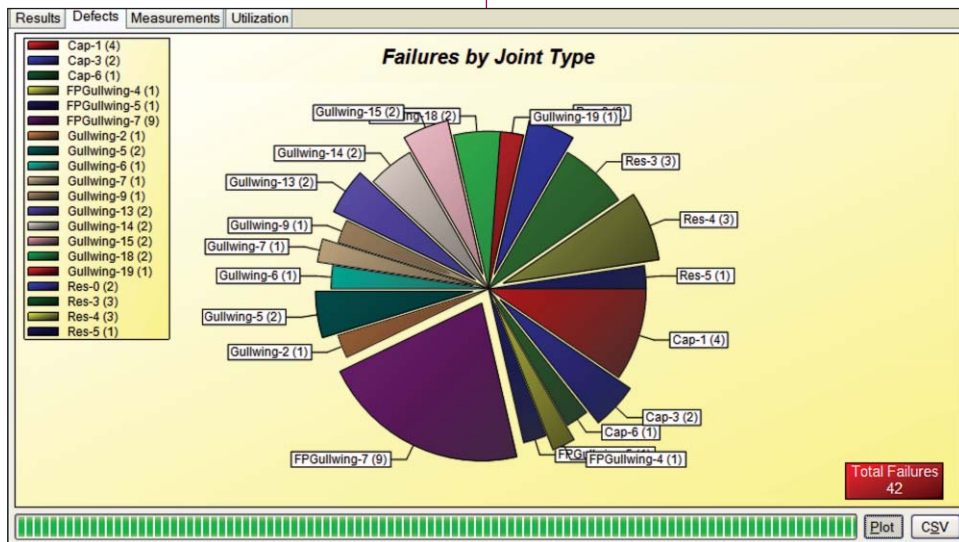


codeNexus – Defect Reporter

Defect Reporter enhancement for the *Medalist* 5DX Automated X-ray Inspection System

Application Note



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The Mission behind codeNexus

To help people move from the old DOS interfaces to a graphical interface.

- ▶ Thus you arrive at 'nexus', the tie, the bond, the link, the connection or interconnection between two entities.

What is the codeNexus – Defect Reporter?

A 'User Contributed' tool for the 5DX that replaces functionality found in:

- ▶ Defect Reporter (DOS based)
- ▶ Some Review Measurements graphing (DOS based)

What does the codeNexus – Defect Reporter do?

It is a graphical user interface of the DOS Defect Reporter. It provides some basic graphing / exporting functionality:

- ▶ Different graph types for the test results
- ▶ A 'Defects Only' view of the test results for production tuning
- ▶ Measurement filtering and graphing
- ▶ Exporting filtered defect / measurement data to CSV
- ▶ Basic chart printing, zooming, and copying functions

What does the interface look like?

Results List View

Results File	Board	Board Serial#	Test End Time	# Defects	CAD File
TA66P7V.RES	BOARD_0_B1_B_A1_A1-1	Family: FET Subtype: STK800A_2_R1_Q 8	25/04/2008 7:26:03 PM	0	10ORCG
19CWI6R.RES	BOARD_0_B1_B_A1_A1-1	Family: FET Subtype: STK800A_2_R1_Q 8	25/04/2008 7:26:21 PM	20	10ORCG
207LD06T.RES	BOARD_0_B1_B_A1_A1-1	Family: FET Subtype: STK800A_2_R1_Q 8	25/04/2008 7:26:41 PM	2	10ORCG
IQUDW8Z.RES	BOARD_0_B1_B_A1_A1-1	Family: FET Subtype: STK800A_2_R1_Q 8	25/04/2008 7:29:17 PM	20	10ORCG
O8YFLBR.RES	BOARD_0_B1_B_A1_A1-1	Family: FET Subtype: STK800A_2_R1_Q 8	25/04/2008 7:30:42 PM	20	10ORCG
OMFEZES.RES	BOARD_0_B1_B_A1_A1-1	Family: FET Subtype: STK800A_2_R1_Q 8	25/04/2008 7:31:22 PM	1	10ORCG
11VNNKJO.RES	BOARD_0_B1_B_A1_A1-1	Family: FET Subtype: STK800A_2_R1_Q 8	25/04/2008 7:31:26 PM	6	10ORCG
J9TGFTT.RES	SECONDARY_A-1	Family: Chip Subtype: 16	25/04/2008 8:04:45 PM	2	ULG6H2
5RFZ5Z.RES	SECONDARY_A-1	Family: Chip Subtype: 16	25/04/2008 8:07:56 PM	0	ULG6H2
1BDG8J4F.RES	SECONDARY_A-1	Family: Chip Subtype: 16	25/04/2008 8:12:04 PM	4	ULG6H2
HK77JG4.RES	SECONDARY_A-1	Family: Chip Subtype: 16	25/04/2008 8:22:04 PM	4	ULG6H2
1W2CPBZ.RES	SECONDARY_A-1	Family: Chip Subtype: 16	25/04/2008 8:23:27 PM	4	ULG6H2
MHR3IJY.RES	SECONDARY_A-1	Family: Chip Subtype: 16	25/04/2008 8:24:23 PM	10	ULG6H2
7P9HN29.RES	SECONDARY_PRIMARY_A1-1	Family: Connector Subtype: 1	25/04/2008 8:25:50 PM	0	F67J33C
1P50QLB.RES	SECONDARY_PRIMARY_A1-1	Family: Connector Subtype: 2	25/04/2008 8:26:05 PM	0	F67J33C
KLQQUJE.RES	SECONDARY_PRIMARY_A1-1	Family: Connector Subtype: 3	25/04/2008 8:29:26 PM	0	F67J33C
23X2FDAE.RES	SECONDARY_A-1	Family: Chip Subtype: 16	05/05/2008 7:26:21 PM	0	ULG6H2
ZFHIE6AN.RES	13035_ROA1282228_2_A_A1-1	Family: Connector Subtype: 002_BYZ60905_53_W 18	07/05/2008 4:28:28 PM	2	1PVQDW

Switch viewing mode

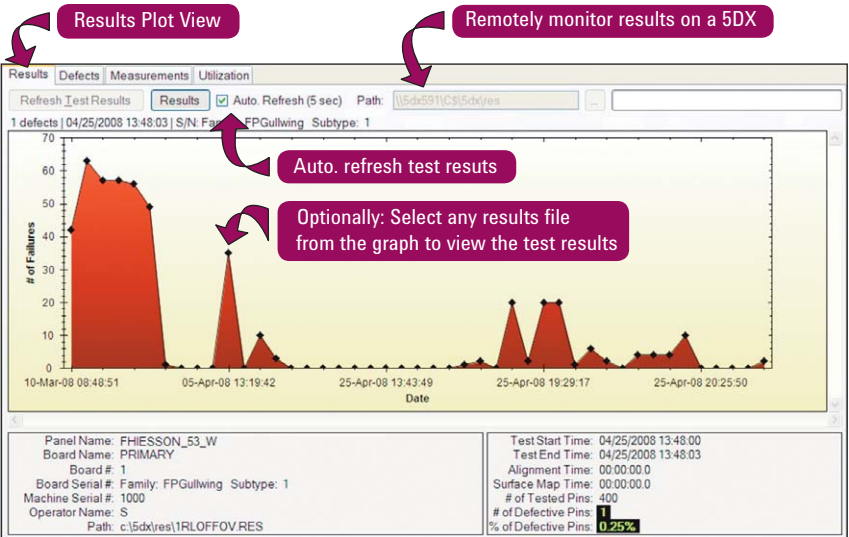
Choose any result folder

Select a result from the list to view the results

Details of the selected result file

Panel Name: FHISSION_53_W
 Board Name: 13035_ROA1282228_2_A_A1
 Board #: 1
 Board Serial #: Family: Connector Subtype: 002_BYZ60905_53_W 18
 Machine Serial #: 591
 Operator Name: S
 Path: c:\5dx\res\ZFHIE6AN.RES

Test End Time: 05/07/2008 16:28:28
 Alignment Time: 00:00:00
 Surface Map Time: 00:00:00
 # of Tested Pins: 4
 # of Defective Pins: 2
 % of Defective Pins: 50.00%



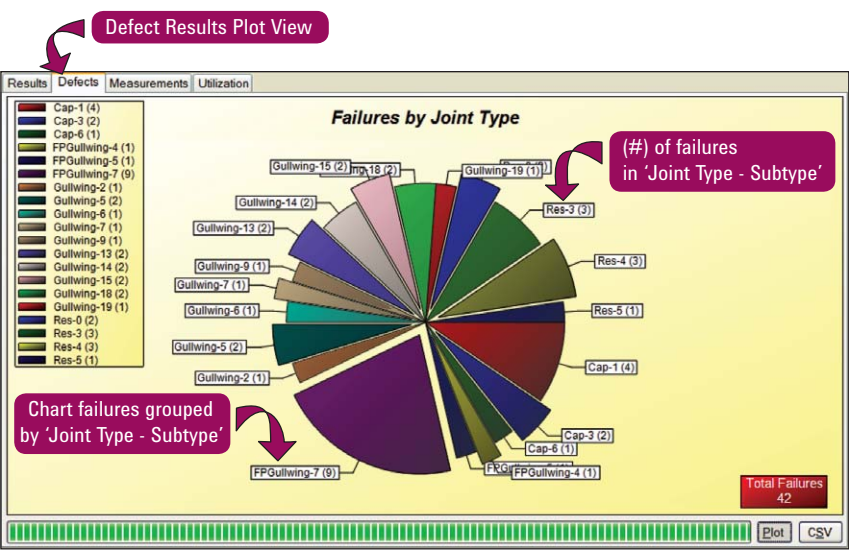
Defect Results List View **Grouping by the selected attribute**

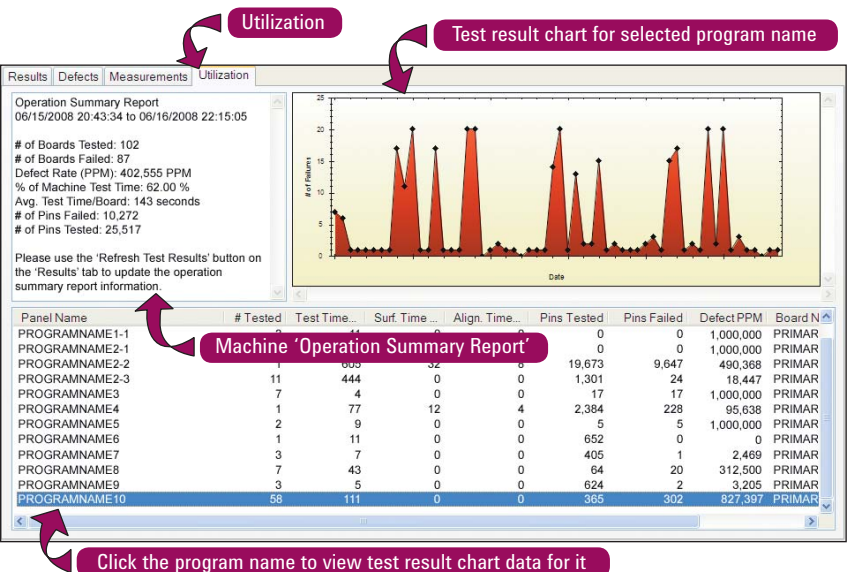
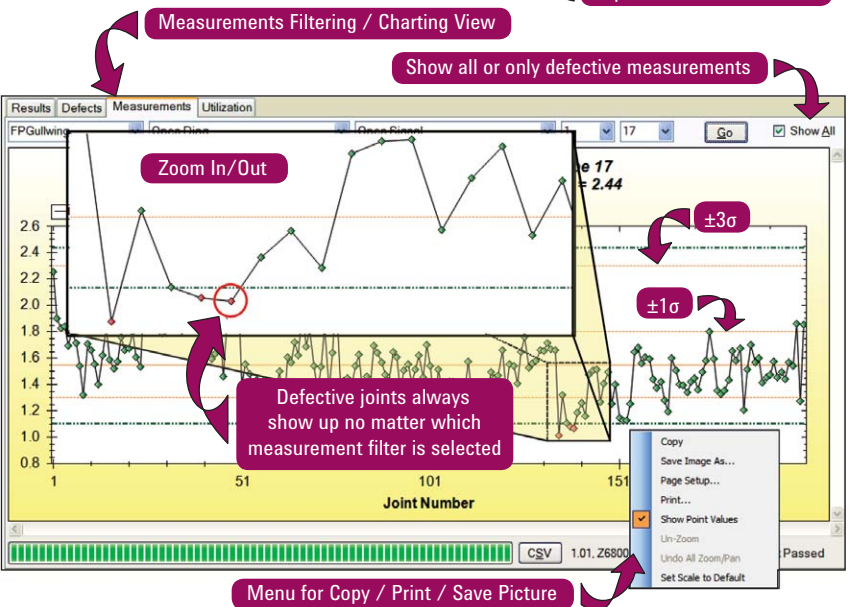
Group by: Joint Type Sub. Ref. Des. Pin Defect Slice Measurement Value Units Package Side Joint Number

Joint Type	Sub.	Ref. Des.	Pin	Defect	Slice	Measurement	Value	Units	Package	Side	Joint Number
Cap - 1 - Contamination - Edge Pixel Variance - 1											
Cap	1	C922	1	Contamination	1	Edge Pixel Variance	0.67		CS_2_C1005_A	U	779
Cap	1	C925	2	Contamination	1	Edge Pixel Variance	0.63		CS_2_C1005_A	U	786
Cap	1	C926	2	Contamination	1	Edge Pixel Variance	0.51		CS_2_C1005_A	U	788
Cap	1	C932	2	Contamination	1	Edge Pixel Variance	0.52		CS_2_C1005_A	U	796
Cap - 3 - Open - Body Width Ratio - 1											
Cap	3	C501	1	Open	1	Body Width Ratio	100.00		CS_2_C5750_F	O	3
Cap	3	C501	2	Open	1	Body Width Ratio	100.00		CS_2_C5750_F	O	4
Cap - 3 - Open - Edge Pixel% - 1											
Cap	3	C501	1	Open	1	Edge Pixel%	3.83		CS_2_C5750_F	O	3
Cap	3	C501	2	Open	1	Edge Pixel%	4.06		CS_2_C5750_F	O	4
Cap - 3 - Open - Profile Deriv HW Ratio - 1											
Cap	3	C501	1	Open	1	Profile Deriv HW Ratio	2.67		CS_2_C5750_F	O	3
Cap	3	C501	2	Open	1	Profile Deriv HW Ratio	2.73		CS_2_C5750_F	O	4
Cap - 3 - Pin Off Pad - Pin Width Ratio - 1											
Cap	3	C501	1	Pin Off Pad	1	Pin Width Ratio	1.30		CS_2_C5750_F	O	3
Cap	3	C501	2	Pin Off Pad	1	Pin Width Ratio	1.30		CS_2_C5750_F	O	4

Export Defects to CSV

Switch viewing mode





FAQ

What does it cost to buy?

- ▶ Nothing.

What versions of 5DX software does it work on?

- ▶ All versions from v7.xx to v8.xx

What versions of Microsoft® Windows® does it work on?

- ▶ All versions of Windows XP
 - Provided .NET 2.0 can be installed on it

Key Points to Remember

- ▶ A chance to improve your current daily tasks.
- ▶ This is 'User Contributed' software and as such may have little or no support.
- ▶ If you are not able to download it from the web.
 - If you are not able to download it from the web, contact support at www.agilent.com/find/contactus

Installation

How is it installed?

There are 2 methods

1. Launch from Desktop

- Place the executable somewhere familiar on the local PC's drive (note: network drive support requires a special security override in Windows)
- Make a shortcut to the executable on your desktop

2. Total Integration

- Rename rpt.exe in the Rxx\Master directory to ".old"
- Copy the codeNexus executable into the Rxx\Master directory
- If the DOS window is appearing for you then rename the trpt.bat to ".old" in the above directory and create a new trpt.bat file with the line "**start rpt.exe**" without the quotes in it.

Build Operator Menu Network Setup

To setup the program to run from a network drive you need to grant network access permissions on the 5DX for the program. Note that a user with Administrator privileges is required to perform these steps.

- ▶ Server Name = **MyServer**
- ▶ Server Share = **MyShare**
- ▶ Program directory = **\Software\MyProgramNameDirectory**
- ▶ Combined network path = **\\MyServer\MyShare\Software\MyProgramNameDirectory**
- ▶ Reformed network path = **//MyServer/MyShare/Software/MyProgramNameDirectory**

With the reformed network path you can now configure the 5DX for all Windows XP users.

On the 5DX controller, in a Command Prompt window, go to the following directory and issue the commands in the order given below:

- ▶ Click the **'Start'** button on the Taskbar
- ▶ Click on **'Run...'**
- ▶ Enter **'cmd'** without the quotes and press the **'Enter'** key.
- ▶ In the Command Prompt window enter the following:
 - **cd /d %windir%\Microsoft.NET\Framework\v2.0.50727**
 - **C:\>CasPol.exe -pp off -m -ag 1.2 -url file://MyServer/MyShare/Software/MyProgramNameDirectory/* FullTrust**

Now run the executable and make sure that you don't get the System.Permissions.EnvironmentPermission error message below or a crash message of "System.Security.SecurityException", if you do recheck the steps above.



An exception 'System.Security.SecurityException' has occurred in ...



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France	0825 010 700*
	*0.125 €/minute
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