TCB

GRANT OF EQUIPMENT AUTHORIZATION

TCB

Certification
Issued Under the Authority of the
Federal Communications Commission
By:

PHOENIX TESTLAB GmbH
Koenigswinkel 10
32825 Blomberg,
Germany

Date of Grant: 10/21/2022

Application Dated: 10/20/2022

Sierra Wireless Inc.
13811 Wireless Way
Richmond, BC, V6V 3A4
Canada

Attention: Ying Wang , Director, Regulatory Compliance

NOT TRANSFERABLE

EQUIPMENT AUTHORIZATION is hereby issued to the named GRANTEE, and is VALID ONLY for the equipment identified hereon for use under the Commission's Rules and Regulations listed below.

FCC IDENTIFIER: N7NHL78A
Name of Grantee: Sierra Wireless Inc.
Equipment Class: PCS Licensed Transmitter
Notes: Embedded module with Cat-M1 and NB-IoT
Modular Type: Single Modular

Grant Notes	FCC Rule Parts	Frequency Range (MHZ)	Output Watts	Frequency Tolerance	Emission Designator
	22H	825.5 - 847.5	0.198	0.005 PM	1M09G7D
	22H	829.0 - 844.0	0.264	0.005 PM	1M09G7D
	22H	829.0 - 844.0	0.201	0.005 PM	1M09W7D
	22H	826.5 - 846.5	0.229	0.005 PM	1M09W7D
	22H	831.5 - 841.5	0.239	0.005 PM	1M10G7D
	22H	831.5 - 841.5	0.226	0.005 PM	1M09W7D
	22H	824.2 - 848.8	0.238	0.005 PM	192KG7D
	22H	824.2 - 848.8	0.217	0.005 PM	192KG7D
	24E	1857.5 - 1902.5	0.205	0.002 PM	1M09G7D
	24E	1857.5 - 1902.5	0.212	0.002 PM	1M08W7D
	24E	1860.0 - 1900.0	0.257	0.002 PM	1M09G7D
	24E	1860.0 - 1900.0	0.21	0.002 PM	1M09W7D
	24E	1851.5 - 1913.5	0.216	0.002 PM	1M10G7D
	24E	1860.0 - 1905.0	0.261	0.002 PM	1M09G7D
	24E	1860.0 - 1905.0	0.255	0.002 PM	1M09W7D
	24E	1850.2 - 1909.8	0.207	0.002 PM	192KG7D
	24E	1850.2 - 1914.8	0.207	0.002 PM	194KG7D
	27	1717.5 - 1747.5	0.206	0.002 PM	1M10G7D
	27	1717.5 - 1747.5	0.209	0.002 PM	1M10W7D
	27	1720.0 - 1745.0	0.258	0.002 PM	1M09G7D
	27	1720.0 - 1745.0	0.244	0.002 PM	1M09W7D
	27	699.7 - 715.3	0.246	0.005 PM	1M09G7D
	27	699.7 - 715.3	0.237	0.005 PM	1M09W7D
	27	701.5 - 713.5	0.259	0.006 PM	1M09G7D

27	701.5 - 713.5	0.21	0.006 PM	1M09W7D
27	779.5 - 784.5	0.23	0.005 PM	1M09G7D
27	779.5 - 784.5	0.2	0.005 PM	1M09W7D
27	782.0 - 782.0	0.25	0.005 PM	1M09G7D
27	782.0 - 782.0	0.202	0.005 PM	1M09W7D
27	1717.5 - 1772.5	0.21	0.002 PM	1M10G7D
27	1720.0 - 1770.0	0.256	0.002 PM	1M09G7D
27	1720.0 - 1770.0	0.245	0.002 PM	1M09W7D
27	1710.2 - 1754.8	0.207	0.002 PM	205KG7D
27	699.2 - 715.8	0.278	0.006 PM	192KG7D
27	777.2 - 786.8	0.229	0.005 PM	191KG7D
27	1710.2 - 1779.8	0.228	0.002 PM	194KG7D
27	898.2 - 899.8	0.193	0.0051 PM	1M10G7D
27	898.2 - 899.8	0.169	0.0051 PM	930KW7D
27	899.0 - 899.0	0.195	0.0027 PM	1M09G7D
27	897.7 - 900.3	0.202	0.0031 PM	194KG7D
27	700.5 - 713.5	0.206	0.0034 PM	1M09G7D
27	700.5 - 713.5	0.197	0.0034 PM	949KW7D
27	703.0 - 711.0	0.207	0.0049 PM	1M09G7D
27	698.2 - 715.8	0.217	0.0055 PM	193KG7D
90	814.7 - 823.3	0.23	0.005 PM	1M09G7D
90	816.5 - 821.5	0.23	0.005 PM	1M09W7D
90	819.0 - 819.0	0.235	0.005 PM	1M09G7D
90	819.0 - 819.0	0.231	0.005 PM	1M09W7D
90	814.2 - 823.8	0.226	0.005 PM	192KG7D

Output power listed are Conducted Power.
It supports Cat-M1 QPSK/16QAM, NB-IoT BPSK/QPSK.
LTE B2, B4, B5, B8, B12, B13, B25, B26, B66, B85
Channel Bandwidth (1.4/3/5/10 MHz) for LTE B5, B12
Channel Bandwidth (1.4/3/5/10/15 MHz) for LTE B26
Channel Bandwidth (1.4/3/5/10/15/20 MHz) for LTE B2, B4, B25, B66
Channel Bandwidth (5/10 MHz) for LTE B13, B85
Channel Bandwidth (1.4/3 MHz) for LTE B8

Modular Approval for mobile RF Exposure conditions, the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. Approval is limited to OEM installation only. OEM integrators must be provided with antenna installation instructions. OEM integrators and end-users must be provided with transmitter operating conditions for satisfying RF exposure compliance. This grant is valid only when the device is sold to OEM integrators and the OEM integrators are instructed to ensure that the end user has no manual instructions to remove or install the device. This module can only be used with a host antenna circuit trace layout design in strict compliance with the OEM instructions provided.
The Maximum Antenna Gains are 2dBi.