FROM: Max McClung, 76336,3110
TO: Dave Brown, 72103,2235
DATE: 11/11/94 7:47 PM

Re: WOSA/XMC, Draft 2, ICounter

Hello Dave,

I would like to go over the ICounter interface in this correspondence.

ICounter Interface ------------------------- Only the AT6400-AUX1 (bus-based indexer) allows the user to have access to hardware counters. Each of the four encoder inputs can be configured as an individual up/down counter (see CNTE command). A ResetCounter() method needs to be added to the ICounter interface (see CNTR command).
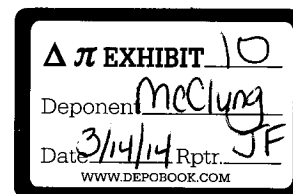
The current counter value for each counter can be obtained via the TCNT command. The counter value cannot be obtained via the "fast status" registers.

The AT6400-AUX1 product also has the ability to interrupt the PC when a count value has exceeded a maximum count, or when a count value falls below a minimum count (see INTHW and CNTINT commands). Perhaps you would include an EnableInterrupt() method.

Conclusion -------------- After reviewing the ITimer and ICounter interfaces, it just occurred to me that you might want to provide timer and counter services within the Motion Component itself. For example, a user might want access to the high-resolution timer in WIN32. Or the user might want to count "motion complete on axis n" interrupts (see INTHW command). Is this what you had in mind with AttachInterrupt()?

Correction ------------- In the discussion of the ITimer interface, the current timer value should be obtained from the TTIM command rather than the [TIM] variable.