1. FlexMatrix Command Line Instruction

1.1.   Overview

The FlexMtrix command line programmer CMLProgrammer can enable a production automation process. You may call it from command line from BAT file or from your application.

1.2.   Execute a Command

Command Line Format:

> FlexMatrix CMLProgrammer.exe   /cmd   [parameter]

Where cmd can be any command listed in Command List section.

Examples: Program FormatABTpl-SK5126.bin to chip
>"FlexMatrix Programmer" /P FormatABTpl-SK5126.bin

The result of each execution is stored in a text file "Result_Report_File.txt". At the same time, the execution result will be appended to the log file "Results_Log_File.txt".

In the result file, the return values are listed line by line. Each line follows the format of "ValueName: Value". The key value is "ReturnValue". When the execution succeeds, the ReturnValue is 0; otherwise it's a negative value.

1.3.   Command List

1.1.1   Command "P" or "p" – Program FlexMatrix Bin File to Chip

Format: FlexMatrix CMLProgrammer.exe   /P   [FlexMatrix Bin FileName]
This command programs the specified FlexMatrix bin file to the attached USB chip, and verifies the execution result.

1.1.2   Command "V" or "v" – Verify FlexMatrix Bin File with the Data in the Chip

Format: FlexMatrix CMLProgrammer.exe   /V   [FlexMatrix Bin FileName]
This command verifies the specified FlexMatrix bin file with the data in the attached USB chip.

1.1.3   Command "R" or "r" – Read from Chip to a Bin File

Format: FlexMatrix CMLProgrammer.exe   /R   [SaveTo FileName]
This command reads the data from the attached UBB chip to the specified file.

1.1.4   Command "L" or "l" – Get Checksum of FlexMatrix Bin File by Loading

Format: FlexMatrix CMLProgrammer.exe   /L   [FlexMatrix Bin FileName]
This command load the specified FlexMatrix bin file into memory and calculates the checksum.

2. Appendices

Appendix A – CML Programmer ReturnValue List

ReturnValue	Description
0	Successful

-1001	Device is not found
-1002	ProgramData block size is not matched
-1003	VerifyData block size is not matched
-1004	File doesn't exist
-1005	File name is missing
-1006	Save to file failed

Appendix B – CML Programmer Result File and Log File Example

The Result_Report_File.txt will be the content between two separation lines.

```
-------------------------------------------------------------------------------------
CMLProgrammerVersion: 1.32.1
DateTime: 8/21/2018 5:14:52 PM
Operation: Program and Verify.
FileName: FormatABTpl-SK5126.bin
Device is found.
PartNo: 5126
Version: 1.13
Revision: 1
Write Completed.
Read Completed.
Verification --- PASSED (1)
ReturnValue: 0 (Successful)
LoadedBufferChecksum: 0x1DFF0
LoadedBufferSize: 2560
VerifyBufferSize: 2560
-------------------------------------------------------------------------------------
CMLProgrammerVersion: 1.32.1
DateTime: 8/21/2018 5:15:14 PM
Operation: Verify.
FileName: SK5126_Test.bin
Read Completed.
Device is found.
ReturnValue: -1003 (VerifyData contents are not matched)
LoadedBufferChecksum = 0x1E02C vs TargetBufferChecksum = 0x1DFF0
-------------------------------------------------------------------------------------
CMLProgrammerVersion: 1.32.1
DateTime: 8/21/2018 5:15:30 PM
Operation: Verify.
FileName: FormatABTpl-SK5126.bin
Read Completed.
ReturnValue: 0 (Successful)
LoadedBufferChecksum: 0x1DFF0
LoadedBufferSize: 2560
VerifyBufferSize: 2560
-------------------------------------------------------------------------------------
CMLProgrammerVersion: 1.32.1
DateTime: 8/21/2018 5:18:39 PM
Operation: Verify
FileName: FormatABTpl-SK5126232.bin
There no such file name!
ReturnValue: -1004 (File doesn't exist)
-------------------------------------------------------------------------------------
CMLProgrammerVersion: 1.32.1
DateTime: 8/21/2018 5:19:22 PM
```

Operation: Verify
ReturnValue: -1005 (File name is missing)

CMLProgrammerVersion: 1.32.1
DateTime: 8/21/2018 5:19:48 PM
Operation: Verify
FileName: FormatABTpl-SK5126.bin
ReturnValue: -1001 (Device is not found)
LoadedBufferChecksum: 0x1DFF0