byucc.edif

Helpers

PrintWriter

EdifHelpers

EdifPrintWriter

NamedObjectCompare

Properties

IntegerTypedValue

ArrayList
......

ExpValue

BooleanTypedValue

EdifNumber

ScaledInteger

1
1

1..*

1
1

NumberTypedValue

StringTypedValue

LinkedHashMap
......

PropertyList

NewTypedValue

1

1

1

Property

*

Names

<<interface>> **EdifOut**

<<interface>> **Nameable**

<<interface>> **EdifNameable**

1

<<interface>> **Properties**

NamedObject

1

NamedPropertyObject

1

RenamedObject

Circuit Objects

EdifFile

1
1

1

EdifLibrary

*

1

*

EdifDesign

1

EdifPort

EdifCell

EdifCellInstance

*

1

1

1
1

1

*

EdifNet

EdifPortRef

*

1

*

<<interface>>
Properties

+*addProperty(in p : Property)*
+*getProperty(in str : String) : Property*
+*getPropertyList() : PropertyList*

<<interface>>
Nameable

+*getName() : String*

<<interface>>
EdifOut

+*toEdif(in epw : EdifPrintWriter)*

<<interface>>
EdifNameable

NamedPropertyObject

-pl : PropertyList
-_name : EdifNameable

+RenamedPropertyObject()
+clone() : Object
+getEdifNameable() : EdifNameable
+setEdifNameable(in name : EdifNameable)
+getName() : String
+setName(in name : String)

PropertyList

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1   1

1   1

NamedObject

-_name

+NamedObject()
+NamedObject(in name : String)
+clone() : Object
+createValidEdifNameable(in string : String) : EdifNameable
+createValidEdifString(in string : String) : String
+isValidEdifName(in string : String) : boolean
+setName(in name : String)
+toString() : String

RenamedObject

-_oldName : String

+RenamedObject()
+RenamedObject(in name : String, in oldname : String)
+clone() : Object
+createValidEdifNameable(in string : String) : EdifNameable
+bitPosition() : int
+leastSignificantBitPosition() : int
+mostSignificantBitPosition() : int
-findBitPosition(in requiredNumber : int) : int
+setOldName(in name : String)
+getOldName() : String
+toString() : String

ExpValue

- _base : int
- _exp : int

+ExpValue(in base : int, in exp : int)
+ExpValue()
+clone() : Object
+getBase() : int
+getExp() : int
+getValue() : int
+setBase(in base : int)
+setExp(in exp : int)
+setPair(in base : int, in exp : int)
+toString() : String

1

1

<<interface>>
EdifOut

ArrayList

ScaledInteger

- _valueType : int
- _intValue : int
- _expValue : ExpValue

+ScaledInteger(in type : int)
+clone() : Object
+setValue(in value : int)
+setValue(in value : ExpValue)
+toString() : String

EdifNumber

+addScaledInteger(in value : ScaledInteger)
+clone() : Object
+toString() : String

1   1..*

1   1

IntegerTypedValue

- _integerValue : int

+integerValue()
+integerValue(in value : int)
+clone() : Object
+getIntegerValue() : int
+setValue(in value : int)
+toString() : String

BooleanTypedValue

- _booleanValue : boolean

+booleanTypedValue()
+booleanTypedValue(in value : boolean)
+clone() : Object
+setValue(in value : boolean)
+getBooleanValue() : boolean
+toString() : String

NumberTypedValue

- _numberValue : EdifNumber

+NumberTypedValue()
+NumberTypedValue(in value : EdifNumber)
+clone() : Object
+getNumberValue() : EdifNumber
+setValue(in value : EdifNumber)
+toString() : String

StringTypedValue

- _stringValue : String

+stringTypedValue()
+stringTypedValue(in value : String)
+clone() : Object
+getStringValue() : String
+setValue(in value : String)
+toString() : String

LinkedHashMap

NewTypedValue

+clone() : Object

1

PropertyList

+PropertyList()
+addProperty(in p : Property)
+getProperty(in str : String)
+clone() : Object
+toString()
+toString(in indent : int)

1

*

1

Property

- _name : String
- _value : NewTypedValue

+Property(in setName : String, in setValue : NewTypedValue)
+clone() : Object
+getName() : String
+getValue() : NewTypedValue
+setName(in setName : String)
+setValue(in setValue : NewTypedValue)
+toString() : String

EdifFile

-_libraries : LinkedHashMap
-_topDesign : EdifDesign

+addLibrary(in library : EdifLibrary)
+getLibraries() : Map
+getLibrary(in lib : String)
+getTopDesign() : EdifDesign
+mergeEdifFile(in newfile : EdifFile, in overwriteCells : boolean, in overwriteDesign : boolean)
+findBlackBoxes(in library : EdifLibrary) : Collection
+findBlackBoxes(in libraries : Collection) : Collection
+welson_merge(in subEdifFile : EdifFile)
+updateCellRef(in newCell : EdifCell)
+setTopDesign(in design : EdifDesign)
+toString() : String
+trimToSize()

NamedPropertyObject

<<interface>>
EdifOut

Each class inherits the
NamedPropertyObject abstract class and
implements the EdifOut interface

EdifLibrary

-_definedCells : ArrayList
-_external : boolean
-_edifFile : EdifFile
-_previous : EdifLibrary
-_next : EdifLibrary

+setEdifFile(in file : EdifFile)
+getEdifFile() : EdifFile
+addCell(in cell : EdifCell)
+addCellToTop(in cell : EdifCell)
+deleteCell(in cell : EdifCell)
+deleteCell(in name : String)
+isExternal() : boolean
+getCell(in name : String) : EdifCell
+getCells() : Collection
+mergeLibrary(in newlib : EdifLibrary)
+merge(in subEdifLib : EdifLibrary)
+setExternal()
+setExternal(in external : boolean)
+toString() : String
+removeCell(in cell : EdifCell)
+trimToSize()

EdifDesign

-_topCellInstance : EdifCellInstance

+getTopCellInstance() : EdifCellInstance
+setTopCellInstance(in cellInstance : EdifCellInstance)
+toString() : String

EdifCellInstance

-_cellType : EdifCell
-_parent : EdifCell

+getCellRef() : EdifCell
+getParent() : EdifCell
+getType() : String
+setCellRef(in cellRef : EdifCell)
+setParent(in p : EdifCell)
+toString() : String

EdifPort

-_direction : int
-_width : int

+EdifPort()
+EdifPort(in p : EdifPort)
+EdifPort(in name : String, in width : int, in direction : int)
+equals(in port : EdifPort)
+getDirection() : int
+getWidth() : int
+isInOut() : boolean
+isInput() : boolean
+isInputOnly() : boolean
+isOutput() : boolean
+isOutputOnly() : boolean
+oppositeDirection(in dir : int) : int
+setDirection(in dir : int)
+setWidth(in setWidth : int)
+toString() : String

EdifCell

-_library : EdifLibrary
-_cellInstanceList : ArrayList
-_netList : ArrayList
-_portList : ArrayList

+EdifCell()
+EdifCell(in name : String)
+addNet(in net : EdifNet)
+addPort(in port : EdifPort)
+addSubCell(in cellInstance : EdifCellInstance)
+deleteSubCell(in cellInstance : EdifCellInstance)
+equals(in cell : EdifCell)
+equalsInterface(in cell : EdifCell)
+getLibrary() : EdifLibrary
+getNetList() : List
+getPort(in name : EdifPort)
+getPortList() : List
+getSortedNetList() : List
+getSortedPortList() : List
+getSortedPropertyList() : TreeMap
+getSortedSubCellList() : List
+getSubCellList() : List
+isLeafCell() : boolean
+setLibrary(in library : EdifLibrary)
+toString()
+toString(in sorted : boolean, in indent : int)
+trimToSize()

EdifNet

-_attachedPortRefs : ArrayList
-_parent : EdifCell

+addPortConnection(in port : EdifPortRef)
+getConnectedPortRefs() : ArrayList
+getParent() : EdifCell
+setParent(in cell : EdifCell)
+toString()
+toString(in indent : int)
+toString(in indent : int, in detail : int)
+trimToSize()

EdifPortRef

-busMember : int
-refPort : EdifPort
-cellRef : EdifCellInstance
-net : EdifNet

+EdifPortRef(in net : EdifNet, in port : EdifPort, in instance : EdifCellInstance, in width : int)
+clone() : Object
+getBusMember() : int
+getNet() : EdifNet
+getRefCell() : EdifCellInstance
+getRefPort() : EdifPort
+toString() : String