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Continuity of document content
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Continuity of ordering part numbers
Infineon continues to support existing part numbers. Please continue to use the ordering part numbers listed in the datasheet for ordering.

信頼性試験成績書

0.18um Process Technology Product and Package

Legacy Fujitsu Reliability Engineering Test Report

Wafer Process : Aizu Fujitsu
Assembly : ASE

Reliability Test 1

Device Type : MCU 1
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	125 ℃ V_{DD}=Maximum Rating	231 (77x3Lots)	(a)	1000h	0
Temperature Humidity Bias 高湿連続動作試験	85 ℃ / 85% RH V_{DD}=Maximum Rating	138 (46x3Lots)	(a)	1000h	0
Low Temperature Operation Life 低温連続動作試験	-55 ℃ V_{DD}=Maximum Rating	78 (26x3Lots)	(a)	1000h	0
High Temperature Storage 高温保存試験	150 ℃	231 (77x3Lots)	(a)	1000h	0
Temperature Cycling 温度サイクル	-65℃～150℃	231 (77x3Lots)	(a)	500cyc	0
Pressure Cooker Test	121℃, 100%RH: 2.03E5 Pa	231 (77x3Lots)	(a)	168h	0
Pressure Cooker Test with Bias	130℃, 85%RH: 2.33E5 Pa V_{DD}=Maximum Rating	99 (33x3Lots)	(a)	96h	0

(a) Pre-condition: Baking (125℃, 24h) +Moisture Absorption (30℃/70%RH, 192h) +IR 260℃ Max. x3

Reliability Test 2

Device Type : MCU 2
Package Type : Plastic QFN-68 Package

Test Item	Test Condition	Tested Number		Tested Time	Failed Number
High Temperature Storage 高温保存試験	150 ℃	69 (23x3Lots)	(b)	1000h	0
Temperature Cycling 温度サイクル	-65℃～150℃	78 (26x3Lots)	(b)	200cyc	0
Unbiased HAST	130℃, 85%RH	78 (26x3Lots)	(b)	168h	0

(b) Pre-condition: Baking (125℃, 24h) +Moisture Absorption (30℃/70%RH, 192h) +IR 260℃ Max. x3

Endurance + Data Retention Test

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

Test Condition (Ta)	Tested Number	Failed Number
1Kcyc (85℃) + Data Retention Bake : 1344h (150℃)	231 (3Lots)	0
10Kcyc (85℃) + Data Retention Bake : 672h (150℃)	231 (3Lots)	0
100Kcyc (85℃) + Data Retention Bake : 336h (150℃)	231 (3Lots)	0

Document History Page

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Document Number: 002-20018

Rev.	ECN No.	Orig. of Change	Description of Change
**	5769776	KUMI	Initial release.