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sensitive code versus interrupt routines

A) sensitive code will lock out all ^{interrupts} ~~sensitive code~~

algorithm

to do sensitive

set a flag

do sensitive code

unset flag

check to see if any are waiting, if so ^{CEJ} to him



interrupt routine will, when entered

check flag

a) set

put name on q

CEJ back (2 CEJs if no hardware chance)

b) wait

proceed

2 CEJ
mode????

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ppu interrupt procedure

check Bp in XT pass for the given interrupt proceed
non zero - go away (interrupt still in progress)
zero

do ~~xxx~~ XT

set to 1

(note: cp will not attempt to mod. until it is set to 1)
(will take ~~15~~ 15 usec)

CP program

compute

check Bp cell

zero

non zero do the CBT (or 2 CBT's)

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event channels

2 queues

a) queue of events

name

data word

b) queue waiting processes

3 OPS

a) place an event on a channel
in all cases, what happened is returned

i) if process queue of the channel empty,

place your name

and data word on the event queue

ii) if process queue non empty,

~~get~~ give up process

Your name

data word

and wake up

check event queue
if an event is already
present, if you
do not enter
event

what!
it full!

(full-1)
if almost full,
a special entry
goes in saying
"you lose"

if full, with goes in
in all cases, the
"event" is
informed

b) get an event from an event channel

i) if event queue empty, ~~keep~~^{get} on process queue

ii) if event queue non empty

get 1st event consisting of

a process name

a data word

c) get an event from an event channel if any
i. if event queue empty, ~~get~~^{get}