NFC API 说明：

Version	Description
v1.0	增加 fnandps.c, fnandps_sw.c, fnandps_bbm.c, fnandps_model.c 部分 API。

● fnandps.c

1. FNfcPs_Config_T FNfcPs_LookupConfig(u16 deviceId);*

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

2. int FNfcPs_CfgInitialize(FNfcPs_T nfc, FNfcPs_Config_T* configPtr);*

描述	* This function initializes a specific FNfcPs _T device/instance. This function must be called prior to using the flash device to read or write any data
参数	* @param FNfcPs_T* nfc FNfcPs _T device/instance * @param FNfcPs_Config_T* configPtr FNfcPs_Config _T instance
返回值	* @return int * SUCCESS/FAILURE

3. void FNfcPs_Reset(*FNfcPs*_T* nfc);

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

4. *void FNfcPs_SetStatusHandler(FNfcPs_T* nfc, void* callBackRef, Nfc_StatusHandler funcPtr);*

描述	* This function registers user handler function to handle interrupt
参数	* @param FNfcPs_T*nfc FNfcPs _T device/instance * @param void* callBackRef Callback parameter used in handler function * @param Nfc_StatusHandler funcPtr Callback function used to handle user interrupt operation
返回值	* @return int * SUCCESS/FAILURE

5. *void FNfcPs_InterruptHandler(void *instancePtr);*

描述	* This function is pre-programmed to handle interrupt
参数	* @param FNfcPs_T* nfc FNfcPs _T device/instance
返回值	* @return int * SUCCESS/FAILURE

6. *u32 FNfcPs_FindInstruction(FNfcPs_T* nfc, u32 command);*

描述	* This function finds command register value according to the given command
参数	* @param FNfcPs_T* nfc FNfcPs _T device/instance * @param u32 command Command register value
返回值	* @return int * SUCCESS/FAILURE

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7. int FNfcPs_Initialize(FNfcPs_T nfc, u16 deviceId);*

描述	* This function initializes a specific FNfcPs _T device/instance.
参数	* @param FNfcPs_T* nfc FNfcPs _T device/instance
返回值	* @return int SUCCESS/FAILURE

8. int FNfcPs_InitController(FNfcPs_T nfc, u32 ctrl);*

描述	* This function initializes NFC device. This function read flash information and configure registers.
参数	* @param FNfcPs_T* nfc FNfcPs _T device/instance * @param u32 ctrl Configuration options
返回值	* @return int SUCCESS/FAILURE

9. int FNfcPs_EraseBlock(FNfcPs_T nfc, u64 destAddr, u32 blockCount);*

描述	* This function erase blocks
参数	* @param FNfcPs_T* nfc FNfcPs _T device/instance * @param u64 destAddr Base address in flash to erase * @param u32 blockCount Number of blocks to erase
返回值	* @return int * SUCCESS/FAILURE

10. int FNfcPs_Write(FNfcPs_T nfc, u64 destAddr, u32 byteCount, u8* srcPtr, u8* userSparePtr);*

描述	* This function initializes a specific FNfcPs _T device/instance. This function must be called prior to using the flash device to read or write any data
参数	* @param FNfcPs_T*

	FNfcPs _T device/instance * @param u64 srcAddr Base address that write to flash * @param u32 byteCount Bytes that write to flash * @param u8* destPtr Point to user data buffer * @param u8* userSparePtr Point to user spare data buffer
返回值	* @return int * SUCCESS/FAILURE

11. int FNfcPs_WriteSpareData(FNfcPs_T nfc, u32 block, u32 page, u8* userSparePtr);*

描述	* This function writes spare data to flash
参数	* @param FNfcPs_T* FNfcPs _T device/instance * @param u32 block Page that write spare data to * @param u32 page Page that write spare data to * @param u8* userSparePtr Point to user spare data buffer
返回值	* @return int * SUCCESS/FAILURE

12. int FNfcPs_Read(FNfcPs_T nfc, u64 srcAddr, u32 byteCount, u8* destPtr, u8* userSparePtr);*

描述	* This function reads data from flash
参数	* @param FNfcPs_T* FNfcPs _T device/instance * @param u64 srcAddr Base address that read from flash * @param u32 byteCount Bytes that read from flash * @param u8* destPtr Point to user data buffer

	* @param u8* userSparePtr Point to user spare data buffer
返回值	* @return int * SUCCESS/FAILURE

13. int FNfcPs_ReadSpareData(FNfcPs_T nfc, u32 block, u32 page, u8* userSparePtr);*

描述	* This function reads spare data from flash
参数	* @param FNfcPs_T* FNfcPs _T device/instance * @param u32 block Page that read spare data from * @param u32 page Page that read spare data from * @param u8* userSparePtr Point to user spare data buffer
返回值	* @return int * SUCCESS/FAILURE

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14. int FNfcPs_TranslateFlashAddress(const FNfcPs_Model_T model, u64 address, unsigned int size, u16 block, u16* page, u16* offset);*

描述	* This function calculates block, page, offset from address
参数	* @param FNfcPs_Model_T model FNfcPs_Model_T instance which contain flash structure information * @param u64 address Base address to translate * @param unsigned int size Size of bytes * @param u16* block Block * @param u16* page Page in block * @param u16* offset

	Offset in page
返回值	* @return int *SUCCESS/FAILURE

15. u16 FNfcPs_GetDeviceSizeInBlocks(const FNfcPs_Model_T model);

描述	* This function returns device size by reading parameter page in flash
参数	* @param FNfcPs_Model_T model FNfcPs_Model_T instance which contain flash structure information
返回值	* @return u16 * Device size

16. u32 FNfcPs_GetDeviceSizeInPages(const NandflashModel model);

描述	* This function returns device size by reading parameter page in flash
参数	* @param FNfcPs_Model_T model FNfcPs_Model_T instance which contain flash structure information
返回值	* @return u32 * Device size

17. u64 FNfcPs_GetDeviceSizeInBytes(const FNfcPs_Model_T model);

描述	* This function returns device size by reading parameter page in flash
参数	* @param FNfcPs_Model_T model FNfcPs_Model_T instance which contain flash structure information
返回值	* @return u64 * Device size

18. u16 FNfcPs_GetBlockSizeInPages(const FNfcPs_Model_T model);

描述	* This function returns block size by reading parameter page in flash
参数	* @param FNfcPs_Model_T model FNfcPs_Model_T instance which contain flash structure information
返回值	* @return u16 * Block size

19. u16 FNfcPs_GetBlockSizeInKBytes(const FNfcPs_Model_T model);

描述	* This function return lun number by reading parameter page in flash
参数	* @param FNfcPs_Model_T model FNfcPs_Model_T instance which contain flash structure information
返回值	* @return u16 *Block size

20. u32 FNfcPs_GetBlockSizeInBytes(const FNfcPs_Model_T model);

描述	* This function returns block size by reading parameter page in flash
参数	* @param FNfcPs_Model_T model FNfcPs_Model_T instance which contain flash structure information
返回值	* @return u32 * Block size

21. u16 FNfcPs_GetPageSizeInBytes(const FNfcPs_Model_T model);

描述	* This function returns page size by reading parameter page in flash
参数	* @param FNfcPs_Model_T model FNfcPs_Model_T instance which contain flash structure information
返回值	* @return u16 * Page size

22. u16 FNfcPs_GetPageSpareSize(const FNfcPs_Model_T model);

描述	* This function returns page spare size by reading parameter page in flash
参数	* @param FNfcPs_Model_T model FNfcPs_Model_T instance which contain flash structure information
返回值	* @return u16 * Page spare size

23. u8 FNfcPs_GetRowAddrCycle(const FNfcPs_Model_T model);

描述	* This function returns row address cycles by reading parameter page in flash
参数	* @param FNfcPs_Model_T model

	FNfcPs_Model_T instance which contain flash structure information
返回值	* @return u8 * Row address cycles

24. u8 FNfcPs_GetColAddrCycle(const FNfcPs_Model_T model);

描述	* This function returns column address cycles by reading parameter page in flash
参数	* @param FNfcPs_Model_T model FNfcPs_Model_T instance which contain flash structure information
返回值	* @return u8 * Column address cycles

25. u8 FNfcPs_GetDeviceId(const FNfcPs_Model_T model);

描述	* This function returns device id by reading parameter page in flash
参数	* @param FNfcPs_Model_T model FNfcPs_Model_T instance which contain flash structure information
返回值	* @return u8 * Device ID

26. u8 FNfcPs_GetDataBusWidth(const FNfcPs_Model_T model);

描述	* This function returns bus width by reading parameter page in flash
参数	* @param FNfcPs_Model_T model FNfcPs_Model_T instance which contain flash structure information
返回值	* @return u8 *Bus width

27. u8 FNfcPs_GetNumLun(const FNfcPs_Model_T model);

描述	* This function returns lun number by reading parameter page in flash
参数	* @param FNfcPs_Model_T model FNfcPs_Model_T instance which contain flash structure information
返回值	* @return u8 * Lun number

28. u8 FNfcPs_HasSmallBlocks(const FNfcPs_Model_T model);

描述	* This function judges if flash block are small blocks
参数	* @param FNfcPs_Model_T model FNfcPs_Model_T instance which contain flash structure information
返回值	* @return u8 * TRUE/FALSE

- **fnandps_bbm.c**

29. void FNfcPs_InitBadBlockTableDesc(FNfcPs_T nfc);*

描述	* This function initializes bad block description instance. This function must be called prior to using the bad block management
参数	* @param FNfcPs_T* nfc FNfcPs _T device/instance
返回值	* @return int * SUCCESS/FAILURE

30. FNfcPs_ScanBadBlockTable(FNfcPs_T nfc);*

描述	* This function scans flash to read bad block table and remap table
参数	* @param FNfcPs_T* nfc FNfcPs _T device/instance
返回值	* @return int * SUCCESS/FAILURE

31. int FNfcPs_CheckBlock(FNfcPs_T nfc, u32 block);*

描述	* This function checks block if it is a bad block
参数	* @param FNfcPs_T* nfc FNfcPs _T device/instance * @param u32 block The block to check

返回值	* @return int * SUCCESS/FAILURE

32. int FNfcPs_MarkBlockBad(FNfcPs_T nfc, u32 block);*

描述	* This function writes error code to spare area in flash, update bad block table and remap table
参数	* @param FNfcPs_T* nfc FNfcPs _T device/instance * @param u32 block The block to mark
返回值	* @return int * SUCCESS/FAILURE