

A. Applicant's Qualifications

QUALCOMM Incorporated (www.qualcomm.com) is a leader in developing and delivering innovative digital wireless communications products and services based on CDMA and other advanced technologies. Headquartered in San Diego, Calif., QUALCOMM is included in the S&P 500 Index and is a 2006 FORTUNE 500® company traded on The Nasdaq Stock Market® under the ticker symbol QCOM.

B. Introduction

This experimental license will add additional sites to 0018-EX-PL-2007 (call sign WE2XFL) that currently authorizes transmission on the requested frequencies. The new sites will utilize channels 63 and 64 only are required to improve coverage conditions for testing purposes. The network is designed to confine the test signals in a small area around Qualcomm buildings.

D. Experimentation Proposal

QUALCOMM is expanding its technology with the emergence of new applications for wireless technology in the 700 MHz band. QUALCOMM has successfully developing this new FLO (Forward Link Only) technology while operating under experimental license call sign WE2XFL. This modification to the existing license will add 3 sites that utilize frequencies already used by the experimental licensed.

For this testing, the mobile receiver units operate in a receive mode only. The only transmitters associated with this license application are located at the fixed sites detailed below.

The test transmitters deployed have a maximum of 8MHz bandwidth. The proposed spectrum to support this testing is allocated to licensed Broadcast TV stations that are divided into 6 MHz channels.

Since the 8MHz BW is greater than the 6 MHz TV channels allocated by the FCC, Qualcomm has identified four frequencies for use what will each overlap two TV channels. Ch 52 is a 6 MHz bandwidth system only. Qualcomm has selected these frequencies and power levels after performing an interference analysis report for each effected TV channel. When the Qualcomm system is deployed, the test transmitter will be centered in the middle of two adjacent TV channels as shown in Figure 1.

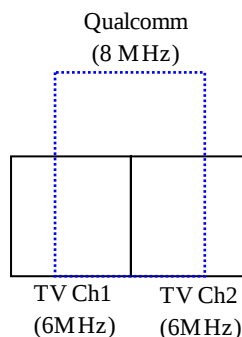


Figure 1: Frequency Overlap

The sites parameters were tested after an interference analysis was performed using the requested peak ERP centered on each TV channel overlapped by the Qualcomm MediaFlo transmitter to present the worst case in-band interference possibility. The four frequencies requested in this application were selected when two adjacent TV channels each resulted in adding 0.00% interference caused to TV stations by the Qualcomm transmitter centered on each channel.

Below, Table 1 and Table 2 summarize Qualcomm's existing license parameters. Table 3 lists the three new sites added with this license modification for channels 63 and 64.

Table 1: Existing Test Frequencies and Locations

Affected TV Channels	TV Channel Frequency Range	Qualcomm Center Frequency	Max BW (MHz)	Qualcomm Low/High Frequencies	Sites
44	650-656	650	8	650-656 MHz	Building X
52	698-704	701	6	698-704 MHz	Building A
61 62	752-758 758-764	758	8	754 - 762 MHz	Building X
63 64	764-770 770-776	770	8	766 - 774 MHz	Building A Building E Building X

Table 2: Existing Transmitter Parameters

Location Name	Lat (N)	Long (W)	Address	Azimuth	RC-AMSL (m)	Down Tilt (degrees)	Antenna Make	Conducted Power (W)	Antenna Gain (dBd)	ERP (W)
Building A	32 53 50.4	117 13 7.5	10555 Sorrento Valley Rd, CA 92121	0	25.28	0	Omni	19.01	6.24	80
Building E	32 52 47.4	117 12 9	4875 Eastgate Mall, San Diego, CA 92121	300	132.63	5	CL-1469B	12.69	8	80.1
Building E	32 52 47.4	117 12 9	4875 Eastgate Mall, San Diego, CA 92121	0	132.63	5	CL-1469B	12.69	8	80.1
Building X	32 54 18.5	117 11 13.2	10309 Pacific Center Ct, San Diego, CA 92121	235	116.24	0	CL-1469B	23.81	8	150.2

Table 3: New Sites for Channel 63 and 64:

Location Name	Lat (N)	Long (W)	Address	Azimuth	RC-AMSL (m)	Down Tilt (degrees)	Antenna Make	Conducted Power (W)	Antenna Gain (dBd)	ERP (W)
Building AA	32 53 27.66	117 13 23.28	10290 Campus Point Dr, San Diego, CA 92121	90	98.5	0	CL1469	19.01	6.24	80
				340						
Building AR	32 54 53.30	117 13 42.19	10945 Vista Sorrento Pkwy	Omni	69	0	Omni	19.01	6.24	80
Building N	32 53 45.64	117 11 43.18W	5775 Morehouse Dr, San Diego, CA 92121	270	168	0	CL1469	19.01	6.24	80

Site Name		AR	AA	AA	N
Lat		32 54 53.30	32 53 27.66	32 53 27.66	32 53 45.64
Long		117 13 42.19	117 13 23.28	117 13 23.28	117 11 43.18W
FCC Question					
1. Channel number.		63, 64	63, 64	63, 64	63, 64
2. Antenna location site elevation above mean sea level in meters.		39	98.5	98.5	98
3. Overall tower height above ground level in meters.		30	50	50	70
4. Height of radiation center above ground level in meters.		69	148.5	148.5	168
5. Maximum effective radiated power in kilowatts.		0.08	0.08	0.08	0.08
6. Transmitter output power in kilowatts.		0.0190	0.0127	0.0127	0.0127
7. Verify that the antenna is nondirectional.		Omni	directional (90 deg)	directional (340 deg)	directional (270 deg)
8. If the antenna is directional, report the relative field values starting at 0 through 350 every 10 degrees.		Rel.FS- Building A	Rel.FS- Building E	Rel.FS- Building E	Rel.FS- Building X
Angle (deg)		Omni			
0			0.01	0.812	0.01
10			0.01	0.622	0.01
20			0.01	0.361	0.01
30			0.01	0.086	0.01
40			0.086	0.01	0.01
50			0.361	0.01	0.01
60			0.622	0.01	0.01
70			0.812	0.01	0.01
80			0.947	0.01	0.01
90			1	0.01	0.01
100			0.947	0.01	0.01
110			0.812	0.01	0.01
120			0.622	0.01	0.01
130			0.361	0.01	0.01
140			0.086	0.01	0.01
150			0.01	0.01	0.01
160			0.01	0.01	0.01
170			0.01	0.01	0.01
180			0.01	0.01	0.01
190			0.01	0.01	0.01
200			0.01	0.01	0.01
210			0.01	0.01	0.01
220			0.01	0.01	0.086
230			0.01	0.01	0.361
240			0.01	0.01	0.622
250			0.01	0.01	0.812
260			0.01	0.01	0.947
270			0.01	0.01	1
280			0.01	0.01	0.947
290			0.01	0.086	0.812
300			0.01	0.361	0.622
310			0.01	0.622	0.361
320			0.01	0.812	0.086
330			0.01	0.947	0.01
340			0.01	1	0.01
350			0.01	0.947	0.01
9. If the emissions are digital, then report the out-of-band emission mask (simple or stringent).		Digital in accordance with section 27.53(f) of the FCC rules			
10. If the emissions are analog, then report the frequency offset (zero, plus, minus or none).		N/A			

