Freescale MQX RTOS Example Guide

The Taskq_lite example

The Taskq_lite code used to demonstrate how to use task queue to synchronize tasks.

Service_task creates a task queue with FIFO queueing policy, Simulated_isr task and suspends itself in the task queue.

Simulated_isr_task resumes the task in the task queue

Running example

The user only needs to do compilation of MQX libraries, ksdk library and the example without any further step.

If the platform supports floating point, you have to disable floating point in <MQX_folder>\rtos\mqx\config\mcu\<board>\mqx_sdk_config.h:

```
#define MQXCFG_ENABLE_FP                0

#define MQXCFG_ALLOCATOR                MQX_ALLOCATOR_LWMEM
```

To run the example the corresponding IDE, compiler, debugger and a terminal program are needed.

Start a terminal application on your PC and set the serial connection for 115200 baud, 8 data bits, 1 stop bit, no parity and no flow control.

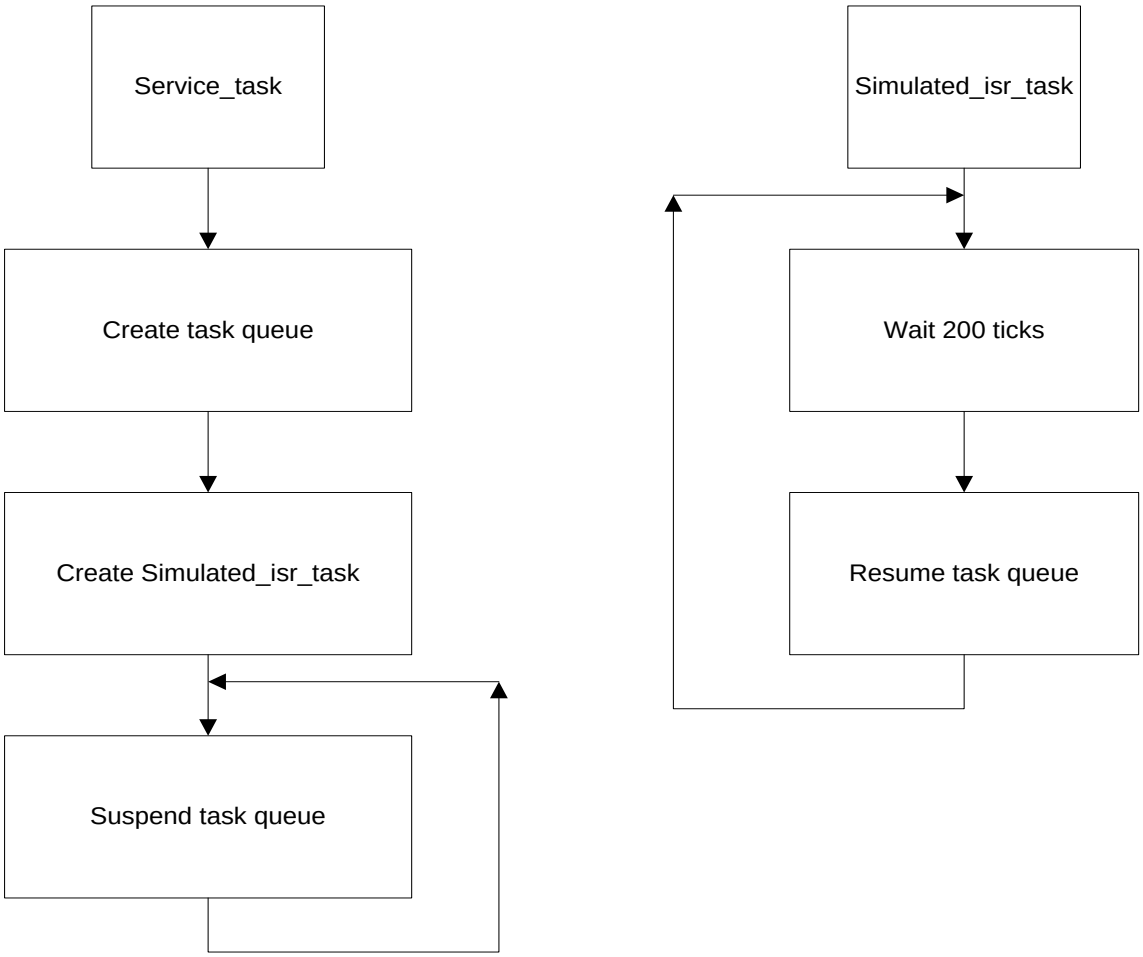
The result will be as the following picture.

Explanning example

The flow of the task is described in the next figure.

There is a service_task that creates a task queue and simulated_isr_task tasks. Entering an infinite loop and suspending itself in the task queue. Simulated_isr_task task waits 200 ticks and resumes the first task in the task queue.

Flow chart


Service_task
Create task queue
Create Simulated_isr_task
Suspend task queue
Simulated_isr_task
Wait 200 ticks
Resume task queue