

CC1101

Reliability Report

CONCLUSION

The CC1101 meets Texas Instruments Norway's product reliability qualification requirements.

Package reliability (20lead QLP - Pb free)

Moisture Sensitivity Level JEDEC Level 3

Temp Cycling -65/150?C, 1000 cycles

High Temp Storage Test 170 °C, 420 hrs.

PCT 121 °C / 100% RH, 15psig, 240 hrs

ESD and Latch-Up

Latch-up testing according to EIA/JESD-78, class I.

Minimum immunity level: ? 100mA at all pins. VDD abs.max. rating x1.5 at all supply pins.

ESD test according to JEDEC STD 22, method A114-Human Body Model, C101C-Charged

Device Model. For details see table below:

HBM 750V and below: PASS HBM 1000V and above: FAIL CDM 400V and below: PASS CDM 500V and above: FAIL

Lifetime

Accelerated lifetime test. Minimum expected lifetime (*): 10 years at 58?C,

1.4 years at 85?C, FIT of approx. 60 (at room temp) with 60% confidence level.

(*) based on test of 9 devices at 125 °C and 1 device at 25 °C for 1070 hours, 0 failures. Devices from lot D64796.00.

Summar y

Based on the above data CC1101 meets Texas Instruments Norway's product reliability qualification requirements and has an acceptable reliability level.

Revision history

1.0 Initial version



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