

信頼性試験成績書

1.5um 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 DIP-64 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	1000h	0
Temperature Humidity Bias 高温連続動作試験	85 °C / 85% RH V _{DD} =Maximum Rating	46	1000h	0
High Temperature Storage 高温保存試験	150 °C	26	1000h	0
Temperature Cycling 温度サイクル	-65°C~150°C	46	200cyc	0
Pressure Cooker Test	121°C, 100%RH: 2.03E5 Pa	46	168h	0
Pressure Cooker Test with Bias	121°C, 100%RH: 2.03E5 Pa V _{DD} =Maximum Rating	26	96h	0

Reliability Test 2

Device Type : MCU 2
Package Type : Plastic SOP-20 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	55	1000h	0
Temperature Humidity Bias 高温連続動作試験	85 °C / 85% RH V _{DD} =Maximum Rating	55	(a) 1000h	0
High Temperature Storage 高温保存試験	150 °C	25	1000h	0
Temperature Cycling 温度サイクル	-65°C~150°C	55	(a) 200cyc	0
Pressure Cooker Test	121°C, 100%RH: 2.03E5 Pa	25	(a) 168h	0
Pressure Cooker Test with Bias	121°C, 100%RH: 2.03E5 Pa V _{DD} =Maximum Rating	25	(a) 96h	0

(a) Pre-condition : Baking(125°C, 24h)+Moisture Absorption(85°C/85%RH, 24h)+IR 250°C Max.

Reliability Test 3

Device Type : MCU 3
Package Type : Plastic SSOP-20 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	55	1000h	0
Temperature Humidity Bias 高温連続動作試験	85 °C / 85% RH V _{DD} =Maximum Rating	25	(b) 1000h	0
High Temperature Storage 高温保存試験	150 °C	25	1000h	0
Temperature Cycling 温度サイクル	-65°C~150°C	55	(b) 200cyc	0
Thermal Shock 熱衝撃	0°C~100°C	25	200cyc	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 _{DD} =Maximum Rating	25	(b) 96h	0

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



Document History Page

Document Title: Qualification Report of 1.5um technology product with J-Devices Package (MUH)
Document Number: 002-20027

Rev.	ECN No.	Orig. of Change	Description of Change
**	5769801	KUMI	Initial release.