

MPAG Submission Details

FCC ID A3LNP935QNA (TCB ref AN23T0198)

PAG KDB: 711189

RF Exposure PAG Items					
PAG Item Description	PAG List Item (s)	Equipment Code(s)	TC Number(s)	Exhibit Category	Additional details
Portable device (tablet) operating above 6GHz that requires RF exposure evaluation. This device supports Wi-Fi operating in the 5.925-7.125 GHz bands	OVER6G	6XD DSS DTS NII	DSS TC826509 DTS TC359754 NII TC139611 6XD TC288269	RF Exposure Info	RF exposure for 6GHz Wi-Fi portable device assessed following FCC guidance with SAR measurements for all exposure conditions, the APD calculated from the SAR values and then LPD measurements to verify that the SAR values relative to the SAR limits, calculated APD values and measured LPD values were consistent. Refer RF exposure exhibit: KR23-SPF0028-C_01760_NP935QNA_SAR_Report <ul style="list-style-type: none"> - Pages 19-21 for the SAR test results - Pages 22-23 for PD results - Page 25 shows TER remains less than 1.0

U-NII devices authorized in U-NII bands 5.925-7.125 GHz (Wi-Fi 6E), PAG ITEM UN6GHZ, Equipment Code 6XD	
This is a portable client device requesting approval under equipment code 6XD for indoor operations.	
Attestation Letter	Refer to the attestation letter WiFi6e Attestation letter NP935QNA for the grantee attestations as required by KDB 987594 for 6XD device.
Label	This is a client-only device, Indoor Use Only warning is not required
Internal Photos and/or External Photos Test report	<p>Antenna Gain information</p> <p>The antenna is shown on page 1 of the internal photos exhibit Internal photo_NP935QNA and pages 6 and 7 of Antenna report_NP935QNA.</p> <p>Antenna gain information is based on host system manufacturer test report for antenna installed in the device.</p> <p>Gain information can be found in the Test Report exhibit Antenna report_NP935QNA. The Part 15 test report uses the appropriate values from the antenna exhibit.</p>
Test Report	<p>Test report exhibit KR23-SRF0178-B_01760_Samsung_NP935QNA_WiFi6E & KR23-SRF0178-B_01760_Appendix B_WiFi6E Test plots_r01_1of3~ 3 of 3</p> <ul style="list-style-type: none"> • PSD and power are measured by measuring conducted power and adding antenna gain. • PSD meets 15.407(b)(6) - Section 7.2 of the report (pages 31-49); for test plots are in pages 15-22 of KR23-SRF0178-B_01760_Appendix B_WiFi6E Test plots_r01_1of3; • Mask based on Full RU for 802.11ax / OFDMA. Partial RU also tested. Top of mask adjusted to top of signal - section 7.4 (pages 56-57 for the test procedure); test plots are in KR23-SRF0178-B_01760_Appendix B_WiFi6E Test plots_r01_2of3. • RBW used for mask was is same as 26BW test. • 99% bandwidth contained within the allocated band for indoor operations in section 7.3 of the report (pages 50-55); test plots are in pages 23-30 of KR23-SRF0178-B_01760_Appendix B_WiFi6E Test plots_r01_1of3 • Spurious emissions: <ul style="list-style-type: none"> ○ Correct antenna height range used per ANSI C63.10 - see page 69 of the report. ○ Device is a notebook PC supporting tablet mode as well and tablet mode @ Z orientation was determined as the worst-case set for radiated test. (see page 10 of the report and page 3-4 of Test setup photos_NP935QNA.) • MIMO devices – the antenna gain calculations to determine aggregate gain are on page 9 of test report.
Test Report	<p>CBP - Test report exhibit KR23-SRF0178-B_01760_Samsung_NP935QNA_WiFi6E</p> <ul style="list-style-type: none"> • CBP documented in section 7.5 of the report (pages 58) • Performed on one channel in each sub-band of operation for both narrowest (20MHz) and widest (160 MHz) bandwidths • 10 MHz wide AWGN signal is used - page 59 <ul style="list-style-type: none"> ○ 160MHz channel tested at lower, upper, and center of channel – see pages 62-63 ○ 20MHz performed at center of channel only – see pages 62-63 • Detection threshold adjusted to consider lowest gain antenna - page 61 <ul style="list-style-type: none"> ○ MIMO device – detection threshold is evaluated based on lowest gain antenna value for all chains (see page 61) • Lowest detection level is reported for each test – see pages 60, item 6. • Test is performed by starting at a level much lower than the required detection level and then increased - page 62-63. • Plots showing the device stopped transmitting - pages 64-68. • Channel puncturing/bandwidth reduction: Not supported

Attestation Letter	<p>Client Device</p> <p>Refer to the attestation letter WiFi6e_Attestation letter_NP935QNA for the grantee attestations as required by KDB 987594 D01 section including:</p> <ul style="list-style-type: none"> confirming that the device will not connect directly to other clients and does not have its own direct internet connection. device can only operate under the control of a low-power indoor access point or subordinate AP in all bands
RF Exposure exhibit	<p>RF Exposure - KR23-SPF0028-C_01760_NP935QNA_SAR_Report (this is for 6E SAR &PD tests) & KR23-SPF0027-B_01760_NP935QNA_SAR_Report (this is for BT/WLAN below 6GHz which documented the co0location evaluation between 6E and BT)</p> <p>Classification is portable. This is consistent with intended use.</p> <p>Simultaneous transmissions with other co-located transmitters is addressed on pages 32-34 of KR23-SPF0027-B_01760_NP935QNA_SAR_Report (this is for BT/WLAN below 6GHz); And total exposure ratio remains < 1.0 which is in page 25 of KR23-SPF0028-C_01760_NP935QNA_SAR_Report.</p>
Operational Description	Operational Description Exhibit U-NII Device SW Security Statement NP935QNA_r01 contains the 15.407(j) security information.