taskslot #0    taskslot #1                          taskslot #N-1    M mainloopslots

taskcode | mainloopcode | taskcode | mainloopcode | ... | taskcode | mainloopcode | mainloopcode

tasktick $Ts$ = TASKTICK * (INTPERIOD / CPUFREQ) = TASKTICK / (CPUFREQ / INTPERIOD) = TASKTICK / uartfs

N task slots   $Tn = N * Ts$

M mainloop slots   $Tr = (N+M) * Ts$                          roundtrip cycle

TaskSet(slot,taskid,interval)          slot is 0 to N-1
                                       taskid equals case number in TaskSwitch()
                                       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**
CPUFREQ = 20_000_000, INTPERIOD = 174
uartfs = CPUFREQ / INTPERIOD = 115200
TASKTICK = 6
TASKS = 5          N = 5              Ts = 6 / 115200 = 1 / 19200 seconds
mainloop slots = 3     M = 3    →     Tn = 5 / 19200 seconds
                   N + M = 8          Tr = 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