

Multiple tasks, the single solution!



JTAG Manager Presentation

by

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JMAN – JTAG Manager is the PC (Windows)-based operational multi-language (English, Russian) envelope that intended for implementation on the OEM electronic board manufacturing facilities, contract manufacturers and/or in the R&D labs;



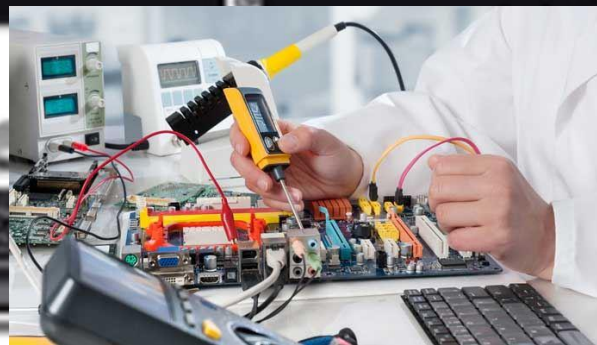
JTAG
TECHNOLOGIES

CORELIS
An **EWA** Company

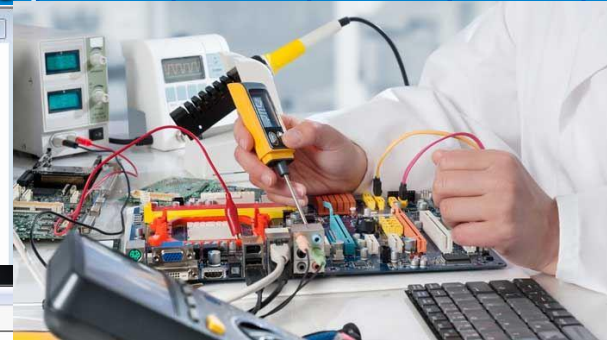
Coming soon!

FLYNN SYSTEMS'
onTAP[®]

GOPEL
electronic



OFS – Operator’s Fault Spotlight or Offline Fault Search station. This module allows to work with test history files stored by JMAN in order to repair fault boards offline (without connection to BS equipment) in any time;



The screenshot displays the OFS software interface with several key sections:

- History - From Folder C:\TAG\GMI\NRB\History**: Includes controls for 'Apply Filters', 'Reset Filters', and 'Reload Results'.
- Filter by serial numbers**: A search field with a 'Clear' button.
- Filter by dates**: Options for 'All', 'Today', 'This Week', and 'This Month', along with 'Minimum' and 'Maximum' date pickers.
- Filter by statuses**: Checkboxes for 'Failed', 'Aborted', and 'Passed'. 'Failed' is selected.
- Filter by UUT**: A dropdown menu with 'NRB' selected.
- Test History Table**:

UUT Name	Part Number	Serial Number	Platform	Instrument	End Time	Elapsed Time
NRB	NRB	0080	JT	37x7 USB	12/10/2015 12:40:15 PM	3 seconds
NRB	NRB	0037	JT	37x7 USB	12/10/2015 12:36:38 PM	4 seconds
NRB	NRB	0024	JT	37x7 USB	12/10/2015 12:31:40 PM	4 seconds
- Test Report (Failed)**:
 - Open: BA0077-01 Rev.07, Corelis, FAILED, 4 seconds
 - Boundary-Scan (JTAG) Tests:

Test Name	Result
1 PC1736-10_RevA_Var1_infrastructure_inf.cvf	PASSED
2 PC1736-10_RevA_Var1_interconnect_ic.cvf	PASSED
3 PC1736-10_RevA_Var1_pu&pd_pull.cvf	FAILED
4 PC1736-10_RevA_Var1_flash_U11.fpi	PASSED
 - Test Vectors - PC1736-10_RevA_Var1_pupd_pull.cvf:

Net/Pin	Vector
U32.V2	Passed
U32.V2	Passed
U32.Y14	Passed
C45.2	Failed
R44.2	Failed
U9.12	Failed
SPI_EN_PLL_80M	Failed
U32.V3	Passed
U32.V3	Passed
U32.AB20	Failed
C170.2	Failed
U24.16	Failed
R206.2	Failed
- Board Scheme**: A schematic diagram of the PCB with a search window open. The search results show 'R206 4.75Kohm 2 2R110'. Red arrows point from the failed test results in the report to the corresponding components (U32.V3, U32.AB20, U24.16, R206.2) in the schematic.

TFL – Test Fault Locator viewer is a subset of the JTAG Manager. Works with BOM and can read test report files from FP, ICT and FT stations.

Test Fault Locator - [DEMO.tfl]

File Project Reports Tools Windows Help

Open Board Demo

Board View (Component Side)

Diagnostic Info

(99) Shorted to: 86

NODE: 99 U1 (P63)
 J1 (P8)
 TP4 (P1)

NODE: 86 U1 (P64)
 J1 (P5)
 TP23 (P1)

Parts (193) Nets (116) ICT Nails (117)

Find

Net/Pin	ICT
<input type="checkbox"/> ADDR6	33
<input type="checkbox"/> ADDR7	32
<input type="checkbox"/> ADDR8	39
<input type="checkbox"/> ADDR9	37
<input type="checkbox"/> ADDR10	25
<input type="checkbox"/> ADDR11	38
<input type="checkbox"/> ADDR12	31
<input type="checkbox"/> ADDR13	40
<input type="checkbox"/> ATA_RESET-	101
<input type="checkbox"/> CABLE_PWR	53
<input type="checkbox"/> CS0-	44
<input type="checkbox"/> CS1-	42
<input type="checkbox"/> CS/	24
<input type="checkbox"/> DA0	46
<input type="checkbox"/> DA1	47
<input type="checkbox"/> DA2	43
<input type="checkbox"/> DASP-	45
<input type="checkbox"/> DD0	94
<input type="checkbox"/> DD1	95
<input type="checkbox"/> DD2	96
<input type="checkbox"/> DD3	97
<input type="checkbox"/> DD4	98
<input checked="" type="checkbox"/> DD5	99
<input checked="" type="checkbox"/> J1.9	
<input checked="" type="checkbox"/> TP4.2	
<input checked="" type="checkbox"/> U1.64	
<input type="checkbox"/> DD6	100
<input type="checkbox"/> DD7	88
<input type="checkbox"/> DD8	87
<input type="checkbox"/> DD9	86
<input checked="" type="checkbox"/> J1.6	
<input checked="" type="checkbox"/> TP23.2	



Diagram of using and data flows for JTAG Manager license.

Functional Test Station



Test Reports

Flying Probe Test Station



Test Reports

ICT Test Station



Repair Reports and Statistic



Local or Remote Server

JTAG Manager Administrative Station

Projects Creation and Data storage

Projects

Test Reports and History

Projects and History files

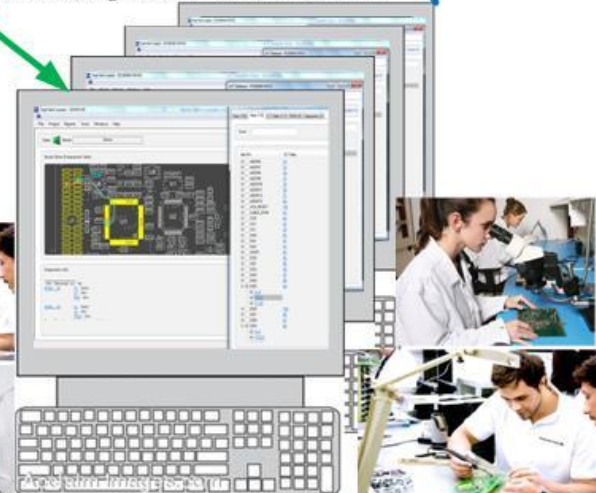
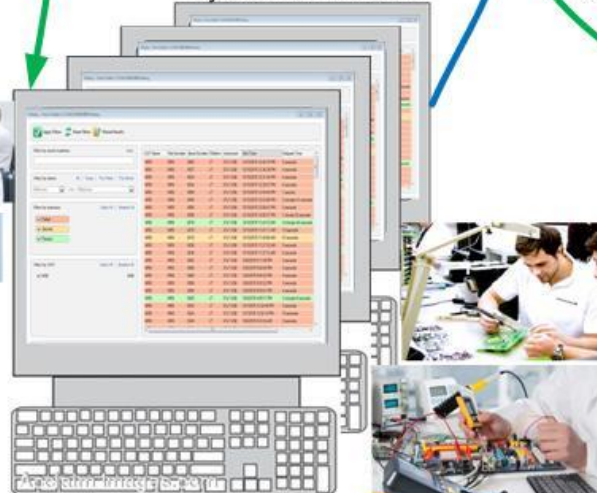
Repair Reports and Statistic

Projects and Report files

JTAG Test Stations for test programs running, by test operators staff.

OFS Stations for JTAG failed boards repair, by technicians staff.

TFL Stations for ICT, FP failed boards repair, by technicians staff and viewer for soldering and visual control staff.



The **JTAG Manager** has easy and intuitively understandable GUI for a new project creation that allows to build tree projects structure.

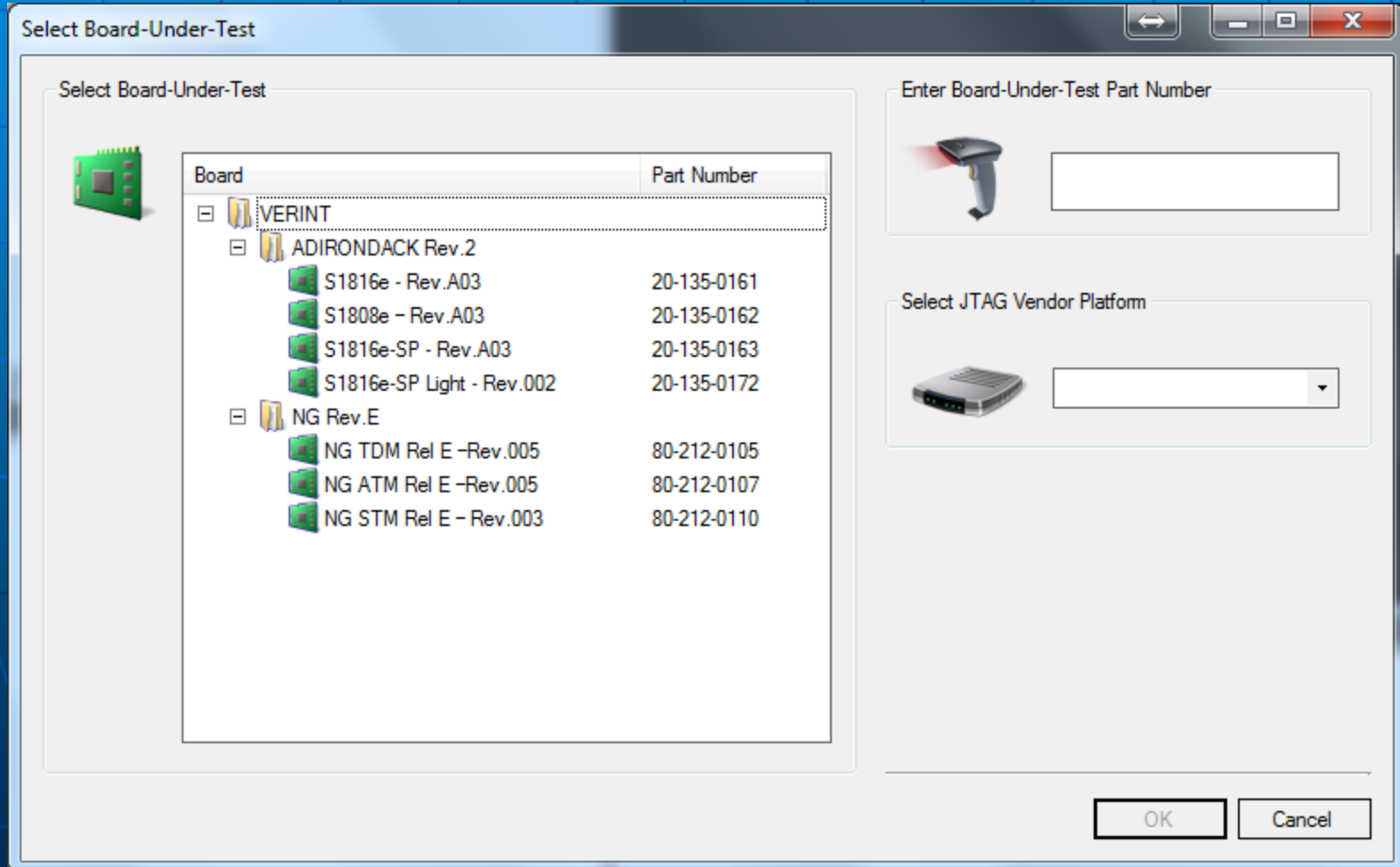
The screenshot displays the JTAG Manager GUI with several panels:

- Objects:** A tree view showing a project named 'SIKLU' containing a sub-project 'EH1202' with various PCB and component files like PCB151, PCB152, PCB152A, PCB151A, FABB024, FABB026, FABB026A-A002, FABB027-A004, FABB020A-A102, FABB016B-A003, SJBB0023_Rev2, FABB028, and FABB030-A001.
- Platforms:** Checkboxes for 'Corelis', 'onTAP', 'JT' (checked), and 'Demo' (checked).
- Properties:** A table with columns 'Name' and 'Value'.

Name	Value
Part Number	SJBB016B_Rev1
Display Name	FABB016B-A003
Save Report After Run	0
Reports Folder	d:\Jtag_Projects\Siklu\Duq...
Demo Parameters	
JT Instrument	3710
JT Instrument Type	USB
JT Parameters	
- Files:** A table with columns 'Type' and 'Path'.

Type	Path
Layout File	C:\JTAG\Siklu\EH1202\PCB152\...
Nails File	
Board Schematics	D:\Jtag_Projects\Siklu\Duqqu\SJBB...
JTAG Chains	
BOM File	D:\Projects\JT\Siklu\FABB029\Sou...
Log File	
JT Project	D:\Jtag_Projects\Siklu\Duqqu\SJBB...
Demo Project	
- BOM Fields:** A configuration window for the Bill of Materials (BOM) table.
 - Part Number Column: Reference Column: Description Column: Start Row:
 - A table with columns: Item, A, B, C, Description, Part Number, Reference.
 - A context menu is open over the 'Part Number' column header, showing options: 'Set Column As Part Number', 'Set Column As Reference', 'Set Column As Description', and 'Set Start Row'.

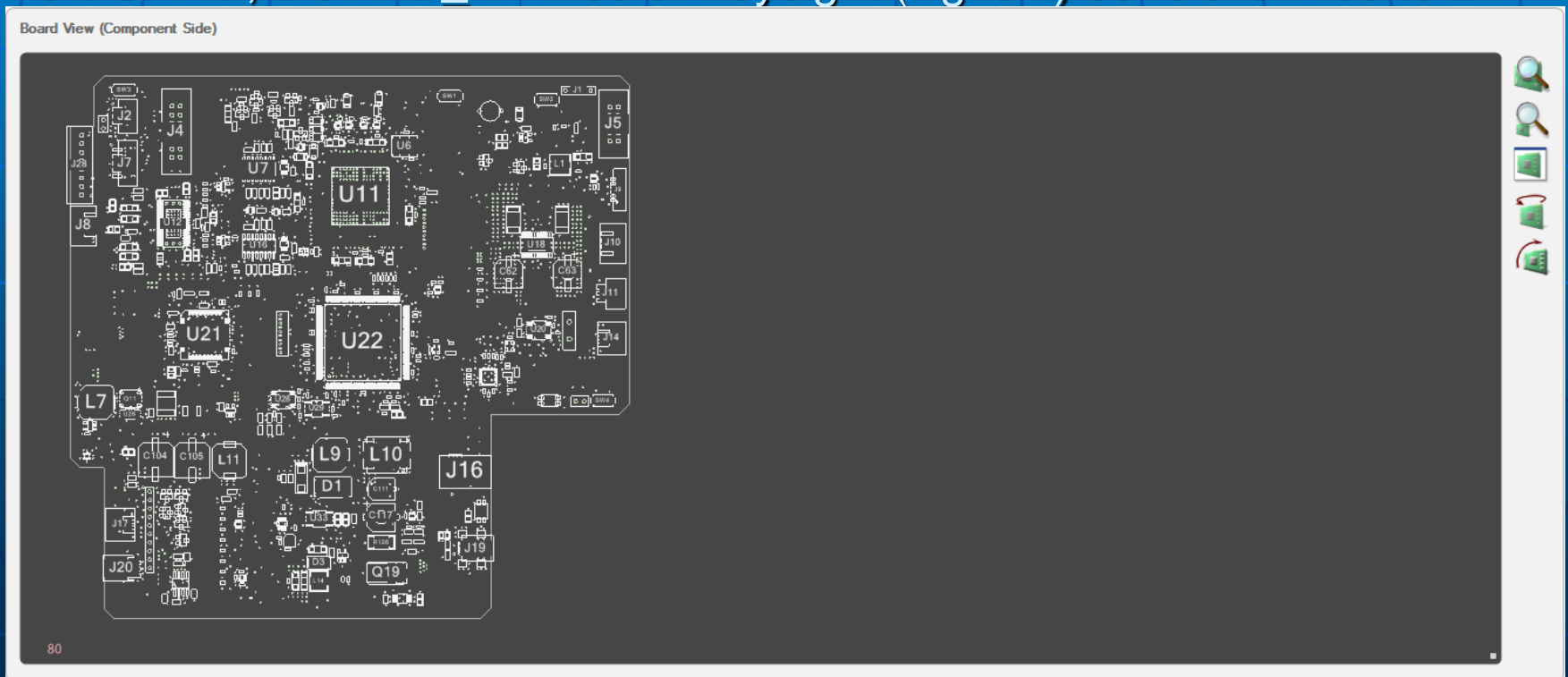
The **JTAG Manager** has simple and friendly operator oriented GUI for board to test selection and avoids necessity to search the test sequence file placement.



The **JTAG Manager** creates the Board View window from the input CAD file with convenient control panel at the right side of the window.

Supported CAD formats:

- o FABMASTER files in FAZ, FAT formats;
- o GENCAD;
- o ODB++ files archived to ZIP, TGZ;
- o BOARD, BOARD_XY files of Keysight (Agilent) 3070 archived to ZIP.



In order to accelerate the project loading and to reduce the project file size the **JTAG Manager** creates file in specially designed JMD format.

Import Board Layout
✕

Select opened layout

Layout file: ▼

Load layout from file

Layout file: Browse

Nails file (optional): Browse

BOM file (optional): Browse

Don't load net geometry

Board View - mcb.jmd

Info

	Input Layout	JTAG Manager Database
Parts	2997	2997
Nets	2293	2293
ICT Nails	70	70
BOM Entries	142	142
File size (KB)	23,770	1,789
Load time (sec.)	8	1

The **JTAG Manager** establishes a project database from input files CAD and BOM. The Data Base includes five interrelated tables - PARTS, NETS, ICT NAILS, BOM, CATEGORIES.

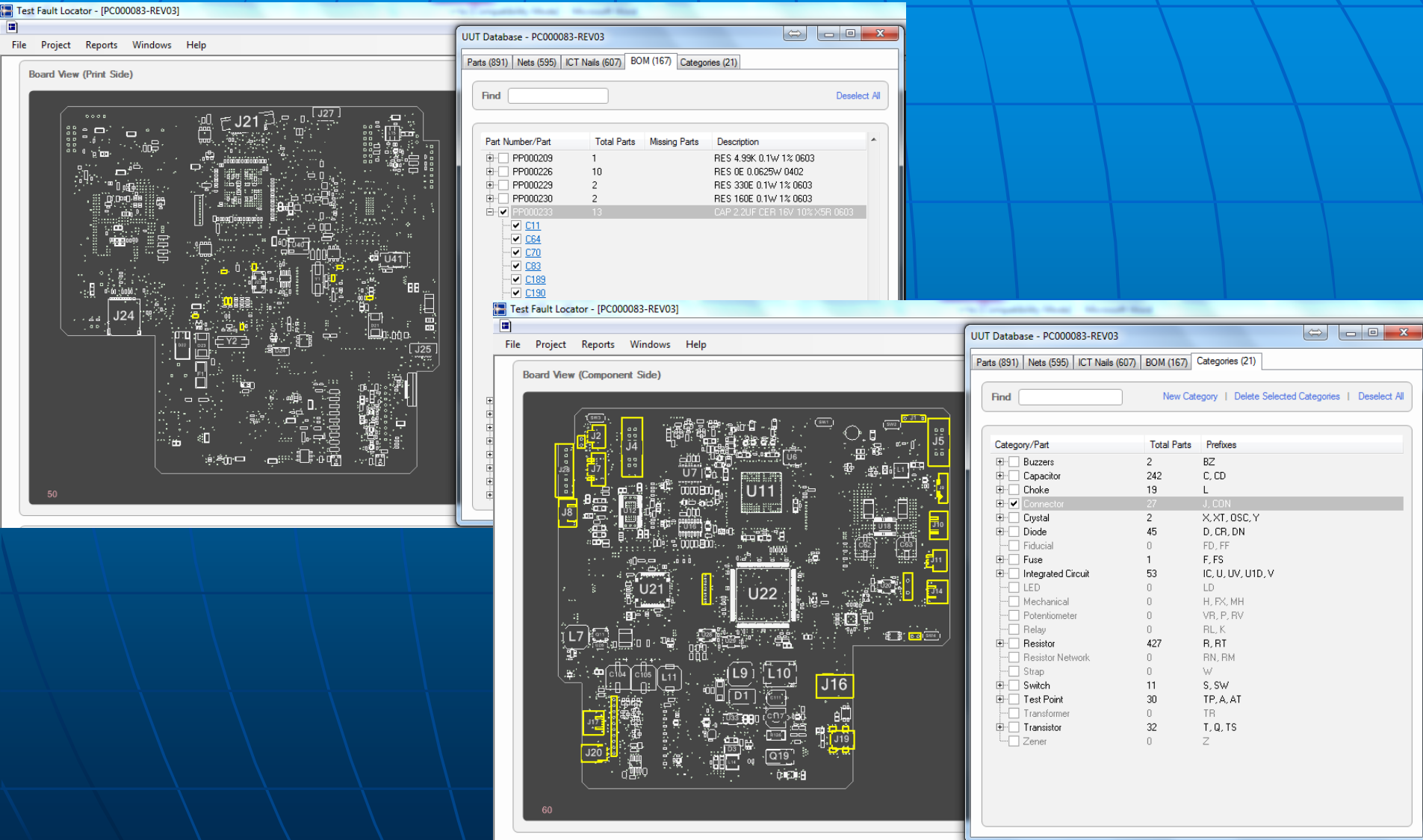
UUT Database - EPT-2015

Parts (280) | Nets (122) | ICT Nails (115) | BOM (99) | Categories (21)

Find Deselect All

Part/Pin	Net	ICT Nail	Category	BOM Part Number	BOM Description
<input type="checkbox"/> R41			Resistor	Part not in BOM	
<input type="checkbox"/> R42			Resistor	102-00029-01	RES,60K4,1%,1/20W,0201
<input type="checkbox"/> R43			Resistor	101-00227-01	RES,1.00K,1%,1/10W,0603,HV
<input type="checkbox"/> R44			Resistor	102-00029-01	RES,60K4,1%,1/20W,0201
<input type="checkbox"/> R45			Resistor	102-00031-01	RES,100K,1%,1/20W,0201
<input type="checkbox"/> R46			Resistor	102-00023-01	RES,22K,1%,1/20W,0201
<input type="checkbox"/> R47			Resistor	102-00036-01	RES,806K,1/10W,1%,0603,HV
<input type="checkbox"/> R48			Resistor	102-00025-01	RES,41K2,1%,1/20W,0201
<input type="checkbox"/> R49			Resistor	102-00014-01	RES,10R,1%,1/10W,0603,HV
<input type="checkbox"/> R50			Resistor	101-00253-01	RES Anti-Surge ,20R,1%,0.2W,0603
<input type="checkbox"/> R51			Resistor	102-00026-01	RES,49K9,1%,1/20W,0201
<input type="checkbox"/> R52			Resistor	102-00025-01	RES,41K2,1%,1/20W,0201
<input type="checkbox"/> 1	B_ICOMP_MEAS	37			
<input type="checkbox"/> 2	N15409851	32			
<input type="checkbox"/> R53			Resistor	102-00020-01	RES,10K,1%,1/20W,0201
<input type="checkbox"/> R54			Resistor	101-00213-01	RES,13.7K,1%,1/20W,0201
<input type="checkbox"/> R55			Resistor	102-00029-01	RES,60K4,1%,1/20W,0201
<input type="checkbox"/> R56			Resistor	102-00037-01	RES,10M,1%,1/10W,0603,HV

The **JTAG Manager** allows to implement search of components by PN or by Categories.



The JTAG Manager realizes simultaneously search of Parts and Nets in Board Scheme and Board View windows

The screenshot displays the JTAG Manager software interface with three main windows:

- Test Fault Locator - [PC000083-REV03]**: The main application window with a menu bar (File, Project, Reports, Windows, Help) and a 'Board View (Print Side)' window showing a PCB layout with components like J21, J24, J25, and U41.
- UUT Database - PC000083-REV03**: A search results window showing a table of parts and nets. The 'Parts (891)' tab is active, displaying a list of resistors.
- Board Scheme**: A schematic diagram window showing a circuit with components like Q15 (FDN338P), R396 (100K), R333 (100E), Q13 (FDN335N), and LED_R. A search panel is overlaid on this window.

The search panel in the Board Scheme window shows the following search results:

- Looking For:** R333 in the current document
- Results:** 1 document(s) with 1 instance(s)
- New Search** button
- Results:**
 - Collapse file paths
 - [Show Fewer Options](#)

Red arrows indicate the search results being applied to the Board View and Board Scheme windows. The 'UUT Database' window also shows a table of parts:

Part/Pin	Net	ICT Nail	Category	BOM Part Number	
<input type="checkbox"/> R327			Resistor	PP000266	R
<input type="checkbox"/> R328			Resistor	PP000241	R
<input type="checkbox"/> R329			Resistor	PP000074	R
<input type="checkbox"/> R330			Resistor	RE805153	R
<input type="checkbox"/> R331			Resistor	PP000273	R
<input type="checkbox"/> R332			Resistor	PP000241	R
<input checked="" type="checkbox"/> R333			Resistor	PP000262	R
<input type="checkbox"/> R334			Resistor	Part not in BOM	

The **JTAG Manager** allows to run BS testing sequences based on CORELIS and JTAG TECHNOLOGIES platforms and graphically displays the test results on the Board View window by colors - green (Passed) and red (Failed).

JTAG Manager - [201587_rEV25.jtm]

File Project Test Reports History Windows Help

Open Board and Platform 201587_Rev25 Corelis Run **FAILED** 17 seconds

Boundary-Scan (JTAG) Tests, Flash Programming & ISP for CPLD / FPGA

11	201587_Rev25_flash_U24.fpi	PASSED
12	201587_Rev25_PLL_U35_ct.cvf	FAILED
13	201587_Rev25_ADC_U36_ct.cvf	FAILED
14	201587_Rev25_ADC_U37_ct.cvf	FAILED
15	201587_Rev25_ADC_U38_ct.cvf	FAILED
16	201587_Rev25_ADC_U39_ct.cvf	FAILED
17	201587_Rev25_ADC_U40_ct.cvf	FAILED
18	201587_Rev25_ADC_U41_ct.cvf	FAILED
19	201587_Rev25_ADC_U42_ct.cvf	FAILED
20	201587_Rev25_ADC_U43_ct.cvf	PASSED

Test Vectors - 201587_Rev25_flash_U24.fpi

Net/Pin	Vector

Board View (Component Side)

Run Log

Test passed

Run Log Diagnostic Info

Deselect All Entities

The **JTAG Manager** makes the Test Operator's work and troubleshooting process easier by concentrating all the necessary data on a single screen and connecting their by hyperlinks.

The screenshot displays the JTAG Manager software interface for a test run on board SLM-1379-V2. The main window is divided into several functional areas:

- Test Results (Left):** A list of 10 test steps. Steps 1-4, 6-10 are marked as PASSED. Steps 5 and 6 are marked as FAILED. Step 5 is 'Test -interconnect' and Step 6 is 'Test -pull_resistors'.
- Board View (Center):** A top-down image of the PCB with a component labeled 'NW_SFP_TXFAULT_PORT0' highlighted in orange. A '365' label is visible near the component.
- UUT Database (Right):** A tree view showing 'Parts (3065)' and 'Nets (2390)'. A search for 'NW_SFP_TXFAULT...' is active, showing a list of components like 'NW_SFP_TX_N2' through 'NW_SFP_TXDIS_P...' and 'NW_SFP_TXFAULT...'.
- Search Panel (Bottom Right):** A search window titled 'Looking For: NW_SFP_TXFAULT_PORT0 in the current document'. It shows '1 document(s) with 3 instance(s)'. The search results list various components like 'db-xc3-24g4xg-rev2...', 'NW_SFP_TXFAU...', 'BLOCK.NW_SFP...', and 'NW_CEP TxFault...'. A 'Collapse file paths' checkbox is checked.
- Waveform View (Bottom Left):** A section titled 'Test Vectors - Test -interconnect' showing timing diagrams for various signals including 'NW_SFP_TXDIS PORT5', 'NW_SFP_TXFAULT PORT0', 'NW_SFP_TXFAULT PORT1', 'NW_SFP_TXFAULT PORT2', 'NW_SFP_TXFAULT PORT3', and 'NW_SFP_TXFAULT PORT4'.
- Board Scheme (Top Right):** A schematic diagram of the board with a search for '3.3V' and a list of components like 'PHY_INT0', 'PHY_INT1', 'PHY_RX10', 'PHY_RX11', etc.

The **JTAG Manager** allows to see full path of “Merged_Nets” through transparent components view, including all related printed conductors and pins.

Boundary-Scan (JTAG) Tests, Flash Programming & ISP for CPLD / FPGA

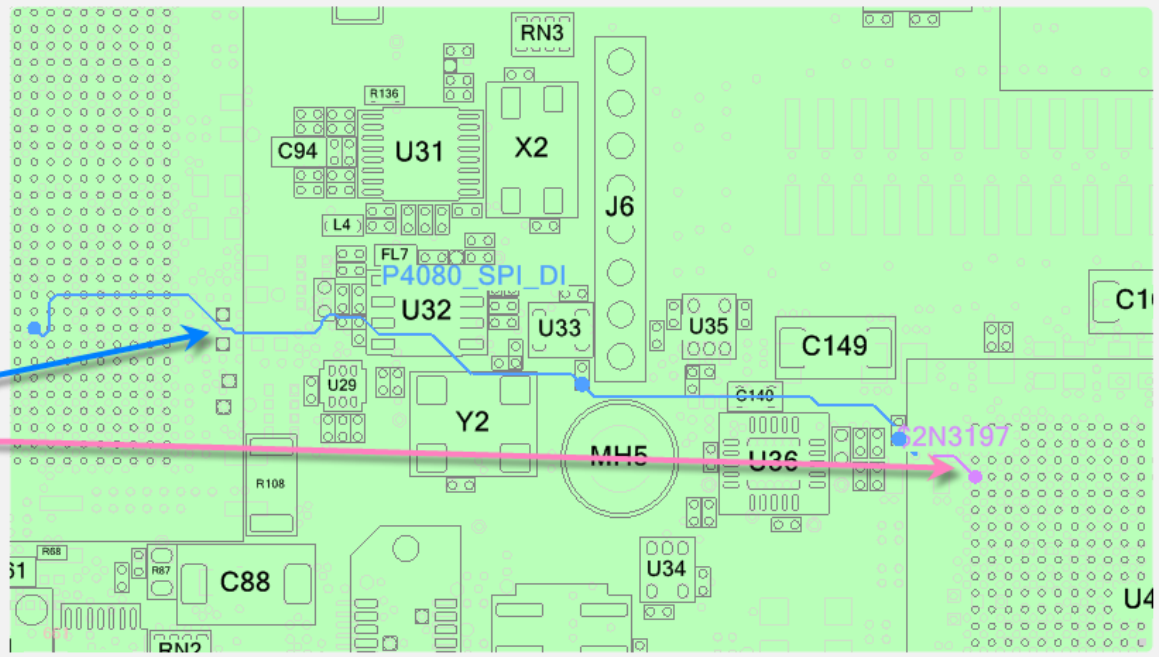
7	BA0086_BA0087_interconnect_ic.cvf	PASSED
8	BA0086_BA0087_buswire_bus.cvf	PASSED
9	FPGA_RESET.svf	PASSED
10	BA0086_BA0087_pu&pd_pull.cvf	PASSED
11	DDR3_SDRAM_BA0086-01_U1_mct.cvf	PASSED
12	DDR3_SDRAM_BA0086-01_U2_mct.cvf	PASSED
13	DDR3_SDRAM_BA0086-01_U3_mct.cvf	FAILED

Test Vectors - BA0086_BA0087_interconnect_ic.cvf

Net/Pin	Vector
<ul style="list-style-type: none"> ✓ \$2N3197 → U11.Y28 → U44.A19 → U44.A19 R984.1 TP532.1 R165.2 R194.2 R861.2 R984.2 	
<ul style="list-style-type: none"> ✓ \$2N4117 → U11.K23 R694.1 	
<ul style="list-style-type: none"> ✓ \$2N4285 	

Transparent resistor R984.

Board View (Component Side)



Diagnostic Info

Deselect All Entities

The **JTAG Manager** allows to find Parts shared by two or more Nets.
 This feature is very helpful for search shorts at branched circuits.

The screenshot shows the 'UUT Database - BA0086_BA0087' window. The search criteria are set to 'gnd'. The 'Parts shared by 2 nets (+2.5V_P4080_LVDD, GND)' list includes the following components:

- U11
- C1031
- C1010
- C942
- C941
- C978
- C940
- C956
- C1070
- C977
- C1008
- C1011
- C976

The background image shows a PCB layout with components like RN510, C1050, C906, C1070, and RN512 highlighted in yellow, indicating they are part of the search results.

Simultaneous highlighting of two suspicious conductors can help to detect the exact short location.

UUT Database - MCB

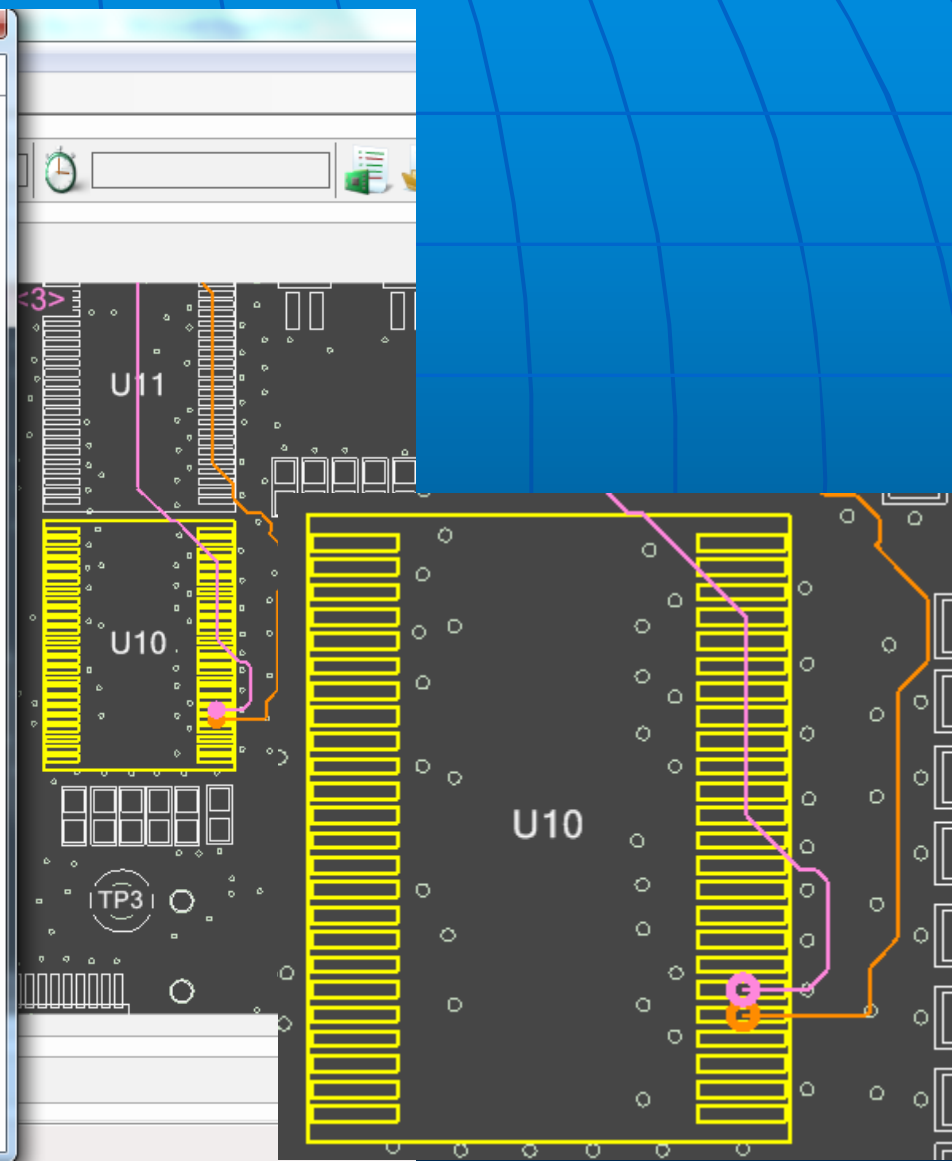
Parts (2997) Nets (2293) ICT Nails (70) BOM (142) Categories (21)

Find Find Shared Parts | Deselect All

Net/Pin	ICT Nails
<input type="checkbox"/> ETH_HOST_1G_TR...	
<input type="checkbox"/> ETH_LINK_0_3_RC	
<input type="checkbox"/> ETH_LINK_4_7_RC	
<input type="checkbox"/> ETH_RESET_N	
<input type="checkbox"/> ETHER_LEDS<0>	
<input type="checkbox"/> ETHER_LEDS<1>	
<input checked="" type="checkbox"/> ETHER_LEDS<2>	
<input checked="" type="checkbox"/> ETHER_LEDS<3>	
<input type="checkbox"/> ETHER_LEDS<4>	
<input type="checkbox"/> ETHER_LEDS<5>	
<input type="checkbox"/> ETHER_LEDS<6>	
<input type="checkbox"/> ETHER_LEDS<7>	
<input type="checkbox"/> ETHER_LEDS<8>	

Parts shared by 2 nets (ETHER_LEDS<2>, ETHER_LEDS<3>) Select All | Deselect All | Close

U10



Example of short location detection with TFL .

3V3

256229-1.
Wed May 11 06:57:32 2016
SN:

All SC JMP/CONT/SC Merged
(3-52-132) Shorted to: 139
NODE: 3

- 3V3
- C6.B
- C7.B

C7 (P2)
C21 (P2)
C28 (P2)
C84 (P2)
C87 (P2)
C90 (P2)
C111 (P2)
C7_DC (P2)

NODE: 52

- FL4 (P1)
- C71 (P2)
- C72 (P2)
- C71,C72 (P2)
- FL4 (P2)
- R89 (P2)
- Y1 (P4)

NODE: 132

- C46 (P2)
- C46_DC (P2)
- FL3 (P1)
- C46 (P2)
- C45 (P2)
- C38 (P2)
- C38,R32 (P2)
- R32 (P2)

NODE: 139

- S7_L
- R27.A
- S7.1

R27 (P1)
S7 (P1)

COMPLETED - FAILED

The **JTAG Manager** produces reports and history files with the names defined by template and stores them in the user defined folders.

Save each report in an individual file

Report format:

Folder: [Browse](#)

File name template:

Available keywords:

File name preview:

Project Name: NRB				
Start Time: 12/8/2015 4:56 PM				
End Time: 12/8/2015 4:59 PM				
Elapsed Time: 3 minutes 5 seconds				
Created by: JTAG Manager rev. 3.1 build 5818JFTE				
JTAG System: JT				
JTAG Controller Type: 37x7 USB				
UUT P/N: NRB				
UUT S/N: 0083				
Sequence Status: Passed				
Test Step Num	Test Step Type	Test Step Name	Elapsed time	Result
1	Ctrl	Ctrl - PAUSE	4 seconds	Done
2	Test	Test - nrb_inter - capture	0 seconds	Passed
3	Test	Test - nrb_inter - ident	0 seconds	Passed
4	STAPL	STAPL - nrb_fpga_prog_u618 - NRB_FPGA_U618	10 seconds	Passed
5	STAPL	STAPL - nrb_fpga_prog_u618 - NRB_FPGA_U618	6 seconds	Passed
6	Ctrl	Ctrl - PAUSE	25 seconds	Done
7	Test	Test - nrb_inter - capture	1 second	Passed
8	Test	Test - nrb_temp_sens20+_u619	1 second	Done
9	Ctrl	Ctrl - IF (item=fail)		Skipped
10	Test	Test - nrb_temp_sens20-_u619	0 seconds	Passed
11	Ctrl	Ctrl - ELSE		Skipped
12	Ctrl	Ctrl - ENDIF		Skipped
13	Test	Test - nrb_temp_sens20+_u620	1 second	Done

The **JTAG Manager** establishes a Test History Data Base from stored history files and previously repair reports to following data processing and boards troubleshooting at **Offline Fault Search (OFS)** station.

History - From Folder C:\JTAG\GMI\NRB\History

Apply Filters
 Reset Filters
 Reload Results

Filter by serial numbers Clear

Filter by dates All | Today | This Week | This Month
 Minimum to Maximum

Filter by statuses [Select All](#) | [Deselect All](#)
 Failed
 Aborted
 Passed

Filter by UUT [Select All](#) | [Deselect All](#)
 NRB NRB

UUT Name	Part Number	Serial Number	Platform	Instrument	End Time	Elapsed Time
NRB	NRB	0080	JT	37x7 USB	12/10/2015 12:40:15 PM	3 seconds
NRB	NRB	0037	JT	37x7 USB	12/10/2015 12:36:38 PM	4 seconds
NRB	NRB	0024	JT	37x7 USB	12/10/2015 12:31:40 PM	4 seconds
NRB	NRB	0024	JT	37x7 USB	12/10/2015 12:30:57 PM	4 seconds
NRB	NRB	0090	JT	37x7 USB	12/10/2015 12:04:40 PM	1 second
NRB	NRB	0090	JT	37x7 USB	12/10/2015 12:03:56 PM	2 minutes 41 seconds
NRB	NRB	0090	JT	37x7 USB	12/10/2015 12:00:47 PM	2 seconds
NRB	NRB	0090	JT	37x7 USB	12/10/2015 12:00:37 PM	1 minute 22 seconds
NRB	NRB	0019	JT	37x7 USB	12/10/2015 11:44:10 AM	2 minutes 46 seconds
NRB	NRB	0019	JT	37x7 USB	12/10/2015 11:41:11 AM	13 seconds
NRB	NRB	0019	JT	37x7 USB	12/10/2015 11:40:50 AM	47 seconds
NRB	NRB	0036	JT	37x7 USB	12/10/2015 11:27:32 AM	5 seconds
NRB	NRB	0036	JT	37x7 USB	12/10/2015 11:27:12 AM	5 seconds
NRB	NRB	0002	JT	37x7 USB	12/8/2015 5:11:00 PM	3 seconds
NRB	NRB	0006	JT	37x7 USB	12/8/2015 5:04:45 PM	3 seconds
NRB	NRB	0006	JT	37x7 USB	12/8/2015 5:04:23 PM	4 seconds
NRB	NRB	0006	JT	37x7 USB	12/8/2015 5:03:32 PM	3 seconds
NRB	NRB	0006	JT	37x7 USB	12/8/2015 5:03:01 PM	4 seconds
NRB	NRB	0083	JT	37x7 USB	12/8/2015 4:59:17 PM	3 minutes 6 seconds
NRB	NRB	0034	JT	37x7 USB	12/7/2015 12:32:46 PM	3 seconds
NRB	NRB	0034	JT	37x7 USB	12/7/2015 12:32:10 PM	15 seconds
NRB	NRB	0026	JT	37x7 USB	12/6/2015 8:33:34 AM	3 seconds

The stored history files include all information and screens appearing during test execution and can be viewed at **Offline Fault Search (OFS)** station for troubleshooting.

The screenshot displays the JTAG Manager software interface. At the top, the title bar reads "Operator Fault Spotlight - [PC1736-10 - Run Results From Monday, December 14, 2015 2:00:57 PM]". The main window is divided into several sections:

- Project Information:** Shows "Open" with project name "BA0077-01 Rev.07", manufacturer "Corelis", status "FAILED", and duration "4 seconds".
- Boundary-Scan (JTAG) Tests, Flash Programming & ISP for CPLD / FPGA:** A list of test results:

1	PC1736-10_RevA_Var1_infrastructure_inf.cvf	PASSED
2	PC1736-10_RevA_Var1_interconnect_ic.cvf	PASSED
3	PC1736-10_RevA_Var1_pu&pd_pull.cvf	FAILED
4	PC1736-10_RevA_Var1_flash_U11.fpi	PASSED
- Test Vectors - PC1736-10_RevA_Var1_pupd_pull.cvf:** A table showing test vectors for various nets/pins. The "SPI_EN_PLL_80M" net is highlighted with a red arrow.

Net/Pin	Vector
U32.V2	[Green bar]
U32.V2	[Green bar]
U32.Y14	[Green bar]
C45.2	[Green bar]
R44.2	[Green bar]
U9.12	[Green bar]
SPI_EN_PLL_80M	[Green bar]
U32.V3	[Green bar]
U32.V3	[Green bar]
U32.AB20	[Green bar]
C170.2	[Green bar]
U24.16	[Green bar]
R206.2	[Green bar]
- Board View (Component Side):** A schematic diagram of the board with component U24 highlighted in yellow. A red arrow points from this component to the diagnostic info.
- Diagnostic Info:** Shows "Pullup/down test <PC1736-10_RevA_Var1_pu&pd_pull.cvf> Fault detected on net SPI_EN_PLL_80M". Under "Possible faults:", it lists "Pullup resistor on R206.2" and "Another pin on this net is i". A red arrow points from this text to the search results.
- Board Scheme:** A search window is open, showing "Looking For: R206 in the current document". Results show "1 document(s) with 1 instance(s)". A specific result for "R206 4.75Kohm 2 2R110:" is highlighted. A red arrow points from this result to the schematic diagram on the right, where resistor R206 is circled in red.

After the board repair the Repair Report should be filled in by the technician person. The Repair Report has saved as part of the history Data Base for statistical collection and further processing.

The image displays two side-by-side screenshots of the 'Repair Report' software interface. Both windows have a title bar with a close button (X) and a standard Windows-style title.

Left Screenshot:

- Date:** 10/12/2015 (dropdown menu)
- Operator:** (empty text field)
- Defect type:** Open (dropdown menu)
- Defect sources:** A list with a dropdown menu open showing options: Open, Short, Missing Part, Misoriented Part, Damaged Part, and Wrong Part. The 'Open' option is selected. To the right of the list are 'Delete' and 'Add' buttons.
- Notes:** (empty text area)
- Buttons:** OK and Cancel at the bottom.

Right Screenshot:

- Date:** 10/12/2015 (dropdown menu)
- Operator:** John Smith (text field)
- Defect type:** Open (dropdown menu)
- Defect sources:** A list containing two entries: 'Pin U20.DI' and 'Pin'. Each entry has a 'Delete' button to its right. Below the list are 'Add' and 'Delete' buttons.
- Notes:** Not soldered U20 pin 4. (text area)
- Buttons:** OK and Cancel at the bottom.

תגובות משתמשים.

ביאלר רן

.Final tests at Marvell Israel Ltd

שמי רן, עובד בחברת מארוול ומשתמש בתוכנה מזה כשנה. התוכנה ידידותית למשתמש ומקלה מאוד את תהליך איתור התקלות המתגלות בבדיקות. ריכוז כל המידע הנדרש (סכימות, בום, מיקום פיזי של רכיבים וכו') חוסך זמן יקר בעת איתור ותיקון תקלות. חשוב לציין את התמיכה הרחבה אותה אני מקבל מלאוניד במגוון נושאים הקשורים לבדיקות בעזרת התוכנה ולא רק בנושאים הקשורים לתוכנה.

דוד שאבו

טכנאי בדיקות JTAG.

אלביט מערכות יבשה ותקשוב תדיראן בע"מ.

ובהחלט התוכנה עזרה לי בתיקון הכרטיסים. MODEM עבדתי על תיקוני מעגלי התוכנה יעילה ומציגה את הקווים שנופלים בצורה ברורה וקלה לאיבחון.

עודד ניר

ראש צוות בדיקות.

אלביט מערכות יבשה ותקשוב תדיראן בע"מ.

התוכנה חוסכת זמן יקר באיתור התקלה ועושה רושם שהיא מייעלת את העבודה.

User's comments (Eng)

Bialer Ran

Final tests at Marvell Israel Ltd.

My name is Ran, working at Marvel and use the software for the last year. The user-friendly software makes revealing of the tests troubleshooting very easy to process. Concentration of required information (schemes, BOM, the physical location of components etc.) saves valuable time for problems search and fixing. It is important to note the broad support that I receive from Leonid by variety of topics related to testing using the software, and not only software-related issues.

David Shabo

JTAG testing technician.

Elbit Systems Ltd.

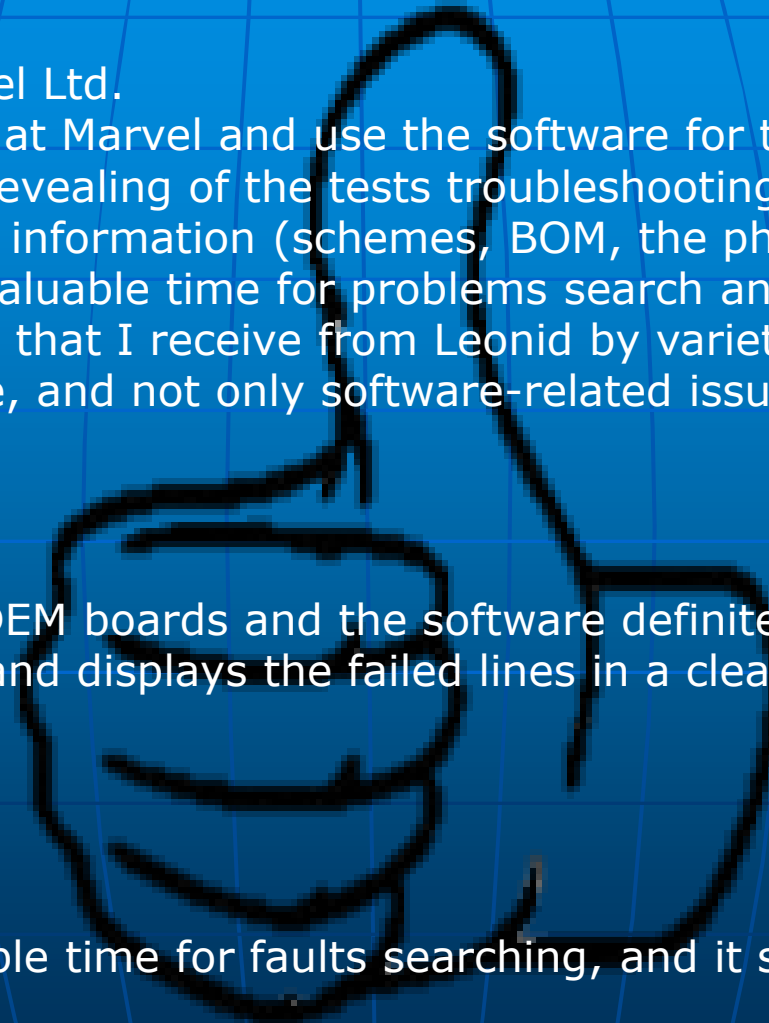
I worked to repair of MODEM boards and the software definitely helped me to do it. The software is effective and displays the failed lines in a clear and easy form to diagnostic.

Oded Nir

Testing team leader.

Elbit Systems Ltd.

The software saves valuable time for faults searching, and it seems that it really streamlines the work.



**Thank you
for your attention.**