

#### 25 October 2018

#### Introduction

Intel is a world leader in computing innovation. The company designs and builds the essential technologies that serve as the foundation for the world's computing devices. Intel also offers a portfolio of wireless communications solutions to connect a broad range of devices. Hardware and software products by Intel and its subsidiaries power the majority of the world's data centers, connect hundreds of millions of cellular handsets and help secure and protect computers, mobile devices and corporate and government IT systems. Intel technologies are also inside intelligent systems, such as automobiles, automated factories and medical devices.

### **Testing to be Performed**

Intel's research and development teams have been designing new radio technologies for the next generation broad band wireless devices. A Special Temporary Authority grant is requested for testing and demonstrations. We have received authorization from the carrier to utilize their spectrum for these tests, and will not connect to their network. The equipment for all four sites will be identical.

#### Locations:

- Hillsboro, Oregon 45°32'34"N 122°57'43"W 400 meter radius
- Hillsboro, Oregon 45°32'23"N 122°54'52"W 1.5 km radius
- Santa Clara, California 37°23'10"N 121°57'53"W
  km radius
- Santa Clara, California 37°24'12"N 121°58'11"W
  meter radius

Proposed Operation: 10/14/2018 - 4/14/2019

"Stop Buzzer" Contact stopbuzzer@intel.com

John A. Hammond 503-264-8726

# **Proposed Transmitter & Antenna Parameters:**

Site Details					Transmitter Emission					
Location	Station Type	Latitude	Longitude	AGL meters	Antenna Type:	Antenna Gain dB	Maximum ERP dBm	Frequency MHz	Bandwidth MHz	Emission Designator MW7W
Hillsboro, Oregon 400 meter radius	FX to MO	45°32'34"N	122°57'43"W	25	directional*	19	52.85 dBm	2496-2690	20	20MW7W
	MO to FX				omni	7 dB	27.85 dBm			
Hillsboro, Oregon 1.5 km radius	FX to MO	45°32'23"N	122°54'52"W		directional*	19	52.85 dBm	2496-2690	20	20MW7W
	MO to FX				omni	7 dB	27.85 dBm			
Santa Clara, California 2.5 km radius	FX to MO	37°23'10"N	121°57'53"W		directional*	19	52.85 dBm	2496-2690	20	20MW7W
	MO to FX				omni	7 dB	27.85 dBm			
Santa Clara, California 500 meter radius	FX to MO	37°24'12"N	121°58'11"W	56	directional*	19	52.85 dBm	2496-2690	20	20MW7W
	MO to FX				omni	7 dB	27.85 dBm			

<sup>\*</sup>Directional Antenna Information: Due to mobile operations, orientation in the horizontal plane of the directional antenna may be between 0-359° Down tilt will be 30 degrees or greater.

## **Geographical Areas of Proposed STA Locations & FAA Information:**

 Hillsboro, Oregon 45°32'34"N 122°57'43"W 400 meter radius



 Hillsboro, Oregon 45°32'23"N 122°54'52"W 1.5 km radius



### **Geographical Areas of Proposed STA Locations & FAA Information:**

 Santa Clara, California 37°23'10"N 121°57'53"W
5 km radius



 Santa Clara, California 37°24'12"N 121°58'11"W 500 meter radius

