

Dual Task Code Review

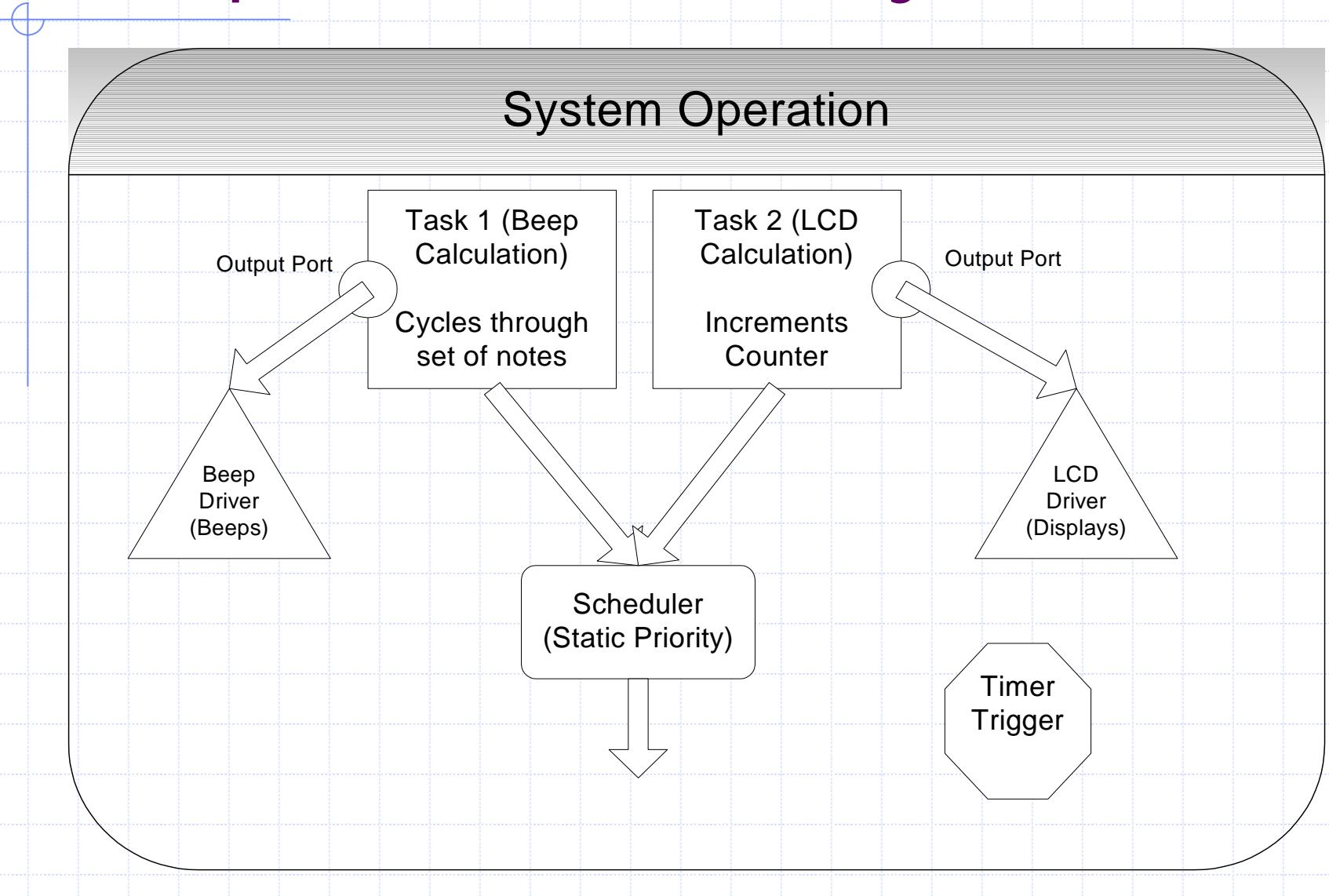
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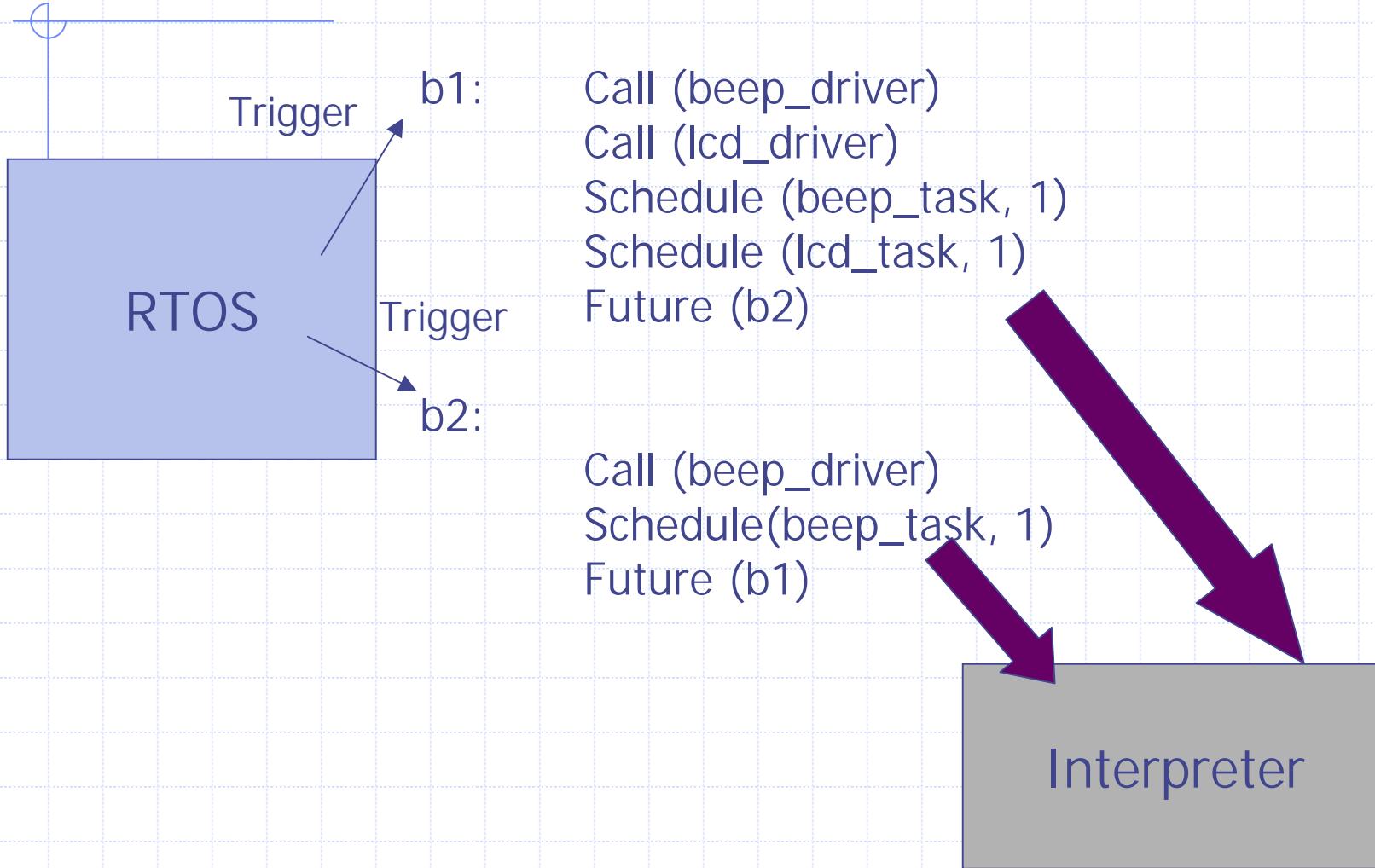
EE290o

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Composition of the System



Ecode/RTOS/Scheduler



Code

```
typedef enum {  
    call,  
    schedule,  
    future,  
}Opcode;
```

```
typedef struct {  
    void(*(fp))();  
    int priority;  
}Task;
```

```
typedef struct {  
    Opcode opcode;  
    int index;  
    void(*driver)();  
    Task task;  
}Ecode;
```

```
int main(int argc, char **argv) {  
    while(1) {  
        if(rtos_timer>35) {  
            rtos_timer= 0;  
            while(ecode[i].opcode!=future) {  
                if(ecode[i].opcode==call)  
                    (*(ecode[i].driver))();  
                if(ecode[i].opcode==schedule){  
                    scheduled_tasks[head_scheduled_tasks] = ecode[i].task;  
                    head_scheduled_tasks++;  
                }  
                i++;  
            }  
            i = ecode[i].index;  
            execute();}  
        }  
        return 0;  
    }  
    void execute() {  
        while(head_scheduled_tasks) {  
            head_scheduled_tasks--;  
            scheduled_tasks[head_scheduled_tasks].fp();  
        }  
    }  
}
```