

kernel_definitions

```
-enum: processState = [EMPTY, RUN, READY, WAIT]
-enum: priorityMode = [NORMAL, RTOS]
```

kernel

```
-pool[SLOT_SIZE]: process*
-stack[STACK_SIZE]: unsigned char
-actualTask: int
-SP: unsigned int

+KernelInit(): char
+KernelStart(): void
+KernelAddProc(func:process*,stkSize:int,
               newPrio:priorityMode): char
+TimedLoopStart(period:int): void
+TimedLoopWait(): void
-idleProcess(): void
-createIdleProc(): void
-restartTask(taskNumber:int): void
-scheduler(): int
-kernelClock(): void
```

process

```
+StackPoint: unsigned int
+StackInit: unsigned int
+Status: processState
+Time: signed int
+Prio: priorityMode
+Function: procFunc
```

<<interface>>

function

```
-procFunc: void (* procFunc) (void);
```

calculus

```
-lookupTableHam: unsigned char[16]
-lookupTableCrc: int

+crcl6(data:unsigned char*,size:int): unsigned int
+crcl6Fast(data:unsigned char*,size:int): unsigned int
+hamming(data:unsigned char*,size:int): unsigned int
+hammingFast(data:unsigned char*,size:int): unsigned int
+initLookupTables(): void
```