

*****Draft*****

Testing Openjpeg Compression/Decompression on a RPi4B running Bare Metal Ultibo

05/18/21

*****Draft*****

```
{=====
=====}
```

```
{Global constants}
```

```
const
```

```
{Version constants}
```

```
ULTIBO_RELEASE_DATE      = '14 May 2021';
```

```
ULTIBO_RELEASE_NAME      = 'Beetroot';
```

```
ULTIBO_RELEASE_VERSION   = '2.1.005';
```

```
ULTIBO_RELEASE_VERSION_MAJOR = 2;
```

```
ULTIBO_RELEASE_VERSION_MINOR = 1;
```

```
ULTIBO_RELEASE_VERSION_REVISION = 003;
```

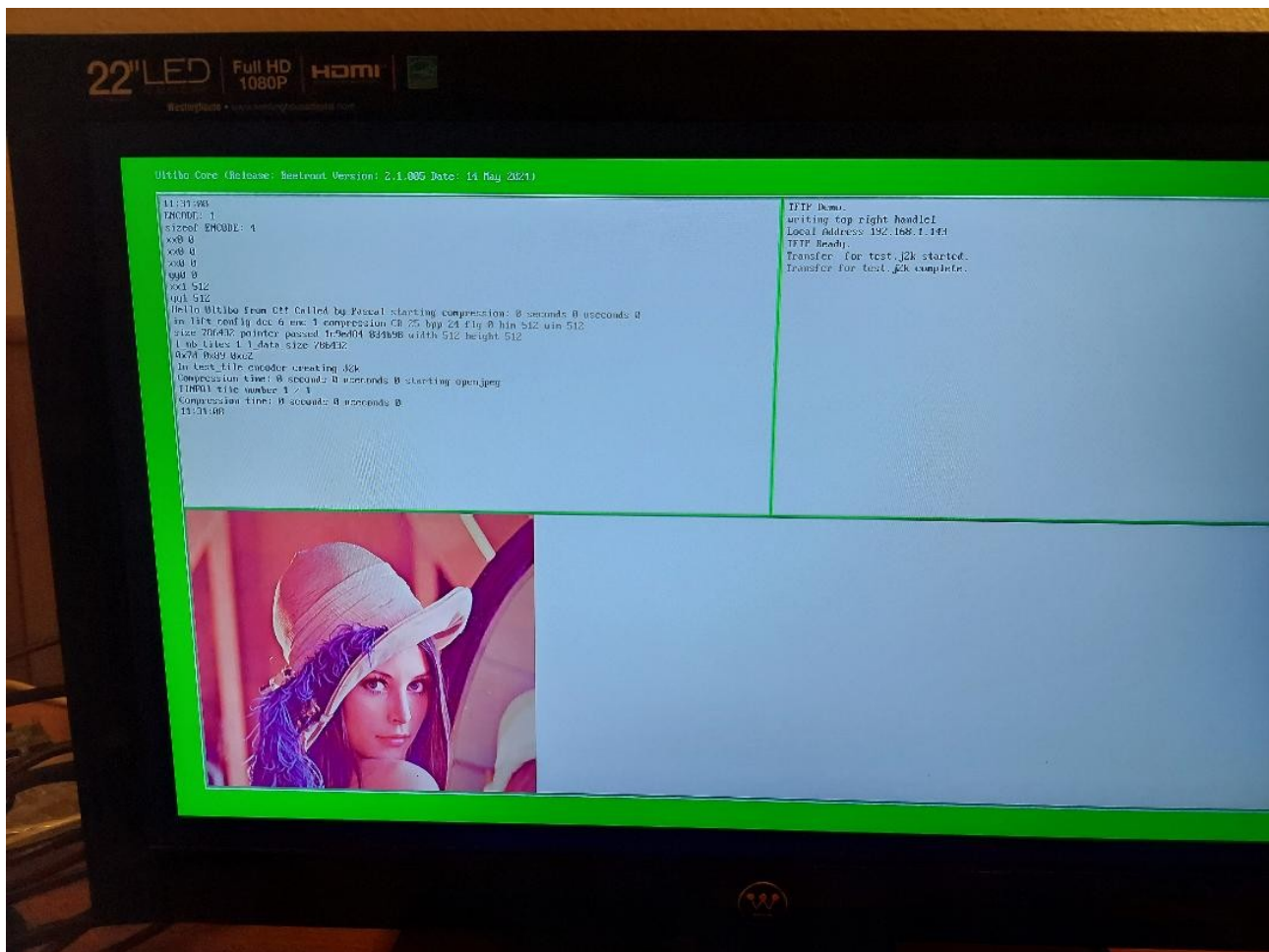
```
{=====
=====}
```

The file test.j2k was created on RPi4B 4Gb.

Input MyBitmap.bmp a copy lena_512_rgb.bmp testfile a copy 512com

```
00000000  19 00 00 00 01 00 00 00 00 00 00 00 00 00 00 00 .....
```

```
00000010  00 02 00 00 00 02 00 00
```



```
devel@mypi3-20:~/tmp $ tftp 192.168.1.143
```

```
tftp> binary
```

```
tftp> get test.j2k
```

```
Received 31411 bytes in 0.1 seconds
```

```
tftp> quit
```

```
devel@mypi3-20:~/tmp $ ~/openjpeg/build/bin/opj_decompress -i test.j2k -o lena512.bmp
```

```
[INFO] Start to read j2k main header (0).
```

```
[INFO] Main header has been correctly decoded.
```

```
[INFO] No decoded area parameters, set the decoded area to the whole image
```

```
[INFO] Header of tile 1 / 1 has been read.
```

```
[INFO] Generated Outfile lena512.bmp
```

```
decode time: 135 ms
```



Perform the decompression on Bare Metal Ultibo.

```
devel@mypi3-20:~/Ultibo_Projects/jpeg2000/RPi4/512-options $ cp 512decom testfile
```

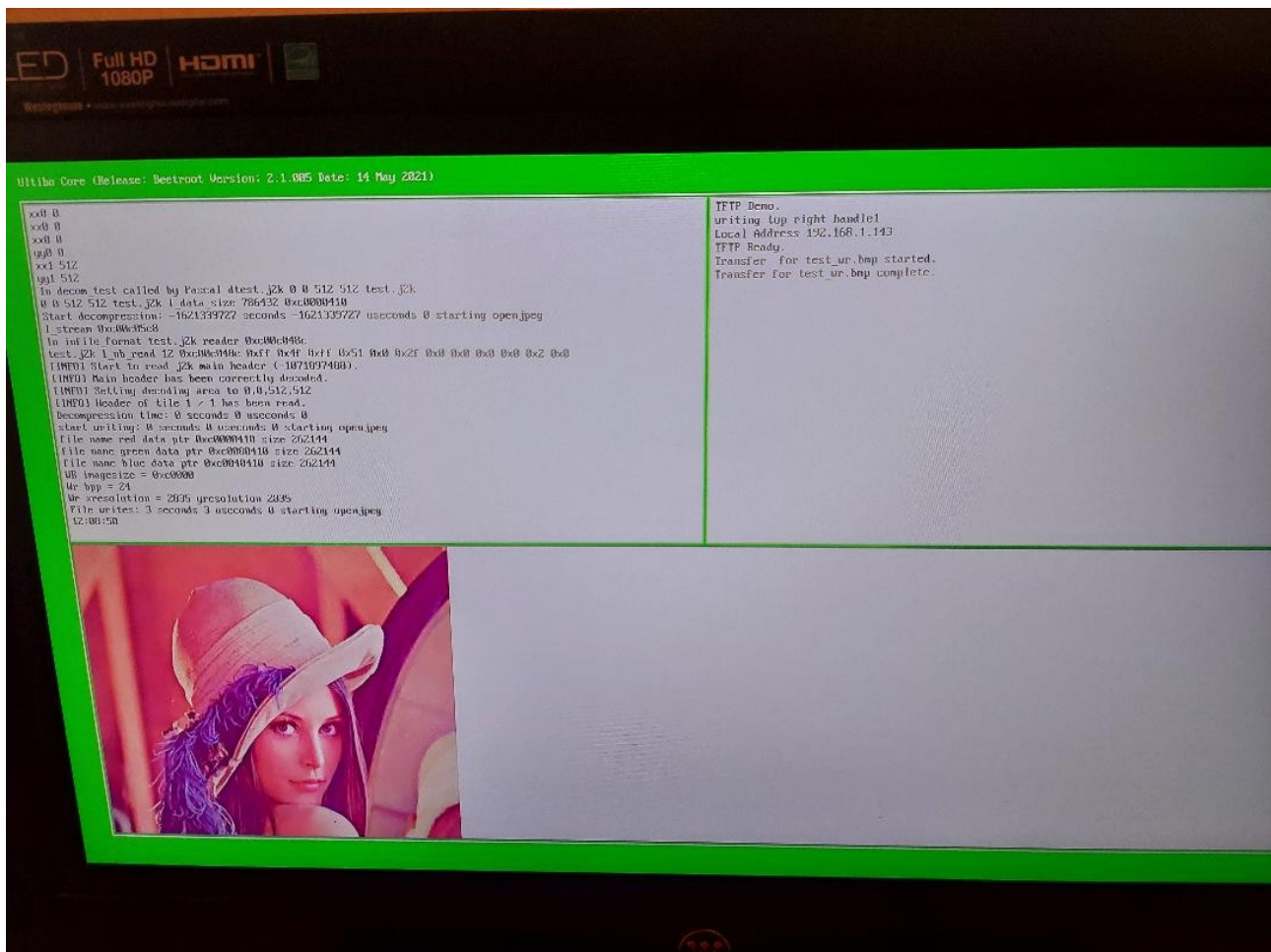
```
devel@mypi3-20:~/Ultibo_Projects/jpeg2000/RPi4/512-options $ tftp 192.168.1.143
```

```
tftp> binary
```

```
tftp> put testfile
```

```
Sent 24 bytes in 0.0 seconds
```

```
tftp> quit
```



```
devel@mypi3-20:~/tmp $ tftp 192.168.1.143
tftp> binary
tftp> get test_wr.bmp
Received 786554 bytes in 1.9 seconds
tftp> quit
```