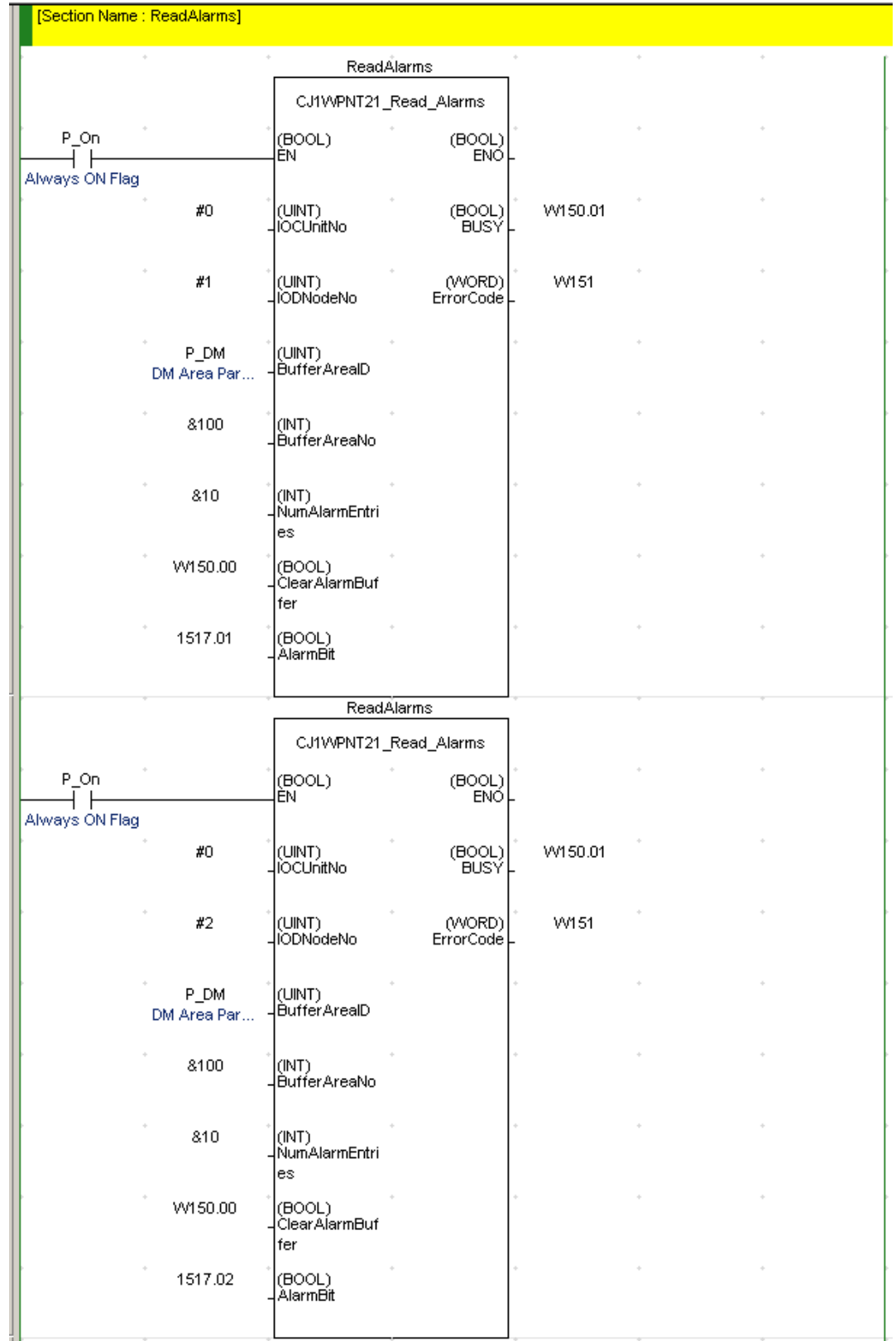


Sequence	CJ1WPNT21: Read Alarms
Basic function	Sends an alarm read message and place the alarm entry in a buffer
Symbol	
File name	Cx1WPNT21_Read_Alarms
Applicable models	CJ1*-CPU**H Unit version 3.0 or higher CJ1M-CPU** Unit version 3.0 or higher
Conditions for usage	None
Function description	<p>Triggered by the <i>AlarmBit</i> the function block will send an Alarm read command (Fins 0101) depending on the <i>IOCUnitNo</i> and <i>IODNodeNo</i>. The resulting alarm data entry will be added to the buffer as defined by <i>BufferAreaID</i>, <i>BufferAreaNo</i> and <i>NumAlarmEntries</i>.</p> <p>The data shift will follow the FIFO principle. The latest alarm entry will be entered at the start of the buffer. The oldest alarm entry will be discarded at the end of the buffer.</p> <p>Setting the <i>ClearAlarmBuffer</i> will clear the entire buffer.</p>
FB precautions	<p>The FB is processed over multiple cycles. The BUSY output variable can be used to check whether the FB is being processed.</p> <p>Be sure to match the <i>IOCUnitNo</i> and <i>IODNodeNo</i> input with the <i>AlarmBit</i> input.</p>
EN input condition	<ul style="list-style-type: none"> The AlarmBit (as set by the IO Controller) triggers the function block.
Restrictions Input variables	<ul style="list-style-type: none"> The common memory ranges (CIO, DM, WR, HR) apply.

Output variables	A single alarm entry (10 words in total) will consist of the following words:
	Word Contents
0	Device Number of IO Device
1	Alarm Type
2	Slot number
3	Subslot number
4	Module Ident number (word 0)
5	Module Ident number (word 1)
6	Specifier / Sequence number
7	Clock (word 0, PLC memory address A351 at moment of alarm event)
8	Clock (word 1, PLC memory address A352 at moment of alarm event)
9	Clock (word 2, PLC memory address A353 at moment of alarm event)

Application example

This example below shows two function blocks (single instance) for reading the alarms for two different IO Devices. Both function blocks will write to the same buffer.



■ Variable Tables
Input Variables

Name	Variable name	Data type	Default	Range	Description
EN	EN	BOOL			1 (ON): FB ON. 0 (OFF): FB OFF.
Unit Number of IO Controller	IOCUnitNo	UINT		0 to F	Specify Unit Number of the IO Controller
Device Number of IO Device	IODNodeNo	UINT		1 to 7D	Specify Device Number of the IO Controller
Memory Code for the Buffer Area.	BufferAreaID	UINT			P_CIO (#00B0): CIO Area P_WR (#00B1): Work Area P_HR (#00B2): Holding Area P_DM (#0082): DM Area
Address offset for the Buffer Area	BufferAreaNo	INT			Specify control area start address
Max number of alarm entries	NumAlarmEntries	INT			Specify the maximum amount of alarm entries (and therefore size of buffer)
Clear buffer	ClearBuffer	BOOL			Set to clear the alarm buffer
Alarm bit of IO Device	AlarmBit	BOOL			Specify the alarm bit of the IO Device

Output Variables

Name	Variable name	Data type	Range	Description
ENO (May be omitted.)	ENO	BOOL		1 (ON): FB processed normally. 0 (OFF): FB not processed or ended in an error.
BUSY	BUSY	BOOL		Busy flag
Error Code	ErrorCode	WORD		Error Code of the FINS 0101 Alarm read command. Value 0xFFFF implies time out.

■ Version History

Version	Date	Contents
1.00	22-12-2008	Original production