

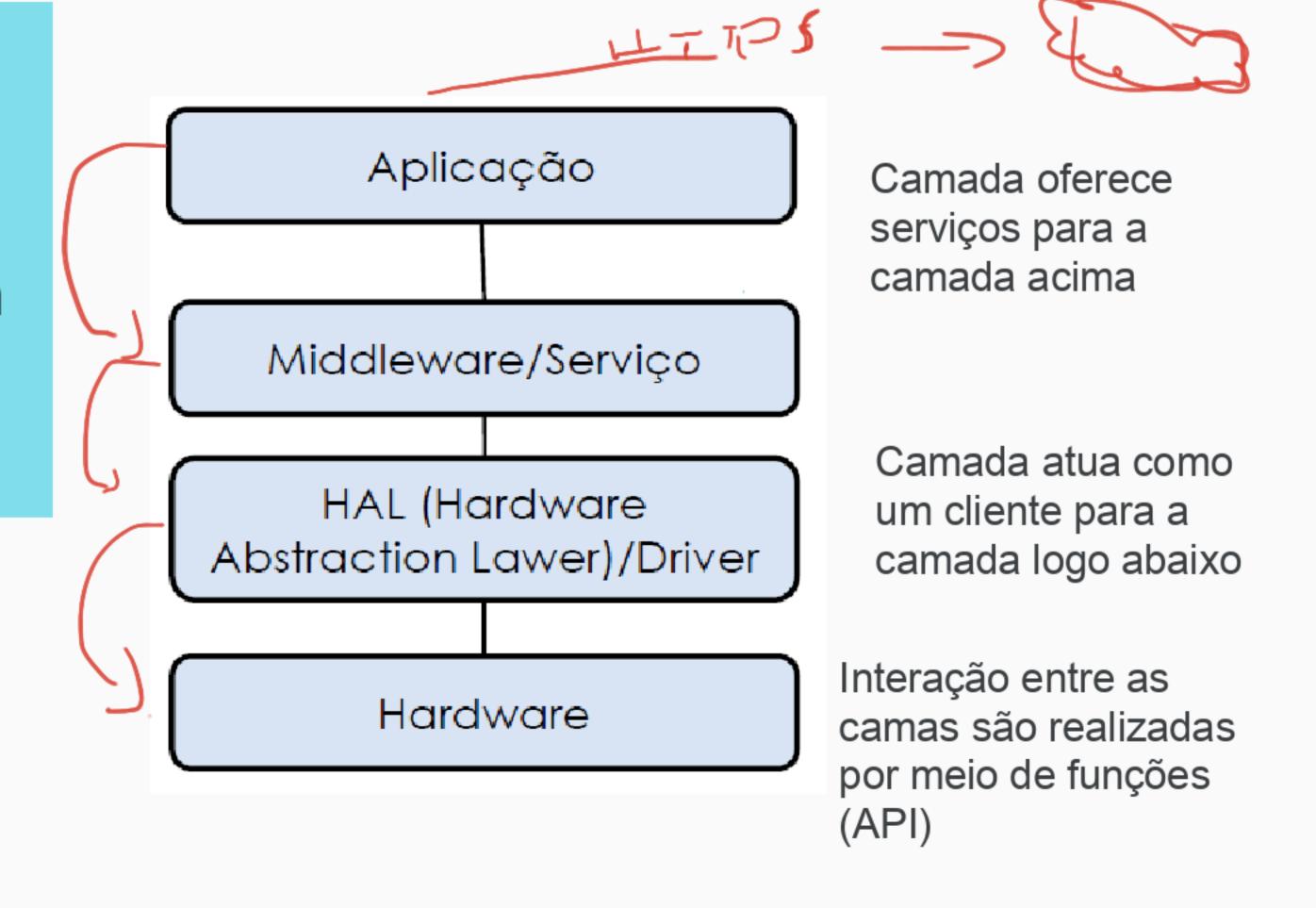
### Arquitetura de Software

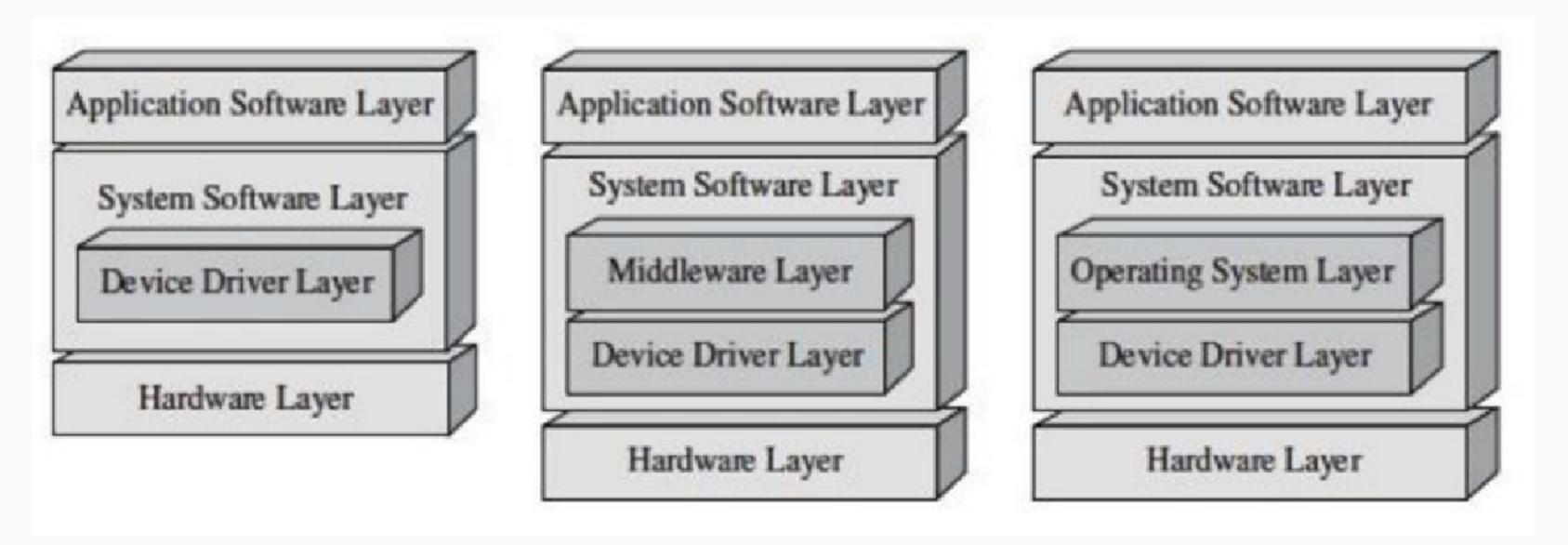
SO, aplicações, drivers

Propriedades externas Hardware, sensores cabos,
Relacionamentos todos os elementos acima se comunicam

Sistemas embarcados = arquitetura em camadas

## Refinamento da arquitetura





Aplicação: define o que o sistema embarcado faz

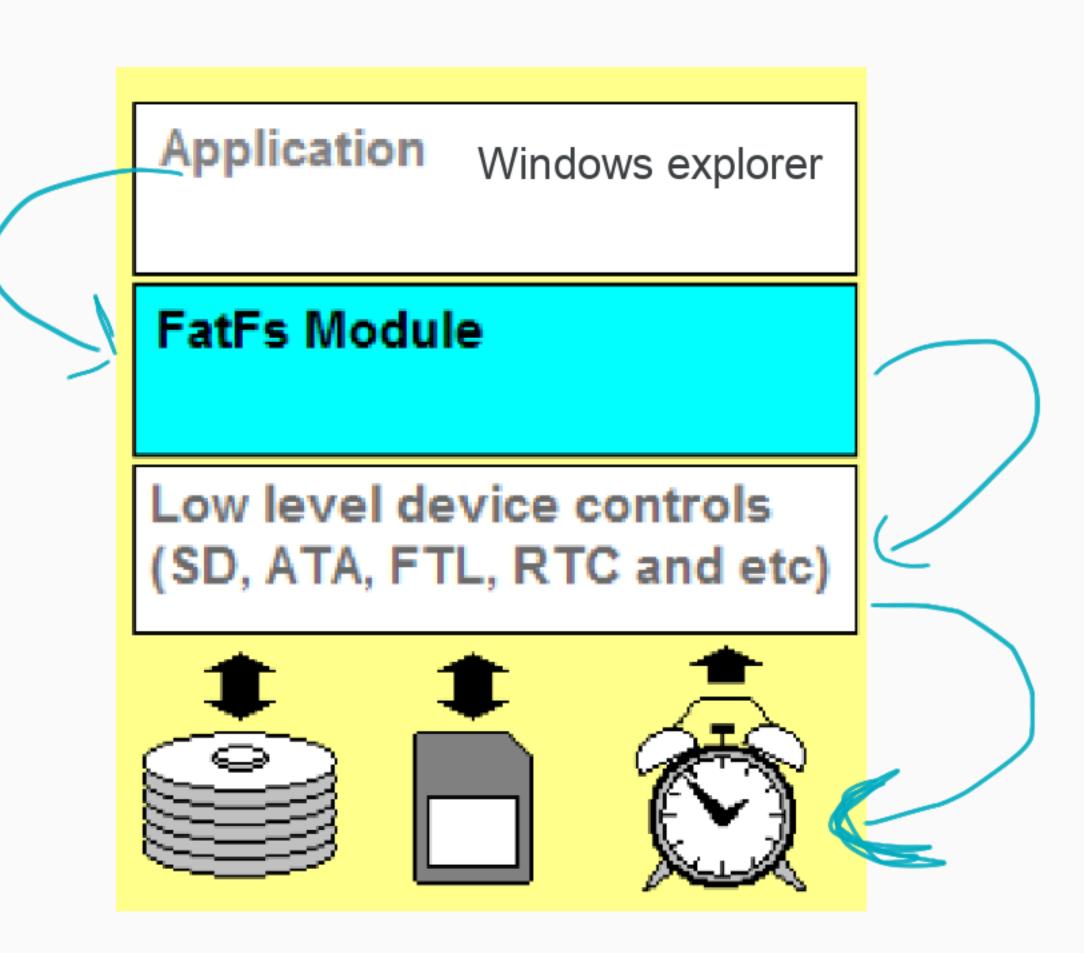
Camada de software de sistema:

Middleware: Abstração de software fora da aplicação

HAL/Driver: Interface do Sofware com o Hardware

RTOS: Sistema operacional em tempo real

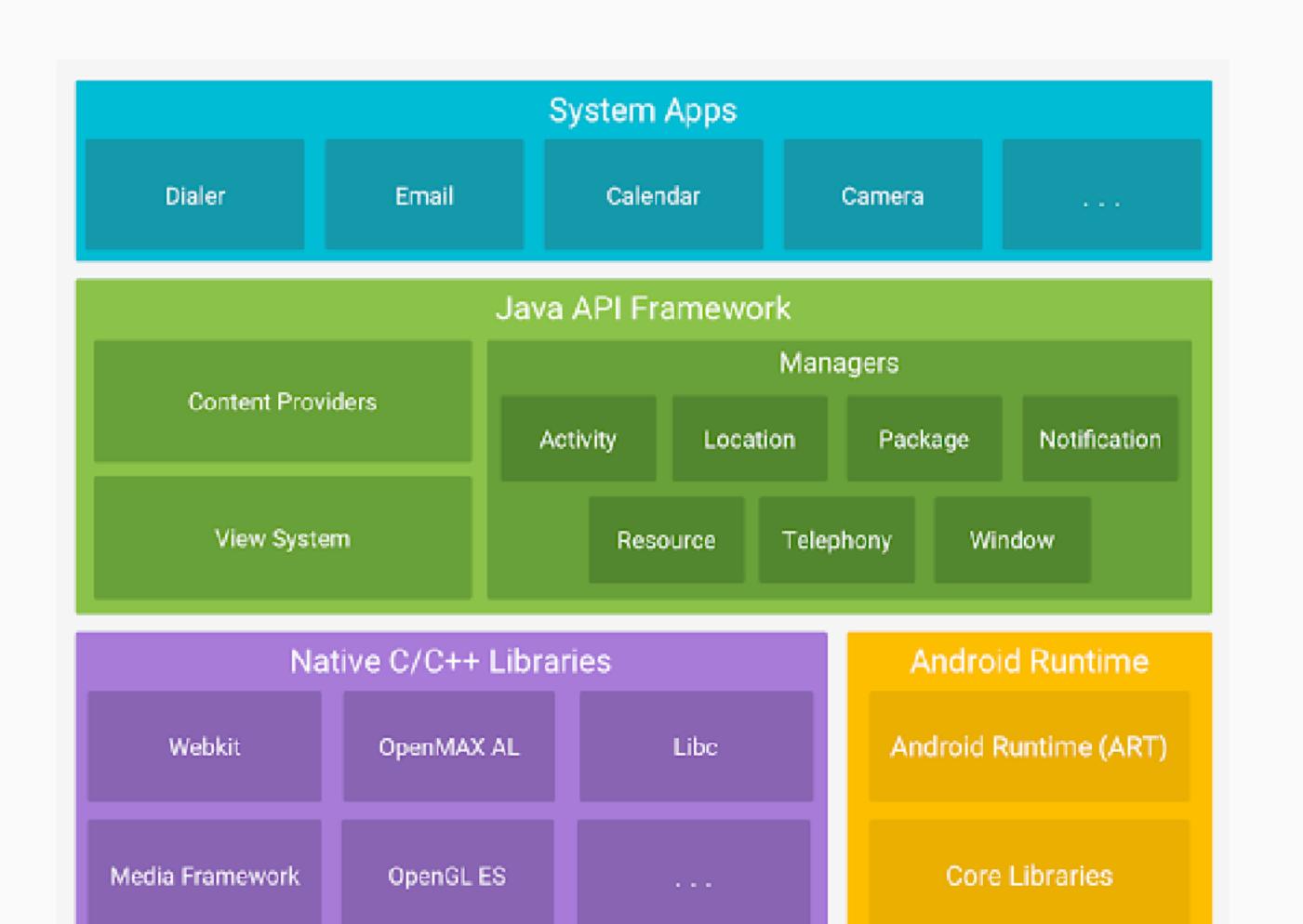
Hardware: nossos dispositivos



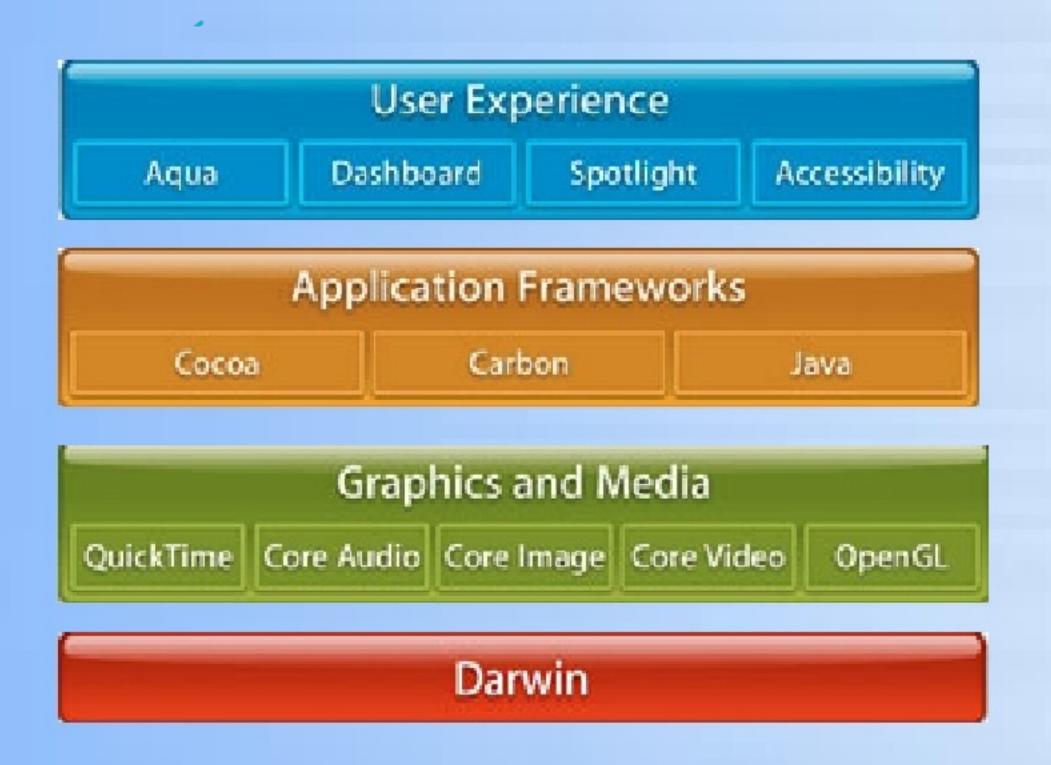
Application
FatFs API

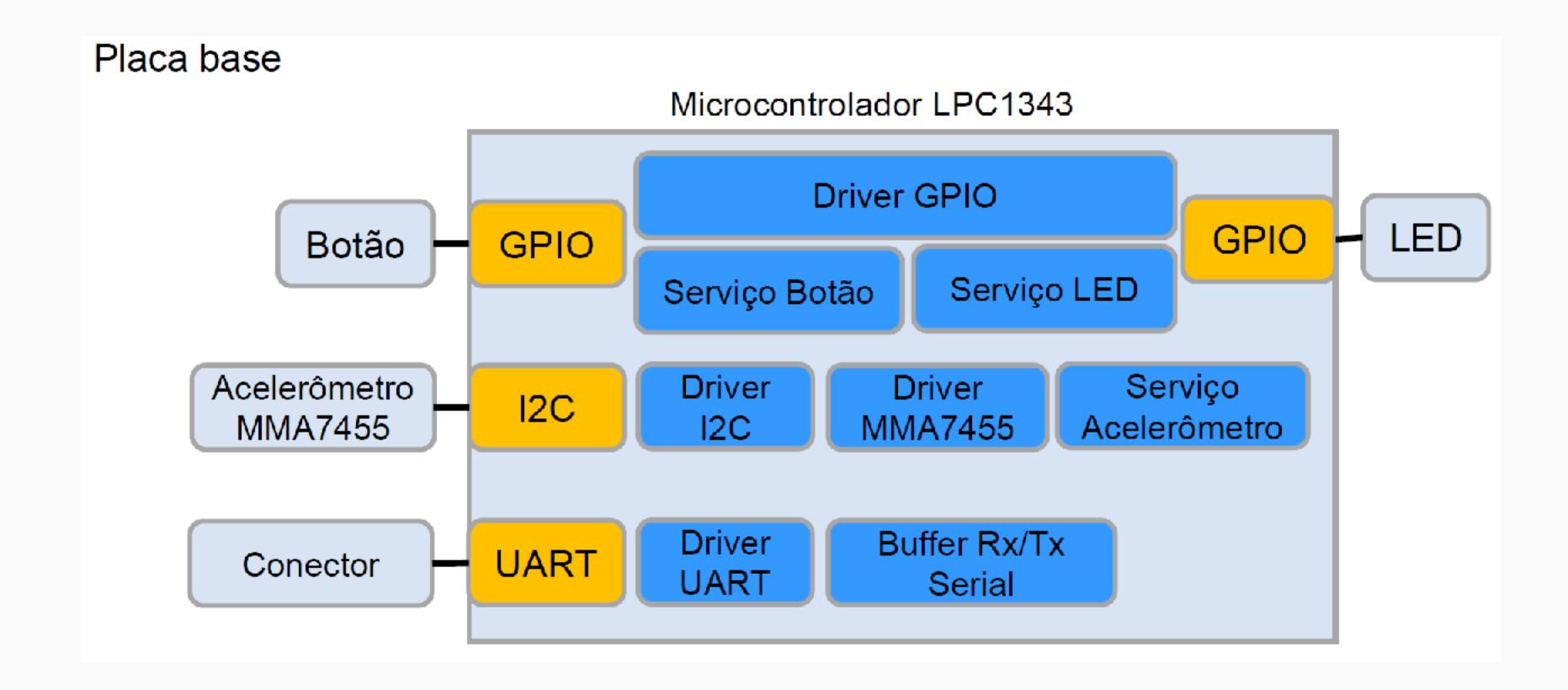
FatFs Module

Storage device controls



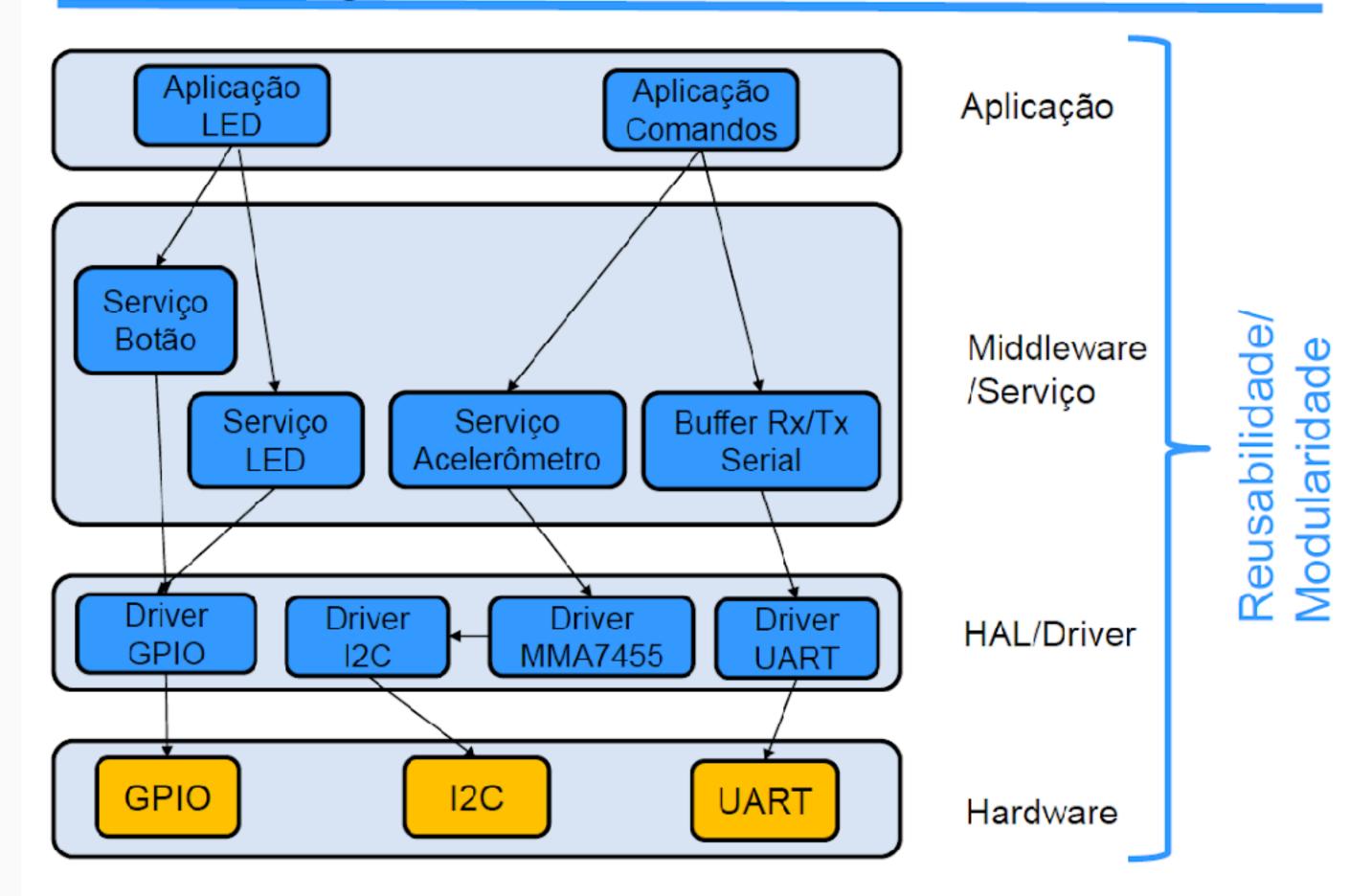
#### ARQUITETURA DO MAC OS X



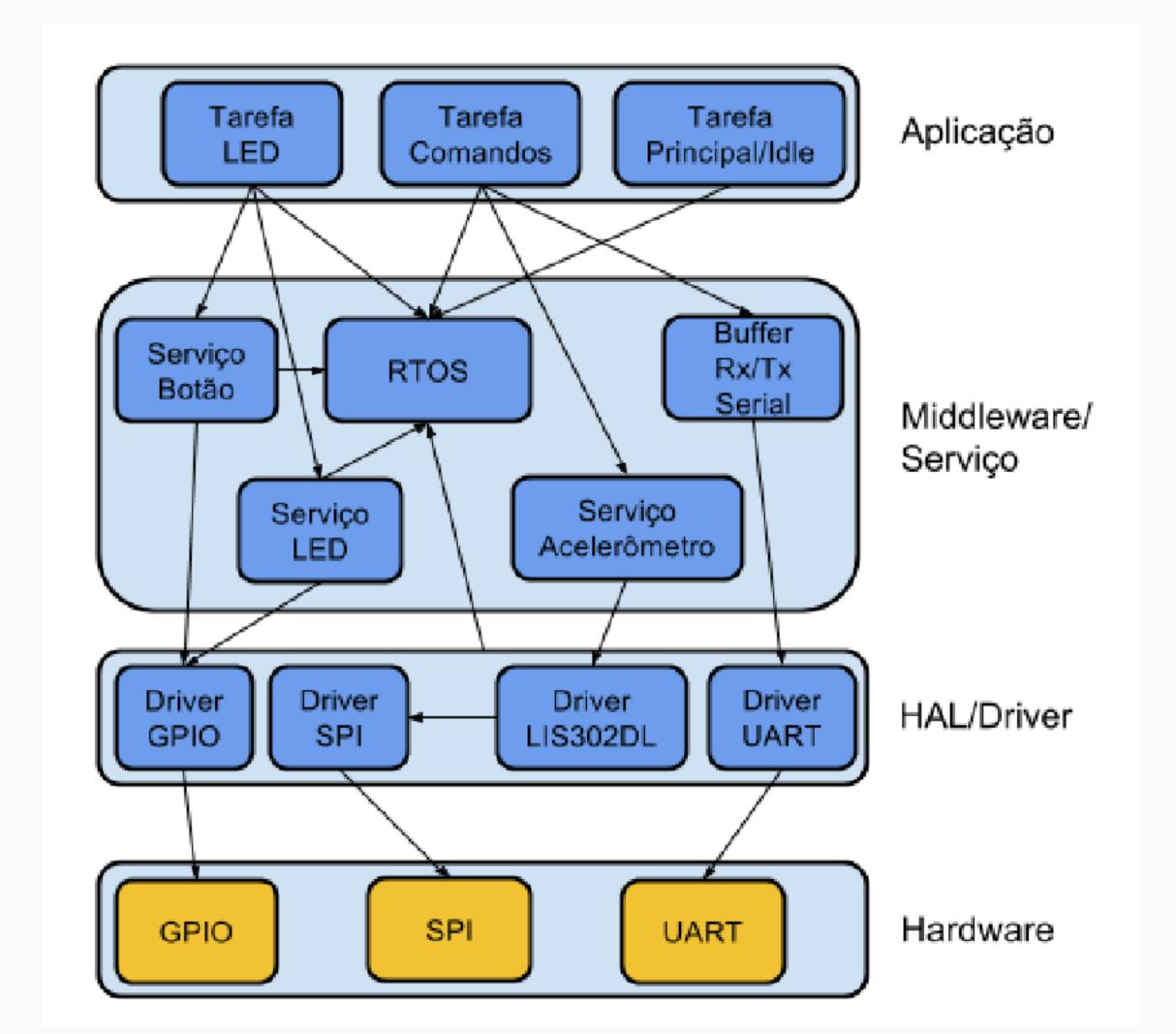


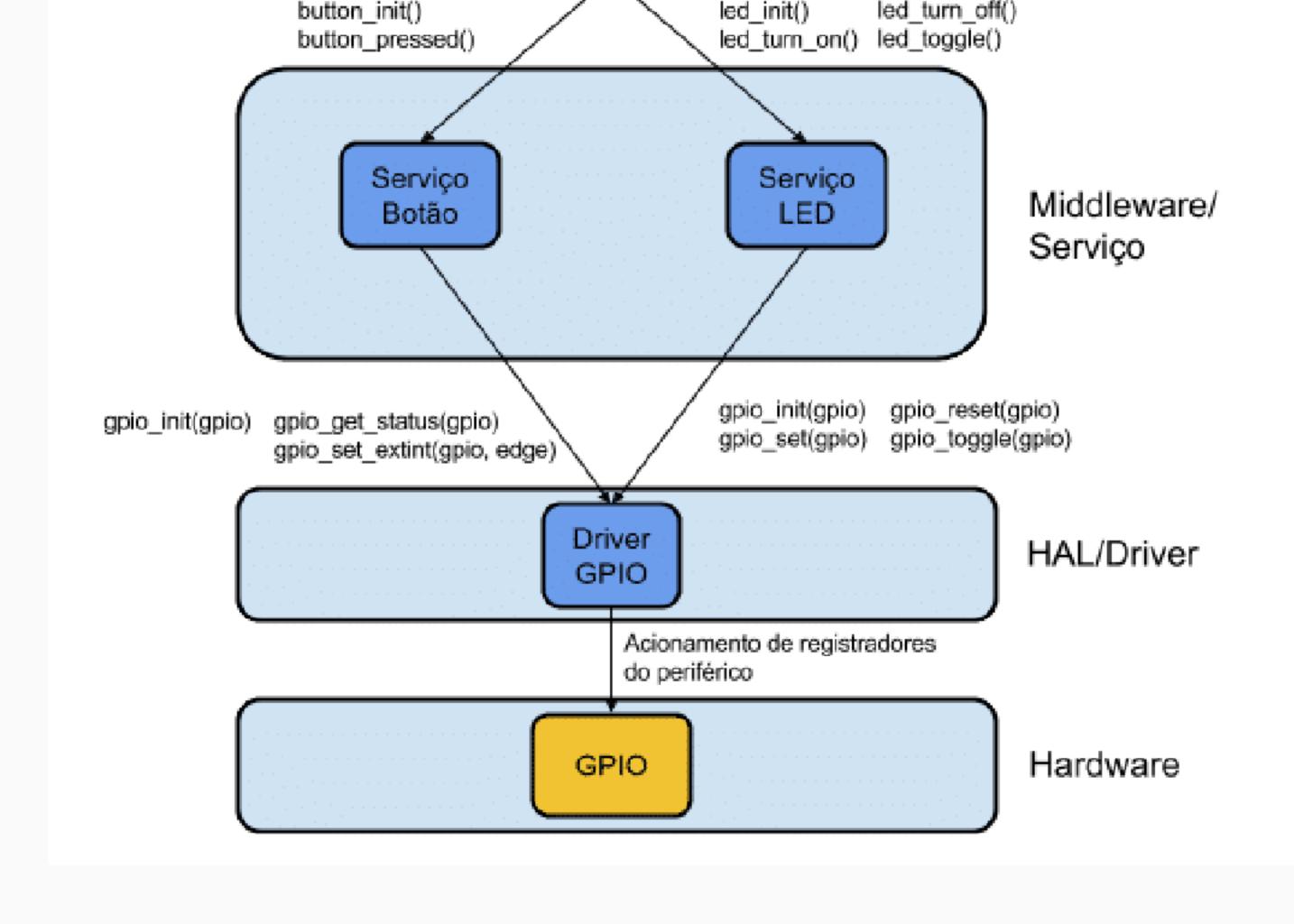
#### SEM RTOS

#### Diagrama de Camadas+Software



# com







**ARM** 

X86

X64

PowerPC

8051