



TLM 2.0 LT with Mandatory Extension System Example

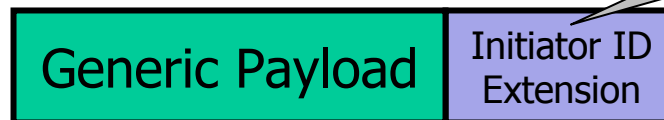
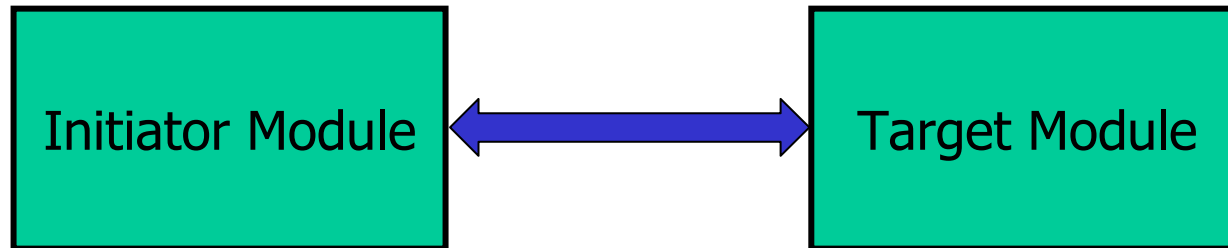
**Jack Donovan, Anna Keist, Charles Wilson
ESLX, Inc.
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LT with Mandatory Extension Example

- **The Goal is to Illustrate:**
 - Application of TLM 2.0 in a real system
 - Use of a mandatory extension
- **Possible Applications:**
 - Architectural exploration
 - Early software development



Example Block Diagram



This extension carries a string containing the initiators 'ID'



TLM 2 GP with mandatory extension



How to run this example (Linux)

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



How to run this example (MSVC)

- Open a explorer window on `examples/tlm/lt_extension_mandatory/build-windows`
- Launch `lt_extension_mandatory.sln`
- Select '**Property Manager**' from the '**View**' menu
- Under '**lt_extension_mandatory > 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_initiator_extension_mandatory.cpp: 275 ns - invalidate_direct_mem_ptr
Received invalidate request - valid request

Info: lt_initiator_extension_mandatory.cpp: 350 ns - log_end
Received TLM_OK_RESPONSE, Data: 0x00000002

Info: lt_initiator_extension_mandatory.cpp: 350 ns - log_start
Creating read transaction - Addr: 0x000000000000000C

Info: lt_target_extension_mandatory.cpp: 350 ns - nb_transport_fw
Extension present, Data: generic ID

Info: lt_target_extension_mandatory.cpp: 350 ns - nb_transport_fw
Read request - Addr: 0x000000000000000C

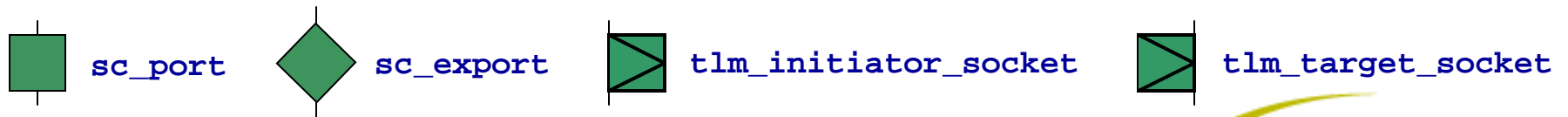
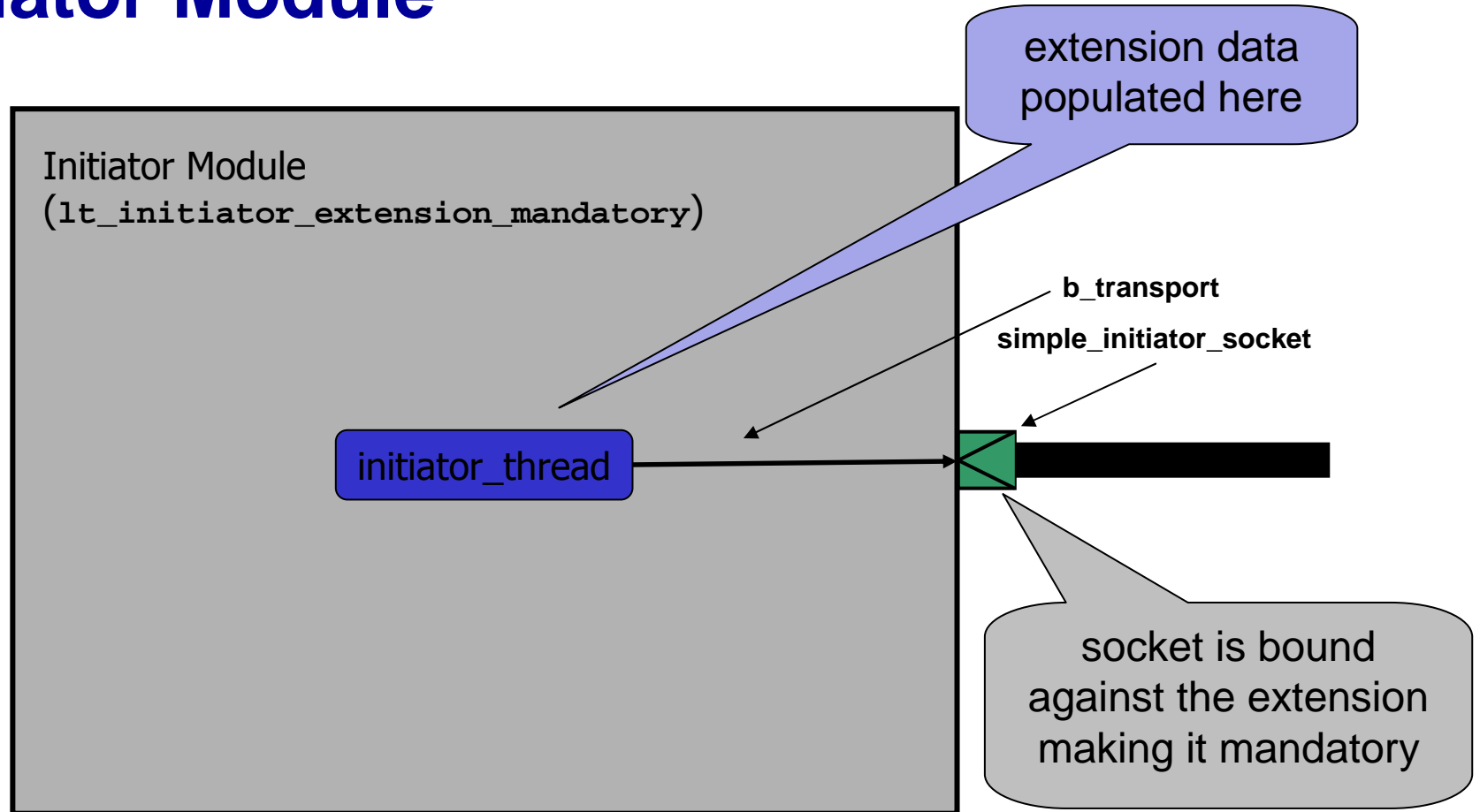
Initiator ID: 101

Info: lt_initiator_extension_mandatory.cpp: 450 ns - log_end
Received TLM_OK_RESPONSE, Data: 0x00000003

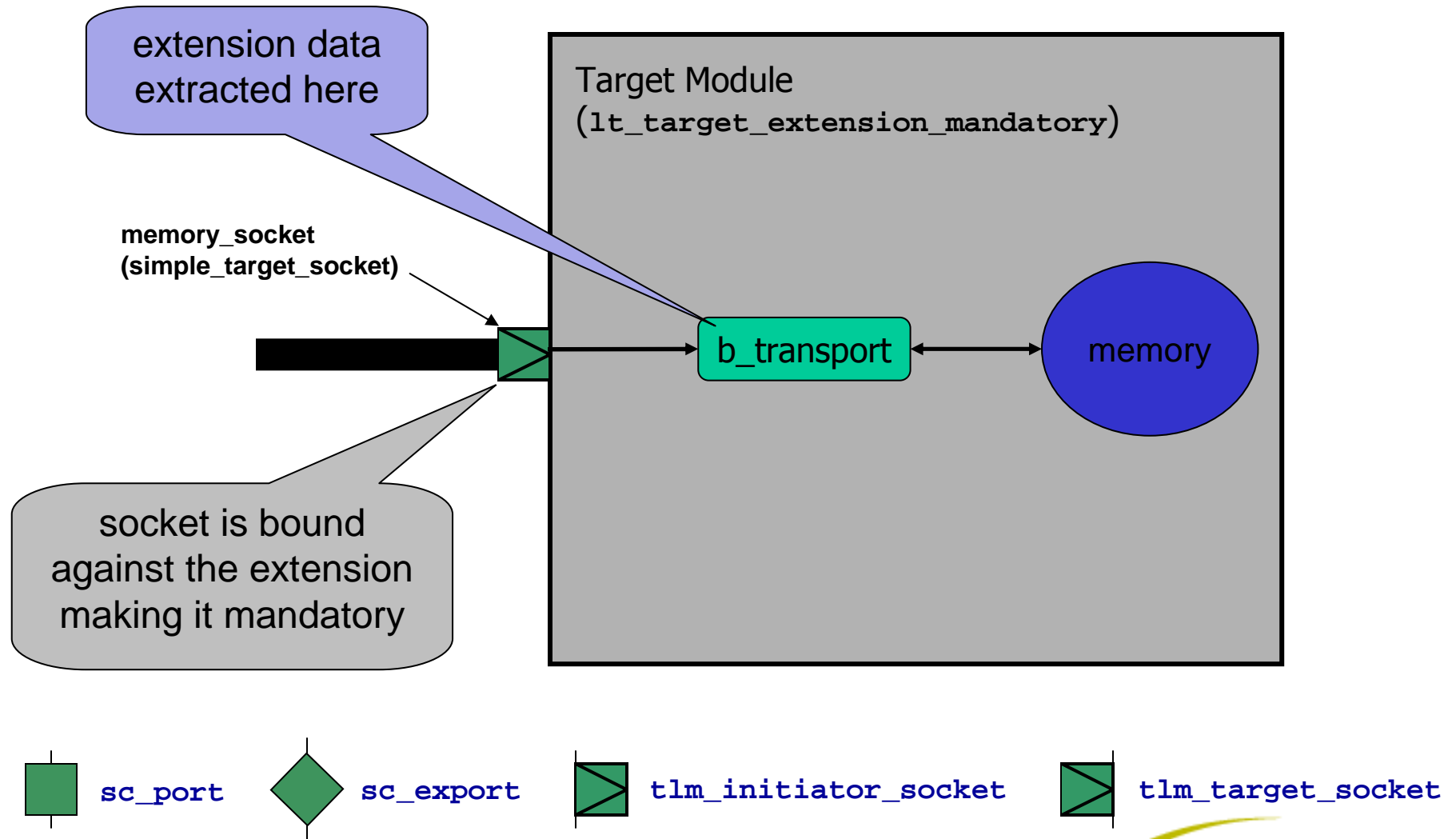
Info: lt_target_extension_mandatory.cpp: 450 ns - get_dmi_ptr
Extension present, Data: generic ID

. . .

Initiator Module



Target Module



Expected Timing

