Freescale MQX RTOS Example Guide

Event_lite example

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

The example

The event_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. 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 any further step.

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

```
#define MQX_USE_EVENTS    1
#define MQX_USE_NAME      1
```

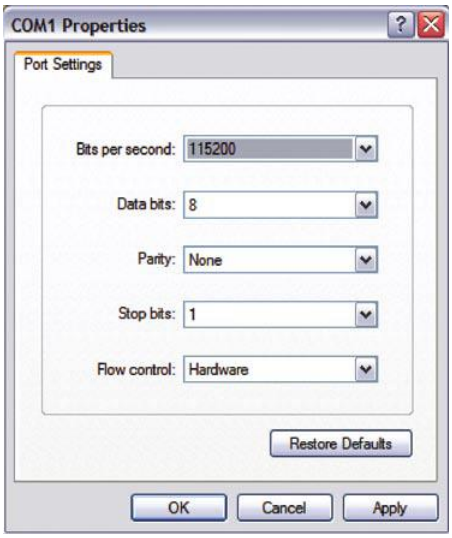
If the platform supports floating point, you have to disable floating point:

```
#define MQXCFG_ENABLE_FP                0
```

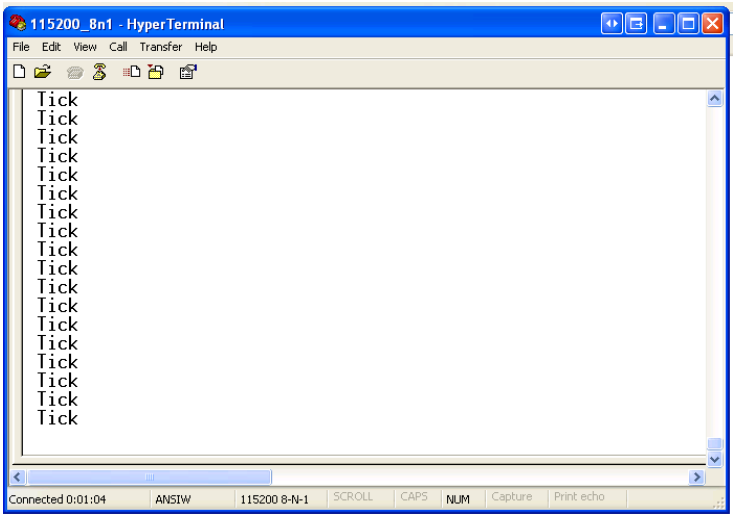
And rebuild MQX library.

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.

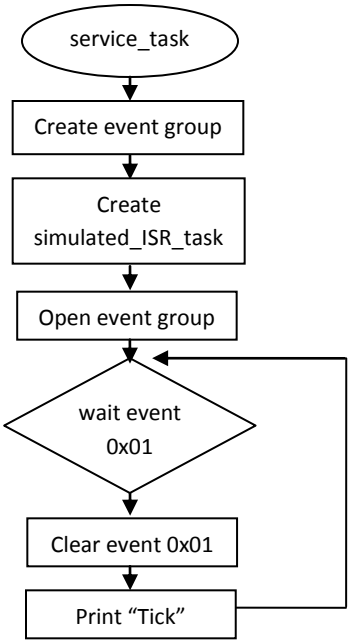


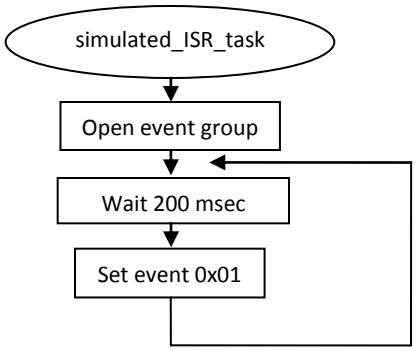
After the board is flashed the HyperTerminal will start printing the "Tick" message every certain time.



Explanation of the example

The example application creates two tasks. The service_task task creates an event group, opens it and enters a loop in which it waits for an event bit. When the appropriate event bit is set, it clears it and prints "Tick.". The simulated_ISR_task task opens a connection to the event group and periodically sets the corresponding event bit with a delay in between.


service_task
Create event group
Create simulated_ISR_task
Open event group
wait event 0x01
Clear event 0x01
Print “Tick”


simulated_ISR_task
Open event group
Wait 200 msec
Set event 0x01