

Net Tie

## **Features**

- Connects two analog routes
- Connects a constrained analog route with an unconstrained analog route
- Connects two analog routes with different routing resource constraints

# **General Description**

The Net Tie Component connects two analog routes to each other. Each of the routes may have a different analog resource constraint.

#### When to Use a Net Tie

The Net Tie Component can be used to split an analog route for fine-grained control of analog routing.

Typically, one or both of the signals connected to the Net Tie Component will have an Analog Constraint (see the Analog Constraint datasheet for details). See Functional Description in this datasheet for examples

## Input/Output Connections.

This section describes the various input and output connections for the Net Tie Component. An asterisk (\*) in the list of I/Os indicates that the I/O may be hidden on the symbol under the conditions listed in the description of that I/O.

## net\_a - Input/Output

Connects to an analog route to be joined.

## net\_b - Input/Output

Connects to an analog route to be joined.

## **Component Parameters**

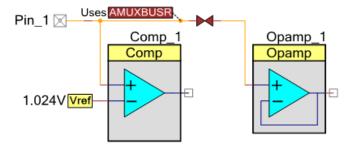
The Net Tie Component has no configurable parameters, other than the Built-in parameters that exist for all Components.

## Resources

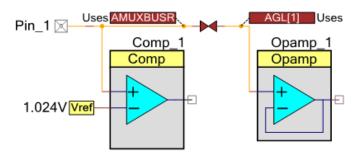
The Net Tie Component itself does not consume hardware resources; however, the analog router will use analog routing resources as necessary to implement the connection.

# **Functional Description**

You can use the Net Tie Component to connect a constrained signal to an unconstrained signal. The Components on the left are connected using AMUXBUSR. The analog router automatically selects routing resources to connect to the Component on the right.



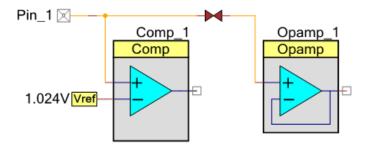
You can use the Net Tie Component to connect two constrained signals. The Components on the left are connected using AMUXBUSR. The Component on the right is connected using AGL[4]. The analog router automatically selects routing resources to connect the signals together.





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You can use the Net Tie Component to connect two unconstrained signals, but in this case the Net Tie is not necessary.



# **Component Changes**

This section lists the major changes in the Component from the previous version.

Version	Description of Changes	Reason for Changes / Impact
1.50.b	The Component was made visible for PSoC 6.	
1.50.a	Minor datasheet edits and updates	

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