

Princeton University
COS 217: Introduction to Programming Systems
SPARC Traps

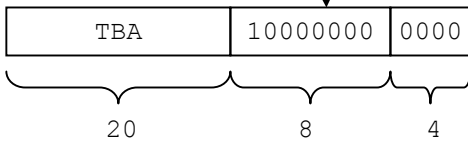
```
!-----  
! hellot.S  
! SPARC Traps  
!-----  
#define STDOUT 1  
#define WRITE 4  
#define GREETING_LENGTH 6  
!-----  
.section ".rodata"  
pcGreeting:  
    .ascii "Hello\n"  
!-----  
.section ".text"  
    .global main  
main:  
    save %sp, -96, %sp  
    mov  STDOUT, %o0  
    set  pcGreeting, %o1  
    mov  GREETING_LENGTH, %o2  
    mov  WRITE, %g1  
    ta   0  
    mov  0, %i0  
    ret  
    restore
```

User Code

```
mov  STDOUT, %o0
set  pcGreeting, %o1
mov  GREETING_LENGTH, %o2
mov  WRITE, %g1
ta   0
```

1 0 + 128

Trap Base Register (TBR)



Address

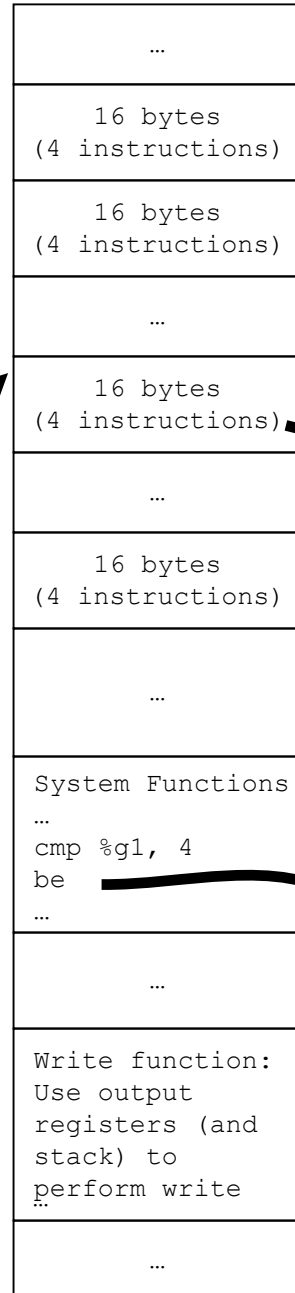
TBA000000000000

TBA000000010000

TBA100000000000

TBA111111110000

Memory



Trap Table (4096 bytes)

3

4