

1. (1) $2^{32} B = 4GB$, $2^{12} B = 4KB$
 整个地址空间为 $4GB$, 一页有 $4KB$.

(2) 页目录起始逻辑地址为 $0x80000000 + (0x80000000 \gg 10)$
 $= 0x80200000$

自映射页表项的逻辑地址为 $0x80000000 + (0x80000000 \gg 10)$
 $+ (0x80000000 \gg 20)$
 $= 0x80200800$

(3) ① $0x0$: 页号为 0 , 二级页表为 0 , offset 为 0 .

~~对页表的地址为~~
 页表中二级页表项为 $0x0$, 无效.

② $0x00803004$: $PDN = 0x002$, $PTN = 0x003$, $off = 0x004$
 $*(PDE^*) 0x1000 = 0x5001$, valid, $PTEntry = 0x5000$

$*(PTE^*) 0x5000 = 0x20001$, valid, $PGEntry = 0x20000$

$*(byte^*) 0x2000 = 0x326001$

③ $0x00402001$: $PDN = 0x001$, $PTN = 0x002$, $off = 0x001$

$*(PDE^*) 0x1004 = 0x1001$, valid, $PTEntry = 0x1000$

$*(PTE^*) 0x1000 = 0x5001$, valid, $PGEntry = 0x5000$

$*(byte^*) 0x5001 = 0x4000 \rightarrow 0x0$

(4) $*(PDE^*) 0x1000 = 0x20001$, valid, $PTEntry = 0x20000$

$*(PTE^*) 0x20004 = 0x326001$, valid, $PGEntry = 0x326000$

$*(byte^*) 0x326000$

$\therefore PDN = 0x003$, $PTN = 0x001$, $offset = 0x02$

\therefore 逻辑地址: $0x00C00028$



2.

指令	结果
Load [0x0000b22]	20
Store [0x00C07222]	Error
store [0x00C005BF]	Error OK
Load [0x00003013]	19
Load [0xFF80078F]	Error
Load [0xFFFFF005]	66 66

