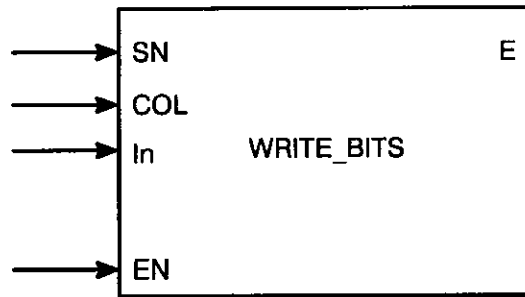


39.0 WRITE BITS

This function can be used in AutoMax Control Block tasks only. It cannot be used in UDC Control Block tasks.



Maximum 'n' = 8

Function

This function stores data into a column in the specified BOOLEAN data structure.

Program Statement

```
CALL WRITE_BITS(STRUCTURE_NAME=structure_name@,      &  
                COLUMN=column%, ENABLE=enable@,      &  
                INPUT1=input1@, ...INPUTN=inputn@,    &  
                ERROR=error@)
```

Inputs

SN (STRUCTURE_NAME) =

Name of the BOOLEAN data structure where data is to be written to. This parameter must be specified by name only (literal value not accepted). The data structure name is limited to a maximum length of 15 characters and must be type BOOLEAN. The specified data structure must be created by a control block within the task. Refer to the SHIFT_BITS block for an example of a control block that creates a BOOLEAN data structure.

COL (COLUMN) =

Selects a column within the specified BOOLEAN data structure, type INTEGER. This parameter is required. The columns are numbered from 0 to MCOL - 1, where MCOL is equal to the number of columns (depth) defined by the control block that created the data structure.

EN (ENABLE) =

Enable input, type BOOLEAN. This parameter is required. The state(s) of the input(s) are written into the column specified by COLUMN when ENABLE is TRUE. If this parameter is FALSE, no data will be written into the column.

In (INPUTn) =

Data input n, type BOOLEAN. The inputs can be specified in any order.

Outputs

E (ERROR) =

Error output, type BOOLEAN. This is an optional parameter. The output is TRUE if the value of COLUMN selects a non-existent column for the specified data structure, or if the column specified has not been loaded previously with data by the control block that created it. Valid values for COLUMN range from 0 to MCOL - 1. See COLUMN above.

Notes

1. The WRITE_BITS block must reference a BOOLEAN data structure that was created by a control block within the task. A minimum of one input must be programmed. The order in which the inputs (input1...input8) are programmed is unimportant. However, all of the inputs programmed by the WRITE_BITS block must also be defined by the control block that created the data structure. If these requirements are not met, a compilation error will occur.
2. If the value of COLUMN selects a non-existent column, the output ERROR is set TRUE, no data is stored in the specified data structure, and the appropriate run time error is logged.
3. If the value of COLUMN selects a column that has not been previously loaded with data by the control block that created it, the output ERROR is set TRUE, no data is stored in the specified data structure, but no run time error is logged.