

Cosmic Compiler

Abstract

This document describes tips and tricks for the different Cosmic compilers (ST7, HCS08, HCS12, S12X). Also refer to the application note concerning the respective target debugger.

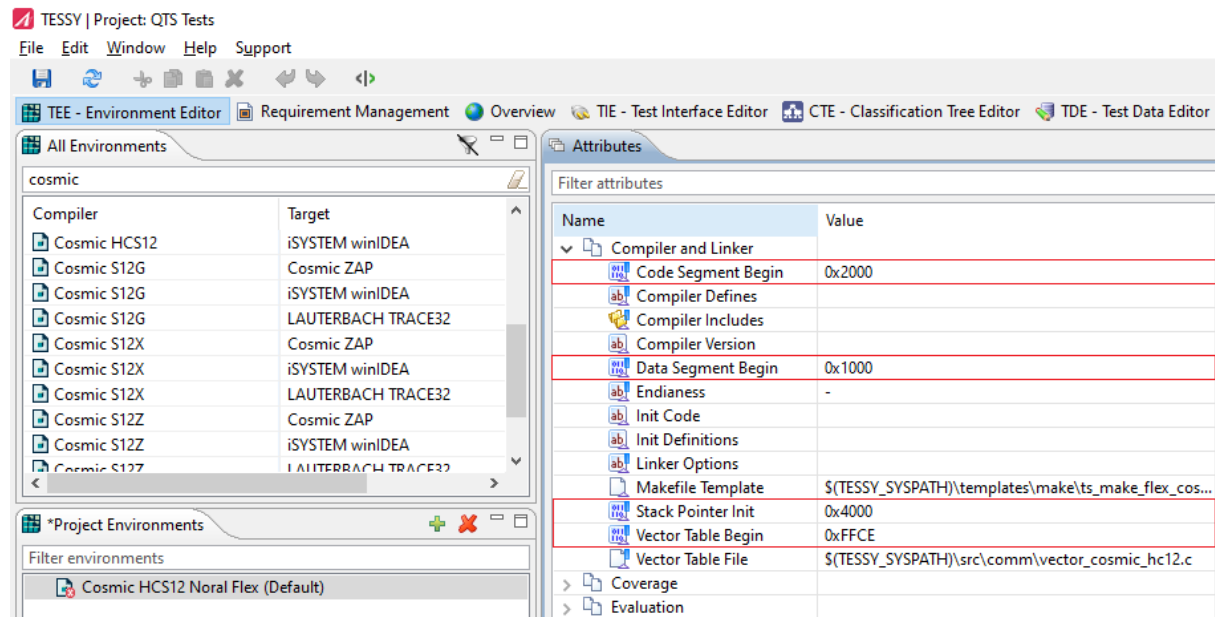
Table of Contents

Abstract	1
1 Introduction.....	2
2 TEE Configuration	2
3 Using the S12X Compiler for HCS12	3

1 Introduction

The integration of the Cosmic compilers into TESSY provide several (module) attribute settings that may be changed to fit your specific needs. These attribute settings may be changed within the Environment Editor (this is recommended) or individually for each module.

2 TEE Configuration



The screenshot above shows the attributes for the Cosmic HCS12 compiler as an example. You may want to change the RAM/ROM memory configuration according to the hardware settings of your project.

*Please note: The **Vector Table Begin** need to correspond with the vector table definition within the **Vector Table File**. Otherwise, the test driver program will not start correctly.*

The **Stack Pointer Init** entry describes the end of the memory area to be used for stack (since the stack grows downward). You need to make sure, that the data and stack area do not overlap each other.

3 Using the S12X Compiler for HCS12

The Makefile templates for the Cosmic HCS12 compiler are prepared for usage with the HCS12 compiler version 4.5i. If you have the newer S12X compiler installed, you may adapt the Makefile template in order to use this compiler. Follow the steps below to get it running:

- Change the compiler command line
- Add the **+hcs** option to generate code for the HCS12 (instead of S12X)

Below, you will find the respective changes within the

...\sys\templates\make\ts_make_hitop_cosmic_hc12.mak

as an example:

```
42 #
43 # SLAVE
44 # (You may change these settings to use your own compiler/lin
45 #
46 S_COMP_OPTIONS := +debug +hcs -dTESSY -dTS_SLAVE -dTS_HITOP -
47 S_LINK_OPTIONS :=
48 S_INCLUDES     := -i$(TESSY_SYS_DOS)\include\tessy\comm -i$(M
49
50 S_CC           := $(COSMIC_HOME)\cxsl2x
51 S_LINK         := $(COSMIC_HOME)\clnk
52 S_OBJECTS      := $(MODULE_PATH_DOS)\tslows_hitop.o \
53                 $(MODULE_PATH_DOS)\tstcomm.o \
54                 $(MODULE_PATH_DOS)\tscoml.o
55 S_STUB_OBJECT  := $(MODULE_PATH_DOS)\ts_$(TESTOBJECT)_stubs.o
56 S_UC_OBJECT    := $(MODULE_PATH_DOS)\ts_$(TESTOBJECT)_usr.o
```