

VARIABLES

```
VAR_GLOBAL  
Di00CPU AT %IX255.0 : BOOL; (* Di 00 CPU *)  
Di01CPU AT %IX255.1 : BOOL; (* Di 01 CPU *)  
FIFOIDx AT %MD100.2048 : ARRAY[ 0..1 ] OF UDINT;  
END_VAR
```

	Project : FIFOLog	
	VARIABLES :	
	Release : FIFOLog	Ver :1.00
	Author :	Date:19/05/2015
	Note :	Page:1 of 1

PROGRAM FIFOLog

```

VAR
FIFO : FIFOFile; (* FIFO file FB instance *)
j : INT; (* Auxiliary variable *)
DataIn : RECORDDATASTRUCT; (* FIFO input data *)
DateTime : SysTimeToDate; (* Actual Date/Time *)
Year : USINT; (* Year value (00-99) *)
Pulse : ARRAY[ 0..1 ] OF BOOL; (* Pulse flag *)
DataOut : RECORDDATASTRUCT; (* FIFO output data *)
END_VAR

```

```

1 (* ***** *)
2 (* PROGRAM "FIFOLog" *)
3 (* ***** *)
4
5 (* ----- *)
6 (* INITIALIZATION *)
7 (* ----- *)
8 (* Execute the program initialization. *)
9
10 IF (SysFirstLoop) THEN
11     FIFO.FileName:='Storage/FIFO.bin'; (* Filename *)
12     FIFO.RLength:=SIZEOF(DataIn); (* Record length *)
13     FIFO.DPtrIn:=ADR(DataIn); (* Data pointer (In) *)
14     FIFO.DPtrOut:=ADR(DataOut); (* Data pointer (Out) *)
15     FIFO.RLimit:=50000/32; (* Records limit *)
16 END_IF;
17
18 (* Calculate the actual Date/Time and manage the FIFO. *)
19
20 DateTime(EpochTime:=SysDateTime); (* Actual Date/Time *)
21 Year:=TO_USINT(DateTime.Year-2000); (* Year value (00-99) *)
22 FIFO(Enable:=TRUE); (* FIFO file FB instance *)
23 FIFO.FIFOIdx:=ADR(FIFOIdx); (* FIFO indexes *)
24 FIFO.In:=FALSE; (* In command *)
25 FIFO.Out:=FALSE; (* Out command *)
26 FIFO.Del:=FALSE; (* Delete command *)
27
28 (* ----- *)
29 (* INSERT DATA ON FIFO REGISTER *)
30 (* ----- *)
31 (* Manage the data record and insert it on FIFO register. *)
32 (* The Date/Time is in the format "14/05/15 12.24.04". *)
33
34 IF (Di00CPU <> Pulse[0]) THEN
35     Pulse[0]:=Di00CPU; (* Pulse flag *)
36
37     IF (Pulse[0]) THEN
38         j:=SysVarsnprintf(ADR(DataIn.DateTime), 3+1, '%02d/', USINT_TYPE, ADR(DateTime.Day));
39         j:=SysVarsnprintf(ADR(DataIn.DateTime)+LEN(DataIn.DateTime), 3+1, '%02d/', USINT_TYPE, ADR
DateTime.Month));
40         j:=SysVarsnprintf(ADR(DataIn.DateTime)+LEN(DataIn.DateTime), 3+1, '%02d ', USINT_TYPE, ADR
Year));
41
42         j:=SysVarsnprintf(ADR(DataIn.DateTime)+LEN(DataIn.DateTime), 3+1, '%02d.', USINT_TYPE, ADR
DateTime.Hour));
43         j:=SysVarsnprintf(ADR(DataIn.DateTime)+LEN(DataIn.DateTime), 3+1, '%02d.', USINT_TYPE, ADR
DateTime.Minute));

```

Project : FIFOLog	
PROGRAM : FIFOLog	
Release : FIFOLog	Ver :1.00
Author :	Date:19/05/2015
Note :	Page:1 of 2

PROGRAM FIFOLog

```

44         j:=SysVarsnprintf(ADR(DataIn.DateTime)+LEN(DataIn.DateTime), 2+1, '%02d', USINT_TYPE, ADR(
ateTime.Second));
45
46         DataIn.Voltage[0]:=DataIn.Voltage[0]+1.0;
47         DataIn.Voltage[1]:=DataIn.Voltage[1]+2.0;
48         FIFO.In:=TRUE; (* In command *)
49     END_IF;
50 END_IF;
51
52 (* ----- *)
53 (* EXTRACT DATA FROM FIFO REGISTER *)
54 (* ----- *)
55 (* Extract and delete record from FIFO register. *)
56
57 IF (Di01CPU <> Pulse[1]) THEN
58     Pulse[1]:=Di01CPU; (* Pulse flag *)
59
60     IF (Pulse[1]) THEN
61         FIFO.Out:=TRUE; (* Out command *)
62         FIFO.Del:=TRUE; (* Delete command *)
63     END_IF;
64 END_IF;
65
66 (* [End of file] *)
67
68

```

	Project : FIFOLog	
	PROGRAM : FIFOLog	
	Release : FIFOLog	Ver :1.00
	Author :	Date:19/05/2015
	Note :	Page:2 of 2

(eLogLib_B100) Manages a FIFO register on a file
 ENCRYPTED CODE

```

VAR_INPUT
Enable : BOOL; (* Enable to execution *)
In : BOOL; (* In command *)
Out : BOOL; (* Out command *)
Del : BOOL; (* Delete command *)
FIFOIdx : @UDINT; (* FIFO indexes *)
Filename : STRING[ 32 ]; (* Path and name of file where to log *)
RLength : UDINT; (* Record length (Accetta SIZEOF) *)
RLimit : UDINT; (* Records limit *)
DPtrIn : @USINT; (* Data pointer (In) *)
DPtrOut : @USINT; (* Data pointer (Out) *)
END_VAR

VAR_OUTPUT
Enabled : BOOL; (* Function block enabled *)
Done : BOOL; (* Execution done *)
Fault : BOOL; (* Execution error *)
NrOfRecs : UDINT; (* Number of records in the file *)
END_VAR

VAR_EXTERNAL
SysActTaskID : USINT; (* Current task ID *)
END_VAR
    
```

1

	Project : FIFOLog	
	FUNCTION BLOCK : FIFOFile	
	Release : FIFOLog	Ver :1.00
	Author :	Date:19/05/2015
	Note :	Page:1 of 1