

Introduction

This chapter helps identify the files you must include when archiving an SOPC Builder project. With this information, you can archive the SOPC Builder system. You may want to archive your SOPC Builder system for one of the following reasons:

- To place an SOPC Builder design under source control
- To create a backup
- To bundle a design for transfer to another location

To use this information, you must decide what source control or archiving tool to use, and you must know how to use it. This chapter describes how to find and identify the files that you must include in an archived SOPC Builder design. Refer to [“Required Files” on page 8-2](#).

Limitations

This chapter provides information about archiving SOPC Builder systems, including their Nios® II software applications, if any. If your SOPC Builder system does not contain a Nios II processor, you can disregard information about archiving Nios II software applications.

This chapter does not cover archiving SOPC Builder *components*, for two reasons:

- SOPC Builder components can be recovered, if necessary, from the original Quartus® II and Nios II installations.
- If your SOPC Builder system was developed with an earlier version of the Quartus II software and Nios II Embedded Design Suite (EDS), when you restore it for use with the current version, you normally use the current, installed components.

If your SOPC Builder system was developed with an earlier version of the Quartus II Complete Design Suite and you restore it for use with the current version, the regenerated system is functionally identical to the original system. However, there might be differences in details such as Quartus II timing, component implementation, or HAL implementation.



For details of version changes, refer to the [Quartus II Reference Documentation](#).

To ensure that you can regenerate your exact original design, maintain a record of the tool and IP version(s) originally used to develop the design. Retain the original installation files or media in a safe place.

The archival process addressed by this chapter is different than Quartus II project archiving. A Quartus II project archive contains the complete Quartus II project, including the SOPC Builder module. The Quartus II software adds all HDL files to the archive, including HDL files generated by SOPC Builder, although these files are not strictly necessary, if you regenerate the design files afterwards. A Quartus II project archive also archives the Quartus II IP (.qip) file.

This chapter is only concerned with archiving the SOPC Builder system, without the generated HDL files.



For more details about archiving Quartus II projects, refer to the *Managing Quartus II Projects* chapter in volume 2 of the *Quartus II Handbook*.

Required Files

This section describes the files required to archive an SOPC Builder system and its associated Nios II software projects (if any). This is the minimum set of files needed to completely recompile an archived system, both the SRAM Object File (.sof).



If you have Nios II software projects, archive them together with the SOPC Builder system on which they are based. For more details about archiving Nios II designs, refer to the *Using the Nios II Software Build Tools* chapter of the *Nios II Software Developer's Handbook*.

SOPC Builder Design Files

The files listed in [Table 8–1](#) are located in the Quartus II project directory.

File description	File name	Write permission required? (1)
SOPC Builder system description	<sopc_builder_system>.sopc	Yes
SOPC Builder classic system description for generation (1)	<sopc_builder_system>.ptf	Yes
SOPC Builder report file	<sopc_builder_system>.sopcinfo	Yes
All non-generated HDL source files (2)	for example: top_level_schematic.bdf, customlogic.v	No

Table 8–1. Files Required for an SOPC Builder System (Part 2 of 2)

File description	File name	Write permission required? (1)
Quartus II project file	<project_name>.qpf	No
Quartus II settings file	<project_name>.qsf	Yes

Notes to Table 8–1:

- (1) The <sopc_builder_system>.ptf file is only required if you intend to edit or view the system in a version of SOPC Builder prior to version 7.1 and must also be writable to generate a system.
- (2) Include all HDL source files not generated by SOPC Builder. This includes HDL source files you create or copy from elsewhere. To identify a file generated by SOPC Builder, open the file and look for the following header:
Legal Notice: (C)<year> Altera Corporation. All rights reserved.

Many source control tools mark local files read-only by default. In this case, you must override this behavior. You do not have to check the files out of source control unless you are modifying the SOPC Builder design or Nios II software project.

Referenced Documents

This chapter references the following documents:

- *Managing Quartus II Projects* chapter in volume 2 of the *Quartus II Handbook*
- *Using the Nios II Software Build Tools* chapter of the *Nios II Software Developer's Handbook*
- *Quartus II Reference Documentation*

Document Revision History

Table 8–2 shows the revision history for this chapter.

Date and Document Version	Changes Made	Summary of Changes
May 2008, v8.0.0	Renumbering from Chapter 7 to 8.	—
October 2007, v7.2.0	No change from previous release.	—
May 2007, v7.1.0	<ul style="list-style-type: none"> ● Chapter 7 was previously chapter 6 ● Added information about new .sopc file type to Table 8–1 ● Added information about legacy .ptf file type to Table 8–1 ● Added Referenced Documents section ● Added reference to new Common BSP Tasks chapter for archiving of Tcl projects 	Updates to this chapter include replacing the legacy .ptf file type with the new .sopc file type.
March 2007, v7.0.0	<ul style="list-style-type: none"> ● No change from previous release 	—
November 2007, v6.1.0	<ul style="list-style-type: none"> ● No change from previous release 	—
May 2006, v6.0.0	Initial release.	—