



R3000 TLB Refill

- Can be optimised for TLB refill only
 - Does not need to check the exception type
 - Does not need to save any registers
 - It uses a specialised assembly routine that only uses k0 and k1.
 - Does not check if PTE exists
 - Assumes virtual linear array - see extended OS notes
- With careful data structure choice, exception handler can be made very fast

```

An example routine
mfc0 k1,C0_CONTEXT
mfc0 k0,C0_EPC # mfc0 delay
                # slot
lw k1,0(k1) # may double
                # fault (k0 = orig EPC)
nop
mtc0 k1,C0_ENTRYLO
nop
tlbwr
jx k0
rfe

```



