# ELECTRONIC DISPLAYS INC.

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# **Digital Time Zone Display Letter of Volatility**

The digital time zone display uses a single MCU to manipulate all the functions of the time zone display. The **STC8A8K64D4 LQFP44** from the STC MCU is the most recently used MCU.

Here are the specifications of the MCU STC8A8K64D4 LQFP44:

**STC8A** is the series

**8K** is 8K bytes ram size, -- volatile memory

64 is 64K bytes Flash memory size -non-volatile memory

D4 contains a max 4 comport LQFP44 is MCU package LQFP44

The display does not use an OS system, the flash memory contains a main program and the subroutines.

- 49K Flash memory used for program memory.
- 15K bytes are assigned for user storage memory.

Only one selectable com port is used, and data is transferred directly from the PC to the time zone display. The communication for the data parameters is **unidirectional**, no data can be retrieved from the time zone display back to the PC.

## **Time Zone Display Synchronization**

Sync signal and time synchronization will be sent out by the first time zone and put on the com port, it will only contain a sync signal and current time information format – YY MM DD HH MM SS.

### 1. Bios / Flash Disk in the same location.

Memory Size: 64KB Memory Type: EEPROM Volatility: nonvolatile

**User Data:** yes (15KB) for parameters storage, format: table structure.

### **2. RAM**

Memory Size: 8KB Memory Type: SRAM Volatility: volatile User data: NO