ZAI Inc.
Experimental STA Request
May 25, 2010
File Number 0241-EX-ST-2010

Exhibit 1

Signal Description

This request seeks authority to test and demonstrate prototype equipment that uses the "time modulated" ultra wideband (UWB) technology developed by Time Domain Corporation ("Time Domain"). This 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. The train of pulses is emitted at a pulse repetition rate of 10 MHz. The pulses are unmodulated but coded with a pseudo-random noise sequence. Each pulse occupies several Gigahertz of bandwidth and the average power of each individual pulse as well as the average power of the pulse train are well below that of unlicensed devices. If an emission designator were to be applied to this device, ZAI believes that 2G60MXN (non-hopping) is descriptive of the signal as modulated. The nominal center frequency of the signal is 4.4 to 4.5 GHz with the half power point bandwidth at 3.1 to 5.6 GHz. The radiated power of the device is below the general limits set forth in Part 15. The total power output from the transmitter is 1.35 W PEP.