

Embedded

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System Calls

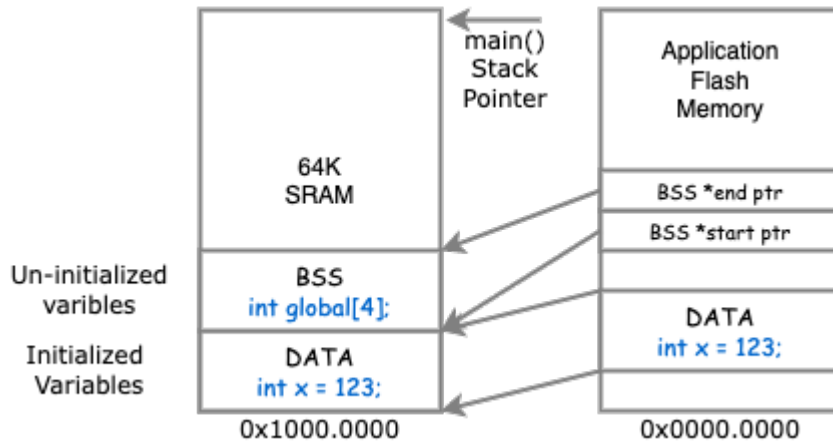
TODO

stdio

memory

Startup

TODO: Preet to write content regarding startup, bss memory and data memory



Here are snippets of code the zero initialize the BSS and copy the DATA section from ROM to RAM.

```
static void startup__init_data_sram(void) {
    extern void *_bdata_lma;
    extern void *_bdata_vma;
    extern void *_data_end;
    uint8_t *src_flash = (uint8_t *)&_bdata_lma; // Flash
    uint8_t *dest_ram = (uint8_t *)&_bdata_vma; // RAM
    while (dest_ram < (uint8_t *)&_data_end) {
        *dest_ram = *src_flash;
        dest_ram++;
        src_flash++;
    }
}

static void startup__init_bss_sram(void) {
    extern void *_bss_start;
    extern void *_bss_end;
    uint8_t *sram_ptr = (uint8_t *)&_bss_start;
    while (sram_ptr < (uint8_t *)&_bss_end) {
        *sram_ptr = 0U;
    }
}
```

```
sram_ptr++;  
}  
}
```