Working with the CT1 using the HA7Net

This article discusses how to read the Embedded Data System's CT1 Counter. The CT1 stores the last three counts with a 32-bit time stamp. The data is stored in the RAM memory of a DS2423 in page 2, memory location 0040 Hex. Reading the CT1 is relatively easy you will need to send a write block command to the HA7Net and then interpret the data returned. The write block should be formatted similar to this URL.

http://ha7.net/1Wire/WriteBlock.html?Address=9000000004A4661D&Data=F04000FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF

There are two variables within this URL that are unique to you. The "ha7.net" and the "9000000004A4661D" will need to be replaced with your HA7Nets IP address and the ROM ID of the DS2423 (ending in 1D) in the CT1 respectively.

After sending the write block, you will receive a response similar to this:

```
F04000190005B328000000056000153910000000055000083A100000054
F04000 = Command sent
     19 = Ignore byte
        0005B32800000056 =Most recent reading
                        0001539100000055 = 2nd reading
                                        000083A100000054 = 3rd reading
```

Converting readings:
0005B32800000056

0005B328 = The time (in Hex) between when the CT1 was powered up and when the reading was taken. The time is recorded in .005 second units.

0005B328 (Hex) = 373544 (Dec)

time * units = seconds since CT1 was powered up
373544*.005 = 1867.72 seconds

00000056 = Pulse count in Hex.

00000056 (Hex) = 86 (Dec)

In this example, the CT1 made its 86th count after the CT1 had been powered up for 1867.72 seconds.