Softlog Systems (2006) Ltd.

ICP Family Programmers

Command Line Interface

1   Installation

- Run DLL installation file "IcpDll_setup_dll_XXX.exe".

    NOTE: DLL setup before version 4.4.1 does not contain command line utility "IcpWinComLine.exe"

2   Files

- IcpWinComLine.exe
- IcpDll.dll
- c_icpexp.h (not required for command line)
- fr_exp.h (not required for command line)

3   ICP Firmware Options

DLL/Command Line Support (D) should be activated in order to use ICP family command line interface

4   Command Line Switches

Note: all switches are **not** case sensitive

###	Switch	Description	Example	Minimum DLL version	Comments
1.	/c	Load configuration file	/cicp01.cfg	-	Mandatory excluding /n,/h,/?
2.	No switch	Hex file to be loaded	Hex1.hex	-	-
3.	/s	Serialization file to be loaded	/sser1.ser	-	-
4.	/i	Programming (standalone mode)	/i	4.4.1	**Always use for GANG**
5.	/n\<channel\>	Get result from selected GANG channel	/n1	4.4.2	Use after GANG programming is done
6.	/a\<space\>	Programming (PC-driven mode), \<space\> is a sum (**decimal**) of the following memory spaces: 1 - PM (program memory) 2 - ID 4 - DM (EEPROM) 8 - reserved 16 - CB (configuration bits)	/a23	-	23 means "all spaces". PC-driven mode is not available for GANG multi-channel programming
7.	/r\<space\>	Read (PC-driven mode only)	/r23	-	-
8.	/v\<space\>	Verify (PC-driven mode only)	/v23	-	-
9.	/l\<space\>	Blank check (PC-driven mode only)	/l23	-	-
10.	/f\<filename\>	File to be saved after read	/fRead1.hex	-	-

###	Switch	Description	Example	Minimum DLL version	Comments
11.	/g<value>	Save errorcode(s) in file "auto01.res"	/g0 - disable /g, /g1-enable /g2-extended	4.4.2 for /g2	**Always set to /g2 for GANG**
12.	/b<value>	PM beginning **(hex)** , valid if both /b and /e are specified	/b50	-	-
13.	/e<value>	PM end **(hex),** valid if both /b and /e are specified	/e1FFE	-	-
14.	/d<value>	Enable/disable debug message box after an operation	/d0 (disable) /d1 (enable) /d2 (on error)	4.4.1 for /d1	Default: disabled
15.	/w<value>	Enable/disable progress window	/w0 (disable) /w1 (enable)	-	Default: enabled
16.	/h /?	Display command line and DLL version string	/h	-	Use with /d0 to disable message box
17.	/t<filename>	Transfer environment file to programmer	/tenv1.pj2	4.4.1	-

5   Return Values (Errorcodes)

See document *"DLL Description.pdf"* for a list of error codes

6   Examples

6.1   Program Device in PC-driven Mode

- Configuration file: icp01.cfg
- Hex file: hex1.hex
- Space for programming: all memories (PM, EEPROM, ID, Configuration bits)

<path to IcpWinComLine.exe>   **/c**icp01.cfg   hex1.hex   **/a**23

6.2   Program Device in PC-driven Mode + Serialization + Message Box

- Configuration file: icp01.cfg
- Hex file: hex1.hex
- Serialization file: ser1.ser
- Space for programming: all memories (PM, EEPROM, ID, Configuration bits)

<path to IcpWinComLine.exe>   **/c**icp01.cfg   hex1.hex   **/s**ser1.ser   **/a**23   **/d**1

6.3   Erase Device (Using Program Operation)

- Configuration file: icp01.cfg
- Hex file: Blank1.hex (file contains blank values only)
- Space for programming: all memories (PM, EEPROM, ID, Configuration bits)
- PM start: 0
- PM end: 3E (valid for any PIC10/12/16/18)

<path to IcpWinComLine.exe>   **/c**icp01.cfg   Blank.hex   **/a**23   **/b**0   **/e**3E

6.4   Program 4 Devices using ICP2-GANG (Standalone Mode)

- Configuration file: icp01.cfg, contains GANG channels 1-4

Step 1 - gang programming: <path to IcpWinComLine.exe>   **/c**icp01.cfg   **/i**   **/g**2
Step 2 - get result for channel 1: <path to IcpWinComLine.exe>   **/n**1   **/g**
Step 3 - get result for channel 2: <path to IcpWinComLine.exe>   **/n**2   **/g**
Step 4 - get result for channel 3: <path to IcpWinComLine.exe>   **/n**3   **/g**
Step 5 - get result for channel 4: <path to IcpWinComLine.exe>   **/n**4   **/g**

Note: steps 2-5 are not required if return code for step 1 is zero (all channels passed)

6.5   Transfer Environment File to Programmer

- Configuration file: icp01.cfg
- Environment file: env1.pj2

<path to IcpWinComLine.exe>   **/c**icp01.cfg   **/t**env1.pj2

IMPORTANT: Environment is saved in **non**-volatile flash memory of ICP2 programmer; therefore avoid multiple transfers of the same environment to keep endurance of the flash memory

ICP Family Command Line Interface

7 Getting Started

7.1 Create a folder with your project

- Create a folder for your project, for example:

  C:\Projects\Project1

- Place your hex file into the folder above, for example

  C:\Projects\Project1\Hex1.hex

7.2 Install ICP GUI software

- Install ICP GUI software by running setup file "IcpWin_setup_X_XX.exe"

7.3 Create ICP GUI shortcut to your project

- Copy created shortcut "ICP for Windows" and rename the copy, for example to "My ICP Project"
- Open the shortcut properties and change "Start in:" directory to "C:\Projects\Project1"

7.4 Run ICP GUI software

- Press on "My ICP Project" to run ICP GUI software
- Configure ICP family programmer for operation with your device
- Create serialization file in the project directory (if required), for example "ser1.ser"
- Save configuration: select "File/Save Configuration" and exit the software
- In the project directory rename "icp01.cfg" to "MyProject.cfg"

7.5 Create command line shortcut (PC-driven programming)

- Create shortcut to "IcpWinComLine.exe"
- Open the shortcut properties and edit as follows:

  Target: "…..\IcpWinComLine.exe" /cMyProject.cfg Hex1.hex /sser1.ser /a23 /d1
  Start in: "C:\Projects\Project1"

- Press on the created shortcut to validate the operation

8 History

8.1 Version 1.1.4 (Jan-2008):

- Switch /g can be used with switch /n in order save individual results in file "ch_i.res"

8.2 Version 1.1.3 (July-2007):

- Added switches /? and /h to show command line and DLL versions in message box
- Added switch /t for environment transfer
- Expanded support for GANG operation:
  - expanded switch /g: g2 will save global and individual results in "auto01.res" file
  - added switch /n to get individual results
- Expanded switch /d: in case of /d2 message box will appear for bad result only

8.3 Version March-2007: initial version