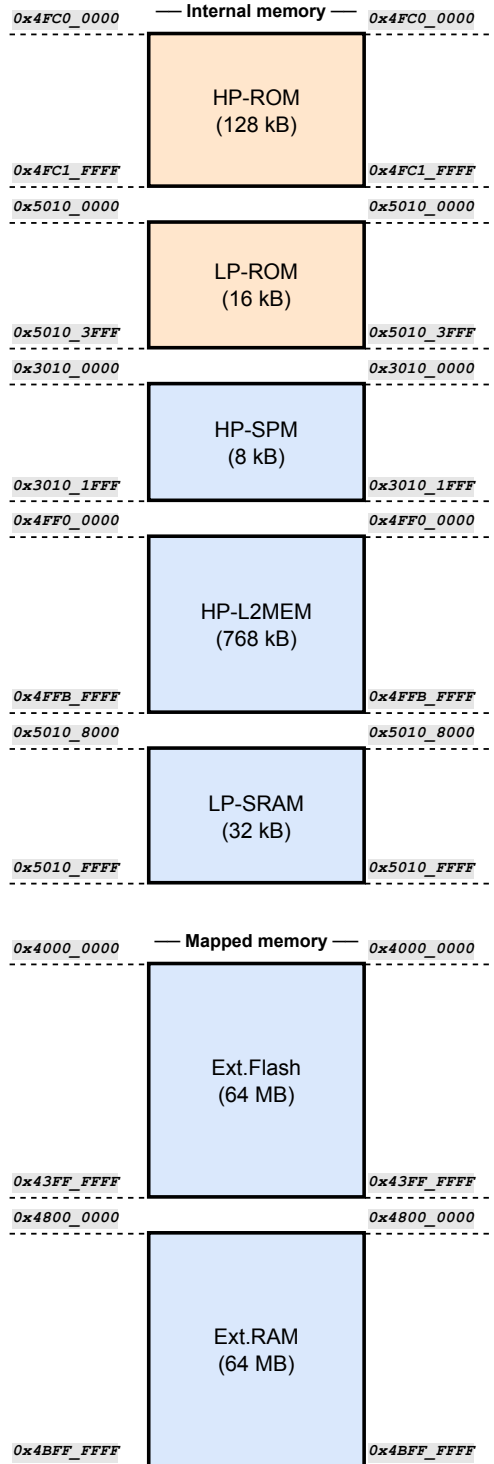
 **ESP32-P4
Memory Map**

I-BUS

D-BUS






ESP32-P4

Peripherals

```
0x3FF00000 HRCPUTCP_BASE
0x3FF04000 TRACE0_BASE
0x3FF04000 TRACE_BASE
0x3FF05000 TRACE1_BASE
0x3FF06000 ASSIST_DEBUG_BASE
0x3FF06000 CPU_BUS_MONITOR_BASE
0x3FF06000 CPU_BUS_MON_BASE
0x3FF0E000 LZMEM_MON_BASE
0x3FF0E000 MEM_MONITOR_BASE
0x3FF0F000 TCM_MON_BASE
0x3FF10000 CACHE_BASE
0x50000000 HPPERIPH0_BASE
0x50000000 USB2_BASE
0x50040000 USB11_BASE
0x50050000 USB_WRAP_BASE
0x50081000 GDMA_BASE
0x50082000 PAUI_BASE
0x50082000 REGDMA_BASE
0x50083000 SDHOST_BASE
0x50083000 SDMMC_BASE
0x50084000 H264_CORE_BASE
0x50085000 AHB_DMA_BASE
0x50086000 JPEG_BASE
0x50087000 PPA_BASE
0x50088000 DMA2D_BASE
0x50089000 KEYMNG_BASE
0x5008A000 AXI_DMA_BASE
0x5008C000 FLASH_SPI0_BASE
0x5008D000 FLASH_SPI1_BASE
0x5008E000 DSP1_MEM_BASE
0x5008E000 PSRAM_MSPIO_BASE
0x5008F000 PSRAM_MSPI1_BASE
0x50090000 AES_BASE
0x50090000 CRYPTO_BASE
0x50091000 SHA_BASE
0x50092000 RSA_BASE
0x50093000 ECC_MULT_BASE
0x50094000 DIGITAL_SIGNATURE_BASE
0x50094000 DS_BASE
0x50095000 HMAC_BASE
0x50096000 ECDSA_BASE
0x50096000 ECMAC_BASE
0x5009C000 USBPHY_BASE
0x5009D000 DDRPHY_BASE
0x5009E000 PVT_BASE
0x5009E000 PVT_MONITOR_BASE
0x5009F000 CSI_HOST_BASE
0x5009F000 CSI_BRG_BASE
0x500A0000 DSI_HOST_BASE
0x500A0000 DSI_BRG_BASE
0x500A1000 ISP_BASE
0x500A2000 RMT_BASE
0x500A3000 BITSCRAMBLER_BASE
0x500A4000 AXI_ICM_BASE
0x500A4000 AXI_ICM_QOS_BASE
0x500A5000 HP_PERI_PMS_BASE
0x500A5000 LP2HP_PERI_PMS_BASE
0x500A6000 DMA_PMS_BASE
0x500A7000 H264_DMA_2D_BASE
0x500C0000 HPPERIPH1_BASE
0x500C0000 MCPWM0_BASE
0x500C0000 MCPWM_BASE
0x500C1000 MCPWM1_BASE
0x500C2000 TIMERGROUP0_BASE
0x500C2000 TIMG0_BASE
0x500C3000 TIMERGROUP1_BASE
0x500C3000 TIMG1_BASE
0x500C4000 I2C0_BASE
0x500C5000 I2C1_BASE
0x500C6000 I2S0_BASE
0x500C6000 I2S_BASE
0x500C7000 I2S1_BASE
0x500C8000 I2S2_BASE
0x500C9000 PCNT_BASE
0x500CA000 UART0_BASE
0x500CA000 UART_BASE
0x500CB000 UART1_BASE
0x500CC000 UART2_BASE
0x500CD000 UART3_BASE
0x500CE000 UART4_BASE
0x500CF000 PART0_BASE
0x500CF000 PART10_BASE
0x500D0000 SPI2_BASE
0x500D1000 SPI3_BASE
0x500D2000 USB2JTAG_BASE
0x500D2000 USB_SERIAL_JTAG_BASE
0x500D3000 LEDC_BASE
0x500D5000 ETM_BASE
0x500D5000 SOC_ETM_BASE
0x500D6000 INTERRUPT_CORE0_BASE
0x500D6000 INTMTX_BASE
0x500D6000 INTR_BASE
0x500D6000 INTERRUPT_CORE1_BASE
0x500D7000 TWAI0_BASE
0x500D8000 TWAI1_BASE
0x500D9000 TWAI2_BASE
0x500DA000 I3C_MST_BASE
0x500DA000 I3C_MST_MEM_BASE
0x500DB000 I3C_SLV_BASE
0x500DC000 LCDCAM_BASE
0x500DE000 ADC_BASE
0x500DF000 UHCIO_BASE
0x500DF000 UHCI_BASE
0x500E0000 GPIO_BASE
0x500E0F00 GPIO_EXT_BASE
0x500E1000 IO_MUX_BASE
0x500E1200 IOMUX_MSPI_PTN_BASE
0x500E2000 SYSTEMER_BASE
0x500E3000 MEM_MON_BASE
0x500E4000 AUDIO_ADC_BASE
0x500E5000 HP_SYS_BASE
0x500E6000 HP_CLKRST_BASE
0x500E6000 HP_SYS_CLKRST_BASE
0x50104000 MIPI_CSI_BRG_MEM_BASE
0x50105000 MIPI_DSI_BRG_MEM_BASE
0x50110000 LPKON_BASE
0x50110000 LP_SYS_BASE
0x50111000 LP_CLKRST_BASE
0x50112000 LP_TIMER_BASE
0x50113000 LP_ANALOG_PERI_BASE
0x50114000 HUK_BASE
0x50114000 LP_HUK_BASE
0x50115000 PMU_BASE
0x50116000 LP_WDT_BASE
0x50118000 LP_MB_BASE
0x50119000 RTC_BASE
0x50120000 LPPERIPH_BASE
0x50120000 LPPERI_BASE
0x50120000 LP_PERI_BASE
0x50120000 LP_PERI_CLKRST_BASE
0x50121000 LP_UART_BASE
0x50122000 LP_I2C_BASE
0x50123000 LP_SPI_BASE
0x50124000 LP_I2C_ANA_MST_BASE
0x50125000 LP_I2S_BASE
0x50125000 LP_I2S_RAM_BASE
0x50126000 LP_TRNG_BASE
0x50127000 LP_ADC_BASE
0x50128000 LP_TOUCH_BASE
0x5012A000 LP_GPIO_BASE
0x5012B000 LP_IOMUX_BASE
0x5012C000 LP_INTR_BASE
0x5012D000 EFUSE_BASE
0x5012E000 LP_PERI_PMS_BASE
0x5012E000 HP2LP_PERI_PMS_BASE
0x5012F000 LP_TSENSOR_BASE
```

	Blk#	Bits	Purpose
 ESP32-P4	0	152	SYSTEM
	1	192	MAC, MAC_EXT, MAC_RSVD, SYS_DATA0
	2	256	SYS_DATA1
	3	256	USR_DATA*
	4	256	KEY0_DATA*
	5	256	KEY1_DATA*
	6	256	KEY2_DATA*
	7	256	KEY3_DATA*
	8	256	KEY4_DATA*
	9	256	KEY5_DATA*
	10	256	SYS_DATA2
e-Fuses			
<i>(*) RD/WR can be disabled</i>			