freertos blinky.c

```
1/*
 2 * @brief FreeRTOS Blinky example
 3 *
 4 * @note
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 7 *
 8 * @par
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29 * this code.
30 */
31
32 #include "board.h"
33 #include "FreeRTOS.h"
34 #include "task.h"
35 #include "queue.h"
36
37
38 #include "FreeRTOSConfig.h"
39 xQueueHandle 0;
40 void tasksender(void *pvParameters)
41 {
      char M = '0';
42
43
      portBASE TYPE status = '0';
44
      while(1)
```

```
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45
      {
46
47
          M= (int) pvParameters;
          status = xQueueSendToBack(Q, &M, 0);
48
49
          if(status == errQUEUE_FULL)
50
          vPrintString("Could not send to Queue.\r\n");
51
52
53
          taskYIELD();
54
      }
55 }
56
57 void taskreceiver(void *pvParameters)
58 {
59
      char RM= '0';
60
      portTickType timeToWait = 150 / portTICK RATE MS;
      portBASE TYPE status = '0';
61
62
      while(1)
63
      {
          if(uxQueueMessagesWaiting(Q) != 0)
64
65
           {
              vPrintString("Could not send to Queue.\r\n");
66
67
68
           status = xQueueReceive(Q, &RM, timeToWait);
69
          if(status == pdPASS)
70
71
              if(RM == 0x02) {
72
73
              } else if(RM== 0x03) {
74
75
76
          } else if(status == errQUEUE EMPTY){
77
78
79
      }
80}
81
82 }
83 int main(void)
84 {
85
      Q = xQueueCreate(1, sizeof(char));
86
      if(Q!= NULL) {
87
88
           char S1 = 0 \times 02:
89
           char S2 = 0x03;
90
91
      xTaskCreate(tasksender, NULL, 100, &S1, 1, NULL);
92
      xTaskCreate(tasksender, NULL, 100, &S2, 1, NULL);
```

freertos_blinky.c 93 xTaskCreate(taskreceiver, NULL, 100, NULL, 2, NULL); 94 95 vTaskStartScheduler(); 96 } 97 return 0; 98 99 } 100 101 102 103 104

105 106