This chapter provides guidelines to help you partition your design to take advantage of Quartus® II incremental compilation, and to help you create a design floorplan using LogicLock™ regions when they are recommended to support the compilation flow.

The Quartus II incremental compilation feature allows you to partition a design, compile partitions separately, and reuse results for unchanged partitions. Incremental compilation provides the following benefits:

- Reduces compilation times by an average of 75% for large design changes
- Preserves performance for unchanged design blocks
- Provides repeatable results and reduces the number of compilations
- Enables team-based design flows

For more information about the incremental compilation feature and application examples, refer to the Quarters II Incremental Compilation for Hierarchical and Team-Based Design chapter in volume 1 of the Quarters II Handbook. For feature support, refer to About Incremental Compilation in Quarters II Help.

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