

KEIL Scatter Loading Instructions

1. the .c file is loaded to the specified location

To achieve to the scatter load under the keil and the .sct file is modified. This project will be implemented to load the hw_config.c file to the 0x08002000 starting position. The path to the .sct file is " ScatterLoading\Project\KEIL\MDK-ARM\ Project.sct", opened as follows:

```
. *****
;
; *** Scatter-Loading Description File generated by uVision ***
; *****
;

LR_IROM1 0x08000000 0x00002000 {      ; load region size_region
  ER_IROM1 0x08000000 0x00002000 {    ; load address = execution address
    *.o (RESET, +First)
    *(InRoot$$Sections)
  }

  RW_IRAM1 0x20000000 0x00002000 {    ; RW data
    .ANY (+RW +ZI)
  }
}

LR_IROM2 0x08002000 0x00000050 {
  ER_IROM2 0x08002000 0x00000050 { ; load the hw_config.c file to the 0x08002000 starting
                                     position
    hw_config.o (+RO)
  }
}

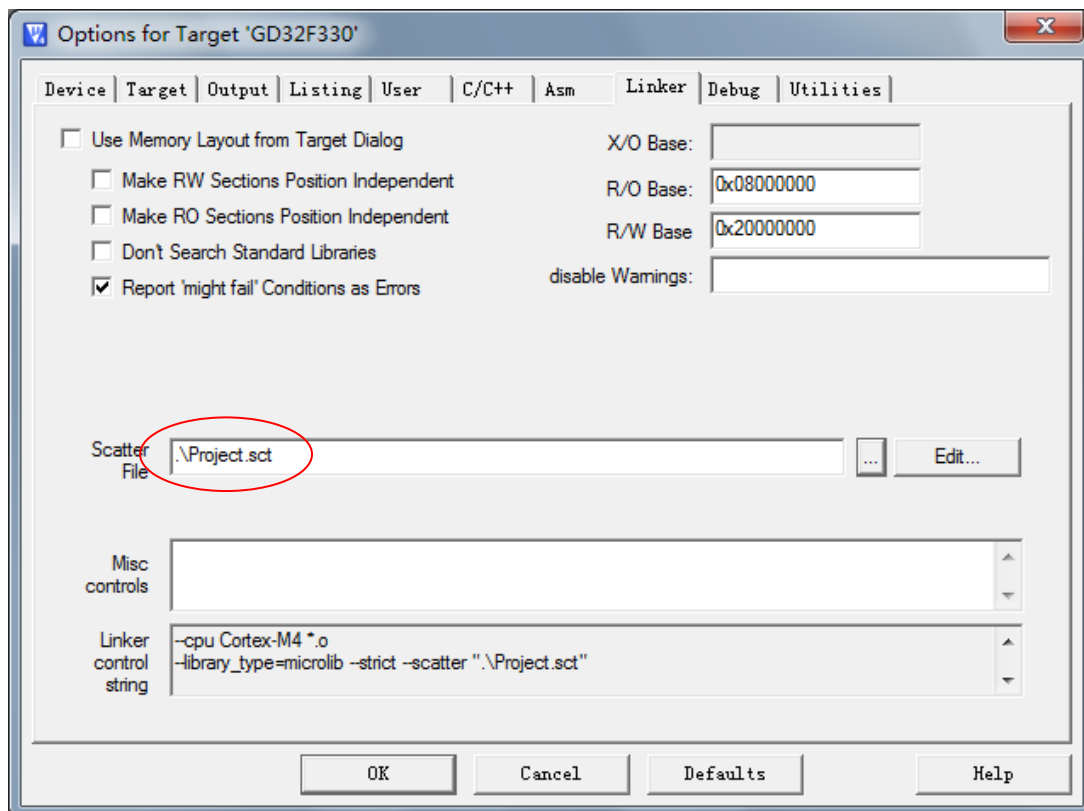
LR_IROM3 0x0800dfb0 0x00000040 {
  ER_IROM3 0x0800dfb0 0x00000040 { ; the delay() function defined as section "delay", then
                                     load the delay() to the 0x0800dfb0 starting position
    main.o (delay)
  }
}

LR_IROM4 0x08002050 0x0000dfb0 {
  ER_IROM4 0x08002050 0x0000dfb0 { ; load address = execution address
    .ANY (+RO)
  }
}
```

The red part is part of the added part for implementing the scatter loading, if you want to implement hw_config.c to load to 0x08002000 starting position only need to add the following code in the sct file:

```
LR_IROM2 0x08002000 0x00000050 {
    ER_IROM2 0x08002000 0x00000050 { ; load the hw_config.c file to the 0x08002000
                                     starting position
        hw_config.o (+RO)
    }
}
```

2. Add the modified sct file above to Keil



3. Load the function to the specified location

Load the delay function in the main.c to the starting position of 0x0800dfb0.

1、 add the following code in the .sct file:

```
LR_IROM3 0x0800dfb0 0x00000040 {
    ER_IROM3 0x0800dfb0 0x00000040 { ; the delay() function defined as section "delay",
                                     then load the delay() to the 0x0800dfb0 starting
                                     position
        main.o(delay)
    }
}
```

