Lattice Radiant Software Known Issues

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Type Conventions Used in This Document

Convention	Meaning or Use
Bold	Items in the user interface that you select or click. Text that you type into the user interface.
<Italic>	Variables in commands, code syntax, and path names.
Ctrl+L	Press the two keys at the same time.
Courier	Code examples. Messages, reports, and prompts from the software.
...	Omitted material in a line of code.
. . .	Omitted lines in code and report examples.
[ ]	Optional items in syntax descriptions. In bus specifications, the brackets are required.
( )	Grouped items in syntax descriptions.
{ }	Repeatable items in syntax descriptions.
|	A choice between items in syntax descriptions.

Contents

Lattice Radiant Software Known Issues

This section lists the known issues and workarounds of the Radiant software. Descriptions include the software versions and devices affected. If you are looking for a workaround to a problem, search for related terms including the tool name or a word from an error message, or scan the Contents. If you want issues for a certain version, search for the version number. This will find issues affecting that version and issues fixed in that version of the software.

Design Entry

Radiant software main window stops working on Windows 10 when Dell Backup and Recovery software is installed.

When Dell Backup and Recovery software is installed, it conflicts with the Radiant software, and may cause it to stop working.

Versions affected: 1.0
Fixed: 1.1
Devices affected: All
Bug number: DNG-2303

Workaround: Uninstall Dell Backup and Recovery software.

Constraints Views

Floorplan View: When using the left mouse button to zoom while objects are selected, the selected objects will be lost

Versions affected: 1.0, 1.1
Devices affected: All
Bug number: DNG-3231
Workaround: If there are objects selected, zoom using the wheel mouse button or keys Ctrl + and Ctrl – keys.

Timing Constraint Editor: It is not possible to drag and drop objects from RTL view into the Timing Constraint Editor while in Detach mode on certain computers

Versions affected: 1.0
Fixed: 1.1
Devices affected: All
Bug number: DNG-2728

Workaround: If you run into this issue, use "Attach" mode to drag and drop objects from RTL view into the Timing Constraint Editor.

Synthesis

Lattice Synthesis Engine (LSE) does not implement async mult

LSE does not implement async mult. LSE always uses MAC16.

Versions affected: 1.1
Devices affected: All
Bug number: DNG-3144

The syn_useioff attribute does not work for LSE.

This attribute controls selective register to be pack into I/O pad cell based on timing requirements. LSE "Use IO Registers" Strategy option is set to Auto to use IO registers whenever applicable. Those IO register inferences cannot be individually prevented by the user HDL attribute "syn_useioff = 0".

Versions affected: 1.0, 1.1
Devices affected: All
Bug number: DNG-3382
Workarounds (2 options):

1. Use the global option "Use IO Registers = False" in Strategy Manager if the design permits, in which LSE will not pack any register into I/O pad cell unless instantiated.

2. Use Synplify Pro for Lattice synthesis tool

No warning message issued by Synplify Pro when Synplify encryption key is missing

When the encrypted design without a valid key is not be synthesized by Synplify Pro, it should provide a warning message. Note that the encrypted design will still be protected.

Versions affected: 1.1
Devices affected: All
Bug number: DNG-5300

For designs with multiple assignments to same parameter, Synplify Pro synthesis will pick up the first assignment without any warning message. Users may get unexpected results.

Versions affected: 1.0
Fixed: 1.1
Devices affected: All
Bug number: DNG-2077
Workaround: Remove any unused assignments and keep the ones with the expected value.

LOC attribute does not work for locating registers for Synplify Pro synthesis

Versions affected: 1.0
Fixed: 1.1
Devices affected: All
Bug number: DNG-2767

Workaround: Use "ldc_set_location" constraint in .pdc file to set location constraints for registers

Implementation Flow

Place & Route (PAR): Some designs may encounter long run times

Versions affected: 1.0
Fixed: 1.1
Devices affected: All

DNG-3007
Workaround: Turn off the Place & Route Design Strategy "Path-based Placement" option.

Timing Analysis

Hold Time calculation shows user speed grade for setup and hold calculation.

The timing engine uses the user speed grade for both setup and hold calculation. This is not the behavior users of Diamond software are expecting. Future versions of Radiant software will change this behavior to do setup calculation at the user speed grade and hold calculation at the M speed grade.

Versions affected: 1.1
Devices affected: All
Bug number: DNG-5651

If there are overlapping set_clock_uncertainty constraints, the most constraining one will be honored by the Timing engine

Here is an example of the issue:

```
 set_clock_uncertainty 1.33 -from [get_clocks myclk1] -to [get_-
clocks myclk2] -setup
```

```
 set_clock_uncertainty 3.0 [get_clocks myclk2] -setup
```

In the case above, 3.0 will be applied as the constraint.

Versions affected: 1.0
Fixed: 1.1
Devices affected: All
Bug number: DNG-2761
Workaround: None. This limitation will be reviewed and addressed in future version.

Programming

Programmer software may not work properly if you open two or more Radiant software projects at the same time

When two Radiant software projects are opened at the same time with only one using the imported .xcf file, the Programmer software may not operate properly. Clicking on the Programmer icon for the first project opens the .xcf

file. If you subsequently click on the programmer icon of the second project, the Programmer will close the first .xcf file and open the second. The second .xcf file will be empty and Programmer will show an error message.

Versions affected: 1.0
Fixed: 1.1
Devices affected: All
DNG-2915

Workaround: If you need two Radiant software projects opened at the same time, close the first Radiant software project before clicking on the programmer icon of the second project.

Revision History

The following table gives the revision history for this document.

Date	Version	Description
04/08/2019	1.1	Added new known issues for Radiant 1.1. Listed previous known issues that have been resolved
02/14/2018	1.0	Initial Release.