

信賴性試驗成績書

0.35um technology product with Nantong Fujitsu Package (CS60ALE)

Legacy Fujitsu Reliability Engineering Test Report

Wafer Process : Aizu Fujitsu

Assembly : Tong Fu

Reliability Test 1

Device Type : MCU 1
Package Type : Plastic LQFP-144 Package

Test Item	Test Condition	Tested Number		Tested Time	Failed Number
High Temperature Operation Life 高温連続動作試験	125 °C V _{DD} =Maximum Rating	77	(a)	1000h	0
Temperature Humidity Bias 高温連続動作試験	85 °C / 85% RH V _{DD} =Maximum Rating	46	(a)	1000h	0
High Temperature Storage 高温保存試験	150 °C	26	(a)	1000h	0
Temperature Cycling 温度サイクル	-65°C~150°C	46	(a)	500cyc	0
Pressure Cooker Test	121°C, 100%RH: 2.03E5 Pa	46	(a)	168h	0
Pressure Cooker Test with Bias	121°C, 100%RH: 2.03E5 Pa V _{DD} =Maximum Rating	26	(a)	96h	0

(a) Pre-condition: Baking (125°C, 24h) +Moisture Absorption (30°C/80%RH, 120h) +Reflow 260°C Max
+Moisture Absorption (30°C/80%RH, 96h) +Reflow 260°C Max

Reliability Test 2

Device Type : MCU 2
Package Type : Plastic LQFP-120 Package

Test Item	Test Condition	Tested Number	Tested Time	Failed Number
High Temperature Operation Life 高温連続動作試験	150 °C V _{DD} =Maximum Rating	77	(b) 1000h	0
Temperature Humidity Bias 高温連続動作試験	85 °C / 85% RH V _{DD} =Maximum Rating	46	(b) 1000h	0
High Temperature Storage 高温保存試験	150 °C	77	(b) 1000h	0
Temperature Cycling 温度サイクル	-65°C~150°C	77	(b) 500cyc	0
Pressure Cooker Test	121°C, 100%RH: 2.03E5 Pa	77	(b) 168h	0
Pressure Cooker Test with Bias	121°C, 100%RH: 2.03E5 Pa V _{DD} =Maximum Rating	33	(b) 96h	0

(b) Pre-condition: Baking (125°C, 24h) +Moisture Absorption (30°C/80%RH, 72h) +Reflow 260°C Max
+Moisture Absorption (30°C/80%RH, 48h) +Reflow 260°C Max

Reliability Test 3

Device Type : MCU 3
Package Type : Plastic QFP-100 Package

Test Item	Test Condition	Tested Number		Tested Time	Failed Number
High Temperature Storage 高温保存試験	150 °C	26	(c)	1000h	0
Temperature Cycling 温度サイクル	-65°C~150°C	46	(c)	500cyc	0
Pressure Cooker Test with Bias	121°C, 100%RH: 2.03E5 Pa V _{DD} =Maximum Rating	26	(c)	96h	0

(c) Pre-condition: Baking (125°C, 24h) +Moisture Absorption (30°C/80%RH, 48h) +Reflow 245°C Max

Document History Page

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(CS60ALE)
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Rev.	ECN No.	Orig. of Change	Description of Change
**	5768972	KUMI	Initial release.

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