

Welcome to Galaxy Examinator reports

Date: Mon Oct 14 13:23:47 2024

Product : LotID :

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

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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>0</u>	Icc_dynamic VCC 15.e201 <> Icc_dynamic	P	n/a .	n/a .	Samples	204	0	2.01125e-06 A	3.0622e-09 A	n/a .	n/a .	100.00 %
<u>1</u>	Sleep_IDD_VCCIO VCCIO 15.e228	P	n/a .	n/a .	Samples	204	0	1.53877e-06 A	2.70515e-08 A	n/a.	n/a .	100.00 %
<u>2</u>	Static_IDD_VCC VCC 15.e201	P	n/a .	n/a .	Samples	204	0	1.94121e-05 A	5.98127e-09 A	n/a.	n/a .	100.00 %
<u>3</u>	Static_IDD_VCCIO VCCIO 15.e228	P	n/a .	n/a .	Samples	204	0	1.68073e-05 A	1.95014e-08 A	n/a .	n/a .	100.00 %
<u>4</u>	Icc_dynamic VCC 15.e201 <> Icc_dynamic	P	n/a .	n/a .	Samples	204	0	0.0010005 A	5.79556e-07 A	n/a .	n/a .	100.00 %
<u>5</u>	Icc_dynamic VCCIO 15.e228 <> Icc_dynamic	P	n/a .	n/a .	Samples	204	0	0.000755744 A	1.7125e-06 A	n/a .	n/a .	100.00 %
<u>6</u>	IDDQ2 VCC 15.e201	P	20 uA	1000 uA	Samples	204	0	58.1544 uA	2.10881 uA	77.45	6.03	100.00 %
<u>7</u>	IDDQ2 VCC 15.e201	P	20 uA	1000 uA	Samples	204	0	208.714 uA	1.99802 uA	81.75	31.48	100.00 %
<u>8</u>	Icc_dynamic VCC 15.e201 <> Icc_dynamic	P	20 uA	1000 uA	Samples	204	0	809.575 uA	2.47668 uA	65.95	25.63	100.00 %
<u>9</u>	Icc_dynamic VCCIO 15.e228 <> Icc_dynamic	P	20 uA	1000 uA	Samples	204	1	55.7267 uA	15.411 uA	10.60	0.7728	99.51 %
<u>10</u>	IDDQ_VCCIO VCCIO 15.e228	P	20 uA	1000 uA	Samples	204	0	168.762 uA	15.7975 uA	10.34	3.14	100.00 %
<u>11</u>	IDDQ_VCCIO VCCIO 15.e228	P	20 uA	1000 uA	Samples	204	0	619.952 uA	19.7639 uA	8.26	6.41	100.00 %
<u>786000</u>	Soft_Bin parameter	_	n/a .	n/a .	Samples	204	0	322.245	4588.3	n/a .	n/a .	100.00 %
<u>786001</u>	Hard_Bin parameter	_	n/a .	n/a .	Samples	204	0	1.03922	0.560112	n/a .	n/a .	100.00 %
<u>786002</u>	Die_X parameter	_	n/a .	n/a .	Samples	204	0	6.38235	4.02956	n/a .	n/a .	100.00 %
<u>786003</u>	Die_Y parameter	_	n/a .	n/a .	Samples	204	0	7.20588	4.22131	n/a .	n/a .	100.00 %
<u>786004</u>	Test_Time parameter	_	0.0 sec	n/a .	Samples	204	0	2.68494 sec	0.0175641 sec	n/a .	50.95	100.00 %
<u>786006</u>	Testing_Site parameter	_	n/a .	n/a .	Samples	204	0	0	0	n/a .	n/a .	100.00 %
<u>786007</u>	Part_ID parameter	-	n/a .	n/a .	Samples	204	0	112.5	59.0339	n/a .	n/a .	100.00 %

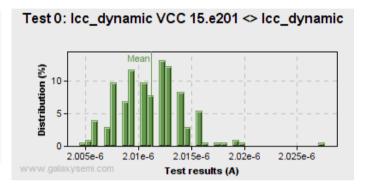
Tests Statistics 2/24



Name Icc_dynamic VCC 15.e201 <> Icc_dynamic

 $\begin{tabular}{lll} Test type & Parametric \\ Low limit & n/a \ . \\ High limit & n/a \ . \\ \end{tabular}$

Exec / Fails 204 / 0 (0.00%)
Mean 2.01125e-06 A
Sigma 3.0622e-09 A
Range 2.31742e-08 A
Cp / Cpk n/a . / n/a .
Samples 204

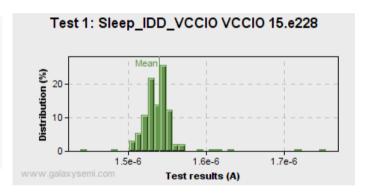


Test

Name Sleep_IDD_VCCIO VCCIO 15.e228

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

Exec / Fails 204 / 0 (0.00%)
Mean 1.53877e-06 A
Sigma 2.70515e-08 A
Range 3.14998e-07 A
Cp / Cpk n/a . / n/a .
Samples 204

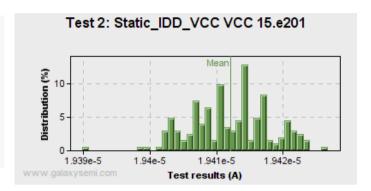


Histogram of Tests 3/24

Name Static_IDD_VCC VCC 15.e201

 $\begin{tabular}{lll} Test type & Parametric \\ Low limit & n/a \ . \\ High limit & n/a \ . \\ \end{tabular}$

Exec / Fails 204 / 0 (0.00%)
Mean 1.94121e-05 A
Sigma 5.98127e-09 A
Range 3.69073e-08 A
Cp / Cpk n/a . / n/a .
Samples 204

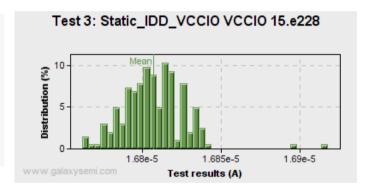


Test

Name Static_IDD_VCCIO VCCIO 15.e228

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

Exec / Fails 204 / 0 (0.00%)
Mean 1.68073e-05 A
Sigma 1.95014e-08 A
Range 1.55784e-07 A
Cp / Cpk n/a . / n/a .
Samples 204



Histogram of Tests 4/24

Name Icc_dynamic VCC 15.e201 <> Icc_dynamic

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

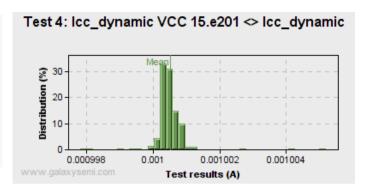
Exec / Fails 204 / 0 (0.00%)
Mean 0.0010005 A
Sigma 5.79556e-07 A
Range 7.38143e-06 A
Cp / Cpk n/a . / n/a .
Samples 204

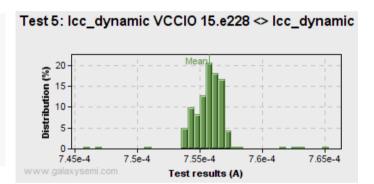


Name Icc_dynamic VCCIO 15.e228 <> Icc_dynamic

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

Exec / Fails 204 / 0 (0.00%)
Mean 0.000755744 A
Sigma 1.7125e-06 A
Range 1.95694e-05 A
Cp / Cpk n/a . / n/a .
Samples 204

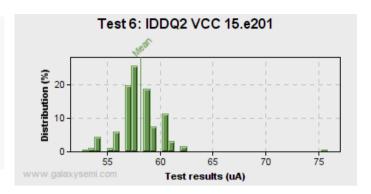




Histogram of Tests 5/24

Name IDDQ2 VCC 15.e201

Test type Parametric Low limit 20 uA 1000 uA High limit 204 / 0 (0.00%) Exec / Fails Mean 58.1544 uA Sigma 2.10881 uA Range 23.1743 uA Cp / Cpk 77.45 / 6.03 Samples 204

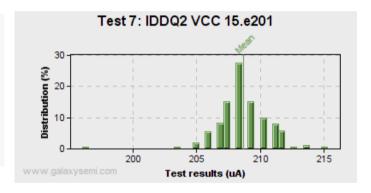


Test

IDDQ2 VCC 15.e201 Name

Test type Parametric Low limit 20 uA High limit 1000 uA Exec / Fails 204 / 0 (0.00%) Mean 208.714 uA Sigma 1.99802 uA Range 19.3119 uA Cp / Cpk 81.75 / 31.48

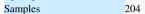
Samples 204



Histogram of Tests 6/24

Name Icc_dynamic VCC 15.e201 <> Icc_dynamic

Test type Parametric Low limit 20 uA High limit 1000 uA Exec / Fails 204 / 0 (0.00%) Mean 809.575 uA Sigma 2.47668 uA Range 33.0448 uA Cp / Cpk 65.95 / 25.63

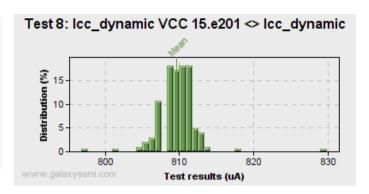


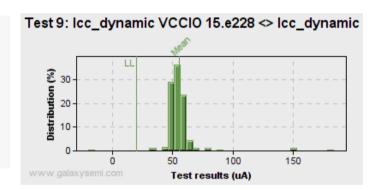


Name Icc_dynamic VCCIO 15.e228 <> Icc_dynamic
Test type Parametric
Low limit 20 uA
High limit 1000 uA

Exec / Fails 204 / 1 (0.49%)
Mean 55.7267 uA
Sigma 15.411 uA
Range 203.848 uA
Cp / Cpk 10.60 / 0.7728

Samples 204



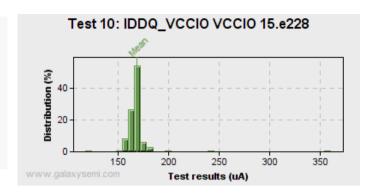


Histogram of Tests 7/24

Test <u>10</u>

Name IDDQ_VCCIO VCCIO 15.e228

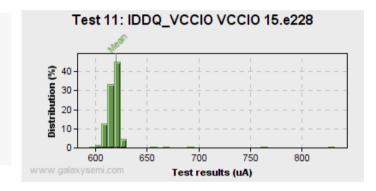
Test type Parametric Low limit 20 uA High limit 1000 uA Exec / Fails 204 / 0 (0.00%) Mean 168.762 uA Sigma 15.7975 uA Range 242.472 uA Cp / Cpk 10.34 / 3.14 Samples 204



Test 11

Name IDDQ_VCCIO VCCIO 15.e228

Test type Parametric Low limit 20 uA High limit 1000 uA Exec / Fails 204 / 0 (0.00%) Mean 619.952 uA Sigma 19.7639 uA Range 236.893 uA Cp / Cpk 8.26 / 6.41 Samples 204



Histogram of Tests 8/24

Test <u>786000</u>

Name Soft_Bin parameter

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

Exec / Fails 204 / 0 (0.00%)

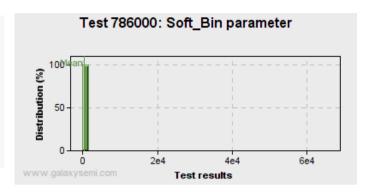
Mean 322.245

Sigma 4588.3

Range 65534

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

Samples 204



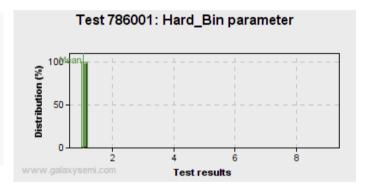
Test <u>786001</u>

Name Hard_Bin parameter

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

Exec / Fails 204 / 0 (0.00%)
Mean 1.03922
Sigma 0.560112
Range 8

Cp / Cpk n/a . / n/a . Samples 204



Histogram of Tests 9/24

Test <u>786002</u>

Name Die_X parameter

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

Exec / Fails 204 / 0 (0.00%)

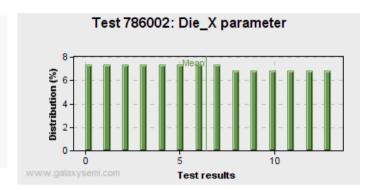
Mean 6.38235

Sigma 4.02956

Range 13

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

Samples 204



Test <u>786003</u>

Name Die_Y parameter

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

Exec / Fails 204 / 0 (0.00%)

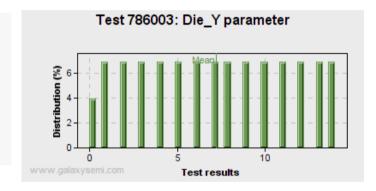
Mean 7.20588

Sigma 4.22131

Range 14

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

Samples 204



Histogram of Tests 10/24

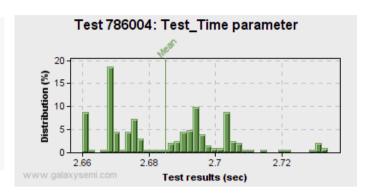
Name Test_Time parameter

Test type

0.0 sec

Low limit High limit n/a .

204 / 0 (0.00%) Exec / Fails Mean 2.68494 sec Sigma 0.0175641 sec Range 0.074 sec Cp / Cpk n/a . / 50.95 Samples 204

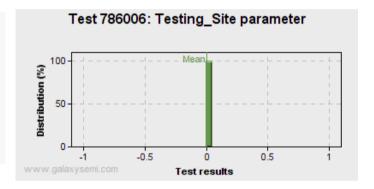


Test 786006

Testing_Site parameter Name

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

Exec / Fails 204 / 0 (0.00%) Mean Sigma 0 Range 0 Cp / Cpk n/a . / n/a . Samples 204



Histogram of Tests 11/24 Test <u>786007</u>

Name Part_ID parameter

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

Exec / Fails 204 / 0 (0.00%)

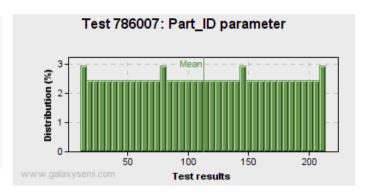
 Mean
 112.5

 Sigma
 59.0339

 Range
 203

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

 Samples
 204





Test Name Cp Test Cp Chart

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

Pareto of Tests Cp 12/24



Test	Name	Cpk	Test Cpk Chart
<u>9</u>	Icc_dynamic VCCIO 15.e228 <> Icc_dynamic	0.7728	

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

Pareto of Tests Cpk 13/24



Test	Name	Failing Bin	Failures count	Yield Loss	Fail contribution	Test Fail rate	Failures Chart
<u>9</u>	Icc_dynamic VCCIO 15.e228 <> Icc_dynamic	9	1	0.5 %	50.0 %	0.5 %	
_	Cumul. of failures	-	1	0.5 %	50.0 %	0.5 %	

- -- 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 14/24



Pareto of Functional Failure Signatures (pins tested in parallel)

Total devices tested: 212
Total patterns detected: 1

Fail count	% of failures	% of tested	Functional Failure signatures (tested pins failing together)
1	100.00 %	0.47 %	% Icc_dynamic VCCIO 15.e228 Icc_dynamic (Test 9)
1	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 Binning	Bin Name	Count	Percentage	Software Binning Chart
1	-	210	99.1 %	
65535	-	2	0.9 %	
Cumul.	Cumul.	212	100.0%	

Pareto of Software Bins 16/24



Hardware Binning	Bin Name	Count	Percentage	Hardware Binning Chart
1	-	210	99.1 %	
9	-	2	0.9 %	
Cumul.	Cumul.	212	100.0%	

Pareto of Hardware Bins 17/24



Show Software bins

212 **Devices tested (with retests)**

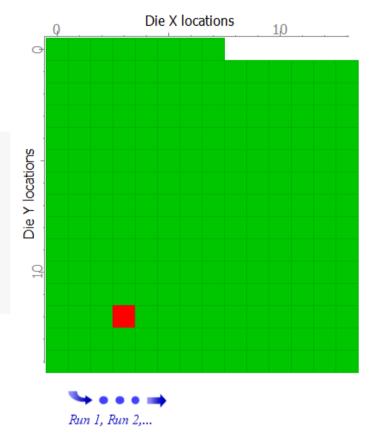
Total physical parts tested 204 (only applies to Wafermaps)



Top 10 Software Binning	1	65535
Color		
Pass/Fail	P	F
Percentage	99.1%	0.9%
Total count	210	2

List of Individual Maps 18/24

Map style	STRIP map (parts tested are PACKAGED DEVICES!)
Total physical parts tested	204
Parts processed	All Data / parts (any Bin)
Data from Sites	All sites
Strip started	Fri Oct 11 02:51:32 2024
Strip ended	Fri Oct 11 03:08:38 2024
Wafer tested in	17 minutes 06 seconds
Average device test time	4.840 sec.
Map dimensions	LowX=0, LowY=0, HighX=13, HighY=14



List of Individual Maps 19/24



Software Binning	Bin Name	Pass/ Fail	Total count	Percentage	Software Binning Chart
1	_	P	210	99.1 %	
65535	_	F	2	0.9 %	
All PASS Bir		P	210	99.1 %	
All FAIL Bi	All FAIL Bins	F	2	0.9 %	
ALL Bins	ALL Bins	-	212	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 20/24



Hardware Binning Summary

<u>Hardware</u> <u>Binning</u>	Bin Name	Pass/ Fail	Total count	Percentage	Hardware Binning Chart
1	_	P	210	99.1 %	
9	_	F	2	0.9 %	
All PASS Bins	All PASS Bins	P	210	99.1 %	
All FAIL Bins	All FAIL Bins	F	2	0.9 %	
ALL Bins	ALL Bins	-	212	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	Mon Oct 14 13:23:47 2024
Data processed	192.7 KB (197366 bytes)
Processing time	0.50 second
Processing speed	388.5 KB/sec
Examinator expires	Sat Oct 14 2034
(null)	-

Global Information 21/24

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_10112024_025431.std
Tests mapping file	n/a
Setup time	Fri Oct 11 02:55:09 2024
Start time	Fri Oct 11 02:51:32 2024
End time	Fri Oct 11 03:08:38 2024
Test duration	17 minutes 06 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)	2.685 sec. (excludes tester idle time)
Test time (ALL parts)	2.685 sec. (excludes tester idle time)
Average test time	4.840 sec. / device (includes tester idle time between parts)
Total parts tested	212 – Includes parts retested (if any)
Good parts (Yield)	210 (99.06%) – Includes parts retested (if any)
Bad parts (Yield loss)	2 (0.94%) – 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 22/24

Spec_name	n/a
Spec_version	n/a
Family ID	n/a
Date code	n/a
	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 23/24



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 24/24