

# 信頼性試験成績書

## 0.65um Process Technology Product and Package Legacy Fujitsu Reliability Engineering Test Report

Wafer Process : Aizu Fujitsu  
Assembly : J-Devices

## Reliability Test 1

Device Type : MCU 1  
Package Type : Plastic QFP-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 <sub>DD</sub> =Maximum Rating	55	(a)	1000h	0
Temperature Humidity Bias 高温連続動作試験	85 °C / 85% RH V <sub>DD</sub> =Maximum Rating	25	(a)	1000h	0
High Temperature Storage 高温保存試験	150 °C	25	(a)	1000h	0
Temperature Cycling 温度サイクル	-65°C~150°C	55	(a)	500cyc	0
Pressure Cooker Test	121°C, 100%RH: 2.03E5 Pa	55	(a)	168h	0
Pressure Cooker Test with Bias	121°C, 100%RH: 2.03E5 Pa V <sub>DD</sub> =Maximum Rating	25	(a)	96h	0

(a) Pre-condition: Baking (125°C, 24h) +Moisture Absorption (85°C/85%RH, 24h) +IR 245°C Max

## Reliability Test 2

Device Type : MCU 2  
Package Type : Plastic QFP-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 <sub>DD</sub> =Maximum Rating	55	(b) 1000h	0
Temperature Humidity Bias 高温連続動作試験	85 °C / 85% RH V <sub>DD</sub> =Maximum Rating	25	(b) 1000h	0
High Temperature Storage 高温保存試験	150 °C	25	(b) 1000h	0
Temperature Cycling 温度サイクル	-65°C~150°C	55	(b) 500cyc	0
Pressure Cooker Test	121°C, 100%RH: 2.03E5 Pa	55	(b) 168h	0
Pressure Cooker Test with Bias	121°C, 100%RH: 2.03E5 Pa V <sub>DD</sub> =Maximum Rating	25	(b) 96h	0

(b) Pre-condition: Baking (125°C, 24h) +Moisture Absorption (85°C/85%RH, 12h) +IR 245°C Max.

### Reliability Test 3

Device Type : Test Chip  
Package Type : Plastic QFP-144 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 <sub>DD</sub> =Maximum Rating	55	(c)	1000h	0
Temperature Humidity Bias 高温連続動作試験	85 °C / 85% RH V <sub>DD</sub> =Maximum Rating	25	(c)	1000h	0
High Temperature Storage 高温保存試験	150 °C	25	(c)	1000h	0
Temperature Cycling 温度サイクル	-65°C~150°C	55	(c)	500cyc	0
Pressure Cooker Test	121°C, 100%RH: 2.03E5 Pa	55	(c)	168h	0
Pressure Cooker Test with Bias	121°C, 100%RH: 2.03E5 Pa V <sub>DD</sub> =Maximum Rating	25	(c)	96h	0

(c) Pre-condition: Baking (125°C, 24h) +Moisture Absorption (30°C/80%RH, 96h) +IR 245°C Max.

## Document History Page

Document Title: Qualification Report of 0.65um technology product with J-Devices Package (CS46)  
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Rev.	ECN No.	Orig. of Change	Description of Change
**	5768897	KUMI	Initial release.