Freescale MQX RTOS Example Guide

Benchmark/timing example

This document explains the benchmark/timing example.

The script

This script /generator/timing.pl adds HTML tags to make human readable HTML form of the timing benchmark output. The input file is supposed to have lines formatted as "name, value, units, loops, note", delimited by comma. The result will be placed into another file named as concatenation of input file name and ".html".

Running the example

Following steps are required to generate the .html report of memory usage.

- Following defines should be placed into mqx_sdk_config.h:

  #define BSP_DEFAULT_MAX_MSGQS (62L)
  #define MQX_USE_SEMAPHORES 1
  #define MQX_USE_LOGS 1
  #define MQX_KERNEL_LOGGING 1

  Or you can replace the default configuration file with the provided one in <timing project>/config/<platform> folder.
- Build all the required libraries.
- Build and run the application project, the terminal console should print the timing results. Please copy the timing benchmark output from console, store it as regular text file.
- Move to generator folder and invoke this script:

  Perl timing.pl <timing_benchmark_console_output_filename>

  Note that timing_benchmark_console_output_filename is the text file name.

Example:

perl timing.pl test.log

The benchmark timing example is designed to analyze the MQX RTOS components of how much time they take to finish their procedures.

The .html report file lists the timing consume of components in a tabular form.