
5.0 NVM FUNCTIONS

This section contains a list of individual functions for NVM and an example of use of the functions.

5.1 Individual Functions

NVMProgram

Description: This function programs size characters from the source buffer to Flash memory starting at the destination address.

Include: plib.h

Prototype: unsigned int NVMProgram(void *address, const void *data, unsigned int size, void * pagebuff)

Arguments: *address Pointer to destination virtual address to start writing from.
*data Pointer to source data to write.
size Number of bytes to write.
*pagebuff Working page buffer in RAM

Return Value '0' if operation completed successfully

Remarks: None

Code Example:

```
NVMProgram((void*) 0xBD000000, (const void*)
0xA0000000, 1024, (void *) 0xA0002000);
```

NVMerasePage

Description: This function erases a single page of program flash.

Include: plib.h

Prototype: unsigned int NVMerasePage(void* address)

Arguments: *address Pointer to destination page virtual address to erase.

Return Value '0' if operation completed successfully

Remarks: None

Code Example:

```
NVMerasePage((void*) 0xBD000000);
```

NVMWriteRow

Description: This function programs a single row of program flash.

Include: plib.h

Prototype: unsigned int NVMWriteRow(void* address, void* data)

Arguments: *address Pointer to destination row virtual address program.
*data Pointer to source data to write.

Return Value '0' if operation completed successfully

Remarks: None

Code Example:

```
NVMWriteRow((void*) 0xBD000000, (void*)
0xA0000000);
```

NVMWriteWord

Description: This function programs a single word of program flash.

Include: plib.h

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NVMWriteWord (Continued)

Prototype: unsigned int NVMWriteWord(void* address, unsigned int data)

Arguments: *address Pointer to destination word virtual address program.
data Source data to write.

Return Value '0' if operation completed successfully

Remarks: None

Code Example: NVMWriteWord((void*) 0xBD000000, 0x12345678);

NVMClearError

Description: This function clears the error flag and resets the flash controller.

Include: plib.h

Prototype: unsigned int NVMClearError(void)

Arguments: None

Return Value '0' if operation completed successfully

Remarks: None

Code Example: NMVClearError();

NVMIsError

Description: This function checks the error flags and return there value.

Include: plib.h

Prototype: NVMIsError()

Arguments: None

Return Value '0' if error flag is not set

Remarks: None

Code Example: if(NVMIsError()) NVMClearError();
