Perf

The Perf module calculates low-level performance metrics for a particular implementation of the ROME core on a system.

Process Information

Prototype Name perf

Process Priority 1

Process Name does not matter.

Prototype Name resp

Process Priority 1

Process Name "resp".

Prototype Name up

Process Priority > 1 (greater than the *perf* process)

Process Name does not matter.

Module Options

PERF_USE_KPRINTF If this option is set, the output from Perf will be printed using *rome_kprintf*

rather than *printf*. This allows the performanace monitor to run without an interrupt-driven serial interface, for example for the PC-based

demonstration program.

Process Operation

The measurement system comprises a performance monitor process and a responder process which exchange messages from the *Perf* messageset. A third process prints the time for which the system has been running, every 15 minutes. Both the monitor and the uptime process use the standard I/o library for output.

TESTCX messages are handled by the main "resp" process and are used to measure the real time to perform a

context switch.

TESTQ messages are replied to from within the "resp" queue handler and are used to measure the real time to perform a Queue Handler call.