

# CCES 1.1.0.1 patch release notes

## CrossCore® Embedded Studio 1.1.0.1 Patch Release Note

CrossCore® Embedded Studio version 1.1.0.1 is a patch release for CrossCore® Embedded Studio 1.1.0. It includes changes to for the following issues:

- **Workarounds for silicon anomaly 19000042**

The CCES interrupt support has been modified to include the anomaly workaround. A handler for exception 15 is registered before main in the startup code. The interrupt dispatcher function raises exception 15 before returning from interrupts. The exception handler for exception 15 is added to libevent.dlb and is called `_anom_19000042_user_exception_handler`.

- **Workarounds for silicon anomaly 19000044**

The CRT startup clears the `RTSEN` bit of `BP_CFG` before calling main to workaround this silicon anomaly.

- **elf2dyn problem with relocations for global array values (CCES-10229)**

Fixes a problem that causes the byte offsets created by elf2dyn.exe to be wrong for some global array data accesses and results in the dynamically loaded code using this data to be corrupted after `dyn_Relocate` is called.

Note that this patch release is specific to CrossCore® Embedded Studio version 1.1.0 and will not work for any other version.

## Patch Utility Invocation

It is recommended that CrossCore® Embedded Studio is closed prior to applying the patch.

The patch utility will check for CrossCore® Embedded Studio v.1.1.0. If this version is not detected an error message will be generated and the patch utility will exit.

The patch utility will overwrite existing files. A backup is not created by the patch utility. If a patched file has been modified and you wish to preserve the changes made you will need to create a backup of the file before applying the patch.

After the patch has been applied you will see "version 1.1.0.1" in the CrossCore® Embedded Studio splash screen each time it is started. You will also be able to see 1.1.0.1 in the CrossCore® Embedded Studio "About" page.

Uninstalling the patch will remove the patch from the installation database, but it will not remove the patched files.

There is no patch installation log generated by default. If you encounter patch installation issues, please contact technical support.

## List of patched files

The following file is new and will be added:

<CCES\_INSTALL>/Blackfin/lib/src/libc/crt/anom\_19000042\_user\_exception\_handler.asm

The following files will be modified:

<CCES\_INSTALL>/Blackfin/include/sys/anomaly\_macros\_rtl.h  
<CCES\_INSTALL>/Blackfin/include/sys/exception.h  
<CCES\_INSTALL>/Blackfin/lib/bf707\_rev\_0.0/crts.doj  
<CCES\_INSTALL>/Blackfin/lib/bf707\_rev\_0.0/crtsc.doj  
<CCES\_INSTALL>/Blackfin/lib/bf707\_rev\_0.0/crtsf.doj  
<CCES\_INSTALL>/Blackfin/lib/bf707\_rev\_0.0/crtsf.doj  
<CCES\_INSTALL>/Blackfin/lib/bf707\_rev\_0.0/libevent.dlb  
<CCES\_INSTALL>/Blackfin/lib/bf707\_rev\_0.0/libeventmt.dlb  
<CCES\_INSTALL>/Blackfin/lib/bf707\_rev\_any/crts.doj  
<CCES\_INSTALL>/Blackfin/lib/bf707\_rev\_any/crtsc.doj  
<CCES\_INSTALL>/Blackfin/lib/bf707\_rev\_any/crtsf.doj  
<CCES\_INSTALL>/Blackfin/lib/bf707\_rev\_any/crtsf.doj  
<CCES\_INSTALL>/Blackfin/lib/bf707\_rev\_any/libevent.dlb  
<CCES\_INSTALL>/Blackfin/lib/bf707\_rev\_any/libeventmt.dlb  
<CCES\_INSTALL>/Blackfin/lib/src/libc/crt/anom\_19000042\_user\_exception\_handler.asm  
<CCES\_INSTALL>/Blackfin/lib/src/libc/crt/basiccrt.s  
<CCES\_INSTALL>/Blackfin/lib/src/libc/crt/cec\_int\_dispatcher.asm  
<CCES\_INSTALL>/Blackfin/lib/src/libc/crt/sec\_int\_dispatcher.asm

<CCES\_INSTALL>/elf2dyn.exe  
<CCES\_INSTALL>/System/ArchDef/BLACKFIN-70x-anomaly.xml  
<CCES\_INSTALL>/System/SourceGenerators/CRTGen/Blackfin/crtfragments.txt  
<CCES\_INSTALL>/System/SourceGenerators/CRTGen/Blackfin/crttemplate.xml

## Support and Assistance

Submit your questions online at: <http://www.analog.com/support>

E-mail your Processor and DSP software and development tools questions from within CrossCore Embedded Studio: [processor.tools.support@analog.com](mailto:processor.tools.support@analog.com)

E-mail your Processors and DSP applications and processor questions to:

- [processor.support@analog.com](mailto:processor.support@analog.com) OR
- [processor.china@analog.com](mailto:processor.china@analog.com) (Greater China support)

Post your questions in the Processors and DSP online technical support community in Engineer Zone at: <http://ez.analog.com/community/dsp>