| **Bus** | **Range** | **Base Address** |
| --- | --- | --- |
| APB1 | 0x4000\_0000 – 0x4000\_7FFF | 0x40000000 |
| APB2 | 0x4001\_0000 – 0x4001\_FFFF | 0x40010000 |
| AHB1 | 0x4002\_0000 – 0x4003\_FFFF | 0x40020000 |
| AHB2 | 0x5000\_0000 – 0x5006\_0BFF | 0x50000000 |

**ADDRESS OF BUSES**

**Peripheral Base Addresses by Bus**

**AHB1 Peripherals (Base: 0x40020000)**

| **Peripheral** | **Base Address** |
| --- | --- |
| GPIOA | 0x40020000 |
| GPIOB | 0x40020400 |
| GPIOC | 0x40020800 |
| GPIOD | 0x40020C00 |
| GPIOE | 0x40021000 |
| GPIOH | 0x40021C00 |
| CRC | 0x40023000 |
| RCC | 0x40023800 |
| FLASH | 0x40023C00 |
| BKPSRAM | 0x40024000 |
| DMA1 | 0x40026000 |
| DMA2 | 0x40026400 |

**APB1 Peripherals (Base: 0x40000000)**

| **Peripheral** | **Base Address** |
| --- | --- |
| TIM2 | 0x40000000 |
| TIM3 | 0x40000400 |
| TIM4 | 0x40000800 |
| TIM5 | 0x40000C00 |
| RTC & BKP | 0x40002800 |
| WWDG | 0x40002C00 |
| IWDG | 0x40003000 |
| SPI2 | 0x40003800 |
| SPI3 | 0x40003C00 |
| USART2 | 0x40004400 |
| I2C1 | 0x40005400 |
| I2C2 | 0x40005800 |
| I2C3 | 0x40005C00 |
| PWR | 0x40007000 |

**APB2 Peripherals (Base: 0x40010000)**

| **Peripheral** | **Base Address** |
| --- | --- |
| TIM1 | 0x40010000 |
| USART1 | 0x40011000 |
| USART6 | 0x40011400 |
| ADC1 | 0x40012000 |
| SDIO | 0x40012C00 |
| SPI1 | 0x40013000 |
| SPI4 | 0x40013400 |
| SYSCFG | 0x40013800 |
| EXTI | 0x40013C00 |
| TIM9 | 0x40014000 |
| TIM10 | 0x40014400 |
| TIM11 | 0x40014800 |

Github\_Changes