

Adapting HC908GZ16 Stationery for HC908GZ8

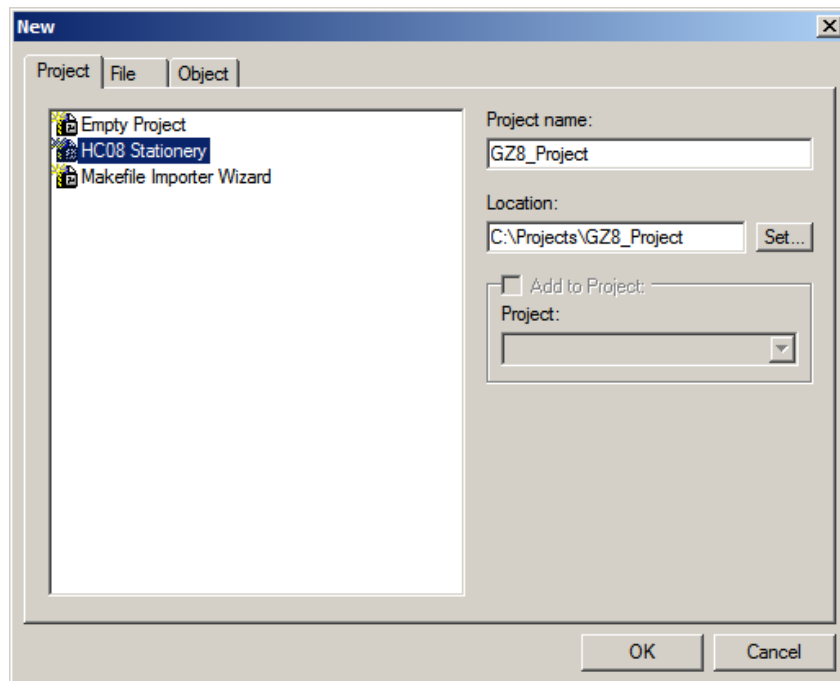
GRGZ Service Pack Software Addendum

In the GRGZ Service Pack for CodeWarrior Development Studio for HC08 Microcontrollers, Special Edition Version 2.1.1, there are no GZ8 stationeries. To create a new project for the GZ8, follow the steps outlined below.

Launch the CodeWarrior IDE

Create a new project for GZ8 starting from GZ16 stationery

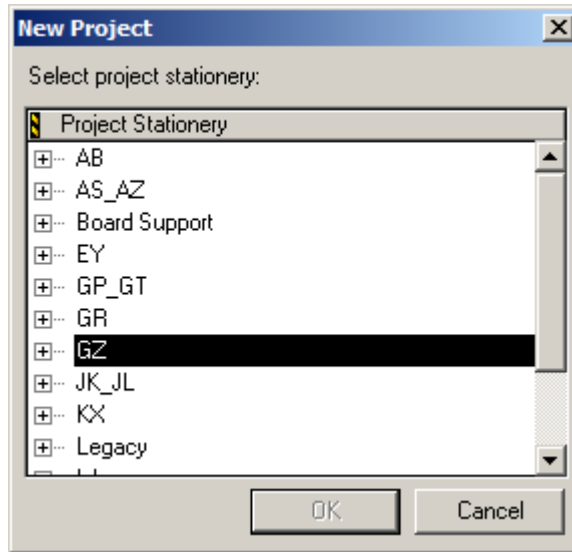
- From main menu bar, select File > New – New window appears



New Window

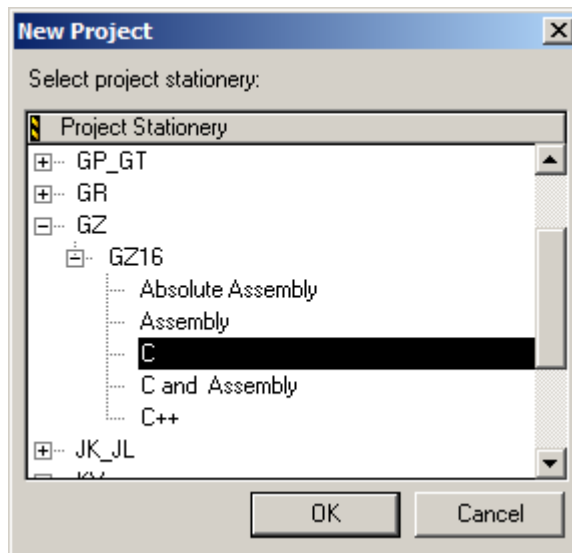


- ❑ **Select HC08 Stationery**
- ❑ **Enter a name for your project in Project Name text box**
- ❑ **Click the OK button – New project Window appears**



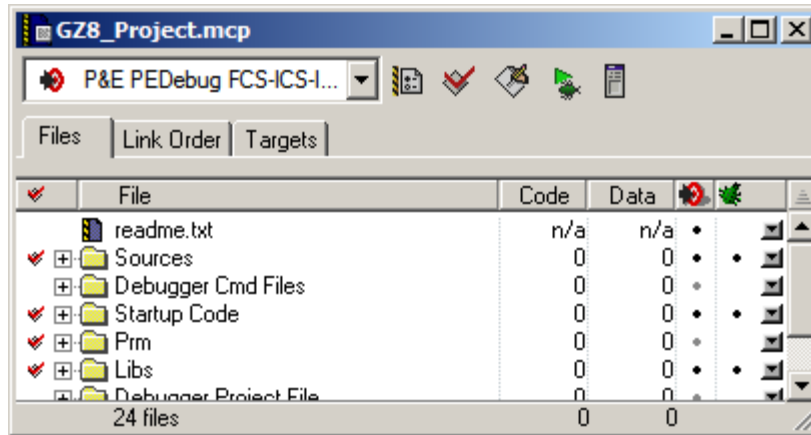
New Project Dialog Window

- ❑ **Click + to display the GZ Stationery**
- ❑ **Click + to display the GZ16 stationery**
- ❑ **If you want to create a project using Absolute Assembly, proceed to page 5**
- ❑ **Select Assembly, C, C and Assembly, or C++ listed below GZ16**



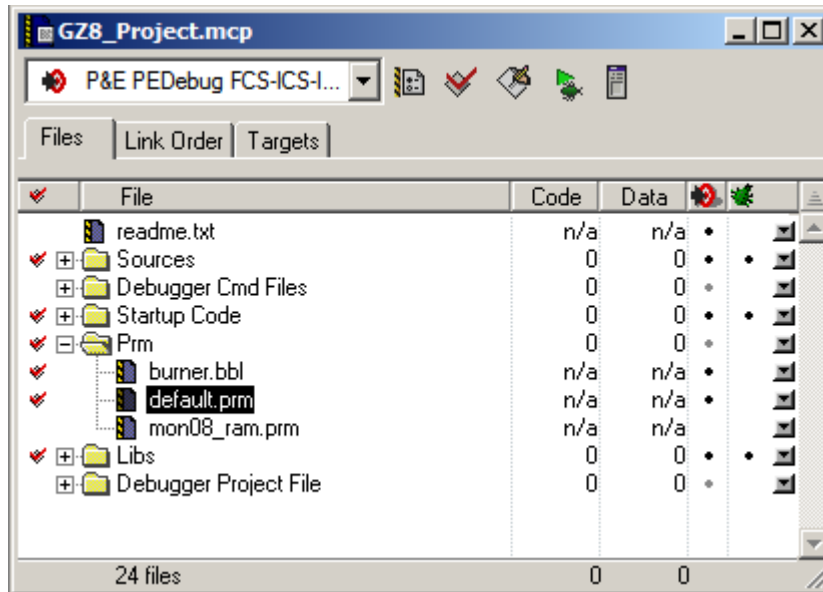
GZ16 stationery

- ❑ **Click the OK button**



Project (GZ8_Project.mcp) Window

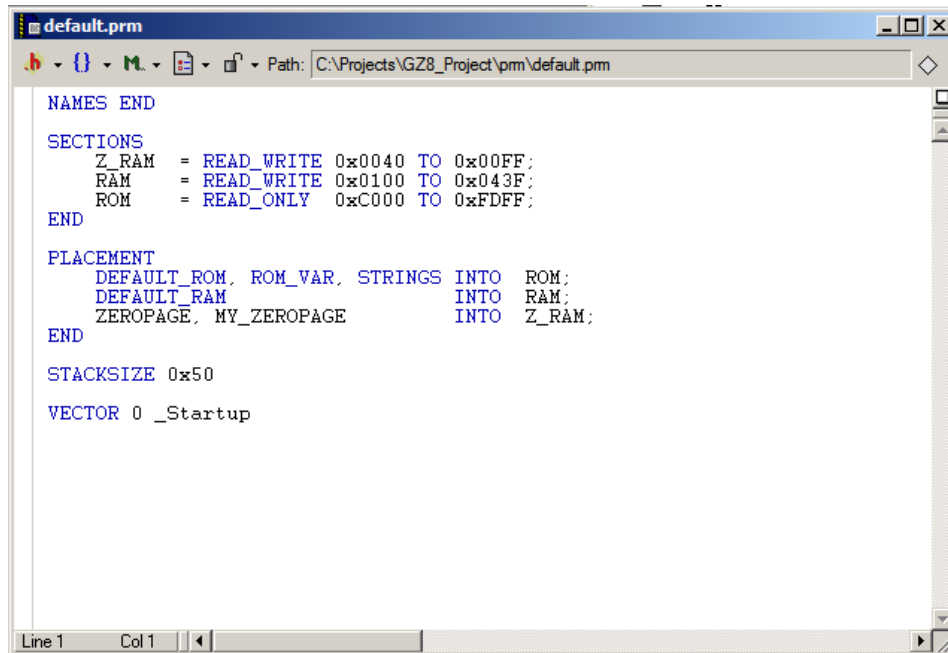
- ❑ You have successfully created a project for the GZ16
- ❑ You must now change the memory mapping in the parameter file to use the GZ8 flash area
- ❑ Click + to display the files in the Prm folder



The .prm File Selected

- ❑ Double-click the .prm file for the target you're using (default.prm in this case)

- Edit the ROM memory section for 8k flash instead of 16k flash

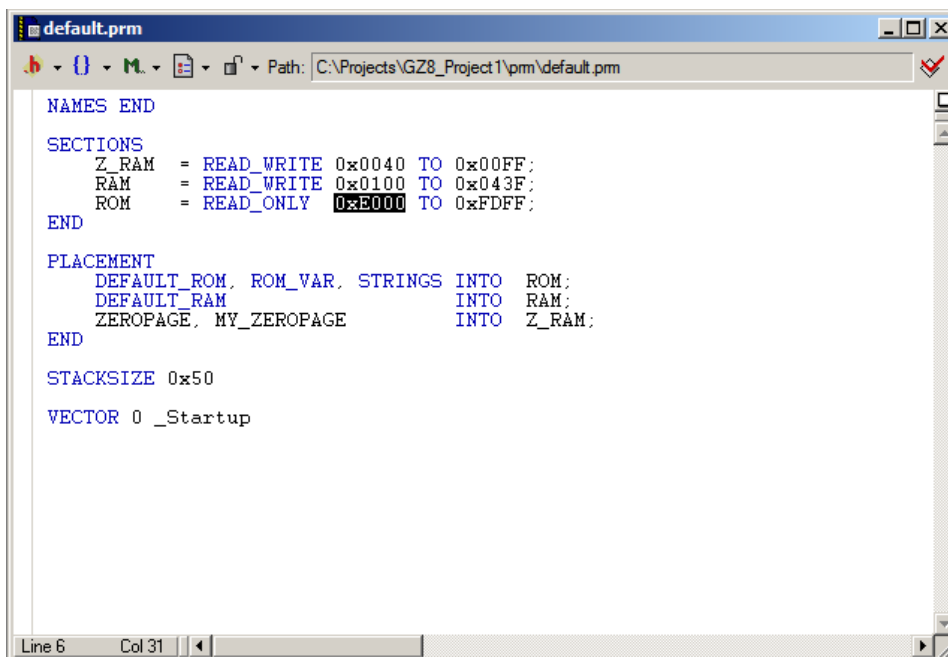


```

default.prm
C:\Projects\GZ8_Project\prm\default.prm
NAMES END
SECTIONS
  Z_RAM = READ_WRITE 0x0040 TO 0x00FF;
  RAM   = READ_WRITE 0x0100 TO 0x043F;
  ROM   = READ_ONLY  0xC000 TO 0xFDFF;
END
PLACEMENT
  DEFAULT_ROM, ROM_VAR, STRINGS INTO ROM;
  DEFAULT_RAM                INTO RAM;
  ZERPAGE, MY_ZERPAGE         INTO Z_RAM;
END
STACKSIZE 0x50
VECTOR 0 _Startup
  
```

default.prm Before Editing

- Change 0xC000 to 0xE000, which is the lower address of the flash area in the GZ8



```

default.prm
C:\Projects\GZ8_Project1\prm\default.prm
NAMES END
SECTIONS
  Z_RAM = READ_WRITE 0x0040 TO 0x00FF;
  RAM   = READ_WRITE 0x0100 TO 0x043F;
  ROM   = READ_ONLY  0xE000 TO 0xFDFF;
END
PLACEMENT
  DEFAULT_ROM, ROM_VAR, STRINGS INTO ROM;
  DEFAULT_RAM                INTO RAM;
  ZERPAGE, MY_ZERPAGE         INTO Z_RAM;
END
STACKSIZE 0x50
VECTOR 0 _Startup
  
```

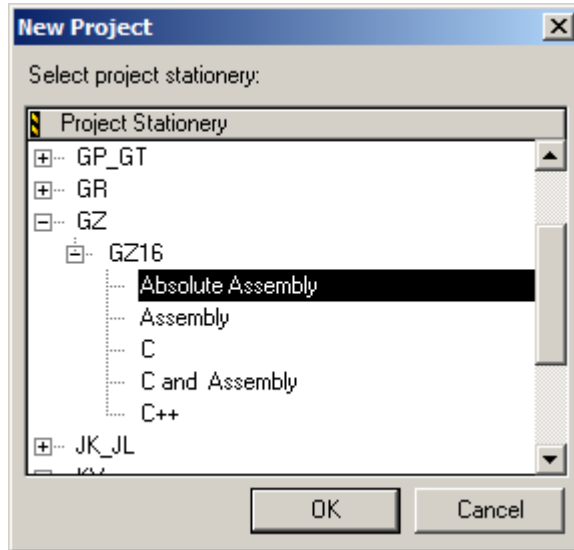
default.prm After Editing

- Save this file
- You're now ready to develop code for the GZ8



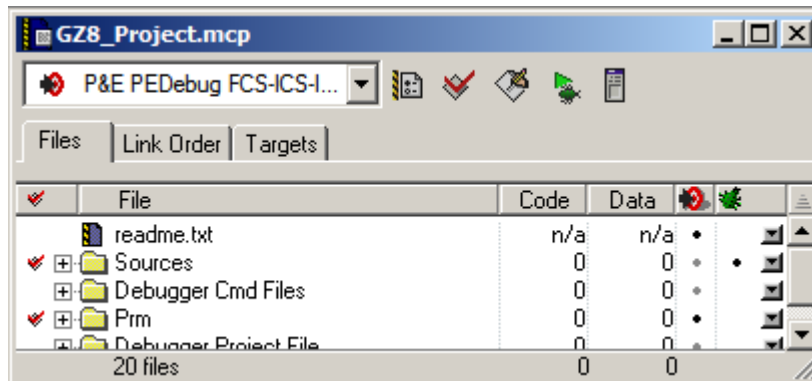
Create a new absolute assembly project for GZ8 starting from GZ16 Stationery

- ❑ Follow the steps on pages 1 and 2
- ❑ Select Absolute Assembly listed below GZ16



GZ16 Absolute Assembly stationery

- ❑ Click the OK button

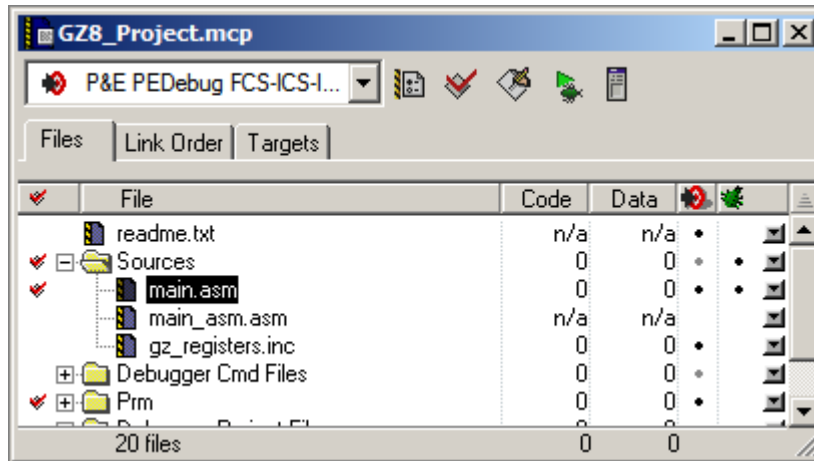


Project (GZ8_Project.mcp) Window

- ❑ You have successfully created an absolute assembly project for GZ16
- ❑ You must now change the assembly source file ROM definition to use the GZ8 flash area

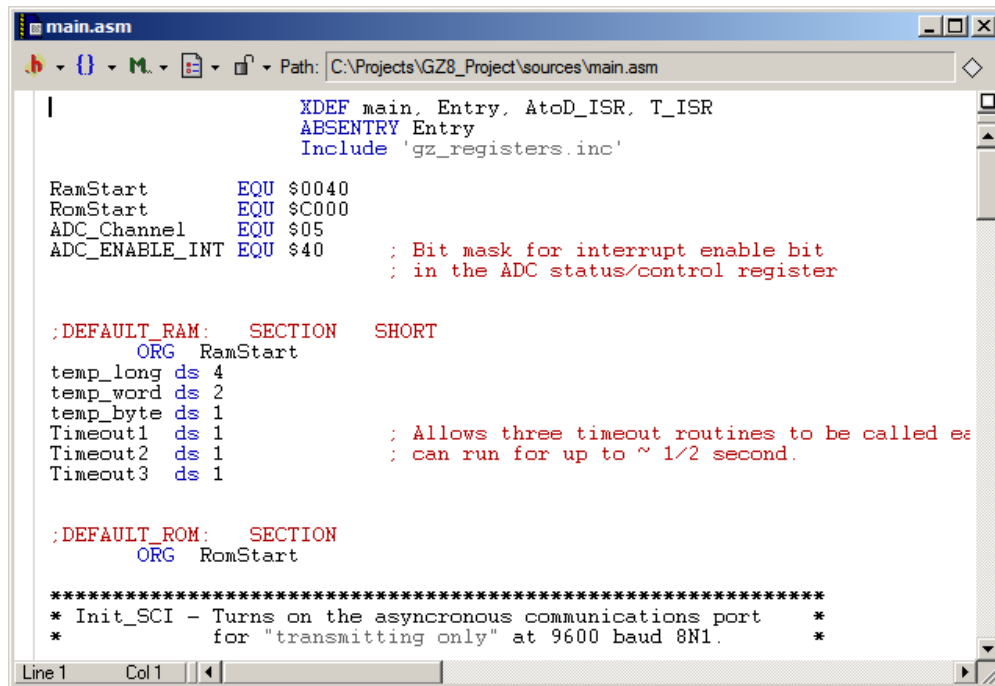


- ❑ Click + to display the files in the Sources folder



The .asm File Selected

- ❑ Double-click the .asm file for the target you're using (main.asm in this case)
- ❑ Edit the definition of RomStart to reflect the lower address for the GZ8 flash



main.asm Before Editing

Freescale Semiconductor, Inc.



- Change "\$C000" to "\$E000", which is the lower address of the flash area in the GZ8

```

XDEF main, Entry, AtoD_ISR, T_ISR
ABSENTRY Entry
Include 'gz_registers.inc'

RamStart      EQU $0040
RomStart      EQU $E000
ADC_Channel   EQU $05
ADC_ENABLE_INT EQU $40      ; Bit mask for interrupt enable bit
                                ; in the ADC status/control register

;DEFAULT_RAM: SECTION SHORT
                ORG RamStart
temp_long ds 4
temp_word ds 2
temp_byte ds 1
Timeout1 ds 1      ; Allows three timeout routines to be called ea
Timeout2 ds 1      ; can run for up to ~ 1/2 second.
Timeout3 ds 1

;DEFAULT_ROM: SECTION
                ORG RomStart

*****
* Init_SCI - Turns on the asynchronous communications port *
*           for "transmitting only" at 9600 baud 8N1. *
*****

Line 6 Col 25

```

main.asm After Editing

- Save this file
- You're now ready to develop absolute assembly code for the GZ8



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JAPAN:

Motorola Japan Ltd.
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