

Appendix B

Using Timer Variables in BASIC Programs

You can use timer elements in BASIC programs. To do this, you must declare the timer as a global, double integer array. For example, COMMON TIMER! (4). The elements of the timer data structure can be accessed as follows:

Element:	Description:
0	Elapsed
1	Reserved for system
2	TPreset
3	bit 15 Q bit 23 T bit 31 TR
4	Reserved for system

WARNING

DO NOT MODIFY TIMER ELEMENTS 0, 1, 3, AND 4 FROM A BASIC PROGRAM. THIS WILL CAUSE THE TIMER TO OPERATE INCORRECTLY, RESULTING IN UNPREDICTABLE MACHINE OPERATION.

Within a BASIC program, you may want to:

- determine if a timer has expired
- change a timer's preset

To change the preset value by using a BASIC statement

- Enter a statement in this format:

`NAME!(2)=new_preset_value`

where NAME! is the name of the global timer variable whose preset you want to change

The value of 2 is the location of the element TPreset within a Timer data type.

Example:

`TIMER1!(2)=2000`

This statement sets the preset value for the variable TIMER1! to 2000.

To determine if a timer has expired by monitoring element Q in a BASIC program

- Use the BASIC function BIT_SET@ to test the value of Q.

Example:

`IF BIT_SET@(TIMER1!(3),15) THEN 250`

This statement examined bit 15 of element 3 in the global variable TIMER1.