



# **Errata Documentation**

For

# IEEE 1685™: IP-XACT, Standard Structure for Packaging, Integrating, and Reusing IP within Tool Flows

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#### **Errata**

This document contains a running list of issues and clarifications to be addressed in the next version of the standard. The errata listed here are collected and managed by the <u>Accellera IP-XACT Working Group</u>. IEEE 1685 can be <u>downloaded here</u>.

- Incorrect wording for SCR about clocks being on scalar ports only 12.9 should say scalar or single-bit
- Annex I uses 0x<digits> for all hex numbers which is ILLEGAL
- Description of whiteBoxType within whiteBoxElement indicates it can be set to 'register' which
  is no longer supported. This is in the schema, not the standard document.
- Problems with TGI.xlsx (sent to Erwin on 10/31/14). These also appear this way in the standard and need to be updated accordingly.
  - 1) The callback getRegisterFileTypeIdentifier is incorrectly defined twice. The second definition should have been named set\* instead of get\*
  - 2) The callback getAbstractorViewComponentInstantiationRef is defined twice. Once returning componentInstantiationName and once returning componentInstantiationID. I assume the latter is the desired definition since you can get the name from the ID.
  - 3) The callback removeFileSetDependency is defined twice, once for files and once for fileSets. Seems like it should have a single definition with the input argument being "fileSetID | fileID" to be consistent with other callbacks that supported multiple ID types.
  - 4) The callbacks getFileBuilderFileType, getFileBuilderCommand, getFileBuilderFlags, getFileBuilderReplaceDefaultFlags, setFileBuilderFlags, setFileBuilderReplaceDefaultFlags are all defined twice. Once in the address space operations section and then an identical definition in the fileBuilder section. Since these are fileBuilder operations it seems like the definitions within the address space section are redundant.





- SCR addressBlockContent is a definition, not an SCR. This needs to either be removed or potentially updated to indicate that when the type is 'reserved' we should not allow registers.
- Link in SCR 7.19 is not to the correct location.
- Multiple references to the now obsolete 'opaque' attribute. Also need to update documentation about opaque bridges to indicate how they are now modeled with sub-space maps.
- 6.11.3.2.e (register field within register) is incorrectly documented as being optional. At least one is required in the current schema.
- Leon expressions (as in uart.xml) are in some cases invalid when combining the '\$pow' function with the '%' operator as the former returns a real and the latter requires integer arguments. Upconversion is currently broken in this regard.
- In Table F.1, in the "Example" column for the "Set" row, the text should be "Set parameter value" instead of "Get parameter Value".
- There is no clear definition about the difference between the Base and Extended API categories.
- The tables 7.2.1 and 7.2.2 don't have any descriptive text. This should either be fixed or more likely they should merge into the field operations table(s).
- Both the IEEE 1685-2009 and 1685-2014 Std documents incorrectly state that an enumeration value for TestContraint is "unConstrained" (with upper case C), page 116 and 93 respectively. The XML schemas (memoryMap.xsd) correctly state that the value is "unconstrained" (with lower case C). Use of the incorrect value will result in syntax errors during schema validation and are likely not to work in compliant tools. The next revision of the standard will be changed to use the correct all-lower-case name.
- **replaceDefaultFlags**: Section 6.15.4 describes replaceDefaultFlags backwards relative to the schema.
- Examples in IEEE1685-2014 LRM reference wrong schema

The examples in Annex I use the namespace <a href="http://www.accellera...hema/IPXACT/2.0">http://www.accellera...hema/IPXACT/2.0</a> instead of <a href="http://www.accellera...PXACT/1685-2014">http://www.accellera...PXACT/1685-2014</a>

#### XML for Annex I.5 isn't well formed

The designConfigurations tag isn't properly closed. It should be:

- <ipxact:designConfigurations>
- <ipxact:ipxactFile>
- <ipxact:vlnv vendor="accellera.org" library="Sample"</pre>
- name="SampleDesignConfiguration" version="1.0"/>
- <ipxact:name>./SampleDesignConfiguration.xml</ipxact:name>
- </ipxact:ipxactFile>





</ir></ipxact:designConfigurations>

#### Typo in Annex I.6 remap state name.

The second remap state is called 'Nornmal', but should be 'Normal'.

## - Bibliography references non-existing URL

B12 lists <a href="http://www.accellera.../refs/toolnames">http://www.accellera.../refs/toolnames</a> as the source for tool names compatible with the *envIdentifier* field. The URL doesn't exist.

#### Example in Annex I.6 lists same file twice in fileSet

```
<ipxact:name>VerilogFiles</ipxact:name>
```

<!-- LINK: file: see 6.15.2, file -->

<ipxact:file>

<ipxact:name>../src/component.v</ipxact:name>

<ipxact:fileType>verilogSource</ipxact:fileType>

<ipxact:isStructural>true</ipxact:isStructural>

</ipxact:file>

<ipxact:file>

<ipxact:name>../src/component.v</ipxact:name>

<ipxact:fileType>verilogSource</ipxact:fileType>

</ipxact:file>

</ipxact:fileSet>

#### - Obsolete TODO reference in annex I.6

There is a TODO comment in the example component:

<!-- TODO: MISSING definition of resetType in document -->

#### - XML for Annex I.7 isn't well formed

There is a comment in the sample design: <!-- Export Master interface -- will be used for TLM to RTL conversion -->

According to the XML specification, it's illegal to have '--' inside comments (except when followed immediately by '>'), which causes parsing to fail.

#### - XML for Annex I.9 is not well formed

The </ipxact:generatorChain> closing tag is missing at the end of the file.

### - Section C.6.2 describing configurableLibraryRefType is incomplete

The description in part (e) for configurableElementValues needs to be expanded to cover the other element types where it is now valid. The new wording should be:

**configurableElementValues** (optional) specifies the configuration for a specific component instance, bus type, abstraction type, design instantiation, design configuration instantiation, or generator chain configuration by providing the value of a specific parameter. See C.5.