Debugging LEON targets
Using DSU commander/TSP

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Leon3 Board link with DSU/TSP

LEON 3 Board

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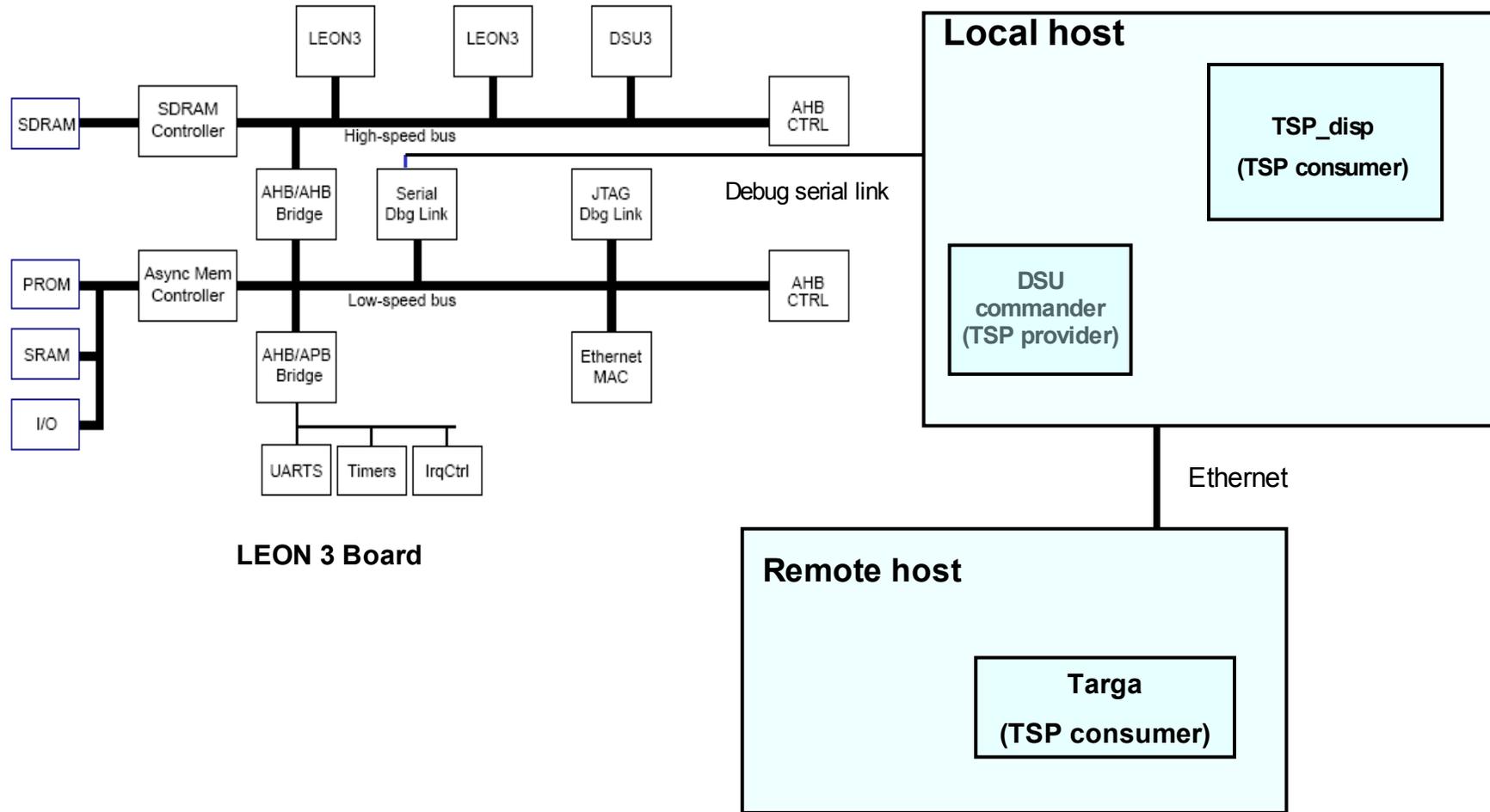
Demo Overview

TSP Synoptic http://savannah.nongnu.org/projects/tsp
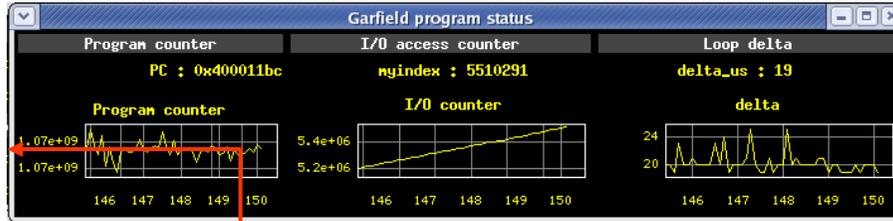
TSP protocol

DSU Commander ALF3 tools

```
dsu > batch start_garfield
stop
Target is  in debug mode.

load garfield.srec
.................................................
garfield.s file loaded, 14852 bytes
```

RPC

TCL Test

```
[leonsvf@gidcl01 demo]$ demo.tcl



==================================================

                LEON debug suport unit
```

Serial

| DSU (debug function) | Flight software |
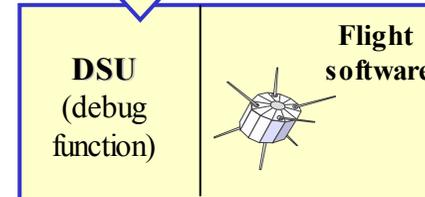
LEON Board

TSP inside DSU commander

- ## Provider easy coding

  - 280 code lines (with comments !)
  - 5 functions, 2 days of work

- ## TSP adaptation : Provider "discovers" its symbols

  - *DSU_GLU_int* : At launch, allocate 1000 "Empty" slots
  - *DSU_GLU_get_pgi* :
    - "Learn" a new set of wanted samples (from consumer),
    - ask SymTK database and add available symbols.
  - *DSU_GLU_thread* :
    - Runs at an artificial synchronous frequency
    - Use the *tsp_datapool_reverse_list* to get only the wanted value.

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