

Installation Guide for CrossCore Embedded Studio

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Embedded Studio

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1 Introduction

This document describes the installation procedures for CrossCore Embedded Studio under both Windows and Linux as well as minimum hardware requirements and supported versions of each operating system. You can find the release notes for older releases in the Docs sub-directory of your CCES installation.

2 System Hardware Requirements

Verify that your PC has these minimum requirements for the CCES installation:

- 3.3GHz dual core or better recommended
- 8 GB RAM; 16GB or more recommended
- 11 GB available disk space

O Note

A faster disk drive or SSD decreases the build time, especially for a large amount of source files. 8GB of RAM or more will substantially increase the performance of the IDE.

3 Supported Operating Systems

Notes for Windows Users

The following versions of Windows are supported for this release of CCES:

- Windows 10 Pro or Enterprise (32-bit and 64-bit)
- Windows 11 Pro or Enterprise (64-bit)

A Notes for Linux Users

The following Linux distributions are supported for this release of CCES:

- Ubuntu 20.04 64-bit
- Ubuntu 22.04 64-bit

4 Installing CrossCore Embedded Studio on Windows

Note: Windows Only

▲ Caution

Windows users may experience User Access Control (UAC) related errors if the software is installed into a protected location, such as Program Files or Program Files (x86). We recommend installing the software in a non-UAC-protected location.

To install CrossCore Embedded Studio, double-click on ADI_CrossCoreEmbeddedStudio-Rel3.0.0.exe

To uninstall CrossCore Embedded Studio, open Control Panel / Programs and Features applet and select to uninstall CrossCore Embedded Studio 3.0.0. You may need to delete the installation directory to clean up any leftover files.

5 Installing CrossCore Embedded Studio on Linux

Mote: Linux Only

The following features are available and supported by this installation:

- Compilation using the Xtensa toolchain for the SHARC-FX core of ADSP-SC83x and ADSP-2183x processors.
- Compilation using the GNU ARM toolchain for the ARM Cortex-M core of ADSP-SC83x processors.
- Compilation using the GNU toolchain for the ARM Cortex-A core on ADSP-SC57x, ADSP-SC58x and ADSP-SC59x processors.
- Compilation using the GNU ARM toolchain for the ADuCM36x, ADuCM302x and ADuCM4x50 ARM Cortex-M cores.
- Debugging ADSP-SC5xx, ADuCM360, ADuCM302x and ADuCM4x50 via the IDE with GDB /OpenOCD.
- Development and debugging of Applications for ADSP-SC83x and ADSP-2183x processors.
- Development and debugging of Applications running under Linux on the ARM Cortex-A core on ADSP-SC57x, ADSP-SC58x and ADSP-SC59x processors.
- Development and debugging of bare-metal applications on the ADuCM360, ADuCM302x and ADuCM4x50 ARM Cortex-M cores.

The following features are available after installing *SHARC Linux Command-Line Tools* though *Help>Install New Software...*:

• Building and command-line execution via the functional simulator (but not cycle-accurate simulation, or debugging within the IDE) of SHARC+ processors.

The following features are only supported under Windows:

- Development, simulation and debug of SHARC processors (excluding the ARM Cortex-A core on ADSP-SC57x, ADSP-SC58x and ADSP-SC59x processors)
- Use of CrossCore Embedded Studio Add-Ins other than the Startup Code/LSP add-in for SHARC-FX and the System Services and Device Driver add-ins
- Debugging an Application using the native CrossCore Debugger

Caution

It is strongly recommended to use the command prompt to install CrossCore Embedded Studio. The installation may not work properly when using Ubuntu Software and/or Ubuntu Software Center.

Some CrossCore Embedded Studio (CCES) components require 32-bit support, so you will need to enable that first. Installing the CrossCore Embedded Studio package will fail otherwise.

```
sudo dpkg --add-architecture i386
sudo apt-get update
```

To install CrossCore Embedded Studio run the following command from the command prompt:

```
sudo apt-get install ./adi-CrossCoreEmbeddedStudio-linux-amd64-3.0.0.
deb
```

To uninstall CrossCore Embedded Studio run the following commands from the command prompt:

```
sudo apt-get purge adi-cces-3.0.0
sudo rm -rf /opt/analog/cces/3.0.0 (to clean up any leftover files)
```

If you want to use the tools from the command line (e.g. via make, cmake or similar) you should add the following directories to your path , whereby \$CCES_BASE needs to be replaced with the CCES install location, which normally is /opt/analog/cces/<version>.

 \$CCES_BASE : \$CCES_BASE/Xtensa/XtensaTools/bin : \$CCES_BASE/ARM/gcc-armembedded/bin: \$CCES_BASE/ARM/arm-none-eabi/bin: \$CCES_BASE/ARM/aarch64-none-elf /bin

5.1 Different users sharing the same CCES license on Linux

Many users can share a single valid license.dat file on a system by creating a symbol link to the valid license.dat in their own home directory (~/.analog/cces).

The user who installed license should ensure that the appropriate directory and file permissions are setup to allow other users to access the valid license.dat.

6 Obtaining Technical Support

You can reach Analog Devices software and tools technical support in the following ways:

- E-mail your questions about software and development tools directly from CrossCore Embedded Studio by choosing Help > Email Support or directly to processor.tools. support@analog.com
- E-mail your questions about processors and processor applications to processor. support@analog.com
- Submit your questions to technical support directly via http://www.analog.com/support
- Contact your Analog Devices sales office or authorized distributor