1 Certificate of Conformity

Product:	Rugged LTE-A Pro Router
Brand:	Sierra
Test Model:	RV55
Sample Status:	Production Unit
Applicant:	Sierra Wireless Inc.
Test Date:	Sep. 25, 2019 ~ Oct. 16, 2019
Standards:	**EN 50155:2017, Clause 13.4.8** **EN 50121-3-2:2016** EN 61000-4-2:2009 EN 61000-4-3:2006 +A1:2008 +A2:2010 EN 61000-4-4:2012 EN 61000-4-5:2014 (Not Applicable) EN 61000-4-6:2014

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by :  , **Date:** Oct. 24, 2019

Rona Chen / Specialist

Approved by :  , **Date:** Oct. 24, 2019

Carl Chen / Project Engineer

2 Summary of Test Results

EN 50121-3-2:2016, Emission EN 50155:2017, Clause 13.4.8			
Port	Test Item / specifications	Result/Remarks	Verdict
Auxiliary a.c. or d.c. power ports - Auxiliary supply sinusoidal a.c. or d.c.	Conducted disturbance 9 kHz-150 kHz: no limits 150 kHz- 500 kHz: 99 dBµV quasi-peak 500 kHz- 30 MHz: 93 dBµV quasi-peak	Minimum passing margin is -47.00 dB at 0.30731 MHz	Pass
Enclosure	Radiated disturbance 30 MHz - 230 MHz: 40 dBµV/m quasi-peak 230 MHz - 1 GHz: 47 dBµV/m quasi-peak	Minimum passing margin is -12.32 dB at 124.97 MHz	Pass
Enclosure	Radiated disturbance 1 GHz - 3 GHz: 76 dBµV/m peak 56 dBµV/m average 3 GHz - 6 GHz: 80 dBµV/m peak 60 dBµV/m average	Minimum passing margin is -22.68 dB at 1032.96 MHz	Pass

EN 50121-3-2:2016, Immunity requirements, EN 50155:2017, Clause 13.4.8					
Table Clause	Basic standard	Port	Test Item / specifications	Result/Remarks	Verdict
3.1	EN 61000-4-6:2014	Auxiliary a.c. power input ports (rated voltage ≤ 400 Vrms)	Radio-frequency common mode (CS) 80% AM (1kHz) 0.15-80 MHz, 10V Performance Criterion A	Test not applicable because port does not exist.	N/A
3.2	EN 61000-4-4:2012	Auxiliary a.c. power input ports (rated voltage ≤ 400 Vrms)	Fast Transients (EFT) 5/50 (T_r/T_h) ns, 5kHz ±2kV Performance Criterion A	Test not applicable because port does not exist.	N/A
3.3	EN 61000-4-5:2014	Auxiliary a.c. power input ports (rated voltage ≤ 400 Vrms)	Surges 1.2/50 (8/20) (T_r/T_h) µs Line to ground: ±2kV 42 Ω, 0.5 µF Line to line: ±1kV 42 Ω, 0.5 µF Performance Criterion B	Test not applicable because port does not exist.	N/A
4.1	EN 61000-4-6:2014	Signal & communication, process measurement & control ports	Radio-frequency common mode (CS) 80% AM (1kHz) 0.15-80 MHz, 10V Performance Criterion A	Performance Criterion A	Pass
4.2	EN 61000-4-4:2012	Signal & communication, process measurement & control ports	Fast Transients (EFT) 5/50 (T_r/T_h) ns, 5kHz ±2kV, Capacitive clamp Performance Criterion A	Performance Criterion A	Pass

EN 50121-3-2:2016, Immunity requirements, EN 50155:2017, Clause 5.2.3					
Table Clause	Basic standard	Port	Test Item / specifications	Result/Remarks	Verdict
5.1	EN 61000-4-3:2006 +A1:2008 +A2:2010	Enclosure ports	Radio-frequency electromagnetic field amplitude modulated (RS)[1], 80% AM (1kHz) 80-800 MHz, 20V/m Performance Criterion A	Performance Criterion A	Pass
5.2	EN 61000-4-3:2006 +A1:2008 +A2:2010	Enclosure ports	Radio-frequency electromagnetic field from digital mobile telephones (RS)[2], 80% AM (1kHz) 800-1000 MHz, 20V/m 1400-2000 MHz, 10V/m 2000-2700 MHz, 5V/m 5100-6000 MHz, 3V/m Performance Criterion A	Performance Criterion A	Pass
5.3	EN 61000-4-2:2009	Enclosure ports	Electrostatic Discharges (ESD) ±6kV Contact discharge ±8kV Air discharge Performance Criterion B	Performance Criterion A	Pass
Note 1: This limit applies to equipment mounted in the passenger compartments, drivers cab or external to the rolling stock (roof, underframe). For equipment mounted in all other areas a severity level of 10 V/m may be used. Note 2: For large apparatus (e.g. traction drives, auxiliary converters) it is often not practical to perform the immunity test to radiated electromagnetic fields on the complete unit. In such cases the manufacturer should test susceptible sub-systems (e.g. control electronics). The test report should justify the selection or not of sub-systems and any assumptions made (e.g. reduction of field due to case shielding).					

N/A: Not Applicable

Note:

1. There is no deviation to the applied test methods and requirements covered by the scope of this report.
2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.