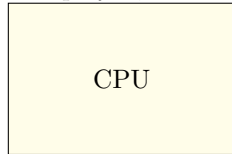


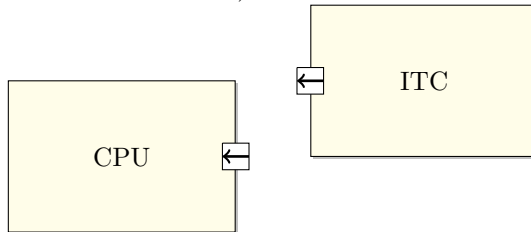
TikzLM is a simple set of  $\text{\LaTeX}$  macros to draw the basic elements in typical SystemC/TLM (Transaction Level Modeling) picture. There's no real documentation, but this document serves as an example and gives hints on how to use the package. Reading the source is the best way to know the details.

## 1 Basics

The macro `\scmodule{(x,y)}{nodename}{Text}` creates a module with text `Text` displayed, and corresponding to a TikZ node called `nodename` :

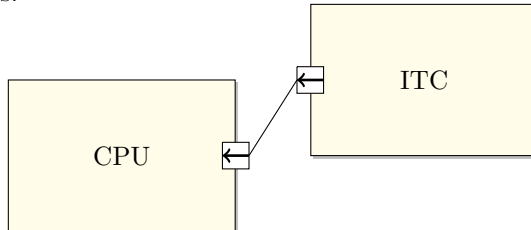


The macro `\scin{node}{angle}{nodename}` (and `\scout`) allows one to add input/output ports to the module. `node` is the place where the port will be drawn (typically obtained with `cpu.south`, or `module.name.15`, or so), `angle` is a rotation angle, used when the port isn't turned towards the right, and `nodename` is the name of the port created (it corresponds to the point where the output wires will be connected).

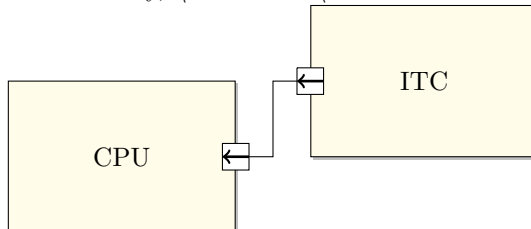


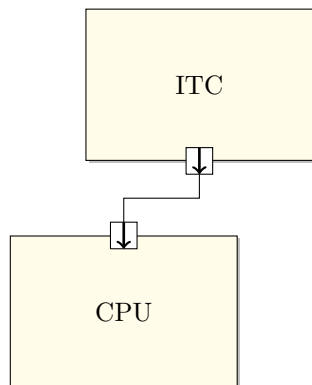
Similarly, `\tsocket` (resp. `\isocket`) allow drawing TLM target (resp. initiator) sockets (different just by the way they are drawn).

To connect ports and sockets, one can use basically `\draw(...) -- (...)`; like this:



Alternatively, `\hbind` and `\vbind` avoid non-horizontal/vertical lines:

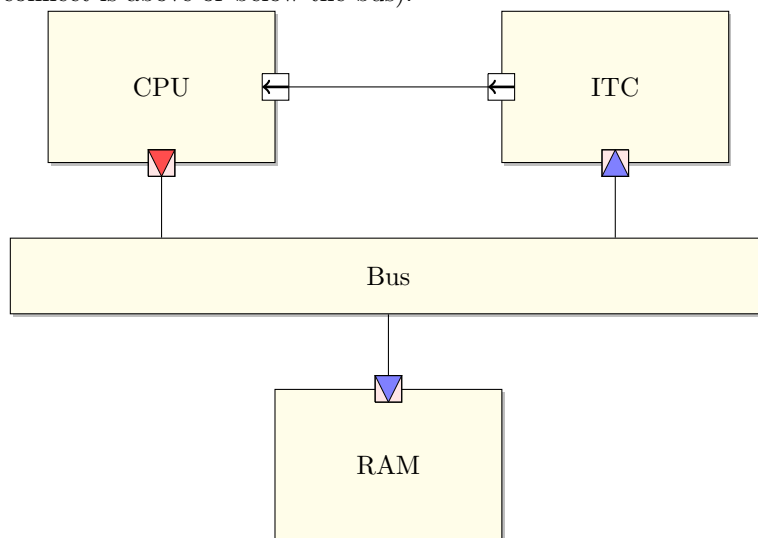




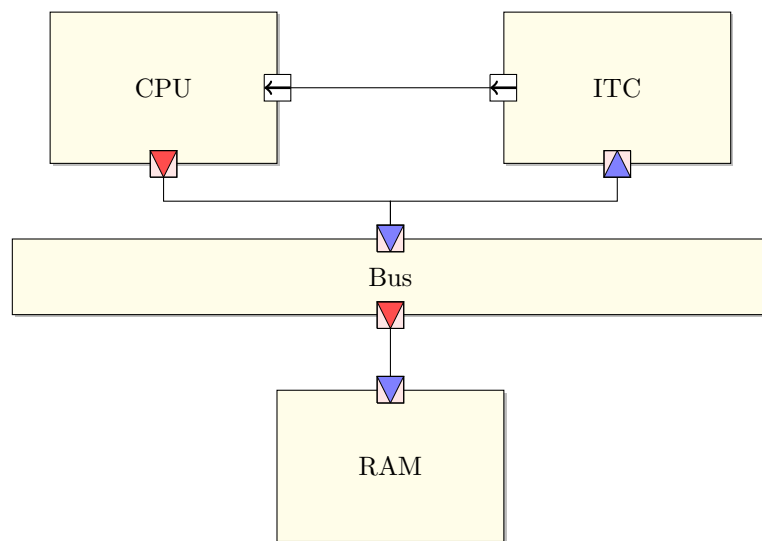
## 2 Example of platform with a bus

`\tlmbus` is a simple wrapper around `\scmodule` giving a long, thin shape to look like a bus.

One can either connect the components directly to the bus with `\hbindbus{socket}{point}` (point is either `Bus.south` or `Bus.north` depending on whether the component to connect is above or below the bus):



... or show explicitly the sockets of the bus:



### 3 Bigger example

