

# MELEXIS PROGRAMMING TOOLBOX

## Introduction

Melexis develops its software on a general platform (Melexis Programming Toolbox) that makes it easy to add new modules in the future. The MPT will guide and support the user in order to detect the correct programmers, the correct revision of firmware, to support the user using the correct tools like Calibration and firmware uploads. It also manages all delivered DLL that can be used for the PTC-04 programmer.

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## MPT Platform

This document gives short description of the most important functions of the MPT.



Figure 1: Melexis Programmable Toolbox.

#### Menu

• File:

These functions allow the user to save his workspace and reopen it later. For instance: You are working with the MLX90251 UI and the PTC-04 UI. If you save this workspace, the software starts-up both User Interfaces when you reopen the workspace and initialize the PTC-04 Programmer.

- o Open Workspace
- Save Workspace
- Save Workspace As ...
- Close Workspace
- Exit

- View: open or close the windows
  - o Toolbar
  - o Status bar
  - o Workspace
  - o System log
  - Data log
- Tools:
  - Search devices: this functions searches for all connected devices.
  - Options: see chapter Data and System Log
- Help:
  - About: Revision number of the MPT.



#### Workspace

The workspace lists all User Interfaces and Product Specific Function Libraries that are installed on the PC. To search all connected the PTC-04 programmers; select the menu "Tools  $\rightarrow$  Search".

To open the User Interface of a MLX product, double click on the name of the product (1). Ones the User Interface is started and all the necessary checks, like Firmware ID, Daughter Board ID ..., are performed the name of the product is printed in bold.

When the User Interface is opened and you can click with the right mouse button on the name of the product. With the right mouse button a list of options becomes available (2):

- **Close**: to close the User Interface.
- Show: brings the User Interface to the front.
- **Reset**: reinitializes the PTC04 programmer.

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ş	😲 Informat O		11:14:44	PTC-04 user interfa	ce - unloading module	
System Log	👰 Informat 0		11:14:58		e: loaded successfully	
5	😲 Informat 0		11:15:09	MLX90275 UI modu	-	≡
ŭ	Informat 0		11:17:50	MLX90251 UI modu	_	
	Informat 0	17.02.06	11:24:22	MLX90251 UI modu	e: loaded successfully	<b>`</b>
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Figure 2: Workspace.



• **Check Revision**: With the revision check, the user gets an overview of all installed modules for a specific MLX product: The required modules for the MLX product, the required revision of those modules, the present installed modules for the MLX product, the present installed revision of the module and the result.

Press **Save List**: to save the revision dependences list in a CSV file.

Melexis Programmable Toolbox - Revision dependences					
Required Module	Required F	Rev. Present Module	Present Rev.	Result	
UI_090251AAMLX		UI_090251AAMLX	1.19	OK	
COMxxxxxAAMLX	1.47	COMXXXXXAAMLX	1.47	OK	
PSF090251AAMLX	1.23	PSF090251AAMLX	1.23	OK	
■ PSF0PTC04AAMLX	1.52	PSF0PTC04AAMLX	1.54	OK	
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For Ex.: the MLX90251:

The first column lists all modules needed for the 90251 User interface.

The Second column lists the required revisions of those modules.

The third column lists all the modules that are installed.

The forth column lists the installed revisions of those modules.

If in the last column the Result is OK, the installed revision of that module is up to date. If it is NOK, that module needs to be update.

Properties



Figure 4: Properties

Figure 3: Check Revision.



### Status Bar

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	Workspace Workspace Workspace WI modules MLX90275 MLX90280BA MLX90215 PTC-04 MLX90316BAD MLX90251 Devices Channels			User Interface PTC-04 Test programmer Calibrate Configuration Firmware commander Upload firmware
×	Туре	Date	Time	Description
ø	Informat		10:01:4	•
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	<		1111	>
	E System Log	🗐 Data Log	3	
Read				PTC-04 - COM4 - PTC04(38050028) - PTC04-DB-HALL01(35050020)

Figure 5: Status Bar.

Ones the User Interface is started and all the necessary checks, like Firmware ID, Daughter Board ID ..., are performed the Programmer type – COM-port number – the programmer Serial Number – Daughter Board type and Daughter Board Serial Number is printed in the status Bar.



#### Data & System Log

The MPT is equipped with two logging systems: a Data Log and a System Log.

The Data logger, logs for each performed read back, the device parameters (decoded EEPROM contends) and the software parameters like targets, solver settings, etc...

The system logger logs all functions performed by the MPT.

The Loggings are printed on the log window and in the log file.

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Figure 6: Data Log



Figure 7: System Log



To change the logging filename and options, select the menu "Tools  $\rightarrow$  Options":

- 1. In the options window you'll find on the left a logging list. Select the logger you want to modify.
- 2. Enable or Disable "Output to Data Log window" or "Output to System Log window".
- 3. Log to file: In this window you can enable and disable the logging (3a) and change the filename of the log (3c).

By selecting "Log to file used for system logging" or "Log to file used for data logging" (3b), system and data information are logged in one file.

If Cumulative log (3d) is checked, the logged data is added to the log file. If it's not checked, the log file is overwritten each time a new session is started.

1	2	
Coptions	System logging         System logging priority:         Output to System Log window         Log To File         O Do not log to file         O Log to file used for data logging         C Log to this file:         D'My Documents\test.log         Browse	
	OK Cancel Apply	

Figure 8: Options - Data and system logging



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