

GangPro-CC Flash Programmer
for the CC series devices - Chipcon product from TI
Command Line interpreter User's Guide

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This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference and*
- (2) this device must accept any interference received, including interference that may cause undesired operation.*

NOTE: *This equipment has been tested and found to comply with the limits for a Class B digital devices, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of more of the following measures:*

- * Reorient or relocate the receiving antenna*
- * Increase the separation between the equipment and receiver*
- * Connect the equipment into an outlet on a circuit different from that to which the receiver is connected*
- * Consult the dealer or an experienced radio/TV technician for help.*

Warning: *Changes or modifications not expressly approved by Elprotronic Inc. could void the user's authority to operate the equipment.*



This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

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1. *GangPro-CC Command Line interpreter*

The **GangPro-CC Multi-FPA API-DLL** can be used with the command line interpreter shell. This shell allows to use the standard Command Prompt windows to execute the API-DLL functions. See the **GangPro-CC Multi-FPA API-DLL User's Guide (PM025A02)** for detailed descriptions of the API-DLL functions.

When the standard software package is installed then all required files are located in the directory

C:\Program Files\Elprotronic\CCxx\USB GangPro-CC\CMD-line

and contains

GP-CC-commandline.exe	-> command line shell interpreter
GangProCC-FPAsel.dll	-> standard API-DLL files
GangProCC-FPA1.dll	-> ----,,,,-----
CCList.ini	-> initialization file

All API-DLL files should be located in the same directory where the **GP-CC-commandline.exe** is located. To start the command line interpreter, the **GP-CC-commandline.exe** should be executed.

Command Syntax:

instruction_name (parameter1, parameter2,)

parameter:

1. string (file name etc.) - "filename"
2. numbers

	integer decimal	eg. 24
or	integer hex	eg. 0x18

Note: Spaces are ignored

Instructions are not case sensitive

F_OpenInstancesAndFPAs("*"# "*")
and **f_openinstancesandfpas("*"# "*")**
are the same.

Example-1:

Run the **GP-CC-commandline.exe**

Type:

```
F_OpenInstancesAndFPAs( "*"# *") // open instances and find the first adapter (any SN)
```

Press ENTER - result ->1 (OK)

Type:

```
F_Initialization() //initialization with config taken from the config.ini  
//setup taken from the GangPro-CC - with defined CCxx type, code file etc.
```

Press ENTER - result ->1 (OK)

Type:

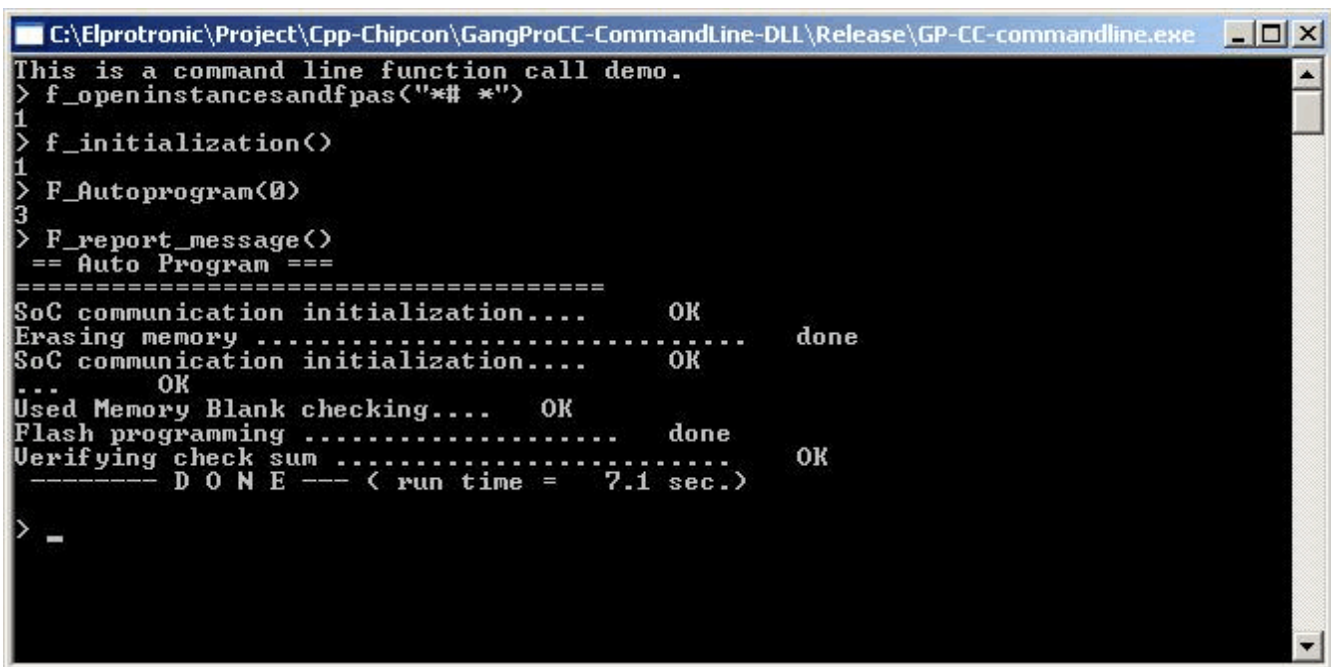
```
F_AutoProgram( 0 )
```

Press ENTER - result ->3 (3-> 0x03 -> programmed two targets -> OK)

Type:

```
F_Report_Message()
```

Press ENTER - result -> displayed the last report message (from the F_Autoprogram(0))



```
C:\Elprotronic\Project\Cpp-Chipcon\GangProCC-CommandLine-DLL\Release\GP-CC-commandline.exe
This is a command line function call demo.
> f_openinstancesandfpas("&# *")
1
> f_initialization()
1
> F_Autoprogram(0)
3
> F_report_message()
== Auto Program ==
=====
SoC communication initialization.... OK
Erasing memory ..... done
SoC communication initialization.... OK
... OK
Used Memory Blank checking.... OK
Flash programming ..... done
Verifying check sum ..... OK
----- D O N E --- < run time = 7.1 sec.>
> -
```

Figure A-1

See figure A-1 for result:

Type **quit()** and press ENTER to close the **GP-CC-commandline.exe** program.

Example-2:

Run the **GP-CC-commandline.exe** and type the following commands:

```
F_OpenInstancesAndFPAs( "*#*" )      // open instances and find the first adapter (any SN)
F_Initialization()
F_Report_Message()
F_ConfigFileLoad( "filename" )      //put vaild path and config file name
F_ReadCodeFile( 1, "FileName" )     //put vaild path and code file name (TL.txt format)
F_AutoProgram( 0 )
F_Report_Message()
.....
.....
F_Put_Byte_to_Gang_Buffer( 1, 0x8000, 0x11 )
F_Put_Byte_to_Gang_Buffer( 1, 0x8001, 0x21 )
.....
F_Put_Byte_to_Gang_Buffer( 1, 0x801F, 0xA6 )
F_Open_Target_Device()
F_Segment_Erase( 0x8000 )
F_Copy_Buffer_to_Flash( 0x8000, 0x20 )
F_Copy_Flash_to_Gang_Buffer( 0x8000, 0x20 )
F_Get_Byte_from_Gang_Buffer( 1, 0x8000 )
F_Get_Byte_from_Gang_Buffer( 2, 0x8000 )
F_Get_Byte_from_Gang_Buffer( 1, 0x8001 )
F_Get_Byte_from_Gang_Buffer( 2, 0x8001 )
.....
F_Get_Byte_from_Gang_Buffer( 1, 0x801F )
F_Get_Byte_from_Gang_Buffer( 2, 0x801F )
F_Close_Target_Device()
quit()
```

List of command line instructions

quit() ;close the command interpreter program
help() ;display list below
F_Trace_ON()
F_Trace_OFF()
F_OpenInstances(no)
F_CloseInstances()
F_OpenInstancesAndFPAs("FileName")
F_Set_FPA_index(fpa)
F_Get_FPA_index()
F_LastStatus(fpa)
F_DLLTypeVer()
F_Multi_DLLTypeVer()
F_Check_FPA_access(index)
F_Get_FPA_SN(fpa)
F_APIDLL_Directory("APIDLLpath")
F_Initialization()
F_DispSetup()
F_Close_All()
F_Power_Target(OnOff)
F_Reset_Target()
F_Report_Message()
F_ReadCodeFile(file_format, "FileName")
F_Get_CodeCS(dest)
F_ReadPasswFile(file_format, "FileName")
F_ConfigFileLoad("filename")
F_SetConfig(index, data)
F_GetConfig(index)
F_Put_Byte_to_Gang_Buffer(target_no, addr, data)
F_Get_Byte_from_Gang_Buffer(target_no, addr)
F_Clr_Code_Buffer()
F_Put_Byte_to_Code_Buffer(addr, data)
F_Put_IEEEAddr64_to_Gang_Buffer(target_no, "Hex data string")
F_Get_IEEEAddr64_from_Gang_Buffer(target_no)
F_Get_Lock_Bits(target_no)
F_AutoProgram(0)

F_Verify_Lock_Bits()
F_Memory_Erase(mode)
F_Memory_Blank_Check()
F_Memory_Write(mode)
F_Memory_Verify(mode)
F_Gang_Flash_Read()
F_Write_IEEE_Address()
F_Read_IEEE_Address()
F_Open_Target_Device()
F_Close_Target_Device()
F_Segment_Erase(address)
F_Sectors_Blank_Check(start_addr, stop_addr)
F_Copy_Buffer_to_Flash(start_addr, size)
F_Copy_Gang_Buffer_to_Flash(start_addr, size)
F_Flash_to_Gang_Buffer(start_addr, size)
F_Write_Lock_Bits()
F_Write_Byte_to_XRAM(addr, data)
F_Write_Byte_to_direct_RAM(addr, data)
F_Copy_Buffer_to_XRAM(start_addr, size)
F_Copy_Gang_Buffer_to_XRAM(start_addr, size)
F_Copy_XRAM_to_Gang_Buffer(start_addr, size)
F_Copy_Buffer_to_direct_RAM(start_addr, size)
F_Copy_Gang_Buffer_to_direct_RAM(start_addr, size)
F_Copy_direct_RAM_to_Gang_Buffer(start_addr, size)
F_Set_PC_and_RUN(xram_en, PC_addr)
F_Copy_MCU_Data_to_Buffer(type)
F_Get_MCU_Data_from_Buffer(target_no)
F_Get_Targets_Vcc()
F_Get_Targets_Result()
F_Get_Active_Targets_Mask()
F_Disable_FPA_index(fpa)
F_Enable_FPA_index(fpa)

See chapter 4 for detailed description of the instructions listed above.

Note:

Not all instructions listed in the chapter 4 are implemented in the command line interpreter. For example - all instructions uses pointers are not implemented, however this is not limiting the access to all features of the API-DLLs, because all instructions uses pointers are implemented also in the simpler way without pointers.