

*****Default*****

Test Ric's WIFI for Ultibo
Rpi4B, Rpi3B+, and Rpi Zero W
11/30/21

*****Default*****

```
if (firmware[i].chipid = WIFI^.chipid) and (firmware[i].chipidrev = WIFI^.chipidrev) then
begin
+ // If no regulatory file just succeed
+ if Length(firmware[i].regufilename) = 0 then
+ begin
+   Result := WIFI_STATUS_SUCCESS;
+   Exit;
+ end;
+
+   RegulatoryFilename := FIRMWARE_FILENAME_ROOT + firmware[i].regufilename;
+   Found := true;

if Result <> WIFI_STATUS_SUCCESS then
exit;

+ Result := WirelessSetInt(WIFI, 'bus:rxglom', 0);
+ // Linux driver says this is allowed to fail
+ //if Result <> WIFI_STATUS_SUCCESS then
+ // exit;
+
Now telnet xx.xx.xx.xx works using WIFI.
```

Result := WirelessSetInt(WIFI, 'bcn_timeout', 10);

Ultibo Core (Release: Beetroot Version: 2.1.125 Date: 25 August 2021)

(Type HELP for a list of available commands)

Directory of C:\

```
29-11-21 16:34:36      52456 bootcode.bin
29-11-21 20:18:36        13 config.txt
29-11-21 16:34:40    <DIR>    firmware
29-11-21 16:34:40      5442 fixup4.dat
29-11-21 16:34:40      7313 fixup.dat
29-11-21 16:34:40    2231712 start4.elf
29-11-21 16:34:42    2955936 start.elf
1-12-21 02:51:48    3087112 kernel.img
29-11-21 20:21:14        56 cmdline.txt
      8 file(s) 8340040 bytes
      1 dir(s)
```

C:\>

Initial tests

Ultibo Core (Release: Beetroot Version: 2.1.125 Date: 25 August 2021)		
General	Platform	
Platform	Board Type:	BOARD_TYPE_RPI_ZERO_W
Memory	Board Model:	0
Heap Blocks	Board Serial:	0x00000000582008C5
CPU	Board Revision:	0x009000C1
FPU	Chip Revision:	0x00000000
GPU	Firmware Revision:	0x608C2879 (1619798137)
RTL	Machine Type:	MACHINE_TYPE_BCM2708
Clock	Memory Base:	0x00000000
Locale	Memory Size:	536870912
Threading	Page Size:	4096
Thread List	Large Page Size:	65536
Scheduler	Section Size:	1048576
Devices	Power State	POWER_STATE_ON
Drivers	POWER_ID_MMIO:	POWER_STATE_OFF
Handles	POWER_ID_MMIO1:	POWER_STATE_OFF
USB	POWER_ID_MMIO2:	POWER_STATE_OFF
PCI	POWER_ID_MMIO3:	POWER_STATE_OFF
MMC / SD / SDIO		
Network		
Storage		
Filesystem		
Disk Cache		
Keyboard		
Mouse		
Touch		

kernel7.img still not getting WIFI https://github.com/develone/Ultibo_Projects/tree/master/RIC-WIFI/tests/RPi3/0403-0201/022720

kernel7.img now gets WIFI on the Rpi3B+ compile with Lazarus IDE (Ultibo-Edition).

kernel7.img now supports tftp

cat config.txt

start_x=1

gpu_mem=128

diff bootcode.bin demofiles/bootcode.bin

diff fixup4.dat demofiles/fixup4.dat

diff fixup.dat demofiles/fixup.dat

diff start4.elf demofiles/start4.elf

diff start.elf demofiles/start.elf

Ultibo Core (Release: Beetroot Version: 2.1.125 Date: 25 August 2021)		
General	General	
Platform		
Memory	Release Name:	Beetroot
Heap Blocks	Release Version:	2.1.125
CPU	Release Date:	25 August 2021
FPU		
GPU	Time (Local):	28-11-21 23:25:09
RTL	Time (UTC):	28-11-21 23:25:09
Clock		
Locale	Timezone:	UTC
Threading		
Thread List	Daylight Start:	None
Scheduler	Daylight Date:	N/A
Devices		
Drivers	Standard Start:	None
Handles	Standard Date:	N/A
USB		
PCI	Temperature (SoC):	36.476 degrees Celcius
MMC / SD / SDIO		
Network	Uptime:	0 days 00:01:31
Storage		
Filesystem		
Disk Cache		
Keyboard		
Mouse		
Touch		

Ultibo Core (Release: Beetroot Version: 2.1.125 Date: 25 August 2021)		
General	Platform	
Platform		
Memory	Board Type:	BOARD_TYPE_RPi3B_PLUS
Heap Blocks	Board Model:	0
CPU	Board Serial:	0x000000008471DEDD
FPU	Board Revision:	0x00A020D3
GPU		
RTL	Chip Revision:	0x00000000
Clock		
Locale	Firmware Revision:	0x5E4E7C2 (1582217154)
Threading		
Thread List	Machine Type:	MACHINE_TYPE_BCM2710
Scheduler		
Devices	Memory Base:	0x00000000
Drivers	Memory Size:	1073741824
Handles		
USB	Page Size:	4096
PCI	Large Page Size:	65536
MMC / SD / SDIO		
Network	Section Size:	1048576
Storage		
Filesystem	Power State	
Disk Cache	POWER_ID_MMC0:	POWER_STATE_ON
Keyboard	POWER_ID_MMC1:	POWER_STATE_OFF
Mouse	POWER_ID_MMC2:	POWER_STATE_OFF
Touch	POWER_ID_MMC3:	POWER_STATE_OFF

kernel71.img now supports tftp

https://github.com/develone/Ultibo_Projects/tree/master/RIC-WIFI/tests/RPi3/0403-0201/112221

Using Ultibo member Paul's uTFTP.pas.

config.txt

cmdline.txt

firmware

```
brcmfmac43430-sdio.bin    brcmfmac43455-sdio.clm_blob
brcmfmac43430-sdio.txt    brcmfmac43455-sdio.txt
brcmfmac43436-sdio.bin    brcmfmac43456-sdio.bin
brcmfmac43436-sdio.clm_blob brcmfmac43456-sdio.clm_blob
brcmfmac43436-sdio.txt    brcmfmac43456-sdio.txt
brcmfmac43436s-sdio.bin   LICENCE.broadcom_bcm43xx
brcmfmac43436s-sdio.txt   Makefile
brcmfmac43455-sdio.bin
```

The folder firmware was copied from ultibowifi 3b1b3d8.

ls firmwar_for_ultibo/022720/

bootcode.bin fixup.dat fixup_x.dat start.elf start_x.elf