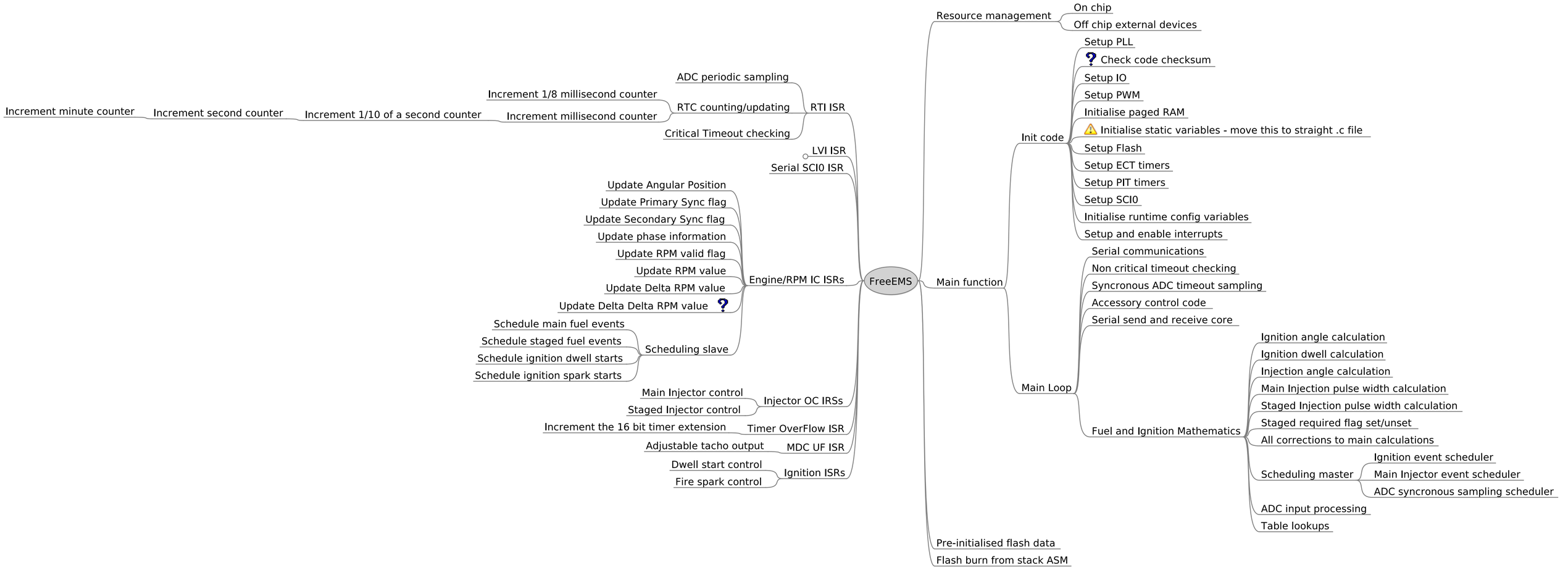
FreeEMS
Resource management
On chip
Off chip external devices
Main function
Init code
Setup PLL
Check code checksum
Setup IO
Setup PWM
Initialise paged RAM
Initialise static variables - move this to straight .c file
Setup Flash
Setup ECT timers
Setup PIT timers
Setup SCI0
Initialise runtime config variables
Setup and enable interrupts
Main Loop
Serial communications
Non critical timeout checking
Syncronous ADC timeout sampling
Accessory control code
Serial send and receive core
Fuel and Ignition Mathematics
Ignition angle calculation
Ignition dwell calculation
Injection angle calculation
Main Injection pulse width calculation
Staged Injection pulse width calculation
Staged required flag set/unset
All corrections to main calculations
Scheduling master
Ignition event scheduler
Main Injector event scheduler
ADC syncronous sampling scheduler
ADC input processing
Table lookups
Pre-initialised flash data
Flash burn from stack ASM
RTI ISR
ADC periodic sampling
RTC counting/updating
Increment 1/8 millisecond counter
Increment millisecond counter
Increment 1/10 of a second counter
Increment second counter
Increment minute counter
Critical Timeout checking
LVI ISR
Serial SCI0 ISR
Engine/RPM IC ISRs
Update Angular Position
Update Primary Sync flag
Update Secondary Sync flag
Update phase information
Update RPM valid flag
Update RPM value
Update Delta RPM value
Update Delta Delta RPM value
Scheduling slave
Schedule main fuel events
Schedule staged fuel events
Schedule ignition dwell starts
Schedule ignition spark starts
Injector OC IRSs
Main Injector control
Staged Injector control
Timer OverFlow ISR
Increment the 16 bit timer extension
MDC UF ISR
Adjustable tacho output
Ignition ISRs
Dwell start control
Fire spark control