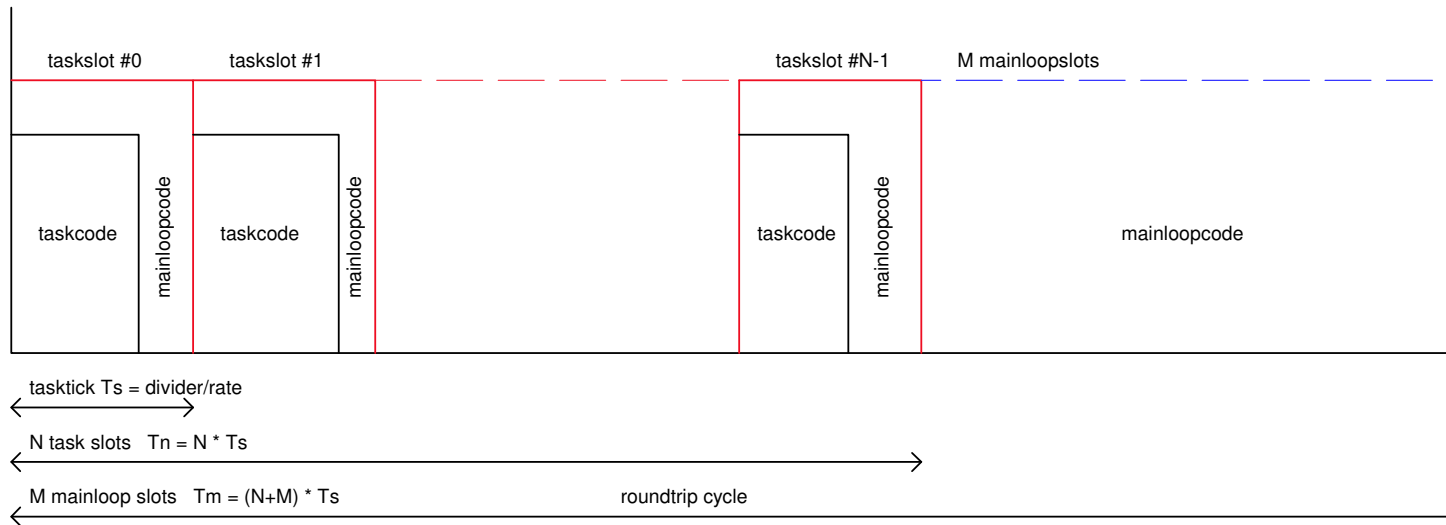


```

SUB INTERRUPT rate
  TASKS HANDLER,divider,taskslots
  RETURNINT
ENDSUB

```



TASKS SET,slot,taskname,interval

slot is 0 to N-1
 taskname is name of declared task
 interval is number of taskticks (1 to 255)
 Task timeslice every $(N+M) * Ts$ seconds
 Task runs every interval * Ts seconds
 Timeslices not used by taskcode, are used by mainloopcode

Requirements for minimal jitter

Taskcode must return within Ts seconds

interval must be integral multiple of $M+N$, interval = $K*(M+N)$

EXAMPLE

rate = 115200

divider = 6

task slots = 5

$N = 5$

mainloop slots = 3

$M = 3$

$N + M = 8$

$Ts = 1 / 19200$ seconds

$Tn = 5 / 19200$ seconds

$Tm = 8 / 19200$ seconds

Mainloopcode has a minimum of $M / (N+M) * 100\% = 37.5\%$ of cpu use

interval = $K * 8 = 16$ $K = 2$

Taskcode runs every $16 * Ts = 16 / 19200 = 1 / 1200$ seconds