

Welcome to Galaxy Examinator reports

Date: Wed Oct 16 16:40:27 2024

Product : LotID :

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Histogram of Tests

Pareto lists: Tests Cp , Tests Cpk , Failures , Failure Signatures , Software Bin , Hardware Bin

Wafermaps & Strip Maps
Bins (Software, Hardware)

Message Log: Empty

Global information and options



Tests Statistics

Test	Name	Type	Low L.	High L.	Source	Execs	Fails	Mean	Sigma	Ср	Cpk	Yield
<u>o</u>	dssc_pll_freq1 -1	P	450 Khz	550 Khz	Samples	200	3	502.261 Khz	22.9782 Khz	0.7253	0.6925	98.50 %
<u>1</u>	VBT_freq1 O_CLK_A 19.g119	P	450 K	550 K	Samples	197	0	505.482 K	4.98937 K	3.34	2.97	100.00 %
<u>2</u>	VBT_freq1 O_CLK_B 19.e113	P	7.8 M	9.5333 M	Samples	197	0	9.29081 M	0.00273866 M	105.5	29.51	100.00 %
<u>3</u>	VBT_freq1 O_CLK_C 19.g117	P	117 M	143 M	Samples	197	0	130.005 M	0.00499404 M	867.7	867.4	100.00 %
<u>4</u>	VBT_freq1 O_CLK_D 19.g137	P	234 M	371.8 M	Samples	197	0	260.005 M	0.00499403 M	4598.8	1735.7	100.00 %
<u>786000</u>	Soft_Bin parameter	_	n/a .	n/a .	Samples	200	0	984.01	7985.81	n/a .	n/a .	100.00 %
<u>786001</u>	Hard_Bin parameter	_	n/a .	n/a .	Samples	200	0	1.135	1.09672	n/a .	n/a .	100.00 %
<u>786002</u>	Die_X parameter	_	n/a .	n/a .	Samples	200	0	6.4	4.0648	n/a .	n/a .	100.00 %
<u>786003</u>	Die_Y parameter	_	n/a .	n/a .	Samples	200	0	7.35	4.13679	n/a .	n/a .	100.00 %
<u>786004</u>	Test_Time parameter	_	0.0 sec	n/a .	Samples	200	0	0.38732 sec	0.0653873 sec	n/a .	1.97	100.00 %
<u>786006</u>	Testing_Site parameter	_	n/a .	n/a .	Samples	200	0	0	0	n/a .	n/a .	100.00 %
<u>786007</u>	Part_ID parameter	_	n/a .	n/a .	Samples	200	0	100.5	57.8792	n/a .	n/a .	100.00 %

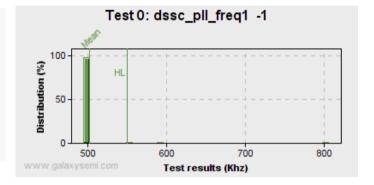
Tests Statistics 2/21



Test dssc_pll_freq1 -1 Name Test type Parametric Low limit 450 Khz High limit 550 Khz Exec / Fails 200 / 3 (1.50%) Mean 502.261 Khz Sigma 22.9782 Khz Range 311.402 Khz

Samples 200

Cp / Cpk



 Test
 1

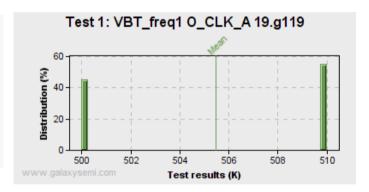
 Name
 VBT_freq1 O_CLK_A 19.g119

 Test type
 Parametric

0.7253 / 0.6925

Low limit 450 K High limit 550 K

Exec / Fails 197 / 0 (0.00%)
Mean 505.482 K
Sigma 4.98937 K
Range 10 K
Cp / Cpk 3.34 / 2.97
Samples 200

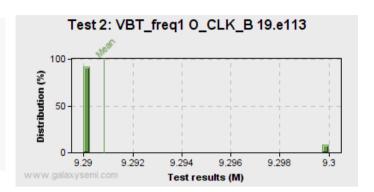


Histogram of Tests 3/21

Test 2

Name VBT_freq1 O_CLK_B 19.e113

Test type Parametric Low limit 7.8 M High limit 9.5333 M Exec / Fails 197 / 0 (0.00%) Mean 9.29081 M Sigma 0.00273866 M Range 0.01 M Cp / Cpk 105.5 / 29.51 Samples 200



Test

Name VBT_freq1 O_CLK_C 19.g117

Test type Parametric
Low limit 117 M
High limit 143 M

 Exec / Fails
 197 / 0 (0.00%)

 Mean
 130.005 M

 Sigma
 0.00499404 M

 Range
 0.01 M

 Cp / Cpk
 867.7 / 867.4

Samples 200

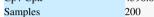


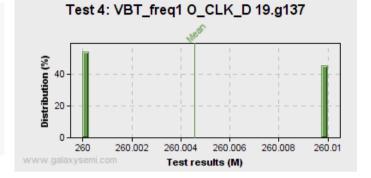
Histogram of Tests 4/21

Test 4

Name VBT_freq1 O_CLK_D 19.g137

Test type Parametric Low limit 234 M High limit 371.8 M Exec / Fails 197 / 0 (0.00%) Mean 260.005 M Sigma 0.00499403 M Range 0.01 M Cp / Cpk 4598.8 / 1735.7





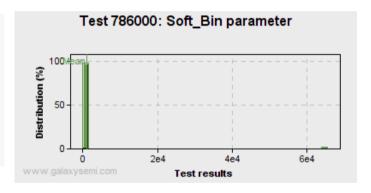
Test <u>786000</u>

Name Soft_Bin parameter

Test type –
Low limit n/a .
High limit n/a .

Exec / Fails 200 / 0 (0.00%)

Mean 984.01
Sigma 7985.81
Range 65534
Cp / Cpk n/a . / n/a .
Samples 200



Histogram of Tests 5/21

Test 786001

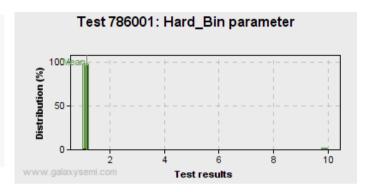
Name Hard_Bin parameter

Test type Low limit n/a . High limit n/a .

200 / 0 (0.00%) Exec / Fails

Mean 1.135 1.09672 Sigma Range 9 Cp / Cpk n/a . / n/a .

Samples 200



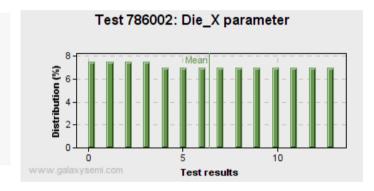


Die_X parameter Name

Test type Low limit n/a . High limit n/a .

200 / 0 (0.00%) Exec / Fails

Mean 6.4 4.0648 Sigma Range 13 Cp / Cpk n/a . / n/a . Samples 200



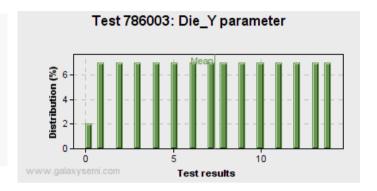
Histogram of Tests 6/21 Test <u>786003</u>

Name Die_Y parameter

Test type - Low limit n/a. High limit n/a.

Exec / Fails 200 / 0 (0.00%)

Mean 7.35
Sigma 4.13679
Range 14
Cp / Cpk n/a . / n/a .
Samples 200



Test <u>786004</u>

Name Test_Time parameter

Test type –
Low limit 0.0 sec
High limit n/a.

 Exec / Fails
 200 / 0 (0.00%)

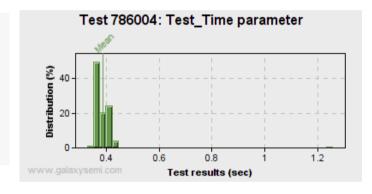
 Mean
 0.38732 sec

 Sigma
 0.0653873 sec

 Range
 0.93 sec

 Cp / Cpk
 n/a . / 1.97

 Samples
 200



Histogram of Tests 7/21

Test <u>786006</u>

Name Testing_Site parameter

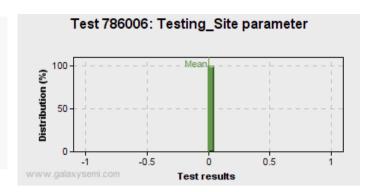
Test type –
Low limit n/a .
High limit n/a .

Exec / Fails 200 / 0 (0.00%)

Mean 0
Sigma 0
Range 0

Cp / Cpk n/a . / n/a .

Samples 200



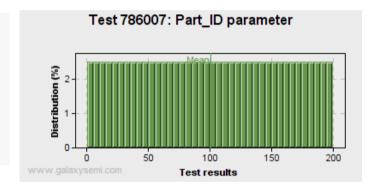


Name Part_ID parameter

Test type - Low limit n/a. High limit n/a.

Exec / Fails 200 / 0 (0.00%)

Mean 100.5
Sigma 57.8792
Range 199
Cp / Cpk n/a . / n/a .
Samples 200



Histogram of Tests 8/21



Test	Name	Ср	Test Cp Chart
<u>0</u>	dssc_pll_freq1 -1	0.7253	

Shows all Cp <= 1.7 (Defined in Options, section 'Pareto/Define Cp cut-off limit')

Pareto of Tests Cp 9/21



Test	Name	Cpk	Test Cpk Chart
<u>0</u>	dssc_pll_freq1 -1	0.6925	

Shows all Cpk <= 1.3 (Defined in Options, section 'Pareto/Define Cp cut-off limit')

Pareto of Tests Cpk 10/21



Test	Name	Failing Bin	Failures count	Yield Loss	Fail contribution	Test Fail rate	Failures Chart
<u>0</u>	dssc_pll_freq1 -1	10	3	1.5 %	100.0 %	1.5 %	
_	Cumul. of failures	-	3	1.5 %	100.0 %	1.5 %	

- -- Yield loss: number of failed test executions / number of parts
- -- Fail contribution: number of failed test executions / number of parts failed
- -- Test Fail rate: number of failed test executions / number of test executions

Pareto of Tests failures 11/21



Pareto of Functional Failure Signatures (pins tested in parallel)

Total devices tested: **200** Total patterns detected: **1**

Fail count	% of failures	% of tested	Functional Failure signatures (tested pins failing together)
3	100.00 %	1.50 %	% dssc_pll_freq1 -1 (Test 0)
3	100 %	-	- Total failures detected

Shows first 25 % of the failure signatures (Defined in Options, section 'Pareto/Define Failure Signatures cut-off limit')



Pareto of Parametric Failure Signatures (tests failing concurrently)

No Parametric failure signature detected



Software Bin	ning Bin Name	Count	Percentage	Software Binning Chart
1	-	197	98.5 %	
65535	_	3	1.5 %	
Cumul.	Cumul.	200	100.0%	

Pareto of Software Bins 13/21



Hardware Bi	nning Bin Name	Count	Percentage	Hardware Binning Chart
1	-	197	98.5 %	
10	_	3	1.5 %	
Cumul.	Cumul.	200	100.0%	

Pareto of Hardware Bins 14/21



Show Software bins

Devices tested (with retests) 200

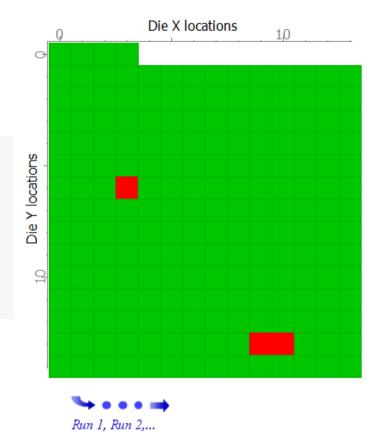
Total physical parts tested 200 (only applies to Wafermaps)



Top 10 Software Binning	1	65535
Color		
Pass/Fail	P	F
Percentage	98.5%	1.5%
Total count	197	3

15/21 List of Individual Maps

Map style	STRIP map (parts tested are PACKAGED DEVICES!)
Total physical parts tested	200
Parts processed	All Data / parts (any Bin)
Data from Sites	All sites
Strip started	Thu Oct 17 03:55:42 2024
Strip ended	Thu Oct 17 04:18:25 2024
Wafer tested in	22 minutes 43 seconds
Average device test time	6.815 sec.
Map dimensions	LowX=0, LowY=0, HighX=13, HighY=14



List of Individual Maps 16/21



Software Binning	Bin Name	Pass/ Fail	Total count	Percentage	Software Binning Chart
1	-	P	197	98.5 %	
65535	-	F	3	1.5 %	
All PASS Bins	All PASS Bins	P	197	98.5 %	
All FAIL Bins	All FAIL Bins	F	3	1.5 %	
ALL Bins	ALL Bins	-	200	100.0 %	

Hint: From the 'Options' tab in the 'Binning' section, you can configure how to compute the binning (from summary or samples)

Software Binning Summary 17/21



G,	lardwa	re Bi	nning S	ummary	
<u>Hardware</u> <u>Binning</u>	Bin Name	Pass/ Fail	Total count	Percentage	Hardware Binning Chart
1	_	P	197	98.5 %	
10	-	F	3	1.5 %	
All PASS Bins	All PASS Bins	P	197	98.5 %	
All FAIL Bins	All FAIL Bins	F	3	1.5 %	
ALL Bins	ALL Bins	-	200	100.0 %	

Hint: From the 'Options' tab in the 'Binning' section, you can configure how to compute the binning (from summary or samples)



No log message to report



Report from	Teradyne–Examinator–Pro+ – V8.1.5 – www.galaxysemi.com
Report created	Wed Oct 16 16:40:27 2024
Data processed	85.3 KB (87343 bytes)
Processing time	21.90 seconds
Processing speed	4.0 KB/sec
Examinator expires	Mon Oct 16 2034
(null)	_

18/21 Global Information

File name	C:/Users/rahmana/OneDrive – Teradyne/Desktop/New Hire/New Hire Tech/UFP New Hire Train/Project 2/Project–2/rahmana_i8243_p2.igxl_pll.std		
Tests mapping file	n/a		
Setup time	Thu Oct 17 03:59:45 2024		
Start time	Thu Oct 17 03:55:42 2024		
End time	Thu Oct 17 04:18:25 2024		
Test duration	22 minutes 43 seconds		
Product	n/a		
Program	rahmana_i8243_p2.igxl		
Revision	n/a		
Lot	n/a		
Sub-Lot	n/a		
WaferID	n/a		
Parts processed	All Data / parts (any Bin)		
Data from Sites	All sites		
Test time (GOOD parts)	0.388 sec. (excludes tester idle time)		
Test time (ALL parts)	0.387 sec. (excludes tester idle time)		
Average test time	6.815 sec. / device (includes tester idle time between parts)		
Total parts tested	200 – Includes parts retested (if any)		
Good parts (Yield)	197 (98.50%) – Includes parts retested (if any)		
Bad parts (Yield loss)	3 (1.50%) – Includes parts retested (if any)		
Parts retested	n/a .		
Parts aborted	0 (0.00%)		
(null)	-		
STDF Version	4.0		
Tester name	SNG-UFP-789		
Tester type	UltraFLEXplus		
Station	1		
Part type	n/a		
Operator	rahmana		
Exec_type	IG-XL		
Exec_version	10.30.10_uflx (P1.11)		
TestCode	n/a		
Test Temperature	n/a		
User Text	n/a		
Aux_file	n/a		
Package type	n/a		
Per_freq	n/a		

Global Information 19/21

Spec_name	n/a
Spec_version	n/a
Family ID	n/a
Date code	n/a
Design Rev	n/a
Facility ID	n/a
Floor ID	n/a
Proc ID	n/a
Flow ID	n/a
Setup ID	n/a
Eng ID	n/a
ROM code	n/a
Serial #	n/a
Super user name	n/a
Handler/Prober	n/a
(null)	_
Site details	Site# 0

Global Information 20/21



Test# policy	Never merge tests with identical test number if test name not matching	
Data Cleaning	None (keep all data)	
Statistics computation	From samples data (if any), otherwise from summary	
Binning computation	From summary data (if any), otherwise from samples	
Cp,Cpk computation	Use standard Sigma formula	
Mean drift formula	Percentage of value drift	

Global Options 21/21