

Multiple tasks, the single solution!



JTAG Manager Presentation

by

Leonid Kurilan

Founder & CEO

Since 2003

Leonid.k@start-test.com Phone. +972-54-6825726

www.Start-Test.com



The Star Test JTAG MANAGER software set contains three main modules:

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

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;

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.

The software is intended for use by:

JTAG testing operators - JMAN and OFS modules;

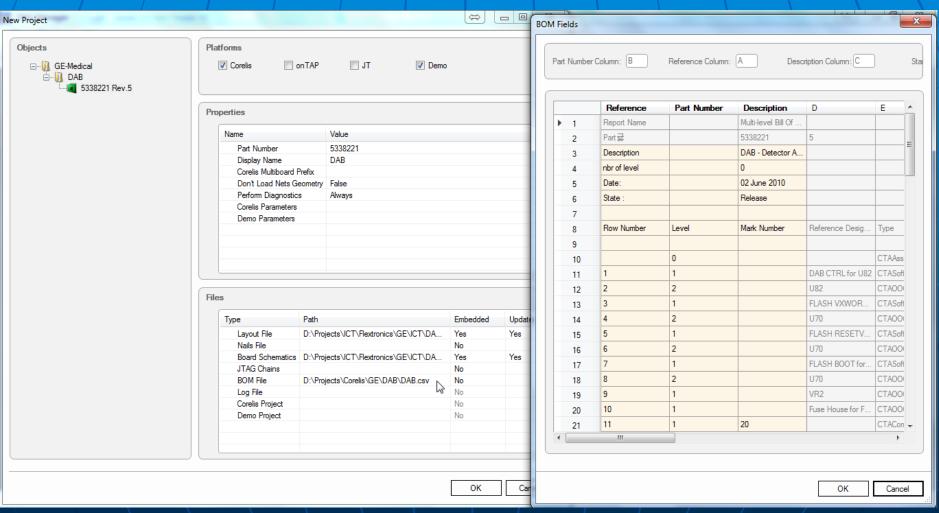
Repair technician staff after JTAG and ICT testing - TFL and OFS modules;

Manual soldering workers - TFL module;

Visual inspection controllers - TFL module.

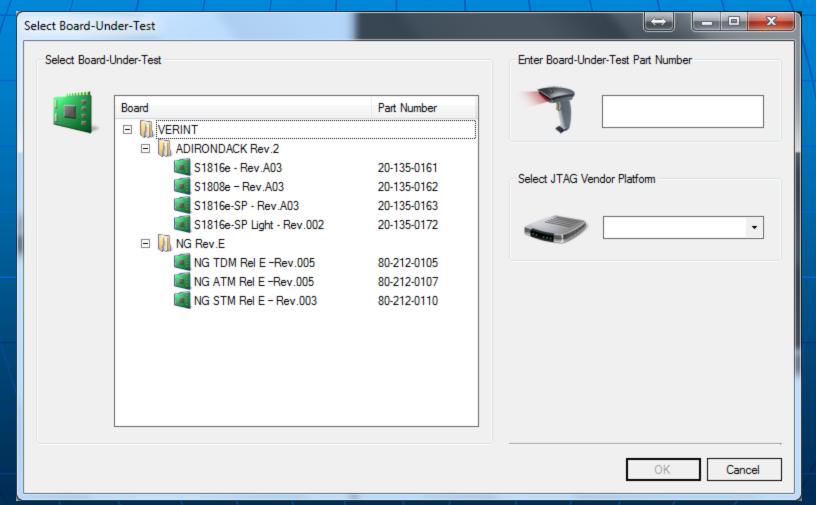


The JTAG Manager has easy and intuitively understandable GUI for a new project creation that allows to build tree projects structure.





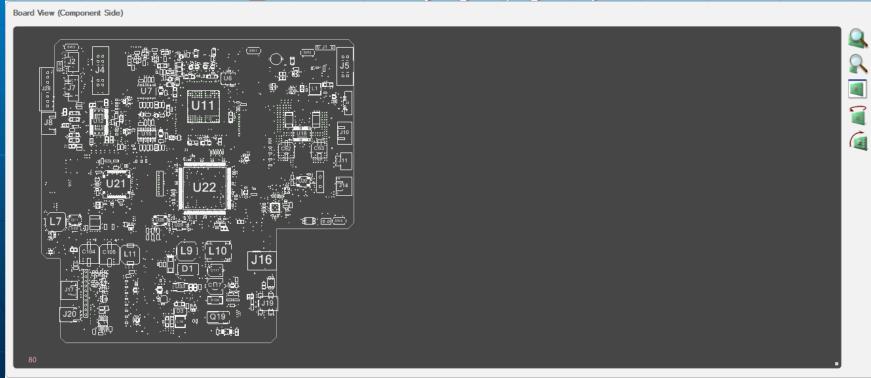
The JTAG Manager has simple and friendly operator oriented GUI for board to test selection and avoids necessity to search the test sequence file placement.





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 reduce the project load time and the project file size the JTAG Manager creates file in specially designed JMD format.

t Board Layout						
Select opened layout			Board View - mcb.jmd			
Layout file: mcb_i	tag.far	•				
		Select	P5	P4	P3	P2
		30000				
Load layout from file			U3 U12		T1 T	Γ2
Layout file:		Browse				
Nails file (optional): BOM file (optional):		Browse Browse	₩\$ U5		U38	
Don't load net geometry		Dionse		U23	U37 U48	J59 Ø 明
bont load net geometry		Load				
				OT Commences commences The commences commence		U61
						S2
Info						
			8	1 ° "J2" ° [-	J3 <u> </u>	J5 📶
	Input Layout	JTAG Manager Database				
Parts	2997	2997				
Nets	2293	2293				
ICT Nails	70	70				
BOM Entries	142	142				
File size (KB)		1,789				
1 10 (10)		1	194			

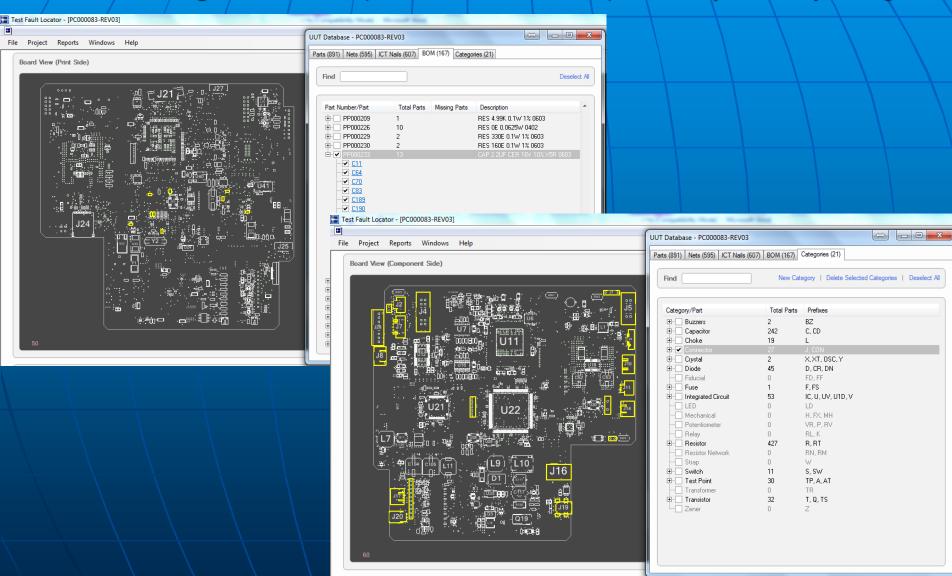


The JTAG Manager establishes a project database from input files CAD and BOM. The Data Base includes five interrelated tables - PARTS, NETS, ICT NAILS, BOM, CATEGORIES.

UUT Database - EP	T-2015					□ X			
Parts (280) Nets (122) ICT Nails (115) BOM (99) Categories (21)									
Find					De	select All			
Part/Pin	Net	ICT Nail	Category	BOM Part Number	BOM Description	^			
⊕ . R41			Resistor	Part not in BOM					
			Resistor	102-00029-01	RES,60K4,1%,1/20W,0201				
⊕ R43	⊕ R43			101-00227-01	RES,1.00K,1%,1/10W,0603,HV				
⊕ R44			Resistor	102-00029-01	RES,60K4,1%,1/20W,0201				
⊕ R45			Resistor	102-00031-01	RES,100K,1%,1/20W,0201				
⊕ R46			Resistor	102-00023-01	RES,22K,1%,1/20W,0201				
			Resistor	102-00036-01	RES,806K,1/10W,1%,0603,HV				
			Resistor	102-00025-01	RES,41K2,1%,1/20W,0201				
⊕ R49			Resistor	102-00014-01	RES,10R,1%, 1/10W,0603,HV				
⊕ R50			Resistor	101-00253-01	RES Anti-Surge ,20R,1%,0.2W,0603				
⊕ R51			Resistor	102-00026-01	RES,49K9,1%,1/20W,0201				
Ē. R52			Resistor	102-00025-01	RES,41K2,1%,1/20W,0201				
1	B ICOMP MEAS	<u>37</u>							
2	N15409851	32							
			Resistor	102-00020-01	RES,10K,1%,1/20W,0201				
			Resistor	101-00213-01	RES,13.7K,1%,1/20W,0201				
⊕ R55			Resistor	102-00029-01	RES,60K4,1%,1/20W,0201				
± R56			Resistor	102-00037-01	RES,10M,1%,1/10W,0603,HV				

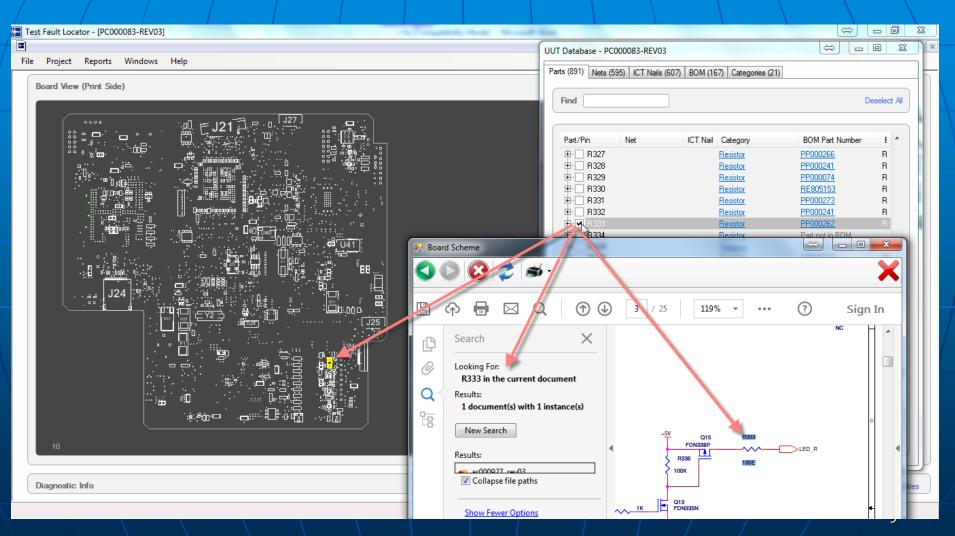


The JTAG Manager allows to implement search of components by PN or by Categories.



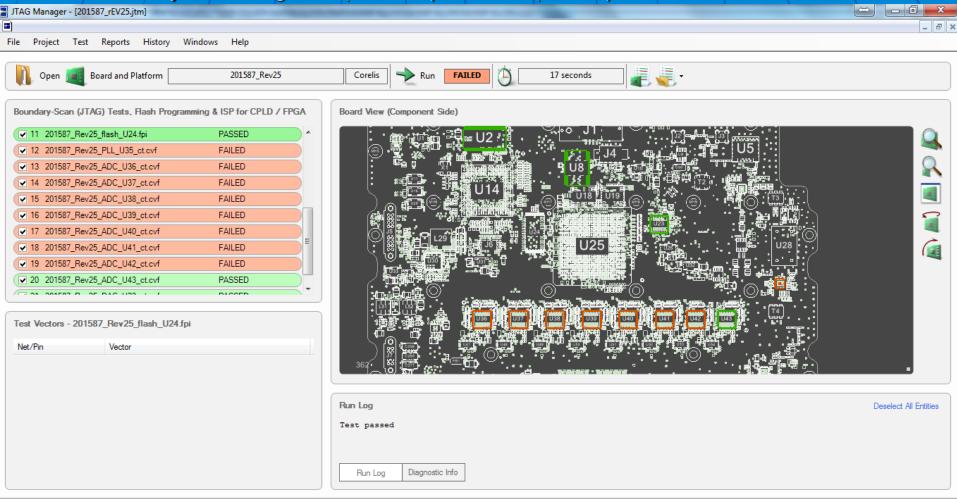


The JTAG Manager realizes simultaneously search of Parts and Nets in Board Scheme and Board View windows



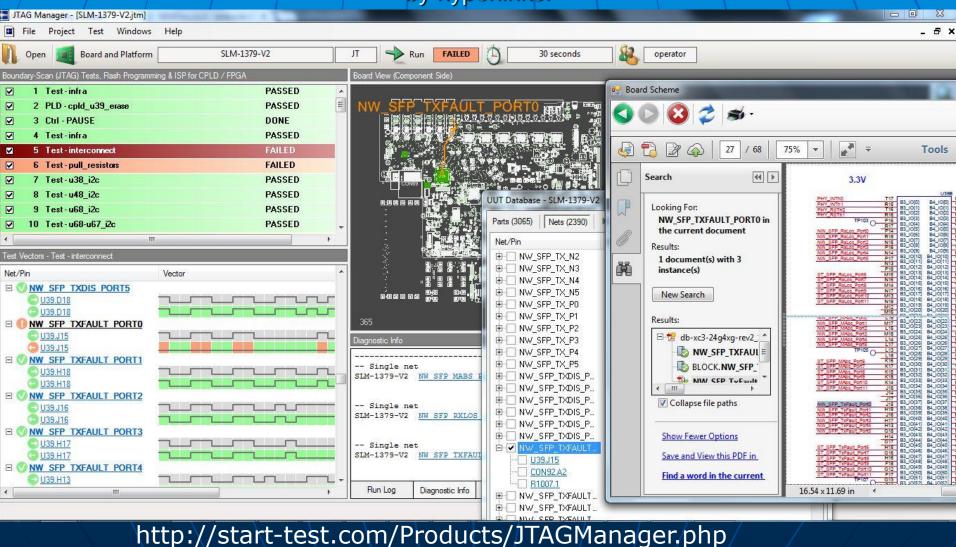


The **JTAG Manager** allows to run BS testing sequences based on CORELIS and JTAG TECHNOLOGIES platforms and graphically displays the test results on the Board View window by colors - green (Passed) and red (Failed).



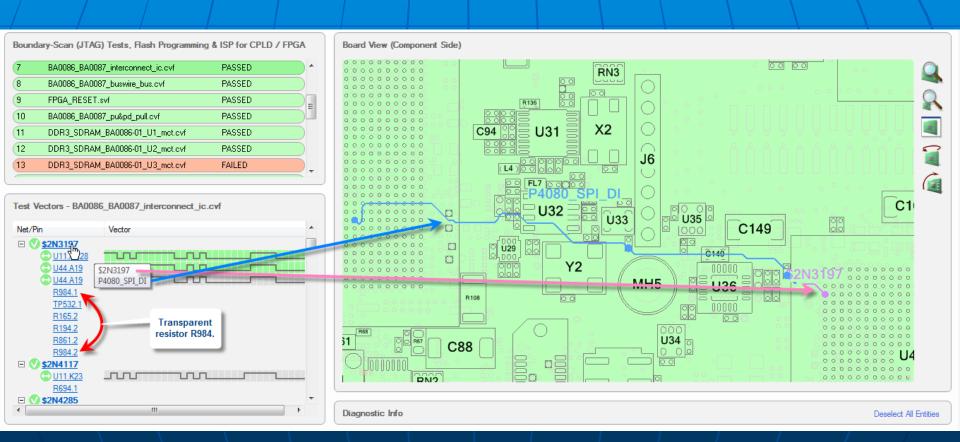


The JTAG Manager makes the Test Operator's work and troubleshooting process easier by concentrating all the necessary data on a single screen and connecting their by hyperlinks.



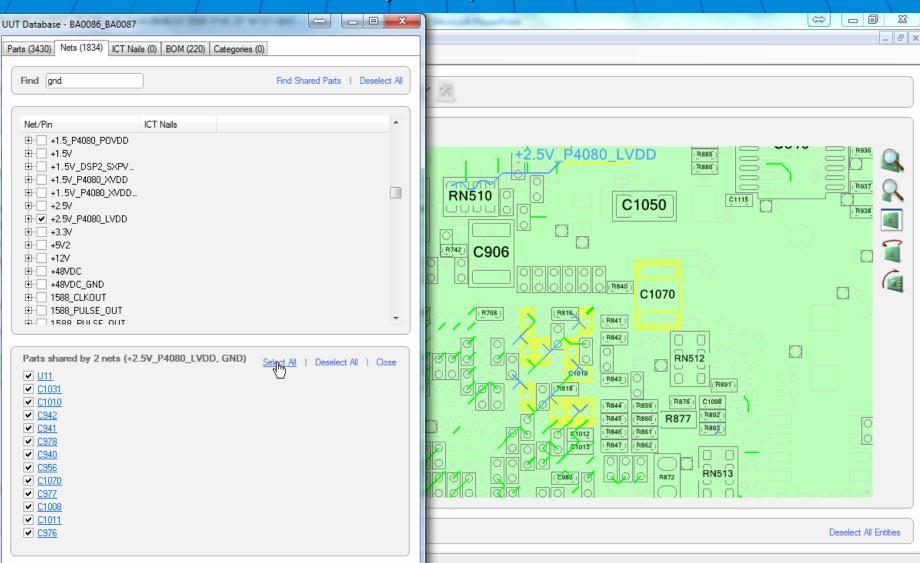


The JTAG Manager allows to see full path of "Merged_Nets" through transparent components view, include all related printed conductors and pins.



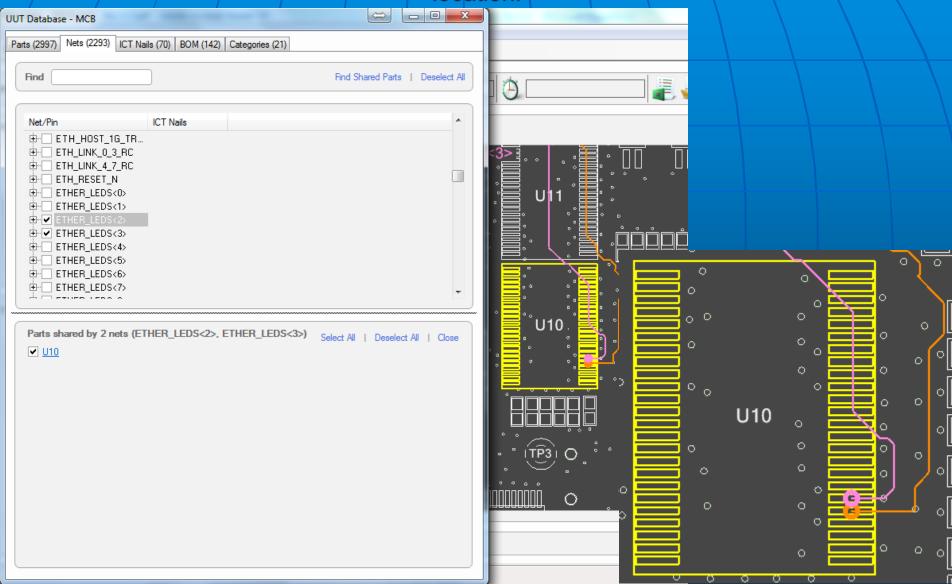


The JTAG Manager allows to find Parts shared by two or more Nets. This feature may be helpful for shorts search.





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



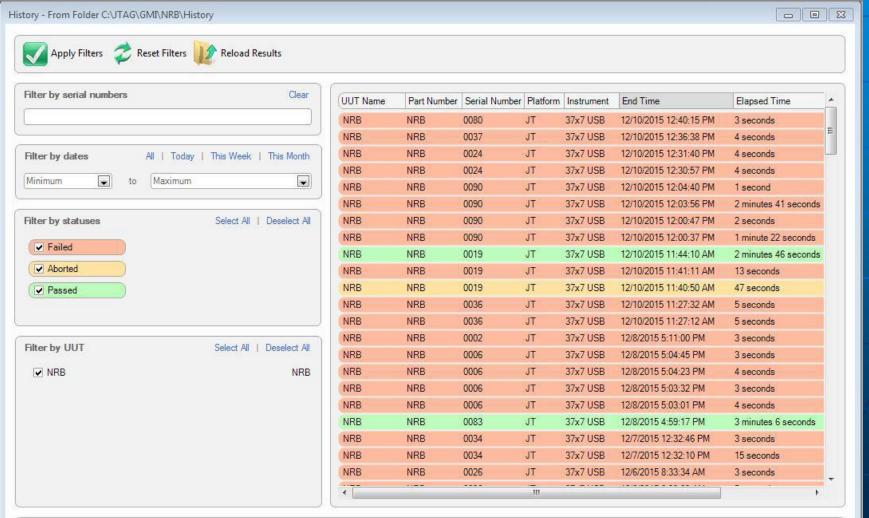


The JTAG Manager produces reports and history files with the names defined by template and stores them in the user defined folders.

/	Save each report	in an individual f	ile										
	Report format:	CSV	•										
	Folder:	D:\Boards\45\45_A	Browse										
	File name template:	_UUT_NAMEPN											
	Available keywords:	_UUT_NAMEPN	_										
	File name preview:	Motherboard 712-654321 123456 John Smith Passed 2015-10-20 14-58-56.csv											
					Project Name: N	IRB							
					Start Time: 12/8	/2015 4:56 PM							
					End Time: 12/8/	2015 4:59 PM							
			nds										
			3.1 build 5818JFTE										
					JTAG System: J								
		JTAG Controller Type: 37x7 USB											
		UUT P/N: NRB											
					UUT S/N: 0083								
					Sequence Statu	s: Passed							
					Test Step Num	Test Step Type	Test Step Nam	е			Elapsed time		Result
							Ctrl - PAUSE				4 seconds		Done
					2	Test	Test - nrb inter	- capture	e		0 seconds		Passed
					3		Test - nrb inter	•			0 seconds		Passed
					4	STAPL	STAPL - nrb_fp	ga prog	u618 - NRB	FPGA U618	10 seconds		Passed
					5		STAPL - nrb fp				6 seconds		Passed
					6		Ctrl - PAUSE	0	_	_	25 seconds		Done
							Test - nrb inter	- capture	e		1 second		Passed
					8		Test - nrb_temp				1 second		Done
					9		Ctrl - IF (item=f		_				Skipped
					10		Test - nrb temp		0- u619		0 seconds		Passed
				-	11		Ctrl - ELSE	_	_				Skipped
							Ctrl - ENDIF						Skipped
							Test - nrb temp	sens20	0+ u620		1 second		Done
		http://c	tart_toct	com	Drodi								

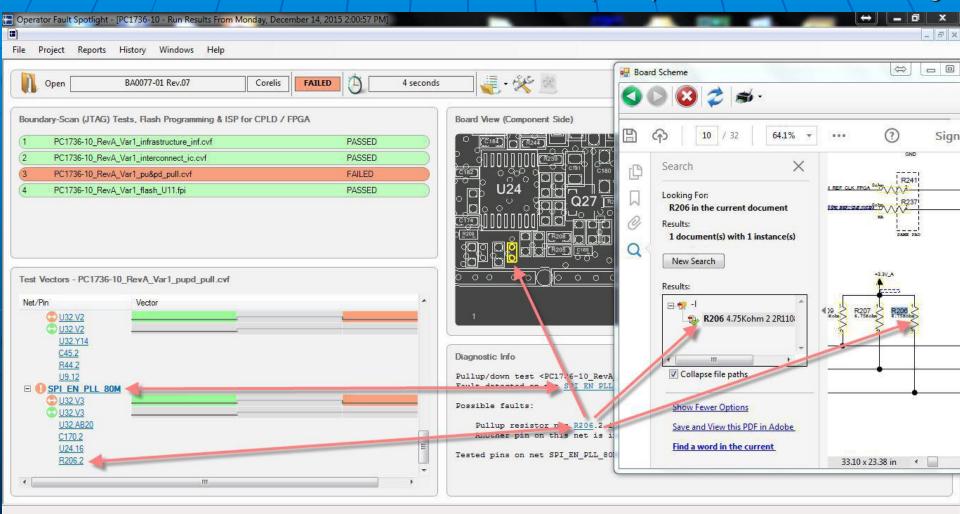


The JTAG Manager establishes a Test History Data Base from stored history files and previously repair reports to following data processing and boards troubleshooting at Offline Fault Search (OFS) station.



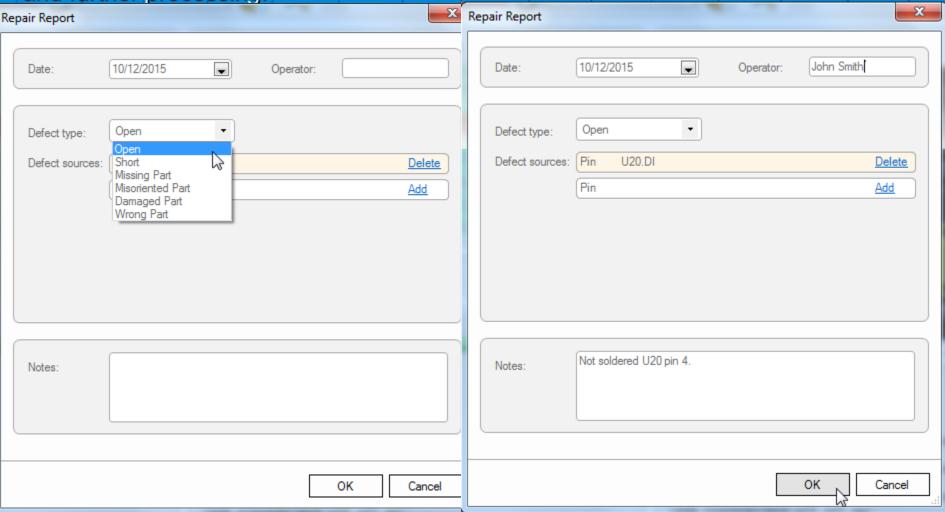


The stored history files include all information and screens appearing during test execution and can be viewed at Offline Fault Search (OFS) station for troubleshooting.

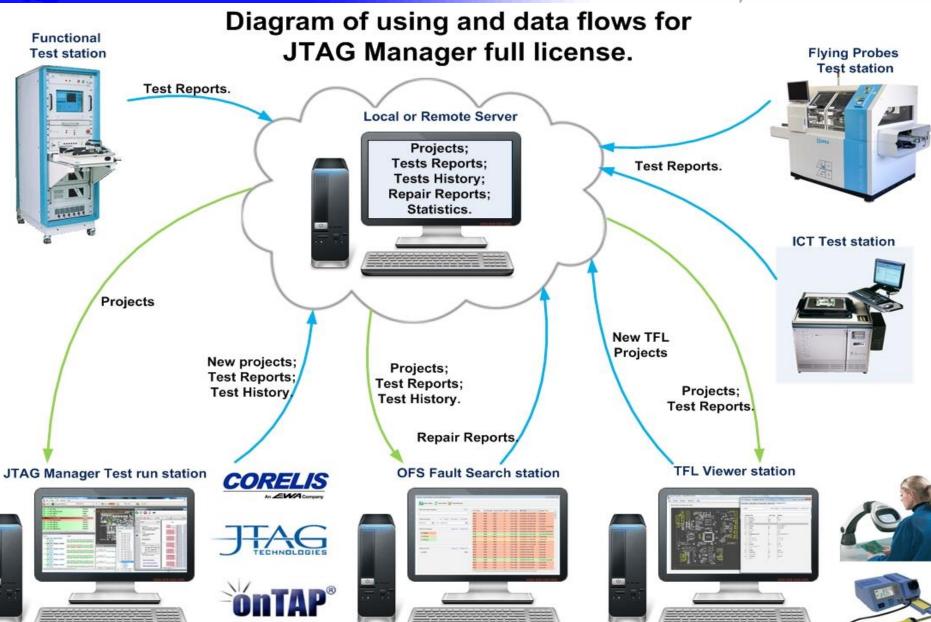




After the board repair the Repair Report should be filled in by the technician person. The Repair Report has saved as part of the history Data Base for statistical collection and further processing.









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.



Licenses

- 30-days free software evaluation license for a single position;
- A single position annual license. This license should be renewed each additional year;
- A single position license without time limit. Including support for the first year. The support issue is renewable for each additional year;
- Full license includes all three modules JMAN, TFL and OFS;
- TFL license includes support of TFL module only;
- OFS license includes support of OFS module only.
- Corporative license for up to 10 JMAN and 10 TFL or OFS stations;
- Corporative license for up to 20 JMAN and 20 TFL or OFS stations;
- Corporative license for up to 50 JMAN and 50 TFL or OFS stations.



Thank you for your attention.