
INTEROFFICE MEMORANDUM

TO: PROFESSOR SONG

FROM: CUNYANG LIU

SUBJECT: LAB #5 PRIVATE TIMER AND DEBUGGING

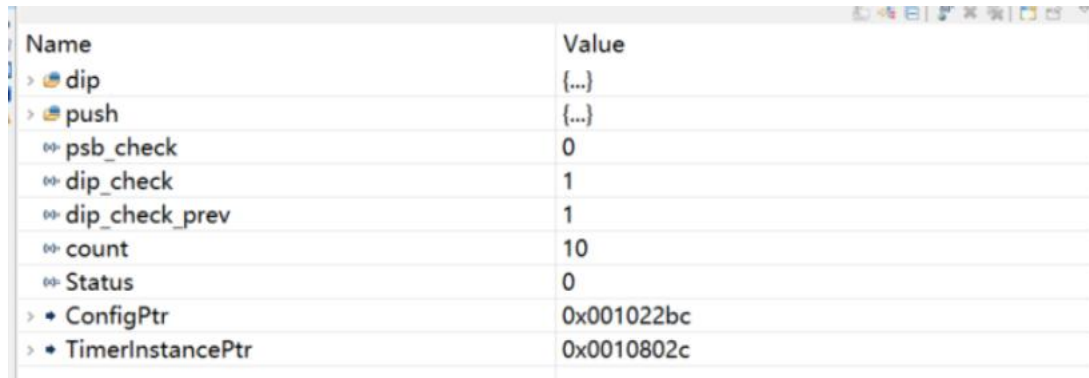
DATE: 08.17.2021

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Capture some screen captures from the debugging session

(a) Variable tab to show count value to be 10.

Add a breakpoint at “count++” and start GDB debugging. Click the Resume button to run the program to the breakpoint, then continue clicking until the count is 10.

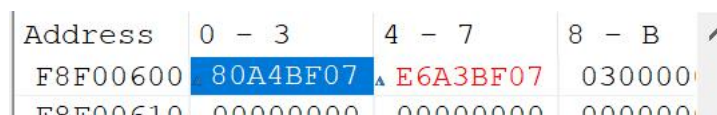


Name	Value
> dip	{...}
> push	{...}
psb_check	0
dip_check	1
dip_check_prev	1
count	10
Status	0
• ConfigPtr	0x001022bc
• TimerInstancePtr	0x0010802c

figure 1 variable tab to show count value to be 10

(b) Screen capture of timer register content

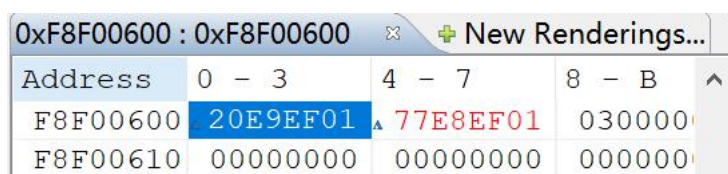
This screen capture that shows timer register content of 0x80A4BF07. The load value is therefore 0x07BFA480 = 130,000,000 = 4 x 32,500,000



Address	0 - 3	4 - 7	8 - B
F8F00600	80A4BF07	E6A3BF07	030000
F8F00610	00000000	00000000	000000

figure 2 timer register content when push switches to b'0100'

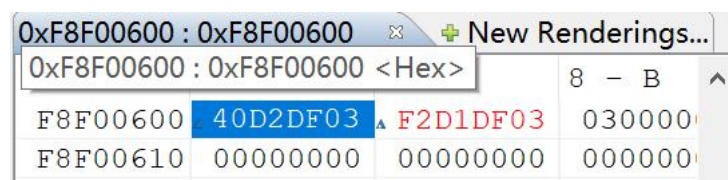
This screen capture that shows timer register content of 0x20E9EF01. The load value is therefore 0x01EFE920 = 32,500,000 = 1 x 32,500,000



Address	0 - 3	4 - 7	8 - B
F8F00600	20E9EF01	77E8EF01	030000
F8F00610	00000000	00000000	000000

figure 3 timer register content when push switches to b'0001'

This screen capture that shows timer register content of 0x40D2DF03. The load value is therefore 0x03DFD240 = 65,000,000 = 2 x 32,500,000



Address	0 - 3	4 - 7	8 - B
F8F00600	40D2DF03	F2D1DF03	030000
F8F00610	00000000	00000000	000000

figure 4 timer register content when push switches to b'0010'