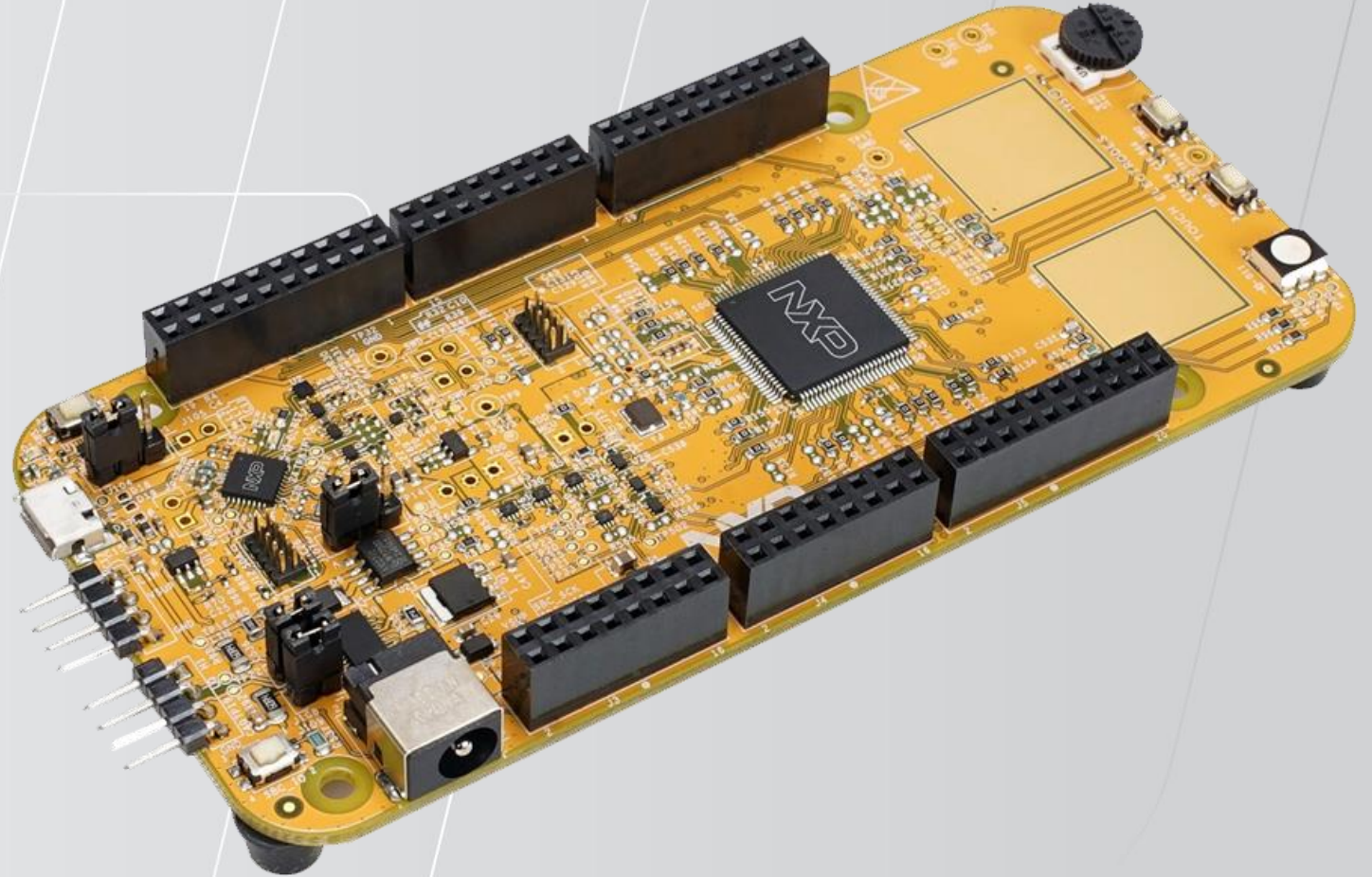


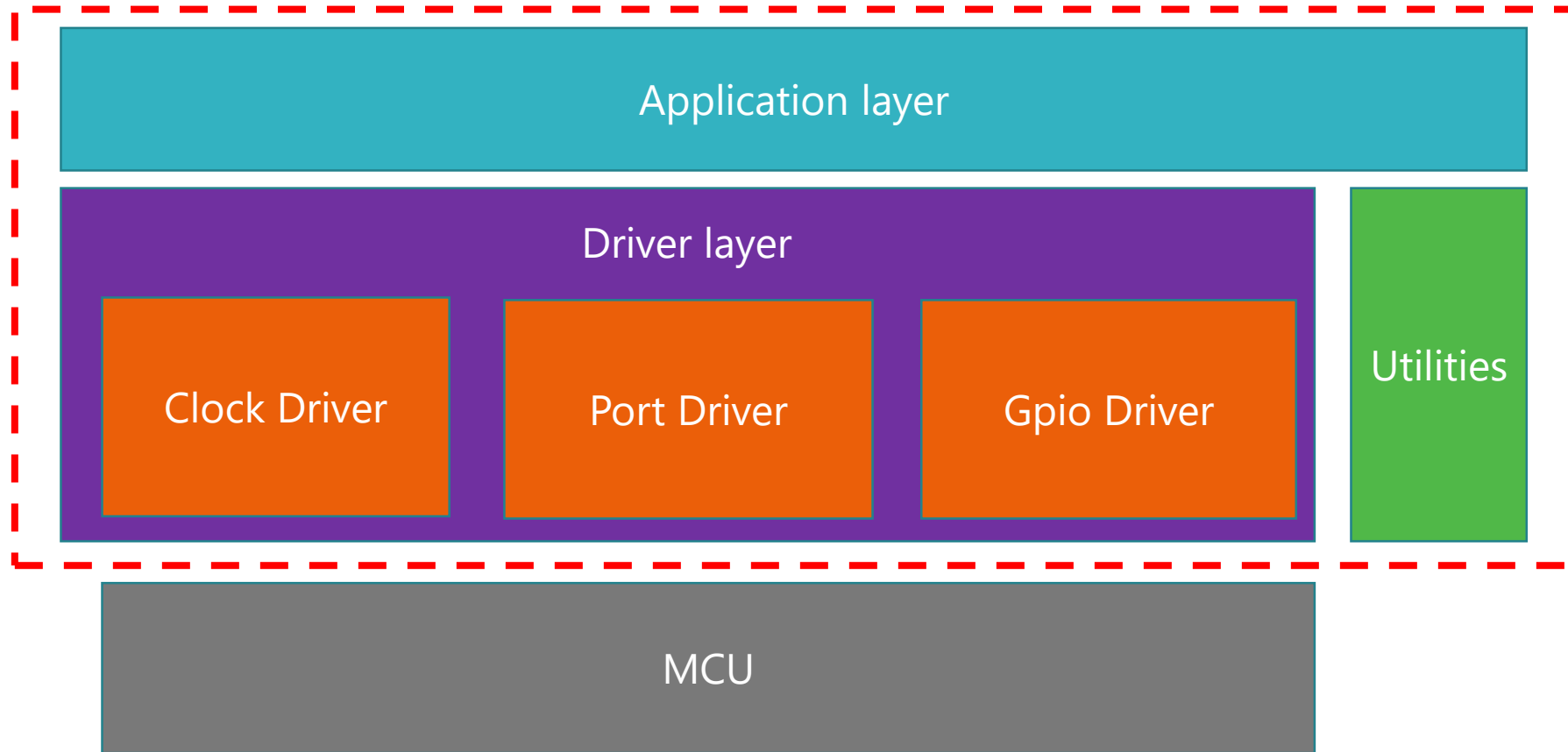
Gpio Driver



29 Aug 2023

- 1. Software Block Diagram**
- 2. Driver**
 - 2.1. Gpio Driver**
 - 2.2. Clock Driver**
 - 2.3. Port Driver**

1. Software Block Diagram



2. Driver

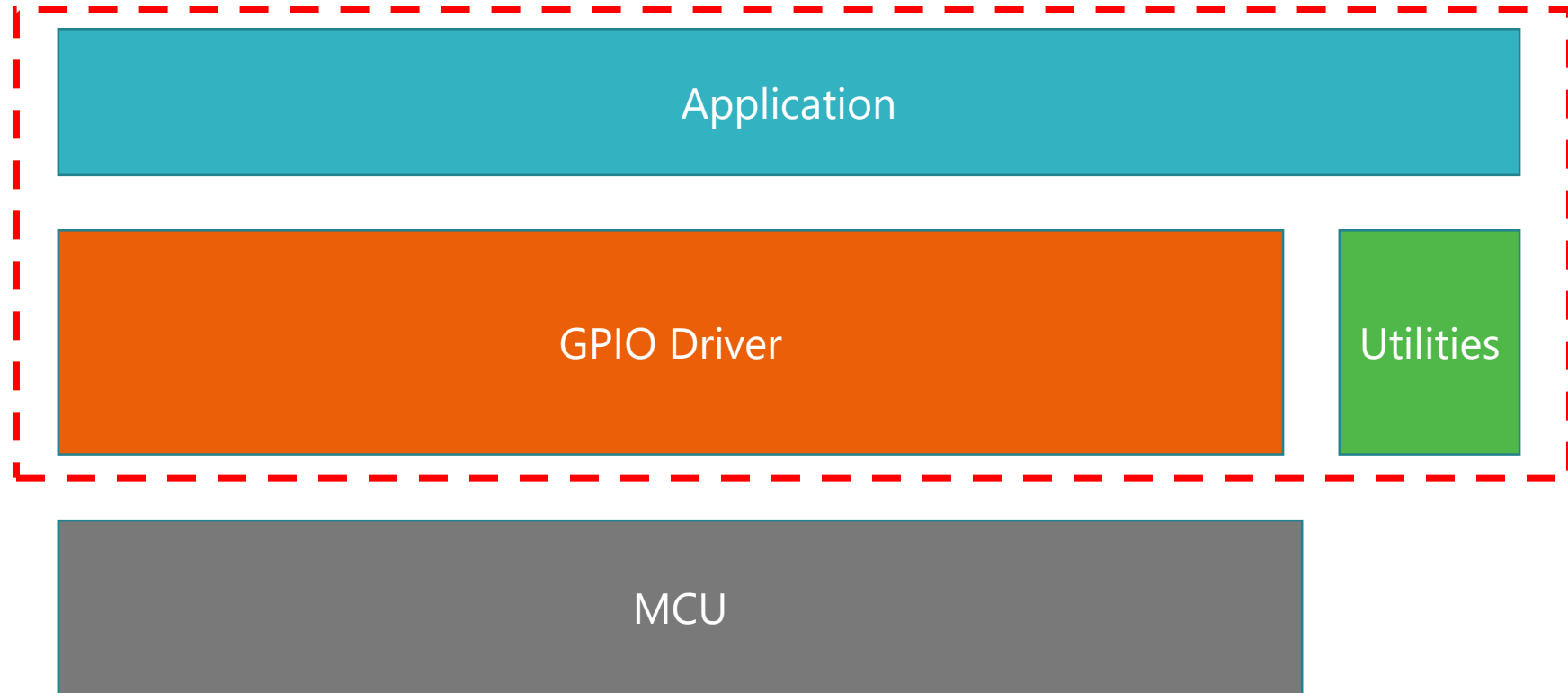
Driver

A driver is is a software component that is driven directly to the hardware.

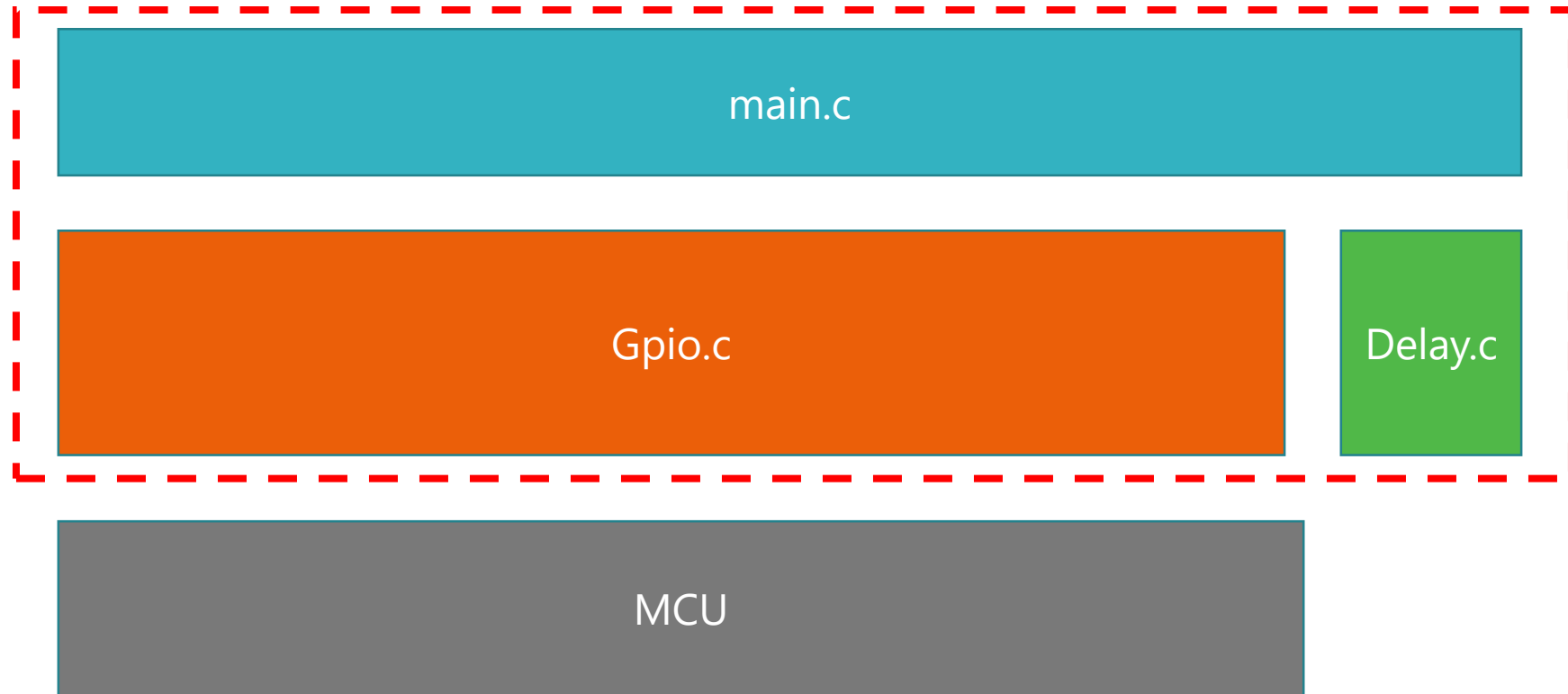


Hardware S32K144

2.1. Gpio Driver



2.1. Gpio Driver



2.1. Gpio Driver

Source File – API- Application programming interface

Gpio API:

```
void Gpio_Init(const Gpio_ConfigType* ConfigPtr);

void GPIO_WriteToOutputPin(GPIO_Type *pGPIOx,
                           unsigned char PinNumber, unsigned char value);

void GPIO_SetOutputPin(GPIO_Type *pGPIOx,
                       unsigned char PinNumber);

void GPIO_ResetOutputPin(GPIO_Type *pGPIOx,
                          unsigned char PinNumber);

void GPIO_ToggleOutputPin(GPIO_Type *pGPIOx,
                           unsigned char PinNumber);

unsigned char GPIO_ReadFromInputPin(GPIO_Type *pGPIOx,
                                     unsigned char PinNumber);
```

Gpio_Registers.h

Include

Gpio.h

Include

Gpio.c

A nighttime cityscape featuring a prominent skyscraper with a spire, illuminated against a dark sky with some clouds. The city lights are reflected in the water in the foreground. A large, semi-transparent, stylized letter 'R' is overlaid on the image, framing the central skyscraper. The text 'Thank you' is written in white, sans-serif font across the middle of the image.

Thank you