The TLM 2.0 Loosely Time (LT) with DMI System Example

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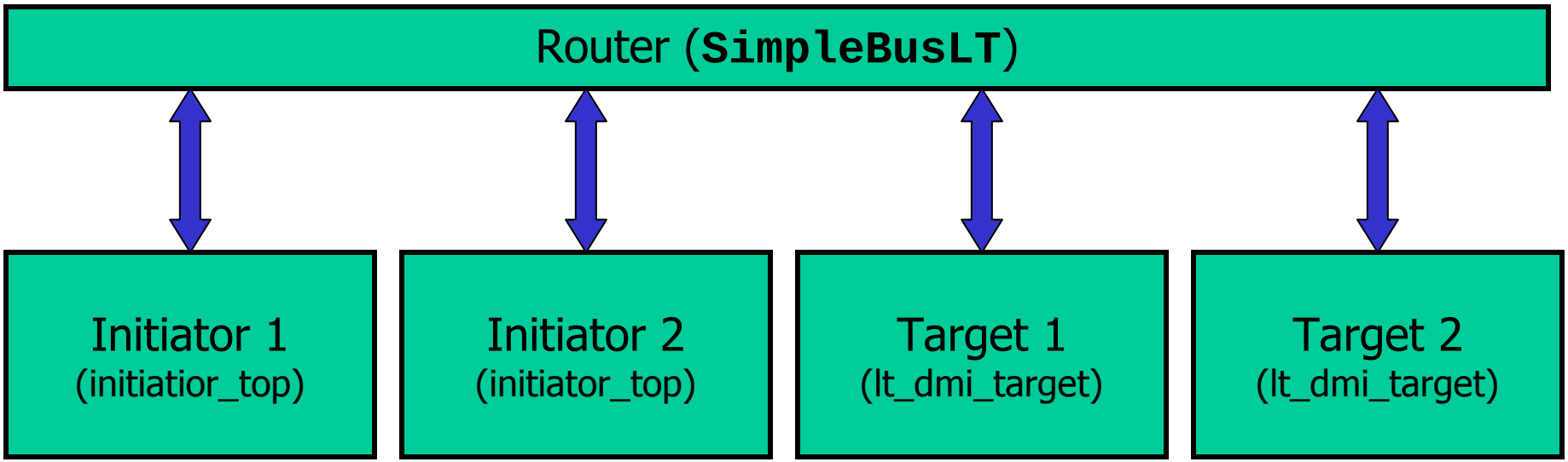
AT Minimum System Example Use Cases

- **Virtual Development Platform**
- **Initial Hardware/Software Partitioning**
- **Initial Architectural Performance Analysis**

Approximately Timed (AT) Block Diagram



TLM 2 GP

How to run this example (Linux)

- **Set `SYSTEMC_HOME`**
- **`cd examples/tlm/lt_dmi/build-unix`**
- **`make clean`**
- **`make`**
- **`make run`**

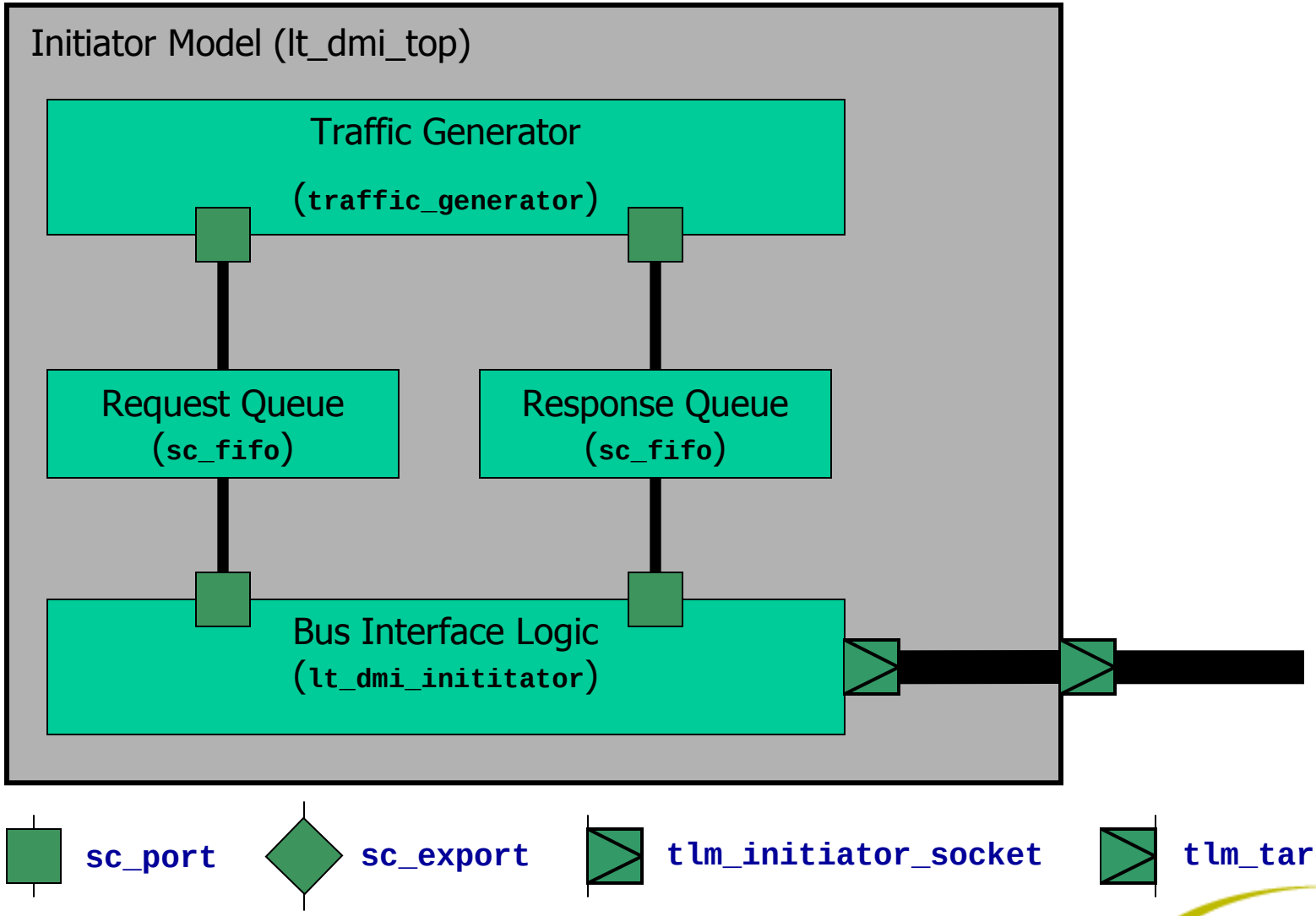
How to run this example (MSVC)

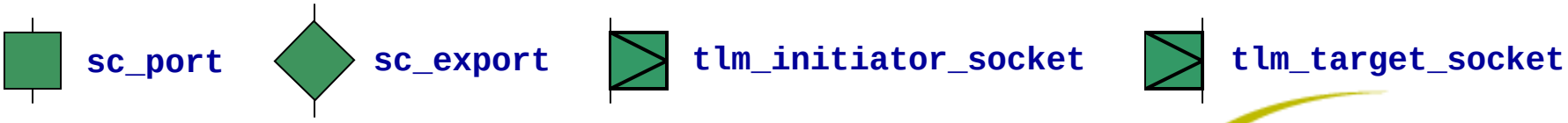
- Open a explorer window on `examples/tlm/lt_dmi/build-windows`
- Launch `lt_dmi.sln`
- Select ‘Property Manager’ from the ‘View’ menu
- Under ‘lt_dmi > Debug | Win32’ select ‘systemc’
- Select ‘Properties’ from the ‘View’ menu
- Select ‘User Macros’ under ‘Common Properties’
- Update the ‘SYSTEMC’ entry and apply
- Build and run

Expected Output (expected.log)

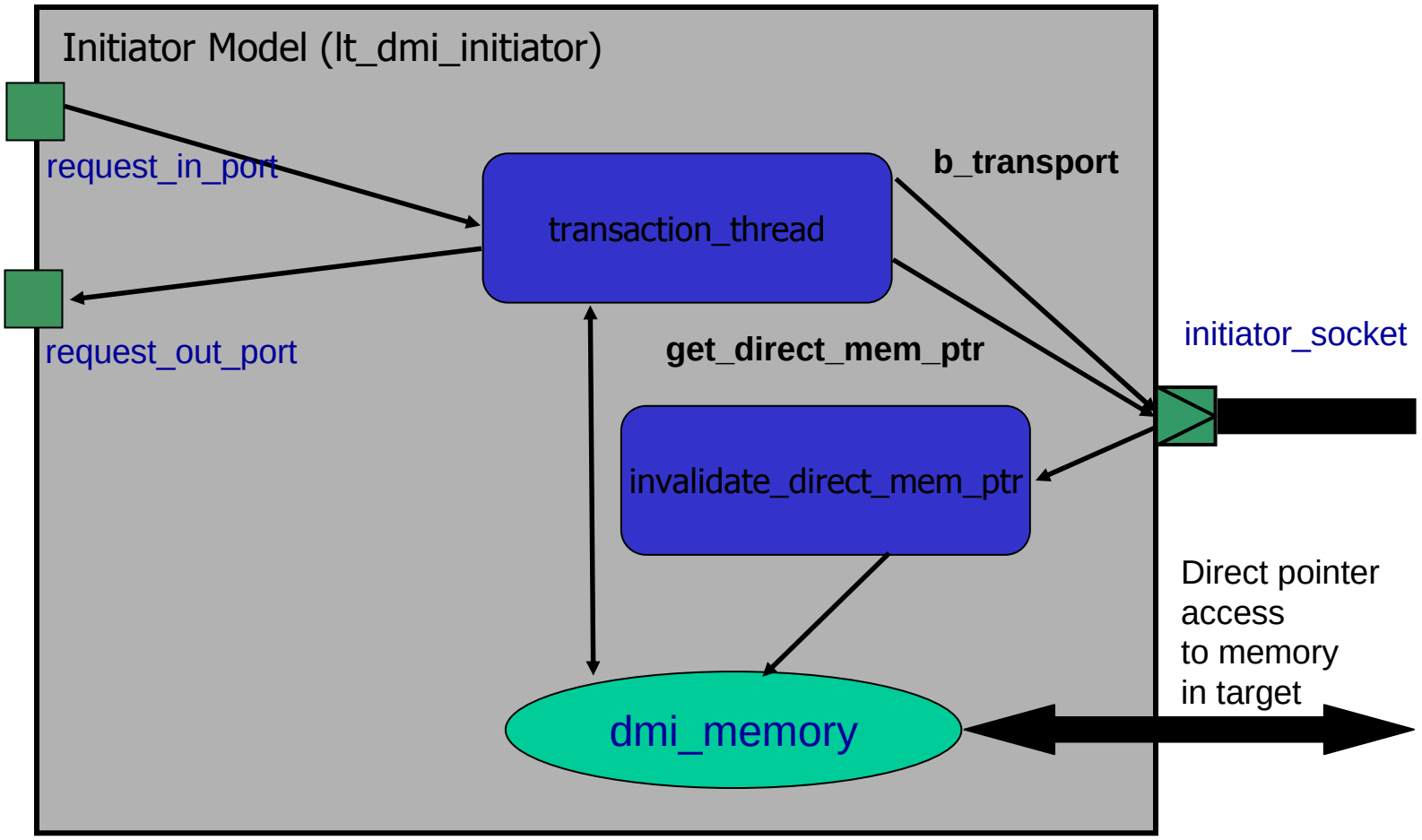
```
Info: lt_dmi_target.cpp: 0 s - toggle_dmi_method
      Target: 201 invalidate_direct_ptr (0, 4096);

Info: dmi_memory.cpp: 0 s - invalidate_dmi_ptr
      Initiator:101 DMI Pointer not invalidated for (0, 4096)

Info: dmi_memory.cpp: 0 s - invalidate_dmi_ptr
      Initiator:102 DMI Pointer not invalidated for (0, 4096)

Info: lt_dmi_target.cpp: 0 s - toggle_dmi_method
      Target: 202 invalidate_direct_ptr (0, 4096);

Info: dmi_memory.cpp: 0 s - invalidate_dmi_ptr
      Initiator:101 DMI Pointer not invalidated for (268435456, 268439552)

Info: dmi_memory.cpp: 0 s - invalidate_dmi_ptr
      Initiator:102 DMI Pointer not invalidated for (268435456, 268439552)

Info: traffic_generator.cpp: 0 s - traffic_generator_thread
      Initiator: 101 Starting Traffic

Info: traffic_generator.cpp: 0 s - traffic_generator_thread
      Initiator: 102 Starting Traffic

Info: lt_dmi_initiator.cpp: 0 s - initiator_thread
      Initiator: 101 b_transport with delay of 0 s);
```

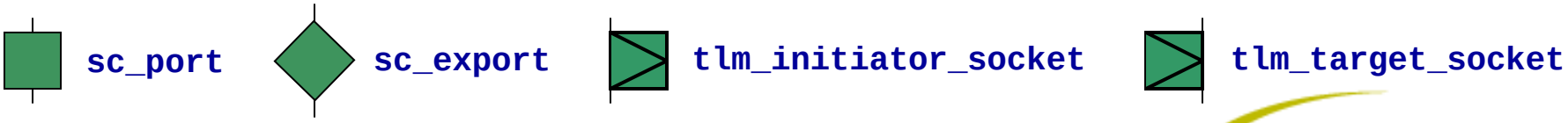
Initiator Component





Bus Interface Logic





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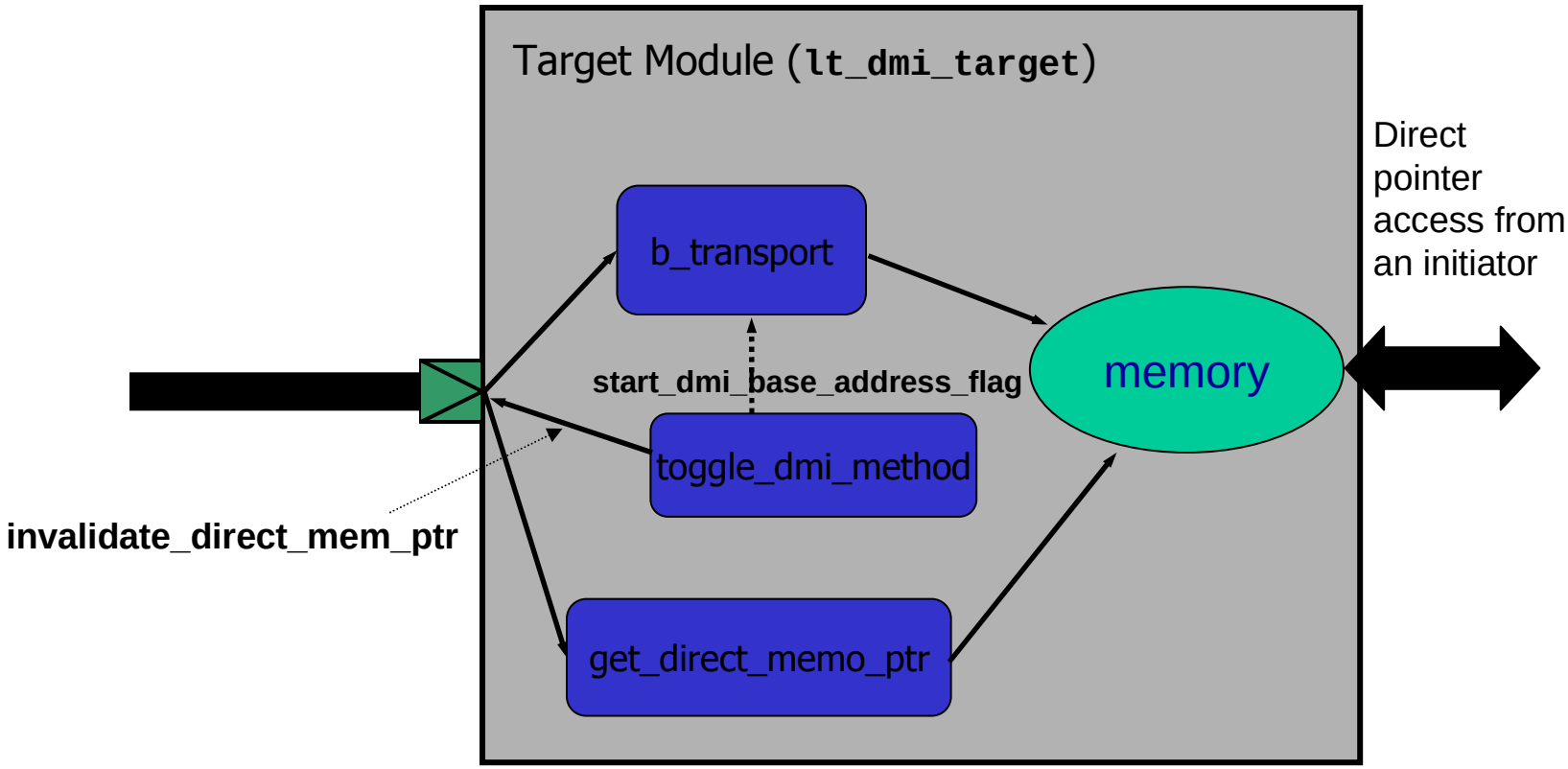
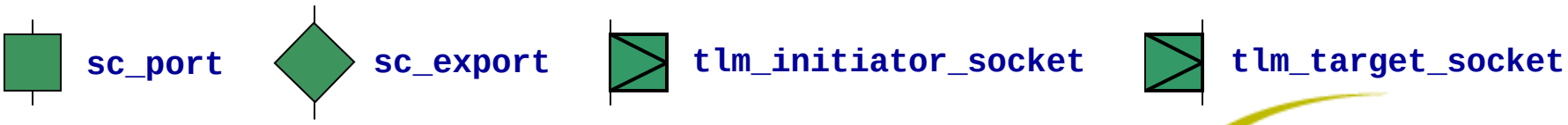
Target Component





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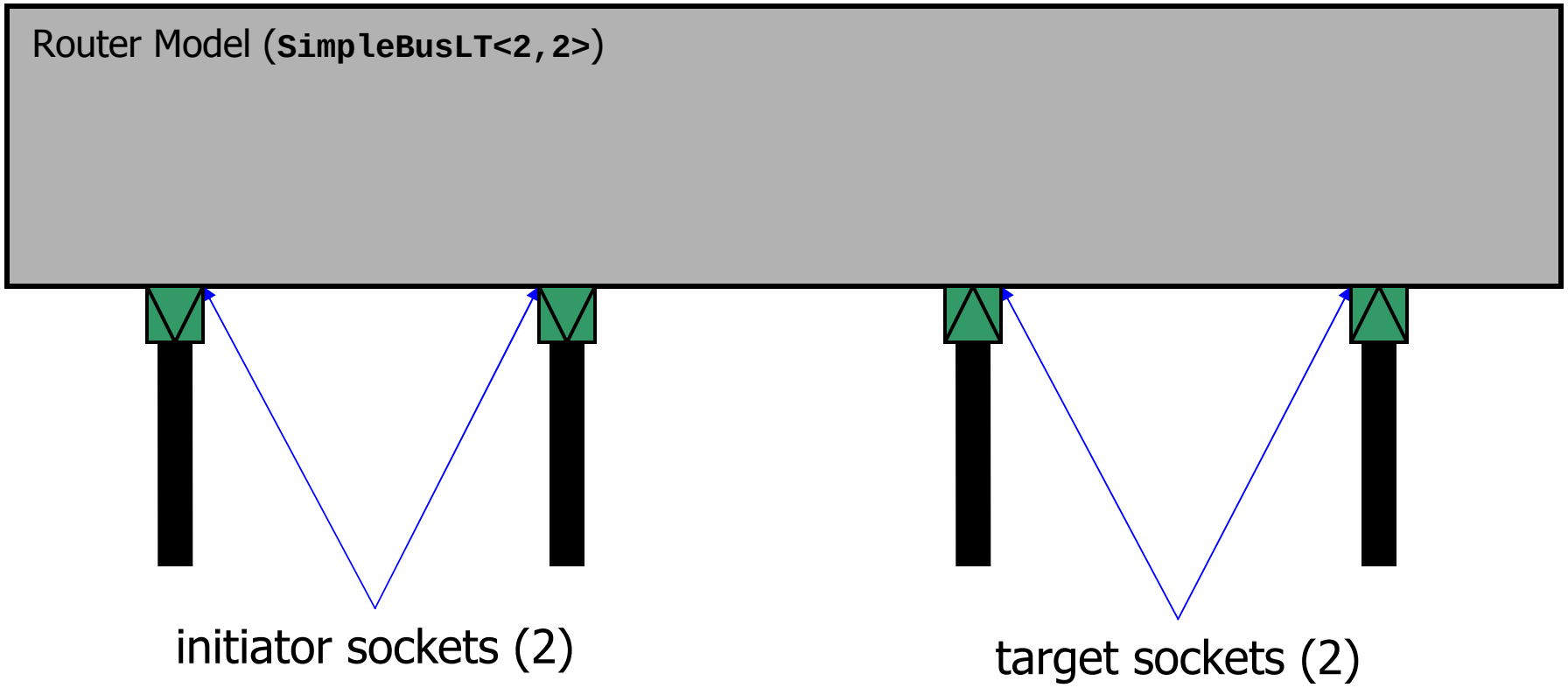
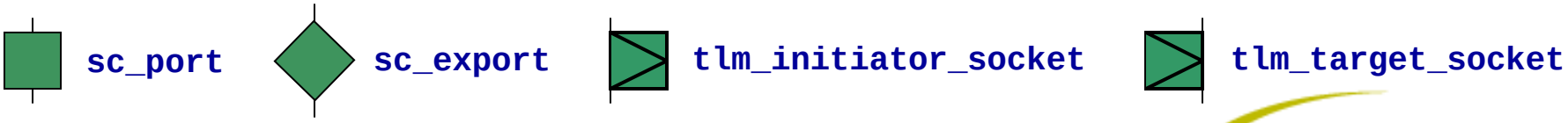
Router Component





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