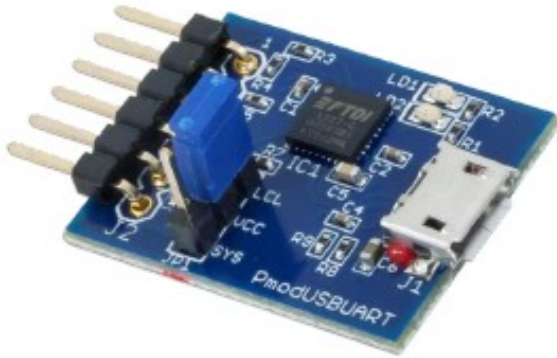


\*\*\*\*\*Default\*\*\*\*\*  
Testing Pico MultiCore  
01/15/22  
\*\*\*\*\*Default\*\*\*\*\*

## PmodUSBUART



*The PmodUSBUART.*

### Features include:

- USB to serial UART interface
- Option to power the system board through the FTDI chip

	Pico	PmodUSBUART
Orange	pin 1 TX	pin 2 RX
White	pin 2 RX	pin 3 TX
Black	pin 3 GRD	pin 5 GRD

```
export PATH=~/.local/openocd/bin:$PATH
```

```
devel@mypi3-20:/opt/pico-examples/build $
```

```
openocd -f interface/raspberrypi-swd.cfg -f target/rp2040.cfg -c "program  
multicore/multicore_runner/multicore_runner.elf verify reset exit"
```

**Hello, multicore\_runner!**

**Factorial 10 is 3628800**

**Fibonacci 10 is 0**

```
add_executable(multicore_runner_queue  
    multicore_runner_queue.c  
)
```

```
target_link_libraries(multicore_runner_queue  
    pico_multicore  
    pico_stdlib)
```

```
# create map/bin/hex file etc.
```

```
pico_add_extra_outputs(multicore_runner_queue)
```

```
# add url via pico_set_program_url
example_auto_set_url(multicore_runner_queue)
openocd -f interface/raspberrypi-swd.cfg -f target/rp2040.cfg -c "program
multicore/hello_multicore/hello_multicore.elf verify reset exit"
```

**Hello, multicore!**  
**It's all gone well on core 0!**

```
openocd -f interface/raspberrypi-swd.cfg -f target/rp2040.cfg -c "program
multicore/multicore_fifo_irqs/multicore_fifo_irqs.elf verify reset exit"
```

**Hello, multicore\_fifo\_irqs!**  
**Irq handlers should have rx'd some stuff - core 0 got 0, core 1 got 0!**

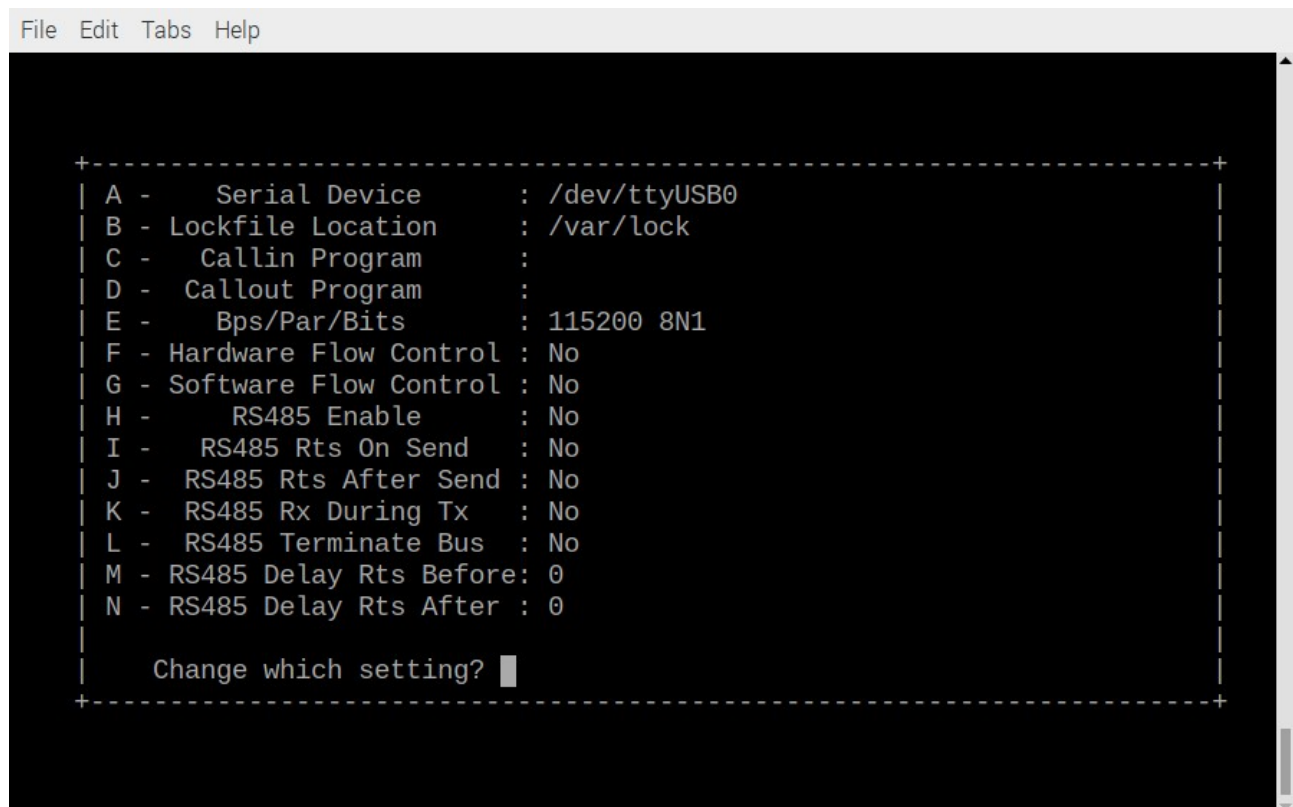
```
add_executable(multicore_fifo_irqs
    multicore_fifo_irqs.c
)

target_link_libraries(multicore_fifo_irqs
    pico_multicore
    pico_stdlib)
```

```
# create map/bin/hex file etc.
pico_add_extra_outputs(multicore_fifo_irqs)
```

```
# add url via pico_set_program_url
example_auto_set_url(multicore_fifo_irqs)
```

Minicom Baud Rate

A screenshot of a Minicom terminal window. The window has a menu bar with 'File', 'Edit', 'Tabs', and 'Help'. The main area is a black terminal with white text. It displays a list of settings for a serial device, enclosed in a dashed box. The settings are: A - Serial Device : /dev/ttyUSB0, B - Lockfile Location : /var/lock, C - Callin Program :, D - Callout Program :, E - Bps/Par/Bits : 115200 8N1, F - Hardware Flow Control : No, G - Software Flow Control : No, H - RS485 Enable : No, I - RS485 Rts On Send : No, J - RS485 Rts After Send : No, K - RS485 Rx During Tx : No, L - RS485 Terminate Bus : No, M - RS485 Delay Rts Before: 0, N - RS485 Delay Rts After : 0. Below the list, it says 'Change which setting?' followed by a cursor. The terminal window has a scrollbar on the right side.

```
File Edit Tabs Help

+-----+
| A -   Serial Device       : /dev/ttyUSB0 |
| B - Lockfile Location     : /var/lock    |
| C -   Callin Program      :              |
| D -   Callout Program     :              |
| E -   Bps/Par/Bits        : 115200 8N1   |
| F - Hardware Flow Control : No           |
| G - Software Flow Control : No           |
| H -   RS485 Enable        : No           |
| I -   RS485 Rts On Send   : No           |
| J -   RS485 Rts After Send : No           |
| K -   RS485 Rx During Tx  : No           |
| L -   RS485 Terminate Bus : No           |
| M - RS485 Delay Rts Before: 0            |
| N - RS485 Delay Rts After : 0            |
|                                     |
| Change which setting? █              |
+-----+
```