

*****Draft*****

DWT Lifting Step
12/02/20

*****Draft*****

Software Description:

uBufferToC.pas

```
procedure Pbuff(ii: word; ss: LongWord; var tmpbuf: Pointer); cdecl; external 'libtest' name 'xyz';  
void xyz(int bp, long ss,int *xx)  
xyz in test.c
```

LibCTest_RPi2.lpr

```
IBPP:=BitMapInfoHeader.BitCount;  
Size:=LineSize * BitMapInfoHeader.Height;  
Buffer:=GetMem(Size);  
Pbuff(IBPP,Size,Buffer); calls a C function in test.c  
That splits the image in RGB calling lifting(int w, int *ibuf, int *tmpbuf).  
Calls singlelift(rb, w, tp, ip);
```

Note: This is only needed when compiling from the command line:

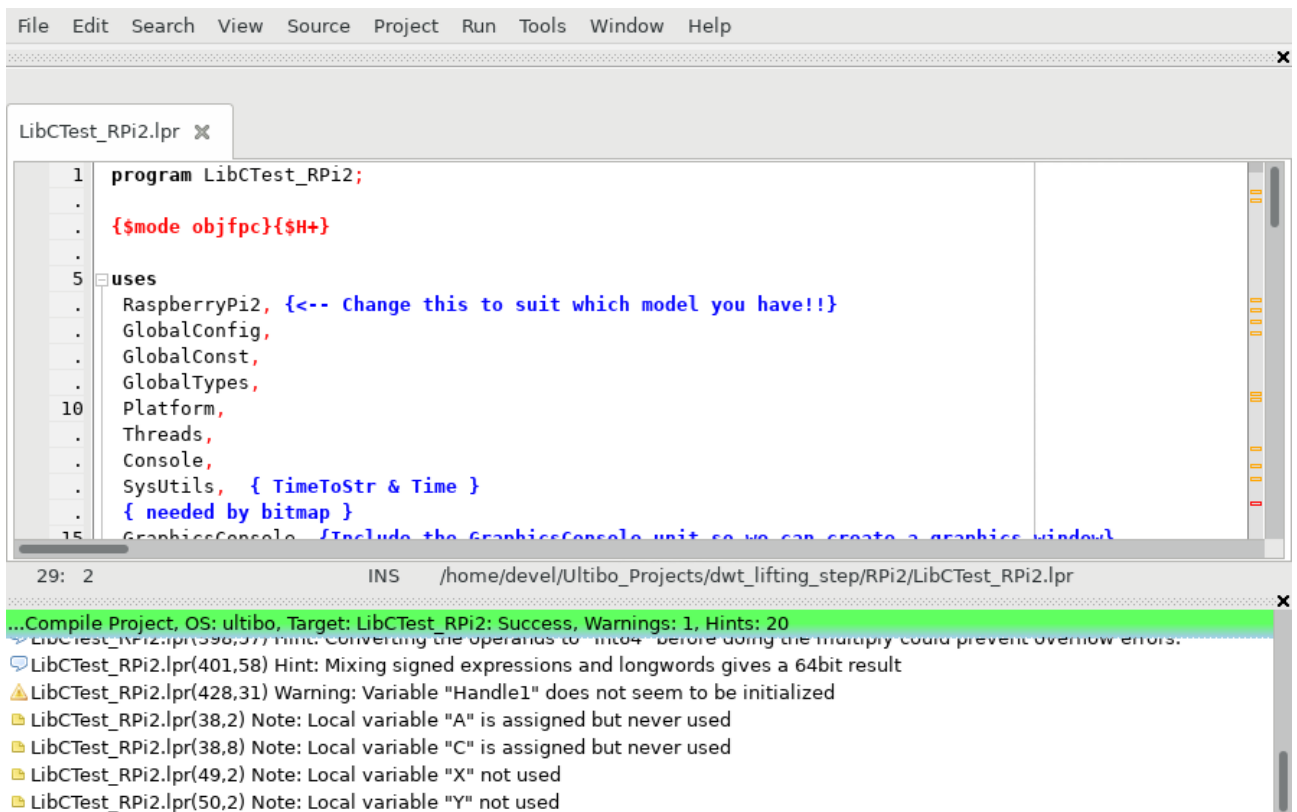
Need to set the PATH for fpc.

```
export PATH=/home/devel/ultibo/core/fpc/bin/:$PATH  
echo $PATH
```

The lifting.c C code is part of test.c.

```
cd Ultibo_Projects/dwt_lifting_step/RPi2/  
./compile.sh
```

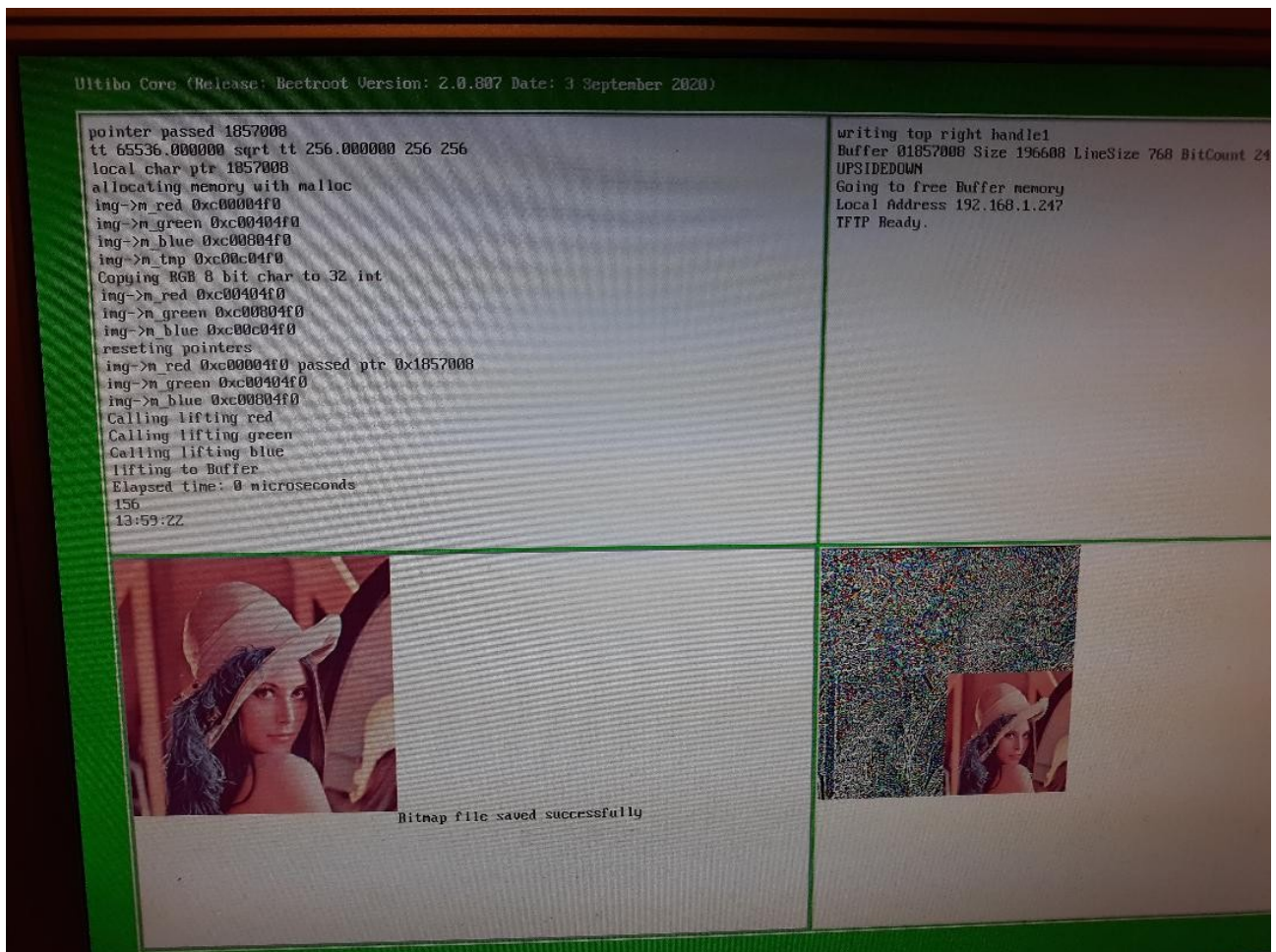
```
#!/bin/bash  
date  
rm -f test.o  
rm -f libtest.a  
rm -f kernel7.img  
arm-none-eabi-gcc -O2 -mabi=aapcs -marm -march=armv7-a -mcpu=cortex-a7 -mfloat-abi=hard -c test.c  
arm-none-eabi-ar rcs libtest.a test.o  
  
fpc -vi -B -Tultibo -Parm -CpARMV7A -WpRPI2B  
@/home/devel/ultibo/core/fpc/bin/RPI2.CFG -O2 LibCTest_RPi2.lpr  
ls -la test.o libtest.a kernel7.img
```



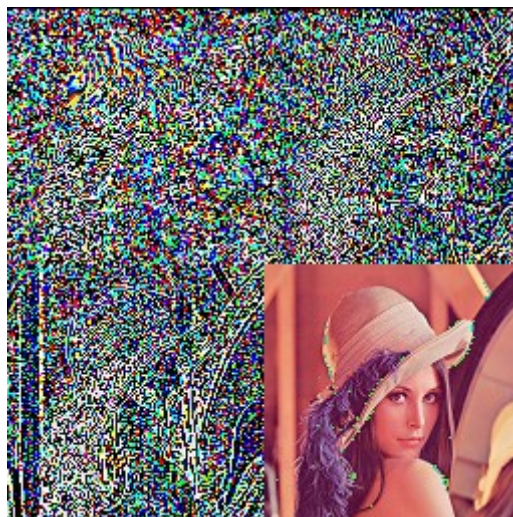
Depress Run/compile to create kernel7.img when the green bar appears.

tftp 192.168.1.247 < cmdstftp

tftp> tftp> Sent 2688432 bytes in 33.1 seconds



DWT 1 LVL



DWT 2 LVLs



DWT 3 LVLs

