Product Qualification Report

BCM20737A1KML2G

Bluetooth Low Energy Compliant, Baseband Processor with an Integrated 2.4 GHz Transceiver

Description

This product qualification report describes the characteristics of the product with respect to quality and reliability.

The qualification sample selection was done on production lots which were manufactured and tested on standard production processes and meet the defined requirements.

The qualification test results of those products as outlined in this document are based on **JESD47** for target applications and may reference existing qualification results of similar products. Such referencing is justified by the structural similarity of the products.

Qualification Assessment

Fully qualified according to **JESD47** for **Commercial/Industry Applications** and assessed as PASS.

For further information about comparable products, please contact the nearest Infineon Technologies office (www.infineon.com).

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Electrical Stress Test Results:

Test Description	Abbr.	Condition	Duration	Lots/SS	Fail/Qty	Result
Early Life Failure Rate JESD22 A108/JESD 74	EFR	Ta = 125°C	24h 168h	2/3497 1/2755	0/3497 0/2755	PASS
High Temperature Operating Life JESD22 A108	HTOL	Ta = 125°C	192h 500h 1000h	1/96 2/2160 2/2160	0/96 0/2160 0/2160	PASS

Environmental Stress Test Results:

Test Description	Abbr.	Condition	Duration	Lots/SS	Fail/Qty	Result
Pre-Conditioning JESD22 A113	PC	MSL3 3 x reflow	192h	1/260	0/260	PASS
Temperature Cycling JESD22 A104	TC*	-55°C to +125°C	500 cyc 1000 cyc	1/77 1/77	0/77 0/77	PASS
Pressure Cooker Test JESD22-A118	PCT*	Ta=121°C RH=100%	96h	1/77	0/77	PASS
High Temperature Storage Life JESD22 A103	HTSL	Ta = 150°C	500hh 1000h	1/77 1/77	0/77 0/77	PASS

Device Characterization and Classifications:

Test Description	Abbr.	Condition	Duration	Lots/SS	Fail/Qty	Result
ESD Charged Device Model JESD22 C101	ESD CDM	Class C1	-	1/3	0/3	PASS
ESD Human Body Model JESD22-A114E	ESD HBM	Class 1C	-	1/3	0/3	PASS
Static Latch Up JESD 78	SLU	Class II	-	1/3	0/3	PASS

Notes:
*For SMD devices reliability stress tests performed after pre-conditioning test (PC)

Further abbreviations: MSL - moisture sensitivity level, Qty – quantity, RH – relative humidity, SS – sample size, Ta – ambient temperature

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**	7863110	Ravindran Lakshmy	Initial Spec Release

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