# **DESCRIPTION**

Product:

LCD Tablet Model DTZ-2100

Manufacturer:

Name Coretronic Corporation

Address No.2, Ke Bei Rd. 5th, Science Park, Chu-Nan 350, Miao-Li

County, Taiwan

**Electrical Rating:** 

Voltage: AC100∼240V Power Consumption: 80 watts or less

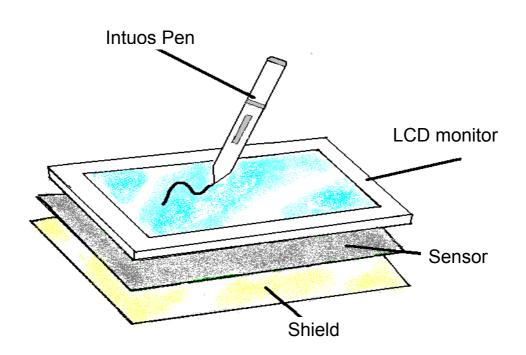
DTZ-2100 is an input / output integrated device for a computer, using Wacom's sensor, an erasing Intuos Pen and a 21.3 inch TFT color LCD monitor.

The tablet continuously transmits data to and from a Intuos Pen.

When transmitting, the tablet sends a signal to the Intuos Pen. The Intuos Pen stores energy from the signal.

When receiving, the Intuos Pen sends a signal that carries coordinate, switch, and pressure data back to the tablet. The tablet sends this data to the computer.

DTZ-2100 provides a Pen computing.



# The intentionally radiated frequencies

The intentionally radiated frequency is 667kHz.

All the other frequencies are unintentionally radiated.

### A. Antenna

The sensor board has two groups of multiple loop coils in X (horizontal) and Y (vertical) directions. Radio frequency energy is radiated from these coils.

Each coil is approximately 26.0mm wide and as long as the height, for the X-axis, and width, for the Y-axis, of the effective area of the tablet. Each coil consists of 8 turns (loops) of copper conductor.

# B. Original oscillation frequency and intentionally radiated frequency

We make one (667kHz) intentionally radiated frequency from the original oscillation frequency of 16MHz by ASIC (Gate Array W4027F).

## C. Operation

The tablet looks for a pointing device, such as a stylus, by feeding electrical current of above-mentioned frequencies through the coils in both X axis and Y axis. The current fed through each coil is not more than 200mA.

The tablet is able to detect the position of a pointing device because of the induction caused between the coil of the pointing device and two coils, one from X-axis and the other from Y-axis, of the sensor board.

### D. Comment on pointing device

The pointing device operates completely passively and has no battery or active oscillator.