

Product Qualification Report

1ED3323MC12N

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 potential applications and may reference existing qualification results of similar products. Such referencing is justified by the structural similarity of the products.

Qualification Assessment

Qualified according to **JEDEC Standard** and assessed as PASS.

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

1ED3323MC12N

DSO-16

Electrical Stress Test Results:

Test Description	Abbr.	Condition ¹⁾	Duration	Lots/Qty	Result
High Temperature Operating Life <i>JESD22-A108</i>	HTOL	$T_j = T_{j, \max}^{2)}$ $V_{\text{Stress}} = V_{\text{CC}, \max}^{2,4)}$	1000 h	3 x 77 pcs	PASS
Latch up <i>JESD78</i>	LU	Refer to datasheet		1 x 3 pcs	PASS
ESD HBM <i>JEDEC JS-001</i>	HBM	Refer to datasheet		3 pcs	PASS
ESD CDM <i>JEDEC JS-002</i>	CDM	Refer to datasheet		3 pcs	PASS

Environmental Stress Test Results:

Test Description	Abbr.	Condition ¹⁾	Duration	Lots/Qty	Result
Preconditioning <i>JESD22-A113</i>	PC	MSL ²⁾ and 3 x reflow			PASS
High Temperature Storage Life <i>JESD22-A103</i>	HTSL	$T_a \geq 150^\circ\text{C}$	1000 h	3 x 77 pcs	PASS
Temperature Humidity Bias <i>JESD22-A101</i>	THB ³⁾	$T_a = 85^\circ\text{C}$ RH = 85% $V_{\text{Stress}} = V_{\text{CC}, \max}^{2,4,5)}$	1000 h	3 x 77 pcs	PASS
<i>Alternative:</i> Highly-Accelerated Stress Test <i>JESD22 A110</i>	HAST ³⁾	$T_a = 130^\circ\text{C}$ RH = 85% $V_{\text{Stress}} = V_{\text{CC}, \max}^{2,4,5)}$	96 h	3 x 77 pcs	PASS
Temperature Cycling <i>JESD22-A104</i>	TC ³⁾	Refer to datasheet	1000 cyc	3 x 77 pcs	PASS
Unbiased Highly-Accelerated Stress Test <i>JESD22-A118</i>	UHST ³⁾	$T_a = 130^\circ\text{C}$ RH = 85 %	96 h	3 x 77 pcs	PASS

Notes:

- 1) As conditions, here typical values are chosen.
- 2) Please refer to datasheet.
- 3) For SMD devices, a preconditioning (PC) according to JESD22 was performed prior to selected reliability stress tests.
- 4) $V_{\text{CC}}/V_{\text{DD}}$ max depending on the device. All values according to max. operating conditions.
- 5) Applied voltage according to V_{CC} , max operating range up to 100 V.

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Edition 05.06.2024

Published by

Infineon Technologies AG

81726 München, Germany

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Document reference

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Please note that this product is not qualified according to the AEC Q100 or AEC Q101 documents of the Automotive Electronics Council.

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