4. DESCRIPTION FOR EUT TESTING CONFIGURATION

**** Operational description - - - -**

The equipment under test (EUT) are Microflex III Mini desk top PC model MFIII-845GV/GE and Microflex II slim size PC model MFII-845GV/GE, FCC ID No.: O2PMILLENNIUM-P4. Both samples are identical with identical mother-boards and daughter-boards and only the ribbon cable is routed differently. After pre-test on both samples in 9x6x6 chamber, we took the worst-case test performance by Microflex III Mini desk top PC model MFIII-845GV/GE for final radiated emission test in 10m open filed site and conducted emission test. The motherboard of EUT is all-in-one designed with 4x AGP VGA, Audio sound and built-in 10/100Mbps network chip. The I/O port of whole PC system contains 2 PS2 ports, 4 USB 2.0 ports, 2 serial ports, 1 parallel port, 1RJ-45 port, 1 VGA port, 2 Audio I/O jack and 6 RJ-11 ports. Power supply unit supply EUT from AC 120V. For more detail specifications about the EUT, please refer to the user's manual.

Test method: According to the major function designed, the EUT configuration was set up by the following steps for test:

(a) Install keyboard and mouse to EUT PS2 ports.
(b) Install microphone and speaker to EUT Audio I/O jacks.
(c) Install two USB 2.0 external hard disk drives and two USB key boards to EUT USB ports.
(d) Install two modems to EUT serial ports.
(e) Install monitor to EUT VGA port.
(f) Install printer to EUT parallel port.
(g) Plug six data cable to EUT RJ-11 ports.
(h) Interconnect EUT RJ-45 port and remote PC off table.

All operational functions of EUT interacting with peripherals including signal transmission between EUT and remote PC, file transmission between EUT and USB 2.0 hard disk drives were set to proceed with test. After preliminary test on EUT with four display resolutions: 2048x1536, 1920x1440, 1600x1200 and 1024x768 in 9x6x6 chamber, we took EUT with the worst-case display resolution, 2048x1536, for radiated emission test in 10m open field site and conducted emission test. The worst-case test result of model MFIII-845GV/GE was recorded and provided in this report.

(A) After the EUT was set up, we did the conducted emission test in conducted emission test site, and the worst case placement finding as the ANSI C63.4 requirement; similarly, the radiated emission test was done at the open field site.

(B) If the peak value of the noise can't under Non-consumer equipment limit 3 dBuV more, we'll change Biconical antenna or Log-periodic antenna for Dipole antenna and record its Quasi-Peak value, making sure it can under 6 dBuV at least.

(C) In the RFI test report, we provided the worst conducted emission testing data and radiated emission test data.

Test Software used

(A) EMITEST program that continuously generates a complete line of repeating "H" letter was the software used during the test.