

信頼性試験成績書

Mirror Flash (65nm Process Technology)

WXIC Process

Package Type: FBGA

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0256A

Reliability Test

Device Type : S29GL02GS
Package Type : FBGA64

Test Item	Test Condition	Number Tested	Tested Time	Number Failed
Early Life Failure Rate	125 3.6V CLK FREQ.= 1MHz	2400	168h	0
High Temperature Operation Life 高温連続動作試験	125 3.6V CLK FREQ.= 1MHz	231	1000h	0
Temperature Cycling 温度サイクル	-40 ~ 150	231	(a) 500cyc	0
Pressure Cooker Test	130 , 85%RH:2.33E5Pa	231	(a) 96h	0
Pressure Cooker Test with Bias	110 , 85%RH:1.20E5Pa 3.3V	231	(a) 96h	0

(a) Pre-condition: Baking (125 , 24h) + Moisture Absorption (30 /70%RH, 216h)
+ Reflow 260 Max. 連続 3 回

Data Retention Test

Device Type : S29GL02GP

Test Item	Test Condition	Number Tested	Tested Time	Number Failed
Data Retention Bake (ウェーハレベル)	225	1 wf	24h	20y pass@55



Endurance Test

Device Type : S29GL02GS
Package Type : FBGA64

Test Item	Test Condition	Number Tested	Tested Time	Number Failed
Endurance Test 書き換え試験	90 , 3.6V	189	100 times	0

信頼性試験成績書

S29GL01GS

Plastic FBGA Package

FBGA64

上記パッケージにおける WXIC プロセス品の信頼性試験結果を
提出致します。

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0280

Reliability Test

Device Type : S29GL01GS
Package Type : FBGA64

Test Item	Test Condition	Number Tested	Tested Time	Number Failed
High Temperature Operation Life 高温連続動作試験	125 , 3.6V CLK FREQ.= 1MHz	120	168h	0
Temperature Cycling 温度サイクル	-40 ~ 150	77	(a) 500cyc	0
Pressure Cooker Test	130 , 85%RH: 2.33E5Pa	77	(a) 96h	0
Pressure Cooker Test with Bias	110 , 85%RH: 1.20E5Pa 3.6V	77	(a) 96h	0

(a) Pre-condition: Baking (125 , 24h) + Moisture Absorption (30 /70%RH, 216h)
+ Reflow 260 Max. 連続 3 回

Endurance Test

Device Type : S29GL01GS
Package Type : FBGA64

Test Item	Test Condition	Number Tested	Tested Time	Number Failed
Endurance Test 書き換え試験	90 , 3.6V	64	10,000 times	0

信頼性試験成績書

Plastic TSOP Package

TSOP48

TSOP56

上記パッケージはハロゲンフリー樹脂を適用した
Bangkok(Thailand)組立品の信頼性試験結果を提出致します。

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0242B

Reliability Test-1

Device Type : Am29F800B
Package Type : TSOP48

Test Item	Test Condition	Number Tested	Tested Time	Number Failed
High Temperature Operation Life 高温連続動作試験	150 5.5V CLK FREQ.=1MHz	231	168h	0
Temperature Cycling 温度サイクル	-40 ~ 150	231	(a) 500cyc	0
Pressure Cooker Test	121 , 100%RH: 2.03E5 Pa	231	(a) 96h	0
Pressure Cooker Test with Bias	130 , 85%RH: 2.33E5 Pa 5.0V	231	(a) 96h	0

(a) Pre-condition: Baking (125 , 24h) + Moisture Absorption (30 /70%RH, 216h)
+ Reflow 260 Max. 連続 3 回

Reliability Test-2

Device Type : S29AL004D
Package Type : TSOP48

Test Item	Test Condition	Number Tested	Tested Time	Number Failed
High Temperature Operation Life 高温連続動作試験	150 3.6V CLK FREQ.=1MHz	153	168h	0
Temperature Cycling 温度サイクル	-40 ~ 150	231	(a) 500cyc	0
Pressure Cooker Test	121 , 100%RH : 2.03E5Pa	231	(a) 96h	0
Pressure Cooker Test with Bias	130 , 85%RH : 2.33E5Pa 3.3V	231	(a) 96h	0

(a) Pre-condition: Baking (125 , 24h) + Moisture Absorption (30 /70%RH, 216h)
+ Reflow 260 Max. 連続 3 回

Reliability Test-3

Device Type : Am29LV128M
Package Type : TSOP56

Test Item	Test Condition	Number Tested	Tested Time	Number Failed
High Temperature Operation Life 高温連続動作試験	150 3.6V CLK FREQ.=1MHz	64	168h	0
Temperature Cycling 温度サイクル	-40 ~ 150	77	(a) 500cyc	0
Pressure Cooker Test	121 , 100%RH : 2.03E5Pa	77	(a) 96h	0
Pressure Cooker Test with Bias	130 , 85%RH : 2.33E5Pa 3.3V	77	(a) 96h	0

(a) Pre-condition: Baking (125 , 24h) + Moisture Absorption (30 /70%RH, 216h)
+ Reflow 260 Max. 連続 3 回

Reliability Test-4

Device Type : Am29LV128M
Package Type : TSOP56

Test Item	Test Condition	Number Tested	Tested Time	Number Failed
Temperature Cycling 温度サイクル	-40 ~ 150	150	(b) 500cyc	0
Pressure Cooker Test	121 , 100%RH : 2.03E5Pa	100	(b) 96h	0
Pressure Cooker Test with Bias	110 , 85%RH : 1.20E5Pa 3.3V	120	(b) 96h	0

(b) Pre-condition: Baking (125 , 24h) + Moisture Absorption (30 /60%RH, 192h)
+ Reflow 260 Max. 連続 3 回

信頼性試験成績書

Plastic TSOP Package

上記パッケージは銅線ワイヤーを適用した Bangkok(Thailand)
組立 TSOP 品の信頼性試験結果を提出致します。

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0277

Reliability Test

Device Type : S29GL064N
Package Type : TSOP48

Test Item	Test Condition	Number Tested	Tested Time	Number Failed
High Temperature Operation Life 高温連続動作試験	150 3.6V CLK FREQ.=1MHz	231	168h	0
Temperature Cycling 温度サイクル	-40 ~ 150	231	(a) 500cyc	0
Pressure Cooker Test	130 , 85%RH : 2.33E5Pa	231	(a) 96h	0
Pressure Cooker Test with Bias	130 , 85%RH : 2.33E5Pa 3.3V	231	(a) 96h	0

(a) Pre-condition: Baking (125 , 24h) + Moisture Absorption (30 /70%RH, 216h)
+ Reflow 260 Max. 連続 3 回