

Time Domain Corporation
Experimental STA Request
July 3, 2001
File No. **0248-EX-ST-2001**

Exhibit 1

Signal Description

This request seeks authority to demonstrate prototype equipment that uses the “time modulated” ultra wideband (UWB) technology developed by Time Domain Corporation (“Time Domain”). The device to be exercised is a PulsON™ Application Demonstrator (PAD). The PAD is a laboratory evaluation device is a test device only. Our access to this device is pursuant to an agreement with an agreement with Time Domain for the evaluation and development of UWB technology. The PAD is not a device to marketed.

The device generates a signal that is pulse position modulated. The position of the modulated pulse employed by this device varies randomly in time so as to produce a spectrum that approximates gaussian noise. If an emission designator were to be applied to this device, Time Domain believes that 2G00-PID would be descriptive of the signal as modulated. The nominal center frequency of the signal is 1.8 to 1.9 GHz. The radiated power is below the Part 15 general limits. For the purpose of this STA, the power spectral density of the device should be specified as < -71.25 dBW/MHz. The total power output from the transmitter is 100 microwatts. The radiated power of the device is 85 microwatts WIRP (52 microwatts ERP) or less.

The PAD will use an omni-directional Time Domain Diamond dipole antenna. Note that this antenna has virtually no gain across the spectrum of the transmitted signal, unlike a classic reference dipole designed.