

VS1033C Qualification Report Summary

1.1 Package qualification

Package type: LQFP 48 RoHS

Dimensions: 7 x 7 x 1.4 (mm)

LQFP48 RoHS (Green) package has passed qualification tests, MSL3 at 260°C.

Package type: FBGA 49 RoHS

Dimensions: 7x7x1.45 (mm)

FBGA 49 RoHS (Green) package has passed qualification tests, MSL3 at 260°C

1.2 Device qualification

The qualification is done for devices that have been fabricated with the production masks and encapsulated with the qualified production package. Each device has also passed the test program (+25 °C), that is also called as "Final Test".

The qualification tests are summarized below

Test	Sample size	Conditions	Result Failed/passed
Electrical temperature characterization (Lot ET604009.001, corners)	11	-30, +25, +85°C at 5 voltage combinations.	0 / 11
Latch-up immunity (Lot ET604009.001-2): I-Test JEDEC JESD78	6	+/- 200 mA CVDD = AVDD = 2.6 V, IOVDD = 3.6 V	0 / 6
Latch-up immunity (Lot ET604009.001-2): Voltage test.	6	3,6 V trigger pulses JEDEC JESD78	0 / 6
ESD susceptibility (Lot ET604009.001): MIL-STD-883 3015	3 x 4	HBM, 1000, 1500 and 2000 V	0 / 9
		HBM 4000 V, pin 42 fail	1 / 2
Life test (Lot ET604009.001)	34	125 °C, 1000 h, AVDD = IOVDD = 3.3V, CVDD = 2.5 V. MIL-STD-883 1005	0 / 34

1.3 Conclusion

VS1033C passed the qualification.