EasyPro 3.2 Evaluation Board User's Manual



ON Semiconductor®

http://onsemi.com

EVAL BOARD USER'S MANUAL

Programming and Evaluation Tool for Serial EEPROMs



What is EasyPRO?

EasyPRO is an easy-to-use, software-driven device programmer that is controlled and powered from the standard USB port of a PC. Designed as an extremely portable module (no bigger than a cell phone), the programmer provides a user-friendly tool for designers, service professionals and dealers.

How easy is it to use?

The new EasyPRO user interface provides a much easier way to find buttons and options required to run the test.

	3 · 🗙	;					EasyPRO - DL	T: CAT24C2	256		-	= x
	Home	Buffer	Pattern	Device F	unctions							0 -
Open device	Open hex	Open bin	Save DUT as HEX	Save Save hex as	<u>S</u> ave bin	Save bin as	 Property window Caption Bar Output window 	Windows				
Device file	e) [Patt	tern file			View	Window]			
i) Pleas	se insert th	e device	in the test so	ocket: Pin #1 r	narked b	Red LED						×
DUT	CAT24C2	56 ×	05 06 07	708090A	OBOC	ODOEC	F 000102030	405060		Properties	~~	άX

How can EasyPRO help me?

EasyPRO allows you to write and read the content of the memory device (IIC, SPI and uWIRE) with either predefined patterns or your custom patterns.



What devices can EasyPRO support?

EasyPRO supports ON Semiconductor serial EEPROM devices, as well as competitor-equivalent products. The programmer is designed to support 8-pin devices in PDIP package. Other packages are supported using the appropriate test socket adapter.



What features are available?

EasyPRO programs and reads the content of the memory device for ON Semiconductor serial EEPROMs. Choose and open the device file from the list available in "Devices" folder.

To write or verify the data to or from the memory, an internal data *Buffer* is available. The buffer size is equal to the memory size of the selected device. The buffer content is shown in hexadecimal format in the left panel and as ASCII characters in the right panel, under DUT / Buffer tab. The buffer content is user editable or can be loaded with a specific data file (predefined or custom pattern).

To program data into the memory or to verify memory content, the "Write", "Read" and "Verify" functions are available under *Device Functions* menu.

By clicking the "Write" button, the data previously loaded in the buffer will be written into the memory device under test. By clicking the "Read" button, the data read from the memory under test will be loaded into the data buffer.

The "Verify" function is used to verify that programming has been correctly performed and that the memory content is identical to the data buffer. The total number of errors will be displayed in the "Output" messages window and the failed locations are marked in red in the buffer window. If the data read from the memory is identical to the data buffer, the message "Done with no differences" will be displayed.

TABLE OF CONTENTS

Program Installation4Driver Installation4Firmware5Overview6Panels7Properties Panel7Output Panel7Caption Panel7Tabs7DUT Tab7File Tab7Ribbons8Home8Open Device8Open Hex9Save DUT as HEX.9Save Hex as.9Save Bin10Save Bin as.10Property Window Button11Output Window Button11Buffer11Erase All12Fill12Start Address12	Installation
Driver Installation 4 Firmware 5 Overview 6 Panels 7 Properties Panel 7 Output Panel 7 Caption Panel 7 Tabs 7 DUT Tab 7 File Tab 7 Ribbons 8 Open Device 8 Open Device 8 Open Hex 9 Save DUT as HEX 9 Save Hex as 9 Save Bin 10 Save Bin as 10 Property Window Button 11 Buffer 11 Erase All 12 Fill 12	Program Installation 4
Firmware 5 Overview 6 Panels 7 Properties Panel 7 Output Panel 7 Caption Panel 7 Tabs 7 DUT Tab 7 File Tab 7 Ribbons 8 Home 8 Open Device 8 Open Hex 9 Save DUT as HEX. 9 Save Hex as 9 Save Bin 10 Save Bin as 10 Property Window Button 11 Output Window Button 11 Buffer 11 Erase All 12 Fill 12	Driver Installation 4
Overview 6 Panels 7 Properties Panel 7 Output Panel 7 Caption Panel 7 Tabs 7 DUT Tab 7 File Tab 7 Ribbons 8 Home 8 Open Device 8 Open Bin 9 Save DUT as HEX. 9 Save Hex 9 Save Bin 10 Property Window Button 11 Output Window Button 11 Buffer 11 Erase All 12 Fill 12	Firmware 5
Panels 7 Properties Panel 7 Output Panel 7 Caption Panel 7 Tabs 7 DUT Tab 7 File Tab 7 Ribbons 8 Home 8 Open Device 8 Open Hex 9 Save DUT as HEX. 9 Save Hex as. 9 Save Bin 10 Property Window Button 11 Output Window Button 11 Buffer 11 Erase All 12 Fill 12	Overview
Properties Panel 7 Output Panel 7 Caption Panel 7 Tabs 7 Tabs 7 DUT Tab 7 File Tab 7 Ribbons 8 Home 8 Open Device 8 Open Hex 8 Open Bin 9 Save DUT as HEX 9 Save Hex as 9 Save Hex as 9 Save Bin as 10 Property Window Button 10 Caption Bar Button 11 Buffer 11 Erase All 12 Fill 12	Panels
Output Panel 7 Caption Panel 7 Tabs 7 DUT Tab 7 File Tab 7 Ribbons 8 Home 8 Open Device 8 Open Hex 8 Open Bin 9 Save DUT as HEX 9 Save Hex 9 Save Bin 10 Property Window Button 10 Caption Bar Button 11 Buffer 11 Erase All 12 Fill 12	Properties Panel 7
Caption Panel 7 Tabs 7 DUT Tab 7 File Tab 7 Ribbons 8 Home 8 Open Device 8 Open Hex 8 Open Bin 9 Save DUT as HEX. 9 Save Hex as. 9 Save Bin 10 Property Window Button 10 Caption Bar Button 11 Buffer 11 Erase All 12 Fill 12 Start Address 12	Output Panel
Tabs 7 DUT Tab 7 File Tab 7 Ribbons 8 Home 8 Open Device 8 Open Hex 8 Open Bin 9 Save DUT as HEX 9 Save Hex 9 Save Hex as 9 Save Bin 10 Property Window Button 10 Caption Bar Button 11 Buffer 11 Erase All 12 Fill 12 Start Address 12	Caption Panel 7
DUT Tab 7 File Tab 7 Ribbons 8 Home 8 Open Device 8 Open Hex 8 Open Bin 9 Save DUT as HEX 9 Save Hex 9 Save Hex as 9 Save Bin 10 Save Bin as 10 Property Window Button 11 Output Window Button 11 Buffer 11 Erase All 12 Fill 12 Start Address 12	Tabs
File Tab 7 Ribbons 8 Home 8 Open Device 8 Open Hex 8 Open Bin 9 Save DUT as HEX 9 Save Hex 9 Save Hex as 9 Save Bin 10 Save Bin as 10 Property Window Button 11 Output Window Button 11 Buffer 11 Erase All 12 Fill 12 Start Address 12	DUT Tab 7
Ribbons8Home8Open Device8Open Hex8Open Bin9Save DUT as HEX9Save Hex9Save Hex as9Save Bin10Save Bin as10Property Window Button10Caption Bar Button11Output Window Button11Buffer11Erase All12Fill12Start Address12	File Tab 7
Home8Open Device8Open Hex8Open Bin9Save DUT as HEX9Save Hex9Save Hex as9Save Bin10Save Bin as10Property Window Button10Caption Bar Button11Output Window Button11Buffer11Erase All12Fill12Start Address12	Ribbons
Open Device8Open Hex8Open Bin9Save DUT as HEX9Save Hex9Save Hex as9Save Bin10Save Bin as10Property Window Button10Caption Bar Button11Output Window Button11Buffer11Erase All12Fill12Start Address12	Home
Open Hex8Open Bin9Save DUT as HEX9Save Hex9Save Hex as9Save Bin10Save Bin as10Property Window Button10Caption Bar Button11Output Window Button11Buffer11Erase All12Fill12Start Address12	Open Device
Open Bin9Save DUT as HEX9Save Hex9Save Hex as9Save Bin10Save Bin as10Property Window Button10Caption Bar Button11Output Window Button11Buffer11Erase All12Fill12Start Address12	Open Hex
Save DUT as HEX9Save Hex9Save Hex as9Save Bin10Save Bin as10Property Window Button10Caption Bar Button11Output Window Button11Buffer11Erase All12Fill12Start Address12	Open Bin
Save Hex9Save Hex as9Save Bin10Save Bin as10Property Window Button10Caption Bar Button11Output Window Button11Buffer11Erase All12Fill12Start Address12	Save DUT as HEX 9
Save Hex as9Save Bin10Save Bin as10Property Window Button10Caption Bar Button11Output Window Button11Buffer11Erase All12Fill12Start Address12	Save Hex
Save Bin10Save Bin as10Property Window Button10Caption Bar Button11Output Window Button11Buffer11Erase All12Fill12Start Address12	Save Hex as 9
Save Bin as10Property Window Button10Caption Bar Button11Output Window Button11Buffer11Erase All12Fill12Start Address12	Save Bin 10
Property Window Button10Caption Bar Button11Output Window Button11Buffer11Erase All12Fill12Start Address12	Save Bin as 10
Caption Bar Button11Output Window Button11Buffer11Erase All12Fill12Start Address12	Property Window Button 10
Output Window Button 11 Buffer 11 Erase All 12 Fill 12 Start Address 12	Caption Bar Button 11
Buffer11Erase All12Fill12Start Address12	Output Window Button 11
Erase All 12 Fill 12 Start Address 12	Buffer 11
Fill 12 Start Address 12	Erase All 12
Start Address 12	Fill 12
	Start Address 12

Size
Value
Checksum
Copy from Pattern 13
Copy to Pattern
Save DUT as HEX 14
Pattern 14
Open Hex
Open Bin 14
Erase All 15
Copy from Buffer 15
Copy to Buffer 15
Checksum
Save Hex
Save Hex as 16
Save Bin 16
Save Bin as 16
Device Functions 17
Read 17
Write
Verify 17
Device Start
Block Size
Buffer Start 18
Supply VCC 18
Sequential Read 19
Page Mode 19
Write Protect 19
Opens Shorts 19

INSTALLATION

Program Installation

Do not connect the EasyPRO tester to the computer prior to installing the application software.

EasyPRO 3.2 software requires the following system configuration:

- Microsoft Windows XP or above
- 20 MB of available hard disk space to install and run EasyPRO software
- USB 1.1 or USB 2.0 port interface

In order to install the program, click on the **Install Software** button from the EasyPRO Quick-Start Kit CD-ROM or double click on the Setup file found in the installation kit.

It is possible that you will be asked if it is safe to run this program. Choose **Run** and the setup process begins. If you change your mind and you want to cancel the setup process, choose **Cancel** (this can also be done in any screen) and the installation will be terminated after your choice. If you want to continue, choose **Next**.

In the next screen you can edit some of the installation parameters, such as the location for the program. You can browse for a new location or type it in the corresponding field. By default the program will be installed and available only for the current user of the computer. It is possible to change this setting if desired. Also you can see the disk requirements to install this program. Choose **Next**.

The next screen asks you if you want to start the installation. If you want to change some parameters, hit **Back** and change them. If everything was setup ok, choose **Next** and the installation process begins.

If during this process you are prompted to accept the installation (because the driver is not digitally signed) choose **Continue Anyway**.

The installation is now complete and you may attach the tester to the computer. *The program is also running without the device attached to the computer.*

Driver Installation

The EasyPRO tester may be plugged directly into the USB port or connected by USB cable.

Once the EasyPRO tester is connected to the computer, the **Found New Hardware** wizard will appear on the computer.

Choose the **automatic** installation or **install from a list or a specific location**.

If you wish to use this option, you can find the driver in the location where your program is installed, in the Driver folder.





If you choose the automatic installation, hit **Next** and the wizard begins searching for available drivers. A screen may appear telling you that the driver is not digitally signed. Choose **Continue Anyway**.

The driver will be installed. In the last screen just hit **Finish**.

Har dwar	e Installation
<u>.</u>	The software you are installing for this hardware: ON® EasyPRO ver.3 has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
	Continue Anyway STOP Installation

The EasyPRO tester and the computer are now ready to be used.



FIRMWARE

In order to start the EasyPRO program, you can either **double click the desktop icon**, or go to the **Start menu > Programs > ON Semiconductor > EasyPRO 3.2 > EasyPRO.**

If this is the first time you use the EasyPRO, it is very possible that the firmware needs to be updated. Whenever a new version of the software kit comes out, the tester firmware is updated. When launched, the program automatically searches if new firmware is on the computer, and, if there is, prompts you to agree with the update.



Hit **YES** and the program automatically updates the firmware. In the output window you can follow the update progress. If you do not update the firmware, the EasyPRO may not work correctly.

OVERVIEW

EasyPRO



Legend:

- 1. Ribbons
- 2. Caption Bar
- 3. Tabs
- 4. Properties Panel
- 5. Output Window
- 6. Progress Bar

PANELS

Properties Panel

DUT Details

These fields show you some memory characteristics as defined in .dev file, such as minimum and maximum VCC that can be used with this part, memory size etc. They are not user editable.

Working Conditions

These fields show you the operating conditions with the tested device. They are a copy of operating conditions as set in the Device Functions ribbon. Only Specific details may be edited here.

Output Panel

Shows you different messages. All output messages, also ERROR messages, are displayed here.

Caption Panel

Shows you different useful tips after executing a function.

TABS

DUT Tab

It is the interface between the program and the DUT (memory).

Any write command takes the data from this tab and any read command outputs the data into this tab.

It can be edited in the hex mode (left panel) or by entering the ASCII characters (right panel).

The content of this tab can be written, exported to a HEX file or copied into the File tab.

File Tab

Allows you to work with pattern files. You can load, modify and/or save the pattern files, or transfer them into the DUT tab. It can be edited in the hex mode (left panel) or by entering the ASCII characters (right panel).

\square	DU	T: C/	T24	C02	/	File	: 240	:02_0	hec	k.he	(×																					
	00	01	02	03	04	05	06	07	08	09	ΟA	ΟB	0C	OD	0E	OF	0	01	02	03	04	05	06	07	08	09	ΟA	ΟB	OC	OD	0E	OF
00	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA									•		•	•				
10	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
20	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA																
30	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
40	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA																
50	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
60	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA																
70	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
80	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA																
90	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
AO	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA																
BO	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
CO	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA					•							•				
DO	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
ΕO	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA																
FO	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U

RIBBONS

Home

Contains the most commonly used functions

н	lome								
Open device	Open hex	Open bin	Save DUT as HEX	Save hex	Save hex as	Save bin	Save bin as	 Property window Caption Bar Output window 	Windows
Device file			Patt	tern file	2			View	Window

Open Device

Open Device - prompts you to open a dev file.

	Home								
Open device	Open hex.	Save DUT	Save Hex	Save her as.	Save Din.	Save bin al.	A A A	Property window Caption Bar Output window	Windows
Device file		中国世	term file					View	Window

It will be opened in the DUT tab, filled by default with "0".

If another .dev file was already opened, the previous will be closed and the new one will be opened instead. Also, if there was a File tab opened, it is closed prior to opening the new device. This function is automatically run when the EasyPRO program is launched.

Open Hex

Open hex - prompts you to open a hex file, which will be opened in the File tab, where it can be edited if desired.

!	Home							
Open device	Open hex	Save DUT	Save hex	Save Save her as.		2 X X	Property window Caption Bar Output window	Windows
Device file		Patt	tern file				View	Window

If there was no file opened until using this function, the File tab is opened with the content of the file. If a file is already opened, it is closed and the new one is opened instead.

Open Bin

Open Bin - prompts you to open a bin file, which will be opened in the File tab, where it can be edited if desired.



If there was no file opened until using this function, the File tab is opened with the content of the file. If a file is already opened, it is closed and the new one is opened instead.

Save DUT as HEX...

Save DUT as Hex - allows you to save the content of the DUT tab (the DUT memory mirror) into a hex file The default location when saving this file is the Patterns directory under the EasyPRO location on your disk.



Save Hex

Save Hex - saves the hex file you edited in the File tab. Remember that this function overwrites the current file. If you want to save the file under a different name, use Save hex as function



Save Hex as...

Save Hex as - allows you to save the opened hex file with another name, without modifying the original one. You are prompted to enter the location for saving, also the new name of the file.

H	lome								
Open device	Open hex.	Save DUT	Save	Save hex as	Save Din.	Save bin as.	A 4 4	Phoperty window Caption Bar Output window	Windows
Device file		Pati	ern file	2				View	Window

Save Bin

Save Bin - saves the bin file you edited in the File tab Remember that this function overwrites the current file. If you want to save the file under a different name, use Save bin as function



Save Bin as...

Save bin as - allows you to save the opened bin file with another name, without modifying the original one. You are prompted to enter the location for saving, also the new name of the file.



Property Window Button

Property Window - This button opens and/or closes the properties window.



In this window you will find a brief description of the part you selected. This fields are non editable. The working conditions are also shown here. You can edit the specific details, i.e. Page Mode and Write Protect. You can expand or collapse the categories using the + or - signs.



Caption Bar Button

Caption Bar - This button opens and/or closes the caption bar.

H	lome									
Open device Device file	Open het.	Open bin_	Save DUT bi HEX Putt	Save hex tem file	Save Ner as.	Save Day	gave bin at.	~ ~ ~	Property window Caption Bar Output window View	Windows Window

This bar shows you different useful tips after executing a function.



Output Window Button

Output Window - In this window are displayed all messages, including error messages.



Output	ф	×
Succesfully load the handler iic.		
Setting the device type		
Done.		
Successful erase the buffer		
Opening the hex file: C:\Work\EasyPRO\v3.0.0\Src\bin_r\Patterns\24c02_check.hex		⊡

Buffer

Allows you to manage the data in the DUT tab



Erase All

Erase All - clears the entire tab (filling with 0xFF), regardless of the Fill options.

		Buffer					
	1	Start Address:	0	D	3	B	51
1		Sizer	100		9	1	
all	-	Value:	0	Checksum	pattern	pattern	as HEX
		Fill Buffer		Validation	1	Pattern file	

Fill

Fill - you can fill the entire DUT tab, or just a section of it with a desired value. Start Address - the address from where to begin the fill operation. Size - number of bytes to fill beginning with the start address. Value - the desired value to fill the buffer.

		Buffer					
D	2	Start Address:	0	D	3	B	do l
1	1	Sizer	100		9	1	TO
all	FIII	Value:	0	Checksum	pattern	pattern	as HEX
		Fill Buffer		Validation	1	Pattern fil-	e

Start Address

Start Address - the address from where to begin the fill operation.

		Buffer					
D	100	Start Address:	0	D	3	B	dal.
1		Sizer	100		9	1	
all	-	Value:	0	Checksum	pattern	pattern	as HEX
		Fill Buffer		Validation	1	Pattern file	

Size

Size - number of bytes to fill beginning with the start address.

		Buffer					
D	100	Start Address	0	D	3	B	10
3 9	Size:	100		9			
all	-	Value:	0	Checksum	pattern	pattern	as HEX
		Fill Buffer		Validation		hitem file	

Value

Value - the desired value to fill the buffer.

		Buffer					
2	2	Start Address:	0	D	3	B	51
1	1	Sizer	100		9	1	TO
all		Value:	0	Checksum	pattern	pattern	as HEX
		Fill Buffer		Validation	1	Pattern file	

Checksum

Checksum - makes the sum of all words in the DUT tab and displays it in the output window. This information may be useful for faster comparison of the data inside the DUT. For a more rigorous check, use Verify, but it needs more time to complete.

		Buffer					
2	2	Start Address:	0		3	B	da1
1	1	Sizer	100		9	1	
all	-	Value:	0	Checksum	pattern	pattern	as HEX
		Fill Buffer		Validation	1	wittern file	

Copy from Pattern

Copy from Pattern - copies the content of the File tab to DUT tab. This is useful for writing a given pattern into the device. Once the data is in the DUT tab, it can be written into the device.

		Buffer				
2	3	Start Address:	0	D	AA	1
1	1	Size:	100			
all	-	Value:	0	Checksum	pattern pattern	as HEX
		Fill Buffer		Validation	Pattern fil	e

Copy to Pattern

Copy to Pattern - copies the content of the DUT tab to File tab. This operation is useful to keep a backup copy of the DUT tab.

		Buffer					
D	Da	Start Address:	0	D	3	R	dal.
1		Sizer	100		9		
all	10	Value:	0	Checksum	pattern	pattern	as HEX
		Fill Buffer		Validation		Pattern file	

Save DUT as HEX...

Save DUT as Hex - allows you to save the content of the DUT tab (the DUT memory mirror) into a hex file. The default location when saving this file is the Patterns directory under the EasyPRO location on your disk.



Pattern

With the functions found here you can manage the data in the File tab



Open Hex

Open Hex - prompts you to open a hex file, which will be opened in the File tab, where it can be edited if desired.

If there was no file opened until using this function, the File tab is opened with the content of the file. If a file is already opened, it is closed and the new one is opened instead.

			Pattern						
Open hex	Open Din	Erase	Copy from buffer	Copy to buffer	Checksum	Same Hex	Save hex as-	Same Bin	Save Don as.
Oper	n file		Fill pattern		Validation		Save	file	

Open Bin

Open bin - prompts you to open a bin file, which will be opened in the File tab, where it can be edited if desired. If there was no file opened until using this function, the File tab is opened with the content of the file. If a file is already opened, it is closed and the new one is opened instead.

			Pattern						
Open hex	Open bin	Erase all	Copy from buffer	Copy to buffer	Checksum	Same hex	Save hex al.		Save Save
Ope	n file		Fill pattern		Validation		Save	file	

Erase All

Erase All - clears the entire tab (filling with 0xFF)



Copy from Buffer

Copy from Buffer - copies the content of the DUT tab to File tab. This operation is useful to keep a backup copy of the DUT tab.



Copy to Buffer

Copy to Buffer - copies the content of the File tab to DUT tab. This is useful for writing a given pattern into the device. Once the data is in the DUT tab, it can be written into the device.



Checksum

Checksum - makes the sum of all words in the File tab and displays it in the output window. This information may be useful for faster comparison of the data inside the DUT. For a more rigorous check, use Verify, but it needs more time to complete.

	Pattern		
Open hex Din	Erase Copy from Copy to buffer	Checksum	
Open file	Fill pattern	Validation Save file	

Save Hex

Save Hex - saves the hex file you edited in the File tab Remember that this function overwrites the current file. If you want to save the file under a different name, use Save hex as function.



Save Hex as...

Save Hex as - allows you to save the opened hex file with another name, without modifying the original one. You are prompted to enter the location for saving, also the new name of the file.



Save Bin

Save Bin - saves the bin file you edited in the File tab Remember that this function overwrites the current file. If you want to save the file under a different name, use Save bin as function

	Pattern			
Qpen hex Din	Erase Copy from Cop all buffer bu	ay to Checksum	Save Save hex hexas.	Save Sime
Open file	Fill pattern	Validation	Save	e file

Save Bin as...

Save Bin as - allows you to save the opened bin file with another name, without modifying the original one. You are prompted to enter the location for saving, also the new name of the file.

		Pattern						
Open O hes b	pen Erase	Copy from buffer	Copy to buffer	Checksum	Same hex	Save hex al.	Save Din	Save bin as
Open fil		Fill pattern		Validation		Save	file	

Device Functions

Here there are some functions that helps you in order to make operations with the tested device



Read

Read - reads the memory and displays the content in the DUT tab. This operation is done under the operation details, details that can be edited in the corresponding menu.

			Devi	ce Functions		
m	D1 00	Device Start Block Size			V Sequential read	-
			100	Supply VCC = 3.30 V		
Read	Write Verity	Buffer Start	0	0 0 0	Write protect	Shorts
Main	Operations		Operatio	n details	Specific details	Contact

Write

Write - writes into the DUT memory the content of the DUT tab. This operation is done under the operation details, details that can be edited in the corresponding menu.

		Device	Functions		
PD 22 04	Device Start	0		V Sequential read	-
	Block Size	100	Supply VCC = 3.30 V	✓ Page mode	
Read Write Verity	Buffer Starb	0	0 0 0	Write protect	Shorts
Main Operations		Operation	details	Specific details	Contact

Verify

Verify - compares the DUT tab content with the DUT.

The differences between memory and DUT tab are displayed in red in the DUT tab. This operation is done under the operation details, details that can be edited in the corresponding menu.

		Device	Functions		
EN EX EX	Device Start Block Size	0		V Sequential read	-
		100	Supply VCC = 3.30 V		-22
Read Wate Verify	Buffer Start		0 0 0	Wite protect	Shorts
Main Operations		Operation	details	Specific details	Contact

Device Start

Device Start - Allows you to edit the start address of the device. Used in Read, Write, or Verify



Block Size

Block Size - Allows you to edit the number of bytes to be read or written. Used in Read, Write, or Verify



Buffer Start

Buffer Start - The buffer start address to begin the operations. Used in Read, Write, or Verify

		Dev	vice Functions		
NO 22 00	Device Start Block Size			V Sequential read	
		100	Supply VCC = 3.30 V	V Page mode	
Read Write Verity	Buffer Start:	0	0 0 0	Wite protect	Shorts
Main Operations		Operati	on details	Specific details	Contact

Supply VCC

Supply VCC - Allows you to edit the value of the VCC supply. Used in Read, Write, or Verify

		D	evice Functions		
ED 22 ED	Device Start			V Sequential read	-
	Block Size	100	Supply VCC = 3.30 V	✓ Page mode	
Read Write Vert	Buffer Start	0	9	Write protect	Shorts
Main Operations		Opera	ition details	Specific details	Contact

Sequential Read

Sequential Read - This mode allows a faster response time for reading large blocks of the memory. Used in Read or Verify



Page Mode

Page Mode - With this control you can set the write mode (page mode/byte mode) and the read mode (sequential/byte mode). For writing mode the default is page mode and for the read mode the default is sequential mode. Used in Read, Write, or Verify



Write Protect

Write Protect - Allows you to activate the write protect mode (WP pin) or not during Read, Write, or Verify

		Device	Functions		
N 2 14	Device Start	0		V Sequential read	-
	Block Size	100	Supply VCC = 3.30 V	✓ Page mode	
Read Write Verify	Buffer Start	0	0 0 0	🔲 Write protect	Shorts
Main Operations		Operation	details	Specific details	Contact

Opens Shorts

Opens Shorts - Verify the contact of the device in the ZIF socket. This function helps you to detect if the device is present in the socket, or, all the pins are in contact with the ZIF socket. Please verify the status of the operation in the output panel.

		Device	Functions		
M 22 04	Device Start	0		V Sequential read	0
	Block Size	100	Supply VCC = 3.30 V	✓ Page mode	
Read Write Verify	Buffer Start	0	0 0 0	🖉 Write protect	Shorts
Main Operations		Operation	details	Specific details	Contact

onsemi, ONSEMi, and other names, marks, and brands are registered and/or common law trademarks of Semiconductor Components Industries, LLC dba "onsemi" or its affiliates and/or subsidiaries in the United States and/or other countries. onsemi owns the rights to a number of patents, trademarks, copyrights, trade secrets, and other intellectual property. A listing of onsemi's product/patent coverage may be accessed at www.onsemi.com/site/pdf/Patent-Marking.pdf. Onsemi is an Equal Opportunity/Affirmative Action Employer. This literature is subject to all applicable copyright laws and is not for resale in any manner.

The evaluation board/kit (research and development board/kit) (hereinafter the "board") is not a finished product and is not available for sale to consumers. The board is only intended for research, development, development, development, and evaluation purposes and will only be used in laboratory/development areas by persons with an engineering/technical training and familiar with the risks associated with handling electrical/mechanical components, systems and subsystems. This person assumes full responsibility/liability for proper and safe handling. Any other use, resale or redistribution for any other purpose is strictly prohibited.

THE BOARD IS PROVIDED BY ONSEMI TO YOU "AS IS" AND WITHOUT ANY REPRESENTATIONS OR WARRANTIES WHATSOEVER. WITHOUT LIMITING THE FOREGOING, ONSEMI (AND ITS LICENSORS/SUPPLIERS) HEREBY DISCLAIMS ANY AND ALL REPRESENTATIONS AND WARRANTIES IN RELATION TO THE BOARD, ANY MODIFICATIONS, OR THIS AGREEMENT, WHETHER EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, INCLUDING WITHOUT LIMITATION ANY AND ALL REPRESENTATIONS AND WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, NON-INFRINGEMENT, AND THOSE ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE CUSTOM OR TRADE PRACTICE.

onsemi reserves the right to make changes without further notice to any board.

You are responsible for determining whether the board will be suitable for your intended use or application or will achieve your intended results. Prior to using or distributing any systems that have been evaluated, designed or tested using the board, you agree to test and validate your design to confirm the functionality for your application. Any technical, applications or design information or advice, quality characterization, reliability data or other services provided by **onsemi** shall not constitute any representation or warranty by **onsemi**, and no additional obligations or liabilities shall arise from **onsemi** having provided such information or services.

onsemi products including the boards are not designed, intended, or authorized for use in life support systems, or any FDA Class 3 medical devices or medical devices with a similar or equivalent classification in a foreign jurisdiction, or any devices intended for implantation in the human body. You agree to indemnify, defend and hold harmless onsemi, its directors, officers, employees, representatives, agents, subsidiaries, affiliates, distributors, and assigns, against any and all liabilities, losses, costs, damages, judgments, and expenses, arising out of any claim, demand, investigation, lawsuit, regulatory action or cause of action arising out of or associated with any unauthorized use, even if such claim alleges that onsemi was negligent regarding the design or manufacture of any products and/or the board.

This evaluation board/kit does not fall within the scope of the European Union directives regarding electromagnetic compatibility, restricted substances (RoHS), recycling (WEEE), FCC, CE or UL, and may not meet the technical requirements of these or other related directives.

FCC WARNING – This evaluation board/kit is intended for use for engineering development, demonstration, or evaluation purposes only and is not considered by **onsemi** to be a finished end product fit for general consumer use. It may generate, use, or radiate radio frequency energy and has not been tested for compliance with the limits of computing devices pursuant to part 15 of FCC rules, which are designed to provide reasonable protection against radio frequency interference. Operation of this equipment may cause interference with radio communications, in which case the user shall be responsible, at its expense, to take whatever measures may be required to correct this interference.

onsemi does not convey any license under its patent rights nor the rights of others.

LIMITATIONS OF LIABILITY: **onsemi** shall not be liable for any special, consequential, incidental, indirect or punitive damages, including, but not limited to the costs of requalification, delay, loss of profits or goodwill, arising out of or in connection with the board, even if **onsemi** is advised of the possibility of such damages. In no event shall **onsemi**'s aggregate liability from any obligation arising out of or in connection with the board, under any theory of liability, exceed the purchase price paid for the board, if any.

The board is provided to you subject to the license and other terms per **onsemi**'s standard terms and conditions of sale. For more information and documentation, please visit www.onsemi.com.

ADDITIONAL INFORMATION

TECHNICAL PUBLICATIONS: Technical Library: www.onsemi.com/design/resources/technical-documentation onsemi Website: www.onsemi.com ONLINE SUPPORT: <u>www.onsemi.com/support</u> For additional information, please contact your local Sales Representative at www.onsemi.com/support/sales

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

onsemi:

EASYPRO1GEVB