , (uint32\_t\*)tempMem, FLASH\_PAGE\_SIZE);

**for**(uint16\_t index=0;index<FLASH\_PAGE\_SIZE;index++)

{

boolTag = (tempMem[index] == \*((uint8\_t\*)pu32Start+index))? 1:0;

**if**(boolTag == 0)

{

**goto** flashAgain;

}

}

}

myFLASH\_Erase(FLASH,appEraseStartAddress,appEraseEndAddress);

**void** (\*p\_Chip\_LOWPOWER\_ChipSoftwareReset)(**void**);

p\_Chip\_LOWPOWER\_ChipSoftwareReset = (**void** (\*)(**void**))0x03003fa1U;

p\_Chip\_LOWPOWER\_ChipSoftwareReset();

}

最后找到OTA\_SetNewImageFlag和ResetMCU

都注释掉，改成调用myFunc即可