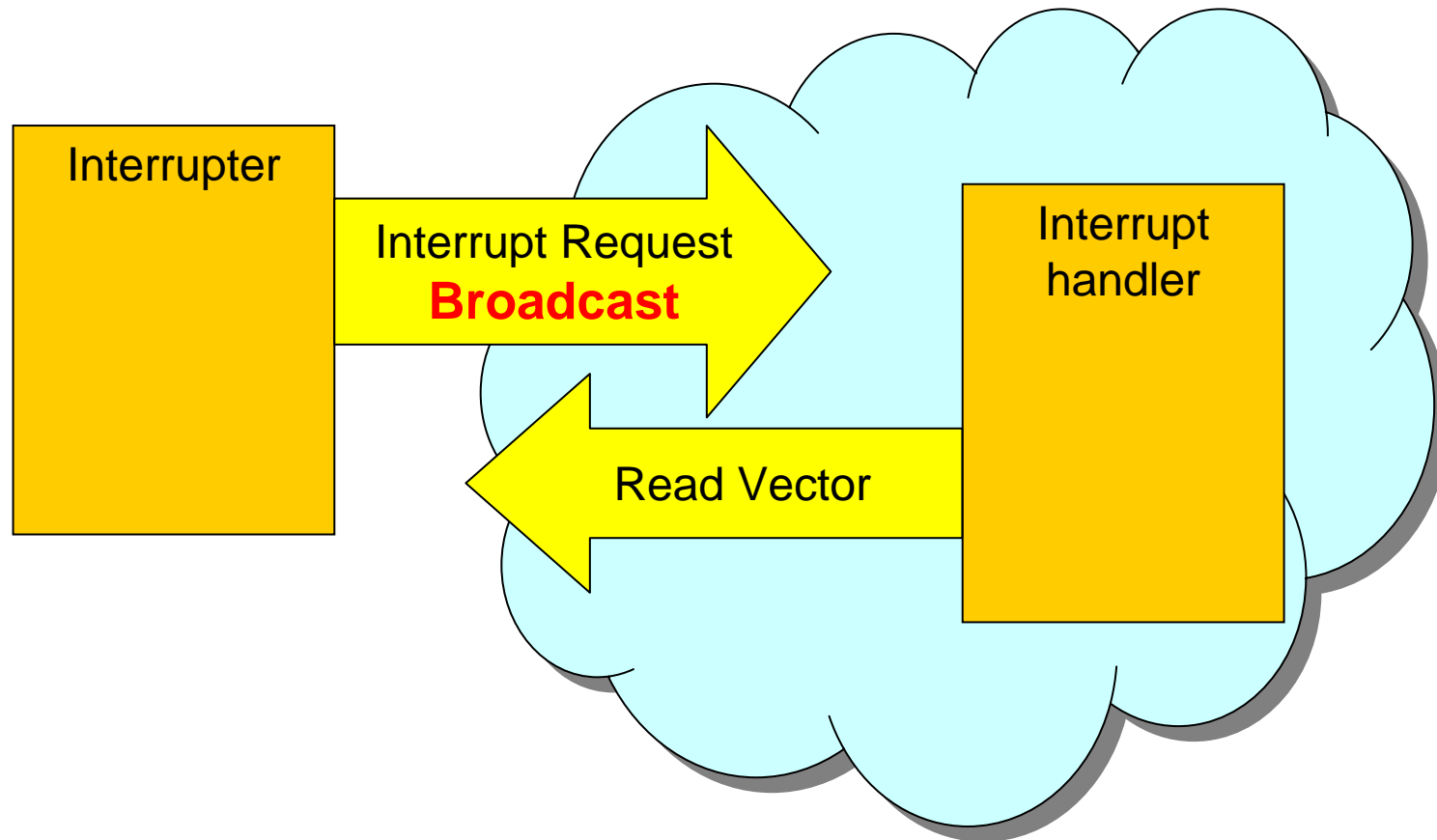


Task synchronization over SpW

Osaka U.

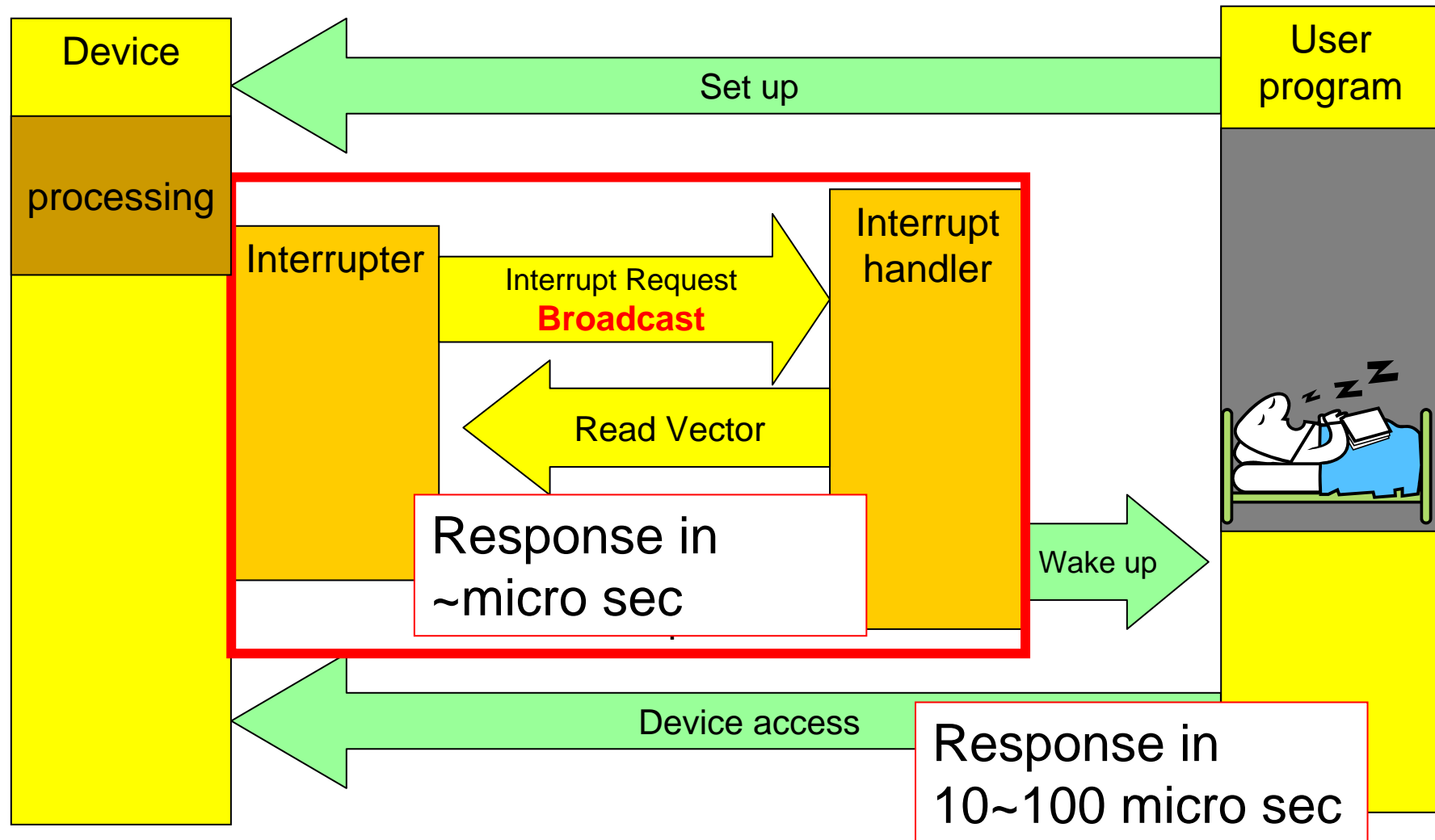
NOMACHI, Masaharu

Interrupt on VME bus



Communication between **strangers**.

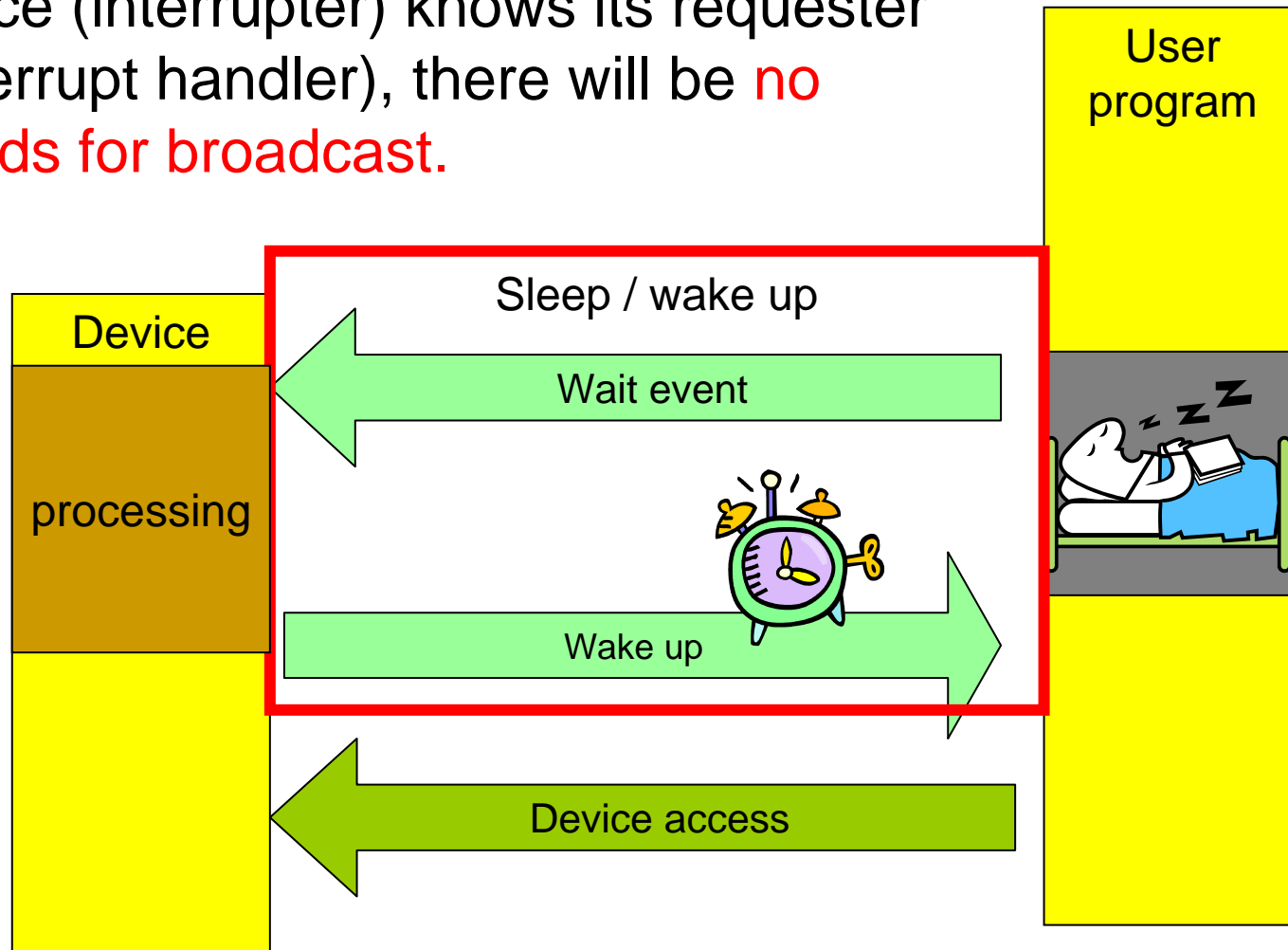
Interrupt in the user program



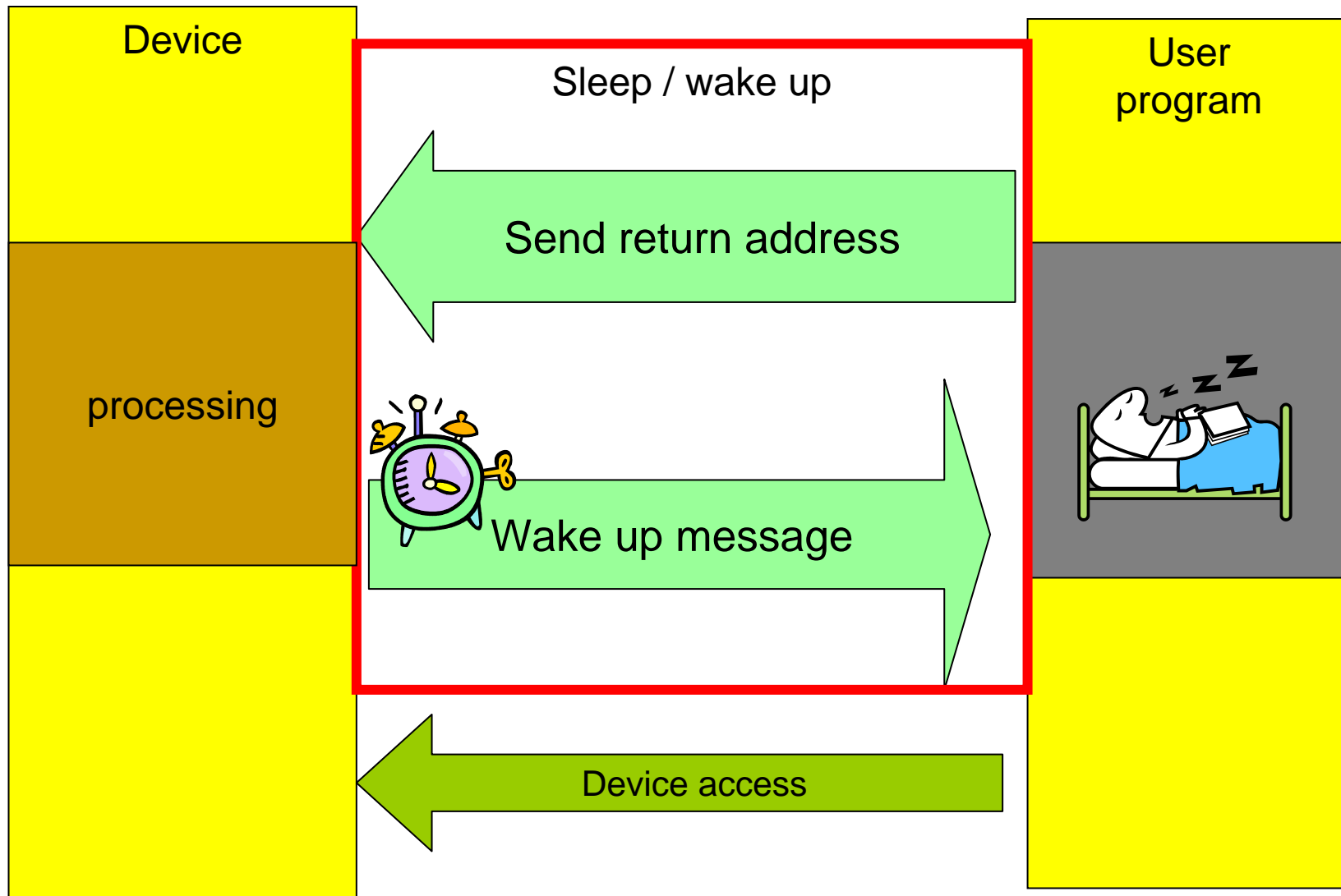
User program knows the device

Do we need broadcast?

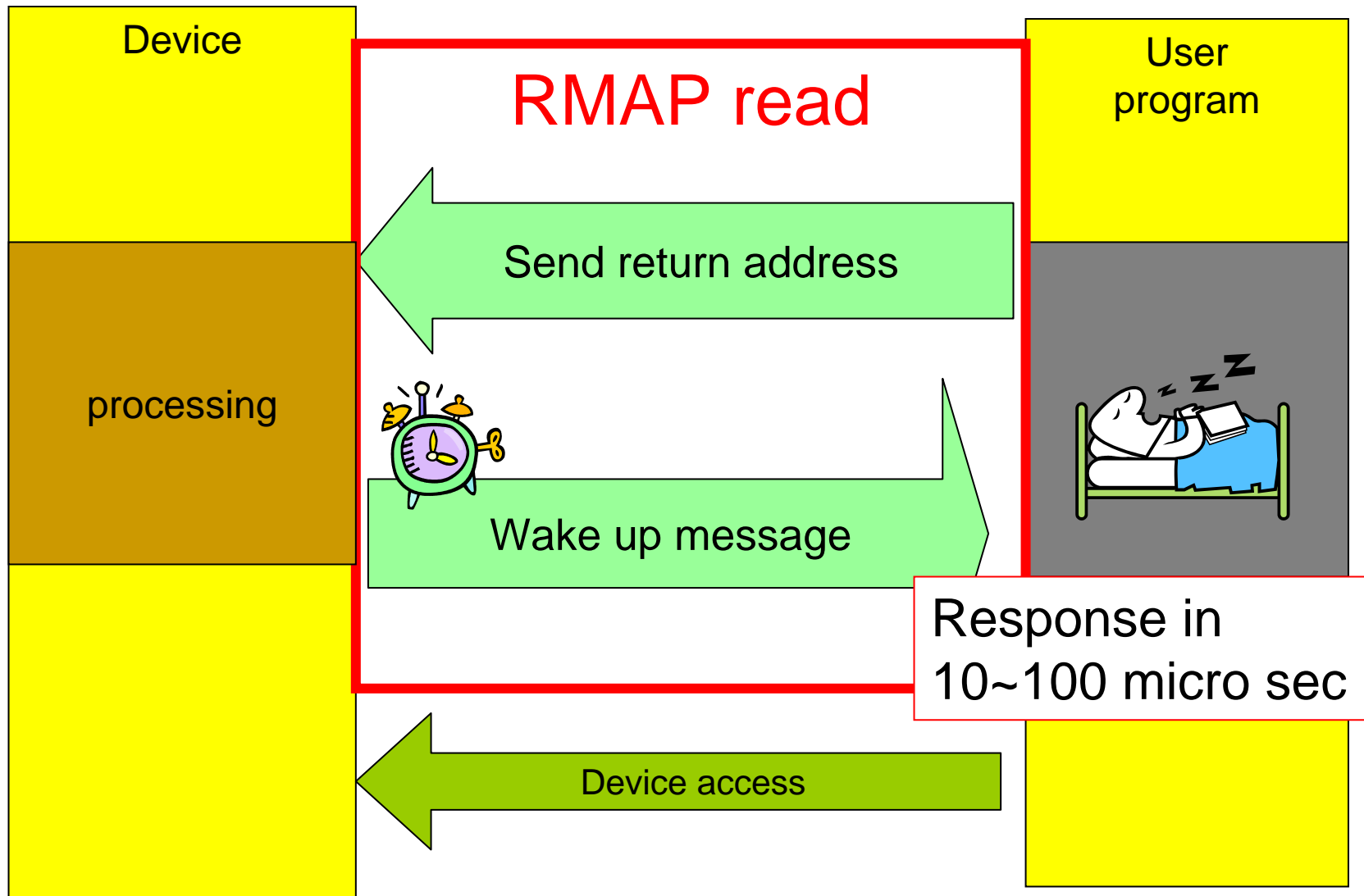
If device (interrupter) knows its requester (interrupt handler), there will be **no needs for broadcast.**



How to implement on SpW?

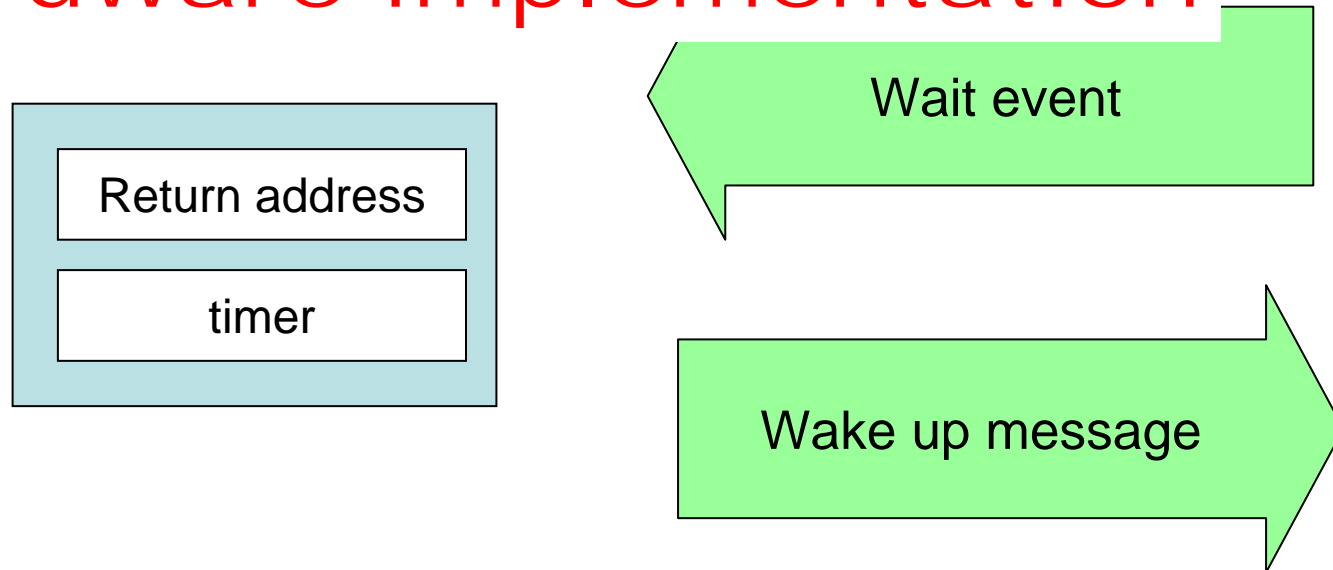


Do we need new protocol?



Interrupt register (event flag)

Hardware implementation



Read wake up message

-1 : Busy. Another process is already waiting.

0: Event already exist.

$n > 0$: Event occurs after “n” tick.

Write interrupt register

0 : cancel

summary

- In application level, message broadcast is not always required.
- Device should remember the requester.
- Wake up mechanism can easily implemented on RMAP protocol.
- Implementation on hardware. No needs for new protocol.