

Freescalé MQX RTOS Example Guide

lwevent_lite example

This document explains the lwevent_lite example, what to expect from the example and a brief introduction to the API.

The example

The lwevent_lite example code shows how a task waits for an event. This event can be set by any other process or interrupt in the system that can set the variable lwevent. The example simulates an ISR event using another simple task.

Running the example

The user only needs to do compilation of MQX libraries, ksdk library and the example without further step. Then we compile the project lwevent_lite.

In <MQX_folder>\rtos\mqx\config\mcu\<board>\mqx_sdk_config.h please set

```
#define MQX_USE_LOGS                      1
#define MQXCFG_ALLOCATOR                 MQX_ALLOCATOR_LWMEM
```

If the platform supports floating point, you have to disable floating point:

```
#define MQXCFG_ENABLE_FP                  0
```

And rebuild MQX library.

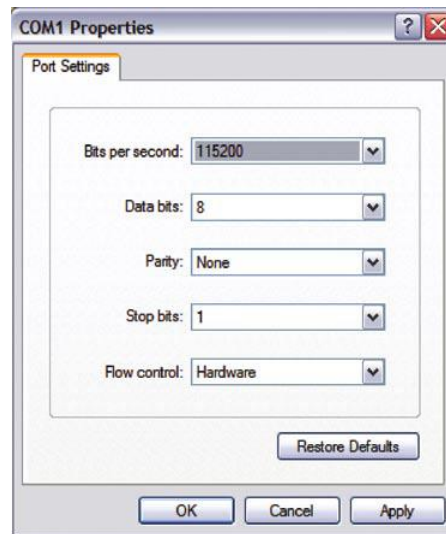
Connect a serial cable from the UART0 port of the board to the PC.

Start HyperTerminal on the PC (Start menu->Programs->Accessories->Communications).

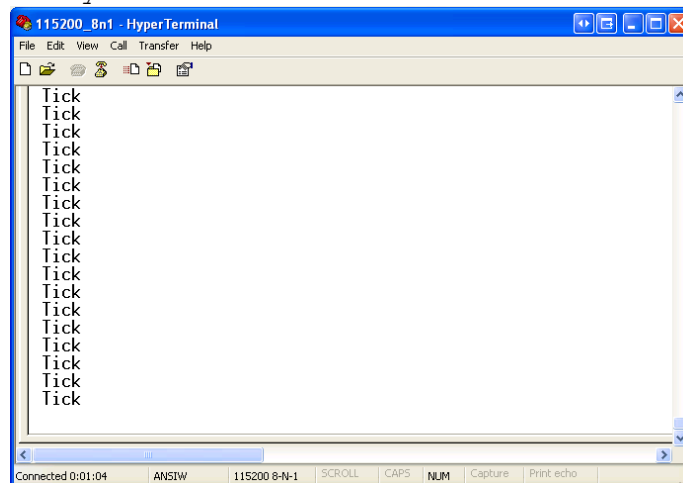
Make a connection to the serial port that is connected to the board (usually will be COM1).



Set it for 115200 baud, no parity, 8 bits and click OK.



After the board is flashed the HyperTerminal will start printing the "Tick" message every certain time.



Explanation of the example

The example application creates two tasks. The `service_task` task creates a `lwevent_lite` group and enters a loop in which it waits for an event bit. When the appropriate `lwevent` bit is set, it clears it and prints "Tick.". The `simulated_ISR_task` task periodically sets the corresponding `lwevent` bit with a delay in between (no connection is opened to a `lwevent` group).

