*********DRAFT*****

./jpeg tests HX8K 04/16/19

*********DRAFT******

```
pi@mypi3-1:~/testbuilds/catzip/sw/board $ make clean; make; make jpeg.txt
1000058:
              2a 03 00 80
                            LDI
                                      0x0100f1fc,R5 // 100f1fc <ptrs>
pi@mypi3-1:~/testbuilds/catzip/sw/host $ ./arm-wbregs 0x00A01000 0x0
                )-> 00000000
00a01000 (
pi@mypi3-1:~/testbuilds/catzip/sw/host $ ./arm-wbregs 0x00A01004 0x1
00a01004 (
                )-> 00000001
pi@mypi3-1:~/testbuilds/catzip/sw/host $ ./arm-zipload -v ../board/jpeg
Halting the CPU
Memory regions:
       Block RAM: 00a00000 - 00a02000
       SDRAM
                    : 01000000 - 02000000
Loading: ../board/jpeg
Section 0: 01000000 - 0104f26c
Writing to MEM: 01000000-0104f26c
Clearing the CPUs registers
Setting PC to 01000000
The CPU should be fully loaded, you may now
start it (from reset/reboot) with:
> wbregs cpu 0x0f
CPU Status is: 0000060f
pi@mypi3-1:~/testbuilds/catzip/sw/host $ ./arm-wrsdram rgb_pack.bin
The size of the buffer is 0x00ffff or 65535 words
READ-COMPLETE
pi@mypi3-1:~/testbuilds/catzip/sw/host $ ./arm-wbregs cpu 0x0f
02000000 (
                ) -> 0000000f
. ptrs.inpbuf = 0x100f1fc buf_red = 0x104f278
. fwd inv = 0x10cf280
x = 0xe22247c sp = 0xe2 z = 0xe200000
x = 0xde22083 \text{ sp} = 0xde z = 0xde000000
x = 0xe221475 sp = 0xe2 z = 0xe200000
x = 0xe32207b \text{ sp} = 0xe3 z = 0xe300000
x = 0xa812055 \text{ sp} = 0xa8 \text{ z} = 0xa8000000
x = 0xb210c4c \text{ sp} = 0xb2 \text{ z} = 0xb2000000
. spliting red sub band
. fwd lifting step only
w = 0x100 \text{ wptr} = 0x104f278 \text{ alt} = 0x108f278 \text{ fwd} \text{ inverse} = 0x10cf280 \text{ fwd} \text{ inverse} = 0x1
. starting red dwt
. ip = 0x104f278 tp = 0x108f278
. in lifting
. in singlelift
. in singlelift
. back from singlelift
```

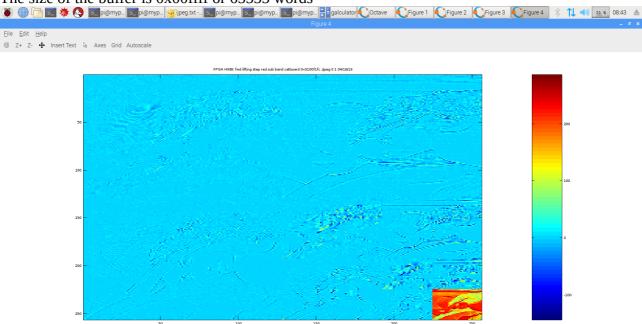
. in lifting

- . in singlelift
- . in singlelift
- . back from singlelift
- . in lifting
- . in singlelift
- . in singlelift
- . back from singlelift
- . testing test_fwd
- . finished ted dwt

pi@mypi3-1:~/testbuilds/catzip/sw/host \$ rm -f dwt.bin ;./arm-rdsdram dwt.bin

Write-COMPLETE

The size of the buffer is 0x00ffff or 65535 words



 $pi@mypi3-1: \sim / testbuilds/catzip/sw/host \$./arm-wbregs \ 0x00A01000 \ 0x1$

00a01000 ()-> 00000001

pi@mypi3-1:~/testbuilds/catzip/sw/host \$./arm-wbregs 0x00A01004 0x1

00a01004 ()-> 00000001

pi@mypi3-1:~/testbuilds/catzip/sw/host \$./arm-zipload -v ../board/jpeg

Halting the CPU Memory regions:

Block RAM: 00a00000 - 00a02000 SDRAM : 01000000 - 02000000

Loading: ../board/jpeg

Section 0: 01000000 - 0104f26c Writing to MEM: 01000000-0104f26c

Clearing the CPUs registers Setting PC to 01000000

The CPU should be fully loaded, you may now

start it (from reset/reboot) with:

> wbregs cpu 0x0f

CPU Status is: 0000060f

pi@mypi3-1:~/testbuilds/catzip/sw/host \$./arm-wrsdram rgb_pack.bin

The size of the buffer is 0x00ffff or 65535 words

READ-COMPLETE

pi@mypi3-1:~/testbuilds/catzip/sw/host \$./arm-wbregs cpu 0x0f

02000000 ()-> 0000000f

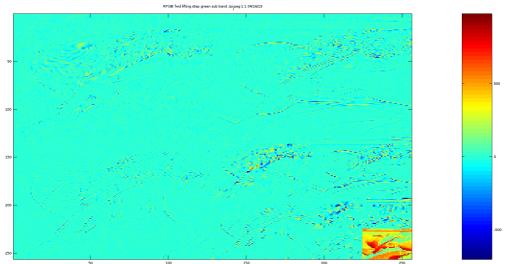
- . $ptrs.inpbuf = 0x100f1fc buf_red = 0x104f278$
- . fwd inv = 0x10cf280
- x = 0xe22247c sp = 0x224 z = 0x22400
- x = 0xde22083 sp = 0x220 z = 0x22000
- x = 0xe221475 sp = 0x214 z = 0x21400
- x = 0xe32207b sp = 0x220 z = 0x22000
- x = 0xa812055 sp = 0x120 z = 0x12000
- x = 0xb210c4c sp = 0x10c z = 0x10c00
- . spliting green sub band
- . fwd lifting step only
- $w = 0x100 \text{ wptr} = 0x104f278 \text{ alt} = 0x108f278 \text{ fwd_inverse} = 0x10cf280 \text{ fw$
- . starting red dwt
- . ip = 0x104f278 tp = 0x108f278
- . in lifting
- . in singlelift
- . in singlelift
- . back from singlelift
- . in lifting
- . in singlelift
- . in singlelift
- . back from singlelift
- . in lifting
- . in singlelift
- . in singlelift
- . back from singlelift
- . testing test_fwd
- . finished ted dwt

pi@mypi3-1:~/testbuilds/catzip/sw/host \$ rm -f dwt.bin ;./arm-rdsdram dwt.bin

Write-COMPLETE

The size of the buffer is 0x00ffff or 65535 words





pi@mypi3-1:~/testbuilds/catzip/sw/host $\$./arm-wbregs $0x00A01000\ 0x2$

00a01000 ()-> 00000002

pi@mypi3-1:~/testbuilds/catzip/sw/host \$./arm-wbregs 0x00A01004 0x1

00a01004 ()-> 00000001

pi@mypi3-1:~/testbuilds/catzip/sw/host \$./arm-zipload -v ../board/jpeg

Halting the CPU Memory regions:

Block RAM: 00a00000 - 00a02000 SDRAM : 01000000 - 02000000

Loading: ../board/jpeg

Section 0: 01000000 - 0104f26c

Writing to MEM: 01000000-0104f26c

Clearing the CPUs registers Setting PC to 01000000

The CPU should be fully loaded, you may now

start it (from reset/reboot) with:

> wbregs cpu 0x0f

CPU Status is: 0000060f

pi@mypi3-1:~/testbuilds/catzip/sw/host \$./arm-wrsdram rgb_pack.bin

The size of the buffer is 0x00ffff or 65535 words

READ-COMPLETE

pi@mypi3-1:~/testbuilds/catzip/sw/host \$./arm-wbregs cpu 0x0f

02000000 ()-> 0000000f

- . ptrs.inpbuf = 0x100f1fc buf_red = 0x104f278
- $. fwd_inv = 0x10cf280$
- x = 0xe22247c sp = 0x7c z = 0x7c
- x = 0xde22083 sp = 0x83 z = 0x83
- x = 0xe221475 sp = 0x75 z = 0x75
- x = 0xe32207b sp = 0x7b z = 0x7b

- x = 0xa812055 sp = 0x55 z = 0x55
- x = 0xb210c4c sp = 0x4c z = 0x4c
- . spliting blue sub band
- . fwd lifting step only
- $w = 0x100 \text{ wptr} = 0x104f278 \text{ alt} = 0x108f278 \text{ fwd_inverse} = 0x10cf280 \text{ fw$
- . starting red dwt
- . ip = 0x104f278 tp = 0x108f278
- . in lifting
- . in singlelift
- . in singlelift
- . back from singlelift
- . in lifting
- . in singlelift
- . in singlelift
- . back from singlelift
- . in lifting
- . in singlelift
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- . finished ted dwt

pi@mypi3-1:~/testbuilds/catzip/sw/host \$ rm -f dwt.bin ;./arm-rdsdram dwt.bin

Write-COMPLETE

The size of the buffer is 0x00ffff or 65535 words

