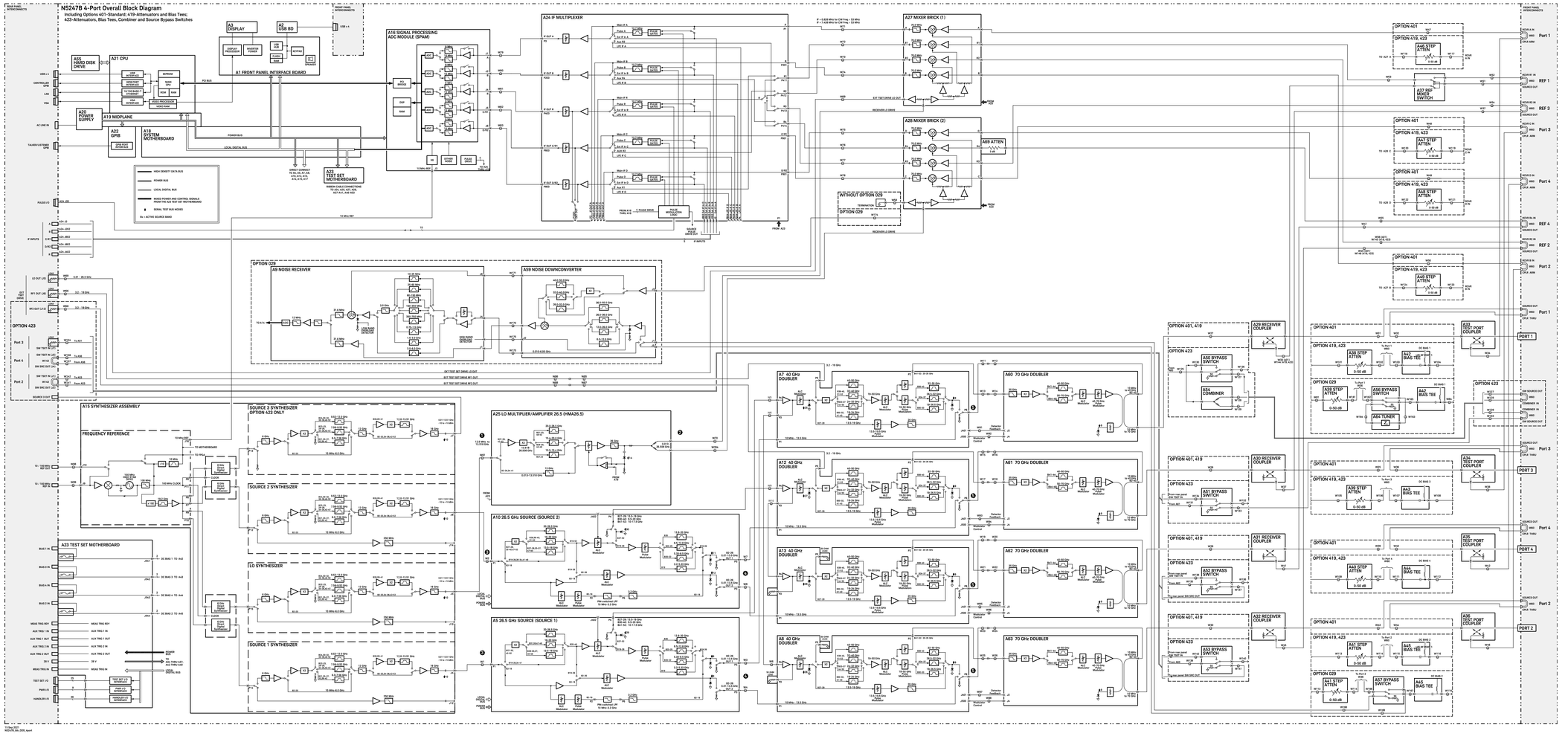
Band	Mixer Brick LO Harmonic Number	❶ LO Synthesizer Frequency (GHz)	❷ A25 HMA26.5 Frequency (GHz)	❸ RF Synthesizer Frequency (GHz)	❹ A5/A10 Source Frequency (GHz)	❺ A13/A15/A13 40 GHz Doubler Frequency (GHz)	❻ A7/A9/A12/A13 40 GHz Doubler Frequency (GHz)	❼ A60/A61/A62/A63 70 GHz Doubler Frequency (GHz)
0	1	---	---	---	---	---	---	---
1	1	---	---	---	---	---	---	---
2	1	0.01348 to 0.01968	0.01348 to 0.01968	0.013 to 0.014	0.013 to 0.014	0.013 to 0.014	0.013 to 0.014	0.013 to 0.014
3	1	0.01948 to 0.02148	0.01948 to 0.02148	0.019 to 0.021	0.019 to 0.021	0.019 to 0.021	0.019 to 0.021	0.019 to 0.021
4	1	0.02148 to 0.02968	0.02148 to 0.02968	0.019 to 0.027	0.019 to 0.027	0.019 to 0.027	0.019 to 0.027	0.019 to 0.027
5	1	0.02948 to 0.04048	0.02948 to 0.04048	0.027 to 0.038	0.027 to 0.038	0.027 to 0.038	0.027 to 0.038	0.027 to 0.038
6	1	0.04048 to 0.05548	0.04048 to 0.05548	0.038 to 0.053	0.038 to 0.053	0.038 to 0.053	0.038 to 0.053	0.038 to 0.053
7	1	0.05548 to 0.08044	0.05044 to 0.08244	0.053 to 0.075	0.053 to 0.075	0.053 to 0.075	0.053 to 0.075	0.053 to 0.075
8	1	0.08044 to 0.11344	0.08044 to 0.11344	0.075 to 0.105	0.075 to 0.105	0.075 to 0.105	0.075 to 0.105	0.075 to 0.105
9	1	0.11344 to 0.15344	0.11244 to 0.15344	0.105 to 0.148	0.105 to 0.148	0.105 to 0.148	0.105 to 0.148	0.105 to 0.148
10	1	0.15344 to 0.21244	0.15344 to 0.21244	0.148 to 0.205	0.148 to 0.205	0.148 to 0.205	0.148 to 0.205	0.148 to 0.205
11	1	0.21344 to 0.25744	0.21144 to 0.25744	0.205 to 0.250	0.205 to 0.250	0.205 to 0.250	0.205 to 0.250	0.205 to 0.250
12	1	0.25744 to 0.40344	0.25744 to 0.40244	0.250 to 0.396	0.250 to 0.396	0.250 to 0.396	0.250 to 0.396	0.250 to 0.396
13	1	0.40344 to 0.50744	0.40344 to 0.50744	0.396 to 0.500	0.396 to 0.500	0.396 to 0.500	0.396 to 0.500	0.396 to 0.500
14	1	0.50744 to 0.83544	0.50744 to 0.83544	0.500 to 0.828	0.500 to 0.828	0.500 to 0.828	0.500 to 0.828	0.500 to 0.828
15	1	0.83544 to 1.3574	0.83544 to 1.3574	0.828 to 1.500	0.828 to 1.500	0.828 to 1.500	0.828 to 1.500	0.828 to 1.500
16	1	1.3574 to 1.5074	1.3574 to 1.5074	1.500 to 1.500	1.500 to 1.500	1.500 to 1.500	1.500 to 1.500	1.500 to 1.500
17	1	1.5074 to 2.0074	1.5074 to 2.0074	1.500 to 2.000	1.500 to 2.000	1.500 to 2.000	1.500 to 2.000	1.500 to 2.000
18	1	2.0074 to 3.3074	2.0074 to 3.3074	2.000 to 3.300	2.000 to 3.300	2.000 to 3.300	2.000 to 3.300	2.000 to 3.300
19	1	3.2074 to 5.3394	3.2074 to 5.3394	3.200 to 5.332	3.200 to 5.332	3.200 to 5.332	3.200 to 5.332	3.200 to 5.332
20	1	5.3394 to 8.0074	5.3394 to 8.0074	5.332 to 8.000	5.332 to 8.000	5.332 to 8.000	5.332 to 8.000	5.332 to 8.000
21	1	8.0074 to 7.6074	8.0074 to 7.6074	8.000 to 7.600	8.000 to 7.600	8.000 to 7.600	8.000 to 7.600	8.000 to 7.600
22	1	7.6074 to 8.5074	7.6074 to 8.5074	7.600 to 8.500	7.600 to 8.500	7.600 to 8.500	7.600 to 8.500	7.600 to 8.500
23	1	8.5074 to 9.5274	8.5074 to 9.5274	8.500 to 9.500	8.500 to 9.500	8.500 to 9.500	8.500 to 9.500	8.500 to 9.500
24	1	9.5274 to 12.0074	9.5274 to 12.0074	9.500 to 12.000	9.500 to 12.000	9.500 to 12.000	9.500 to 12.000	9.500 to 12.000
25	1	12.0074 to 12.8074	12.0074 to 12.8074	12.000 to 12.800	12.000 to 12.800	12.000 to 12.800	12.000 to 12.800	12.000 to 12.800
26	1	12.8074 to 13.5174	12.8074 to 13.5174	12.800 to 13.510	12.800 to 13.510	12.800 to 13.510	12.800 to 13.510	12.800 to 13.510
27	1	4.7407 to 7.9037	13.2174 to 15.2074	6.755 to 7.900	13.510 to 15.200	13.510 to 15.200	13.510 to 15.200	13.510 to 15.200
28	1	7.9037 to 9.3537	15.2074 to 16.7074	7.755 to 8.000	15.200 to 16.700	15.200 to 16.700	15.200 to 16.700	15.200 to 16.700
29	1	8.3537 to 9.5237	16.7074 to 19.0474	8.000 to 8.500	16.700 to 19.040	16.700 to 19.040	16.700 to 19.040	16.700 to 19.040
30	1	9.5237 to 10.0037	19.0474 to 20.0074	8.500 to 9.500	19.040 to 20.000	19.040 to 20.000	19.040 to 20.000	19.040 to 20.000
31	1	10.0037 to 10.6537	20.0074 to 21.3074	10.000 to 10.664	10.000 to 10.664	20.000 to 21.328	20.000 to 21.328	20.000 to 21.328
32	1	10.6537 to 12.0037	21.3074 to 24.0074	10.664 to 12.000	10.664 to 12.000	21.328 to 24.000	21.328 to 24.000	21.328 to 24.000
33	1	12.0037 to 13.2537	24.0074 to 26.5074	12.000 to 13.250	12.000 to 13.250	24.000 to 26.500	24.000 to 26.500	24.000 to 26.500
34	3	8.8358 to 9.0051	8.8358 to 9.0051	13.250 to 13.510	13.250 to 13.510	26.500 to 27.020	26.500 to 27.020	26.500 to 27.020
35	3	9.0051 to 9.5025	9.0051 to 9.5025	6.753 to 7.125	13.510 to 14.250	27.020 to 28.500	27.020 to 28.500	27.020 to 28.500
36	3	9.5025 to 10.1358	9.5025 to 10.1358	7.125 to 7.600	14.250 to 15.200	28.500 to 30.400	28.500 to 30.400	28.500 to 30.400
37	3	10.1358 to 10.6691	10.1358 to 10.6691	7.600 to 8.000	15.200 to 16.000	30.400 to 32.000	30.400 to 32.000	30.400 to 32.000
38	3	10.6691 to 12.0358	10.6691 to 12.0358	8.000 to 9.025	16.000 to 18.050	32.000 to 36.100	32.000 to 36.100	32.000 to 36.100
39	3	12.0358 to 12.6858	12.0358 to 12.6858	9.025 to 9.520	18.050 to 19.040	36.100 to 38.080	36.100 to 38.080	36.100 to 38.080
40	3	12.6858 to 13.3358	12.6858 to 13.3358	9.520 to 10.000	19.040 to 20.000	38.080 to 40.000	38.080 to 40.000	38.080 to 40.000
41	3	13.3358 to 13.5125	13.3358 to 13.5125	10.000 to 10.133	10.000 to 10.133	20.000 to 20.265	40.000 to 40.530	40.000 to 40.530
42	3	6.7462 to 7.4375	13.3725 to 15.2758	10.133 to 11.455	10.133 to 11.455	20.265 to 22.910	40.530 to 43.820	40.530 to 43.820
43	3	7.4579 to 8.0012	15.2758 to 16.0025	11.455 to 12.000	11.455 to 12.000	22.910 to 24.000	45.820 to 48.000	45.820 to 48.000
44	3	8.0012 to 8.3346	16.0025 to 16.6691	12.000 to 12.500	12.000 to 12.500	24.000 to 25.000	48.000 to 50.000	48.000 to 50.000
45	3	8.3346 to 8.9346	16.6691 to 17.8691	12.500 to 13.250	12.500 to 13.250	25.000 to 26.500	50.000 to 53.000	50.000 to 53.000
46	3	8.9346 to 9.0079	17.8691 to 18.0158	13.250 to 13.510	13.250 to 13.510	26.500 to 27.020	53.000 to 54.040	53.000 to 54.040
47	3	9.0079 to 9.5012	18.0158 to 19.0025	8.753 to 7.163	13.510 to 14.325	27.020 to 28.650	54.040 to 57.300	54.040 to 57.300
48	3	9.5513 to 10.0179	19.1025 to 20.0358	7.163 to 7.513	14.325 to 15.025	28.650 to 30.050	57.300 to 60.100	57.300 to 60.100
49	3	10.0179 to 10.1346	20.0358 to 20.2691	7.513 to 7.600	15.025 to 15.200	30.050 to 30.400	60.100 to 60.800	60.100 to 60.800
50	3	10.1346 to 10.6679	20.2691 to 21.3358	7.600 to 8.000	15.200 to 16.000	30.400 to 32.000	60.800 to 64.000	60.800 to 64.000
51	3	10.6679 to 11.1346	21.3358 to 22.2691	8.000 to 8.350	16.000 to 16.700	32.000 to 33.400	64.000 to 66.800	64.000 to 66.800
52	3	11.1346 to 11.6679	22.2691 to 23.3358	8.350 to 8.750	16.700 to 17.500	33.400 to 35.000	66.800 to 70.000	66.800 to 70.000

Test Node	Error Description	Assembly	Frequency Band
8	Unleveled, Source 1, Out 1	A5	0.01 - 13.5 GHz
		A7	13.5 - 40 GHz
9	Unleveled, Source 1, Out 2	A29	40 - 70 GHz
		A5	0.01 - 13.5 GHz
		A8	13.5 - 40 GHz
		A32	40 - 70 GHz
10	Unleveled, Source 1 Synthesizer	A4	Full Range
11	Unleveled, Source 2, Out 1	A10	0.01 - 13.5 GHz
		A12	13.5 - 40 GHz
		A30	40 - 70 GHz
12	Unleveled, Source 2, Out 2	A10	0.01 - 13.5 GHz
		A13	13.5 - 40 GHz
		A31	40 - 70 GHz
13	Unleveled, Source 2 Synthesizer	A17	Full Range
14	Unleveled, LO Drive	A25	Full Range
15	Unleveled, LO Synthesizer	A15	Full Range
16	Unlocked, Source 1 Synthesizer, Integrator Low	A4	Full Range
17	Unlocked, Source 1 Synthesizer, Integrator High	A4	Full Range
18	Unlocked, Source 2 Synthesizer, Integrator Low	A17	Full Range
20	Unlocked, Source 2 Synthesizer, Integrator High	A17	Full Range
22	Unlocked, LO Synthesizer, Integrator Low	A15	Full Range
23	Unlocked, LO Synthesizer, Integrator High	A15	Full Range
25	Unleveled, Doubler 1, Prelevel	A7	13.5 - 70 GHz
26	Unleveled, Doubler 2, Prelevel	A8	13.5 - 70 GHz
27	Unleveled, Doubler 3, Prelevel	A12	13.5 - 70 GHz
28	Unleveled, Doubler 4, Prelevel	A13	13.5 - 70 GHz
29	Unleveled, Source 1, PL	A5	13.5 - 70 GHz
30	Unleveled, Source 2, PL	A10	13.5 - 70 GHz