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-----
peripherals_init(): Low level startup
WARNING: SD card could not be mounted

I2C slave detected at address: 0x38
I2C slave detected at address: 0x62
I2C slave detected at address: 0x72

entry_point(): Entering main()
Starting RTOS

List of commands (use help <name> to get full help if you see ...):
    crash : Deliberately crashes the system to demonstrate how ...
    i2c : I2c read 0x20 0x00 <nb>...
    tasklist : Outputs list of RTOS tasks, CPU and stack usage....
-----

taskinfo
  Name  Status Pr Stack CPU%   Time
  ----  -
IDLE ready  0  316  89  14173113 us
led1 blocked 1  308   0    261 us
led9 blocked 1  308   0   3049 us
cli running 3 1320   0   4769 us

Overhead: 1627798 uS
-----
```

[illegible]

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List of commands (use help <name> to get full help if you see ...):

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 i2c : i2c read 0xDD 0xRR <n>...

 tasklist : Outputs list of RTOS tasks, CPU and stack usage....

help crash

Deliberately crashes the system to demonstrate how to debug a crash

help i2c

i2c read 0xDD 0xRR <n>

i2c write 0xDD 0xRR <value> <value> ...

help tasklist

Outputs list of RTOS tasks, CPU and stack usage.

tasklist <time>' will display CPU utilization within this time window.

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taskinfo

Name	Status	Pr	Stack	CPU%	Time
IDLE	ready	0	316	83	8151867 us
led1	blocked	1	308	0	153 us
led0	blocked	1	308	0	2941 us
cli	running	3	1320	0	4775 us

Overhead: 1627799 uS

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```
-----  
tasklist
```

Name	Status	Pr	Stack	CPU%	Time
IDLE	ready	0	316	95	31778912 us
led1	blocked	1	308	0	576 us
led0	blocked	1	308	0	3364 us
cli	running	3	1320	0	4773 us

```
Overhead: 1627796 uS  
-----
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```

```
-----  
i2c read 0x38 0x41  
I2C Read of Slave 0x38  
    0x41: 0x00 (0)
```

```
-----  
i2c read 0x62 0x41  
I2C Read of Slave 0x62  
    0x41: 0x00 (0)
```

```
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```

```
-----  
i2c read 0x62 0x00 5  
I2C Read of Slave 0x62  
    0x00: 0x00 (0)  
    0x01: 0x00 (0)  
    0x02: 0x00 (0)  
    0x03: 0x00 (0)  
    0x04: 0x00 (0)
```

```
-----  
i2c read 0x72 0x10 3  
I2C Read of Slave 0x72  
    0x10: 0xB4 (180)  
    0x11: 0xC1 (193)  
    0x12: 0x40 (64)  
-----
```

crash0

peripherals_init(): Low level startup

WARNING: SD card could not be mounted

I2C slave detected at address: 0x38

I2C slave detected at address: 0x62

I2C slave detected at address: 0x72

---- WARNING: We crashed previously ----

PC: 0x00000FE4

LR: 0x00000FE4

PSR: 0x610F0000

R0: 0x00000000

R1: 0x10000ADA

R2: 0xDEADBEEF

R3: 0x00000001

Find the *.lst file in your _build directory, and lookup
the PC value to locate which function caused this.

The LR should be the 'previous' function that was running.

R0-R3 are parameters to functions.

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```

00001c10 <pxPortInitialiseStack>:
pxPortInitialiseStack():
/Users/sarika/workspace/sjtwo-c/projects/lpc40xx_freertos/l1_freertos/portable/gcc/arm_cm4f/port.c:208
    *pxTopOfStack = portINITIAL_XPSR;    /* xPSR */
1c10:  f04f 7380  mov.w  r3, #16777216    ; 0x10000000
1c14:  f840 3c04  str.w  r3, [r0, #-4]
/Users/sarika/workspace/sjtwo-c/projects/lpc40xx_freertos/l1_freertos/portable/gcc/arm_cm4f/port.c:212
    *pxTopOfStack = ( StackType_t ) portTASK_RETURN_ADDRESS;    /* LR */
1c18:  4b07      ldr r3, [pc, #28]    ; (1c38 <pxPortInitialiseStack+0x28>)
1c1a:  f840 3c0c  str.w  r3, [r0, #-12]
/Users/sarika/workspace/sjtwo-c/projects/lpc40xx_freertos/l1_freertos/portable/gcc/arm_cm4f/port.c:210
    *pxTopOfStack = ( ( StackType_t ) pxCode ) & portSTART_ADDRESS_MASK;    /* PC */
1c1e:  f021 0101  bic.w  r1, r1, #1
/Users/sarika/workspace/sjtwo-c/projects/lpc40xx_freertos/l1_freertos/portable/gcc/arm_cm4f/port.c:221
    *pxTopOfStack = portINITIAL_EXC_RETURN;
1c22:  f06f 0302  mvn.w  r3, #2
/Users/sarika/workspace/sjtwo-c/projects/lpc40xx_freertos/l1_freertos/portable/gcc/arm_cm4f/port.c:210
    *pxTopOfStack = ( ( StackType_t ) pxCode ) & portSTART_ADDRESS_MASK;    /* PC */
1c26:  f840 1c08  str.w  r1, [r0, #-8]
/Users/sarika/workspace/sjtwo-c/projects/lpc40xx_freertos/l1_freertos/portable/gcc/arm_cm4f/port.c:216
    *pxTopOfStack = ( StackType_t ) pvParameters;    /* R0 */
1c2a:  f840 2c20  str.w  r2, [r0, #-32]
/Users/sarika/workspace/sjtwo-c/projects/lpc40xx_freertos/l1_freertos/portable/gcc/arm_cm4f/port.c:221
    *pxTopOfStack = portINITIAL_EXC_RETURN;
1c2e:  f840 3c24  str.w  r3, [r0, #-36]
/Users/sarika/workspace/sjtwo-c/projects/lpc40xx_freertos/l1_freertos/portable/gcc/arm_cm4f/port.c:226
}
1c32:  3844      subs  r0, #68 ; 0x44
1c34:  4770      bx  lr
1c36:  bf00      nop

```