

SPI API 说明:

Version	Description
v1.0	更新 fspips.c, fspips_sw.c, fhandps_hw.c 部分 API。

● fspips.c

1. *FSpiPs_Config_T* FSpiPs_LookupConfig(u16 deviceId);*

描述	* This function finds FSpiPs_Config_T instance according to device id
参数	* @param u16 deviceId Device ID for controller
返回值	* @return FNfcPs_Config_T * FSpiPs_Config_T instance

2. *int FSpiPs_CfgInitialize(FSpiPs_T* spi, FSpiPs_Config_T* ConfigPtr);*

描述	* This function initializes a specific FSpiPs_T device/instance. This function must be called prior to using the device to read or write any data
参数	* @param FSpiPs_T* spi FSpiPs_T device/instance * @param FSpiPs_Config_T* configPtr FSpiPs_Config_T instance
返回值	* @return int * SUCCESS/FAILURE

3. *void FSpiPs_Reset(FSpiPs_T* spi);*

描述	* This function reset controller, all registers are reset to default value
参数	* @param FSpiPs_T* spi FSpiPs_T device/instance
返回值	* @return int * SUCCESS/FAILURE

4. *int FSpIPs_SelfTest(FSpIPs_T* spi);*

描述	* This function execute self test
参数	* @param FSpIPs_T* spi FSpIPs_T device/instance
返回值	* @return int * SUCCESS/FAILURE

5. *void FSpIPs_SetStatusHandler(FSpIPs_T* spi, void* callBackRef, FSpIPs_StatusHandler funcPtr);*

描述	* This function registers user handler function to handle interrupt
参数	* @param FSpIPs_T* spi FSpIPs_T device/instance * @param void* callBackRef Callback parameter used in handler function * @param FSpIPs_StatusHandler funcPtr Callback function used to handle user interrupt operation
返回值	* @return int * SUCCESS/FAILURE

6. *void FSpIPs_InterruptHandler(void* instancePtr);*

描述	* This function provides default interrupt handler
参数	* @param void* instancePtr Interrupt callback parameter
返回值	* @return int * SUCCESS/FAILURE

● fspips_sw.c

7. *int FSpIPs_Initialize(FSpIPs_T* spi, u16 deviceId);*

描述	* This function initializes a specific FSpIPs_T device/instance.
参数	* @param FSpIPs_T* spi FSpIPs_T device/instance
返回值	* @return int

	SUCCESS/FAILURE
--	-----------------

8. *int FSpiPs_Initialize_Master(FSpiPs_T* spi);*

描述	* This function initializes SPI device as master
参数	* @param FSpiPs_T* spi FSpiPs_T device/instance
返回值	* @return int SUCCESS/FAILURE

9. *int FSpiPs_Initialize_Slave(FSpiPs_T* spi);*

描述	* This function initializes SPI device as slave
参数	* @param FSpiPs_T* spi FSpiPs_T device/instance
返回值	* @return int * SUCCESS/FAILURE

10. *int FSpiPs_Transfer(FSpiPs_T* spi, u8* sendBuffer, u8* recvBuffer, u32 byteCount);*

描述	* This function transfer data with opposite end
参数	* @param FSpiPs_T* spi FSpiPs_T device/instance * @param u8* sendBuffer Point to send data * @param u8* recvBuffer Point to receive data * @param u32 byteCount Number of bytes to transfer
返回值	* @return int * SUCCESS/FAILURE

● fspips_hw.c

11. *void FSpiPs_Mst(FSpiPs_T *spi);*

描述	* This function sets device as master
参数	* @param FSpiPs_T* spi FSpiPs_T device/instance
返回值	* @return void

12. *void FSpiPs_Slv(FSpiPs_T *spi);*

描述	* This function sets device as slave
参数	* @param FSpiPs_T* spi FSpiPs_T device/instance
返回值	* @return void

13. *void FSpiPs_Enable(FSpiPs_T* spi);*

描述	* This function enables device
参数	* @param FSpiPs_T* spi FSpiPs_T device/instance
返回值	* @return void

14. *void FSpiPs_Disable(FSpiPs_T* spi);*

描述	* This function disables device
参数	* @param FSpiPs_T* spi FSpiPs_T device/instance
返回值	* @return void

15. *int FSpiPs_SetSckMode(FSpiPs_T* spi, u32 sckMode);*

描述	* This function sets clock mode
参数	* @param FSpiPs_T* spi FSpiPs_T device/instance * @param u32 sckMode Clock mode
返回值	* @return int SUCCESS/FAILURE

16. *int FSpiPs_SetTMod(FSpiPs_T* spi, u32 tmod);*

描述	* This function sets transfer mode
参数	* @param FSpiPs_T* spi FSpiPs_T device/instance * @param u32 tmod Transfer mode
返回值	* @return int SUCCESS/FAILURE

17. *int FSpiPs_SetSlvOut(FSpiPs_T* spi, BOOL enable);*

描述	* This function sets slave output
参数	* @param FSpiPs_T* spi FSpiPs_T device/instance * @param BOOL enable Enable this function or not
返回值	* @return int SUCCESS/FAILURE

18. *int FSpiPs_SetLoopBack(FSpiPs_T* spi, BOOL enable);*

描述	* This function sets loopback
参数	* @param FSpiPs_T* spi FSpiPs_T device/instance * @param BOOL enable Enable this function or not
返回值	* @return int SUCCESS/FAILURE

19. *int FSpiPs_SetDFS32(FSpiPs_T* spi, u32 dfs32);*

描述	* This function sets data frame size
参数	* @param FSpiPs_T* spi FSpiPs_T device/instance * @param u32 dfs32 Date frame size
返回值	* @return int SUCCESS/FAILURE

20. *int FSpiPs_SetDFNum(FSpiPs_T* spi, u32 dfNum);*

描述	* This function sets data frame number
参数	* @param FSpiPs_T* spi FSpiPs_T device/instance * @param u32 dfNum Data frame number
返回值	* @return int SUCCESS/FAILURE

21. *int FSpiPs_SetSlave(FSpiPs_T* spi, u32 slaveNo);*

描述	* This function sets slave select
参数	* @param FSpiPs_T* spi FSpiPs_T device/instance * @param u32 slaveNo Slave select
返回值	* @return int SUCCESS/FAILURE

22. *int FSpiPs_SetSckDv(FSpiPs_T* spi, u32 sckdv);*

描述	* This function sets clock divider
参数	* @param FSpiPs_T* spi FSpiPs_T device/instance * @param u32 sckdv Clock divider
返回值	* @return int SUCCESS/FAILURE

23. *int FSpiPs_SetTxEmptyLvl(FSpiPs_T* spi, u8 tlvL);*

描述	* This function sets tx empty threshold
参数	* @param FSpiPs_T* spi FSpiPs_T device/instance * @param u8 tlvL Threshold
返回值	* @return int SUCCESS/FAILURE

24. *u32 FSpIps_GetTxLevel(FSpIps_T* spi);*

描述	* This function gets tx fill level
参数	* @param FSpIps_T* spi FSpIps_T device/instance
返回值	* @return int SUCCESS/FAILURE

25. *int FSpIps_SetRxFullLvl(FSpIps_T* spi, u8 tlv);*

描述	* This function sets rx full level
参数	* @param FSpIps_T* spi FSpIps_T device/instance * @param u32 tlv Rx full level
返回值	* @return int SUCCESS/FAILURE

26. *u32 FSpIps_GetRxLevel(FSpIps_T* spi);*

描述	* This function gets rx full level
参数	* @param FSpIps_T* spi FSpIps_T device/instance
返回值	* @return u32 Rx full level

27. *void FSpIps_EnableIntr(FSpIps_T* spi, u32 mask);*

描述	* This function enables certain interrupt according to mask
参数	* @param FSpIps_T* spi FSpIps_T device/instance * @param u32 mask Interrupt mask
返回值	* @return void

28. *void FSpIps_DisableIntr(FSpIps_T* spi, u32 mask);*

描述	* This function disables certain interrupt according to mask
参数	* @param FSpIps_T* spi FSpIps_T device/instance

	* @param u32 mask Interrupt mask
返回值	* @return void

29. void *FSpiPs_ClearIntrStatus*(*FSpiPs_T* spi*);

描述	* This function clears interrupt status
参数	* @param <i>FSpiPs_T* spi</i> <i>FSpiPs_T</i> device/instance
返回值	* @return void

30. void *FSpiPs_SetDMATLvl*(*FSpiPs_T* spi, u32 tlvl*);

描述	* This function sets dma tx threshold level
参数	* @param <i>FSpiPs_T* spi</i> <i>FSpiPs_T</i> device/instance * @param u32 tlvl DMA tx empty level
返回值	* @return void

31. void *FSpiPs_SetDMARLvl*(*FSpiPs_T* spi, u32 tlvl*);

描述	* This function sets dma rx threshold level
参数	* @param <i>FSpiPs_T* spi</i> <i>FSpiPs_T</i> device/instance * @param u32 tlvl DMA rx full level
返回值	* @return void

32. void *FSpiPs_EnableDMATx*(*FSpiPs_T* spi*);

描述	* This function enables tx dma
参数	* @param <i>FSpiPs_T* spi</i> <i>FSpiPs_T</i> device/instance
返回值	* @return void

33. void *FSpiPs_EnableDMARx*(*FSpiPs_T* spi*);

描述	* This function enables rx dma
----	--------------------------------

参数	* @param FSpiPs _T* spi FSpiPs _T device/instance
返回值	* @return void

34. void FSpiPs_DisableDMA(FSpiPs_T* spi);

描述	* This function disables dma
参数	* @param FSpiPs _T* spi FSpiPs _T device/instance
返回值	* @return void

35. u32 FSpiPs_GetStatus(FSpiPs_T* spi);

描述	* This function gets status
参数	* @param FSpiPs _T* spi FSpiPs _T device/instance
返回值	* @return u32 Status

36. u32 FSpiPs_Recv(FSpiPs_T* spi);

描述	* This function receives data from rx if rx is not empty
参数	* @param FSpiPs _T* spi FSpiPs _T device/instance
返回值	* @return u32 Received data

37. void FSpiPs_Send(FSpiPs_T* spi, u32 data);

描述	* This function writes data to tx if tx is not full
参数	* @param FSpiPs _T* spi FSpiPs _T device/instance * @param u32 data Data that writes to tx
返回值	* @return void