Product Qualification Report

1EDB6275F

Driver IC

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 **JEDEC** 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 **JEDEC** for **Industrial Applications** and assessed as PASS

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

1EDB6275F
PG-DSO-8
MSL: 3; 260 °C

qualified 2021

Electrical Stress Test Results:

Test Description	Abbr.	Condition	Duration	Lots/SS	Fail/Qty	Result
High Temperature Operating Life *JESD22-A108*	HTOL	T_j = approx. 145 °C V = 5 V / 20 V	1000 h	3 x 77	0 / 231	PASS
Latch-Up *EIA/JESD78*	LU	T_a = 125 °C	-	1 x 6	0 / 6	PASS
ESD Human Body Model *ANSI/ESDA/JEDEC JS-001*	ESD HBM	Class 2 (2000 V to < 4000 V)	-	1 x 3 (per voltage level)	0 / 3	PASS
ESD Charged Device Model *ANSI/ESDA/JEDEC JS-002*	ESD CDM	Class C3 (> 1000 V)	-	1 x 3 (per voltage level)	0 / 3	PASS

Environmental Stress Test Results:

Test Description	Abbr.	Condition	Duration	Lots/SS	Fail/Qty	Result
High Temperature Storage Life *JESD22-A103*	HTSL	T_a = 150 °C	1000 h	3 x 77	0 / 231	PASS
Pre-Conditioning *J-STD020 / JESD22-A113*	PC	MSL and 3 x reflow	-	3	0	PASS
Temperature Cycling *JESD22-A104*	TC[1]	-65 °C to +150 °C	500x	3 x 77	0 / 231	PASS
Biased Highly Accelerated Stress Test *JESD22-A110*	HAST[1]	T_a = 130 °C r.h. = 85 % V_{CC} = 3.3 V / 20 V	96 h	3 x 77	0 / 231	PASS

Mechanical Stress Test Results:

Test Description	Abbr.	Condition	Duration	Lots/SS	Fail/Qty	Result
Moisture Sensitivity Level *IPC / J-STD-020*	MSL	MSL 3 @ 260 °C		1 x 22	0 / 22	PASS
Solderability *JESD22-B102*	SD			3 x 15	0 / 45	PASS
Lead Integrity *JESD22-B105*	LI			3 x 12	0 / 36	PASS
Physical Dimensions *JESD22B-100*	PD			1 x 30	0 / 30	PASS

Abbreviations:

- MSL - moisture sensitivity level
- Qty – quantity
- RH – relative humidity
- SS – sample size
- T_a – ambient temperature

[1] For SMD devices, a pre-conditioning (PC) according to JESD22 was performed prior to selected reliability stress tests.

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Document reference

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