

Re: about clock register setting

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<http://www.tech-archive.net/Archive/WindowsCE/microsoft.public.windowsce.platbuilder/2008-01/msg00408.html>

- *From:* "Bruce Eitman [eMVP]" <beitman.nospam@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>
 - *Date:* Wed, 23 Jan 2008 10:19:30 -0500
-

Pick up a C book, that is pretty basic. Dereference a pointer to an element of structure and read the value, then do bitwise and with 0x1F, then compare the result with 16.

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"daniel" <daniel@xxxxxxxxxxxxxxxxxxxxxxxxxxxx> wrote in message
news:0F83D30F-4274-45E7-9CA7-65EA85E394DF@xxxxxxxxxxxxxxxxxxxx

Thank you Bruce,

I feel I can understand the remaining code by referencing the cpu datasheet but the first if condition statement can't be understood.
if ((pCLKRegs->cccr & 0x1F) < 16)
What's the meaning of pCLKRegs->cccr & 0x1F ?

"Bruce Eitman [eMVP]" wrote:

Explaining line by line would take pages of information. Could you narrow it down by telling us what you don't understand?

I will give you a quick overview of what is going on.

1. You have a structure which maps to how the registers are layed out in the hardware

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2. You have a pointer to the structure
2. The pointer to the stucuture is mapped to the base address of some part of the hardware
3. By dereferencing the pointer to the strucutre, you are reading/writitng the register in hardware
4. The registers are defined in the PXA270 Developer's Manual where you can get all of the detail for the hardware.

—
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"daniel" <daniel@xxxxxxxxxxxxxxxxxxxxxxxxxxxx> wrote in message
news:4ADB7896-5EDB-4F8A-9B36-88359C02FB4E@xxxxxxxxxxxxxxxxxxxxx

I'm not familiar with hardware register control.
During reading my pxa 27x BSP, I got reached a very hardware specific code about system clock manager setting like following.

```
// pCLKRegs is a Clock manager's address and cccr is Core  
Clock  
Configuration register  
if ((pCLKRegs->cccr & 0x1F) < 16)  
{  
// If do not change to 91Mhz, do not need to change mdrefr.  
//pMEMC->mdrefr &= ~(0xFFF);  
//pMEMC->mdrefr =  
((0x1<<29)|(0x1<<20)|(0x1<<17)|(0x1<<16)|(0x1<<13)|0x31);  
pMEMC->mdcnfg = 0xA000AC9;  
pMEMC->mdrefr = 0x2013A031;  
pMEMC->msc0 = 0x15D095D2;  
}
```

Is there any kind teacher who will let me know the code line by line?
Or
introduce any material which I should first study.
Thank you in advance.

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