

casovani

PLC_1 [CPU 313C]

PLC_1

General

Name	PLC_1	Author	Dipl. Ing. Pavel Votrubec
Comment	Jednoduchý prográmek blikání žárovky H1 po stisknutí tlačítka S1 ve periodě blikání 2Hz..	Rack	0
Slot	2		

General\Catalog information

Short designation	CPU 313C	Description	Work memory 128KB; 0.1ms/1000 instructions; DI24/DO16; AI5/AO2 integrated; 3 pulse outputs (2.5kHz); 3 channels counting and measuring with 24V (30kHz) incremental encoders; MPI interface; multi-tier configuration up to 31 modules
Order number	6ES7 313-5BG04-0AB0	Firmware version	V3.3

General\Identification & Maintenance

Plant designation		Location identifier	
--------------------------	--	----------------------------	--

MPI interface\General

Name	MPI interface_1	Comment	
-------------	-----------------	----------------	--

MPI interface\General\Catalog information

Short designation	DI24/DO16	Description	Digital input/output DI24 + DO16
--------------------------	-----------	--------------------	----------------------------------

MPI interface\Interrupt selection

Interrupt selection	None		
----------------------------	------	--	--

MPI interface\Inputs

Temperature unit	Degrees Celsius		
-------------------------	-----------------	--	--

MPI interface\Inputs\Channel group 0 - 3

Input delay	3ms		
--------------------	-----	--	--

MPI interface\Inputs\Channel group 0 - 3\Hardware interrupt channel 0

Rising (positive) edge	0	Falling (negative) edge	0
-------------------------------	---	--------------------------------	---

MPI interface\Inputs\Channel group 0 - 3\Hardware interrupt channel 1

Rising (positive) edge	0	Falling (negative) edge	0
-------------------------------	---	--------------------------------	---

MPI interface\Inputs\Channel group 0 - 3\Hardware interrupt channel 2

Rising (positive) edge	0	Falling (negative) edge	0
-------------------------------	---	--------------------------------	---

MPI interface\Inputs\Channel group 0 - 3\Hardware interrupt channel 3

Rising (positive) edge	0	Falling (negative) edge	0
-------------------------------	---	--------------------------------	---

MPI interface\Inputs\Channel group 4 - 7

Input delay	3ms		
--------------------	-----	--	--

MPI interface\Inputs\Channel group 4 - 7\Hardware interrupt channel 4

Rising (positive) edge	0	Falling (negative) edge	0
-------------------------------	---	--------------------------------	---

MPI interface\Inputs\Channel group 4 - 7\Hardware interrupt channel 5

Rising (positive) edge	0	Falling (negative) edge	0
-------------------------------	---	--------------------------------	---

MPI interface\Inputs\Channel group 4 - 7\Hardware interrupt channel 6

Rising (positive) edge	0	Falling (negative) edge	0
-------------------------------	---	--------------------------------	---

MPI interface\Inputs\Channel group 4 - 7\Hardware interrupt channel 7

Rising (positive) edge	0	Falling (negative) edge	0
-------------------------------	---	--------------------------------	---

MPI interface\Inputs\Channel 0

Measuring type	Voltage	Measuring range	+/- 10V
-----------------------	---------	------------------------	---------

Totally Integrated Automation Portal			
Interference frequency suppression	50Hz	Integration time	20ms
MPI interface\Inputs\Channel group 8 - 11			
Input delay	3ms		
MPI interface\Inputs\Channel group 8 - 11\Hardware interrupt channel 8			
Rising (positive) edge	0	Falling (negative) edge	0
MPI interface\Inputs\Channel group 8 - 11\Hardware interrupt channel 9			
Rising (positive) edge	0	Falling (negative) edge	0
MPI interface\Inputs\Channel group 8 - 11\Hardware interrupt channel 10			
Rising (positive) edge	0	Falling (negative) edge	0
MPI interface\Inputs\Channel group 8 - 11\Hardware interrupt channel 11			
Rising (positive) edge	0	Falling (negative) edge	0
MPI interface\Inputs\Channel 1			
Measuring type	Voltage	Measuring range	+/- 10V
Interference frequency suppression	50Hz	Integration time	20ms
MPI interface\Inputs\Channel group 12 - 15			
Input delay	3ms		
MPI interface\Inputs\Channel group 12 - 15\Hardware interrupt channel 12			
Rising (positive) edge	0	Falling (negative) edge	0
MPI interface\Inputs\Channel group 12 - 15\Hardware interrupt channel 13			
Rising (positive) edge	0	Falling (negative) edge	0
MPI interface\Inputs\Channel group 12 - 15\Hardware interrupt channel 14			
Rising (positive) edge	0	Falling (negative) edge	0
MPI interface\Inputs\Channel group 12 - 15\Hardware interrupt channel 15			
Rising (positive) edge	0	Falling (negative) edge	0
MPI interface\Inputs\Channel 2			
Measuring type	Voltage	Measuring range	+/- 10V
Interference frequency suppression	50Hz	Integration time	20ms
MPI interface\Inputs\Channel group 16 - 19			
Input delay	3ms		
MPI interface\Inputs\Channel group 16 - 19\Hardware interrupt channel 16			
Rising (positive) edge	0	Falling (negative) edge	0
MPI interface\Inputs\Channel group 16 - 19\Hardware interrupt channel 17			
Rising (positive) edge	0	Falling (negative) edge	0
MPI interface\Inputs\Channel group 16 - 19\Hardware interrupt channel 18			
Rising (positive) edge	0	Falling (negative) edge	0
MPI interface\Inputs\Channel group 16 - 19\Hardware interrupt channel 19			
Rising (positive) edge	0	Falling (negative) edge	0
MPI interface\Inputs\Channel 3			
Measuring type	Voltage	Measuring range	+/- 10V
Interference frequency suppression	50Hz	Integration time	20ms
MPI interface\Inputs\Channel group 20 - 23			
Input delay	3ms		

Totally Integrated Automation Portal								
MPI interface\Inputs\Channel group 20 - 23\Hardware interrupt channel 20								
Rising (positive) edge	0	Falling (negative) edge	0					
MPI interface\Inputs\Channel group 20 - 23\Hardware interrupt channel 21								
Rising (positive) edge	0	Falling (negative) edge	0					
MPI interface\Inputs\Channel group 20 - 23\Hardware interrupt channel 22								
Rising (positive) edge	0	Falling (negative) edge	0					
MPI interface\Inputs\Channel group 20 - 23\Hardware interrupt channel 23								
Rising (positive) edge	0	Falling (negative) edge	0					
MPI interface\Inputs\Channel 4								
Measuring type	Resistor (2-wire terminal)	Measuring range	600 ohmsOhm					
MPI interface\MPI address\Interface networked with								
Subnet:	Not networked							
MPI interface\MPI address\Parameters								
Address:	2	Highest address:	31					
Transmission speed:	187.5 kbps							
MPI interface\I/O addresses\Input addresses								
Start address	0	End address	2					
Process image	OB1-PI	Interrupt OB number	40					
MPI interface\I/O addresses\Output addresses								
Start address	0	End address	1					
Process image	OB1-PI							
MPI interface\Channel 0								
Operating mode	Not configured							
MPI interface\Outputs\Output 0								
Output type	Voltage	Output range	+/- 10V					
MPI interface\Outputs\Output 1								
Output type	Voltage	Output range	+/- 10V					
MPI interface\Channel 1								
Operating mode	Not configured							
MPI interface\Channel 2								
Operating mode	Not configured							
IO address overview								
outputs	true	inputs	true					
outputs	true	outputs	true					
Type	AddrFrom	AddrTo	Module	PIP	DP	PN	Rack	Slot
true	true	true	true	true	true	true	true	true
Startup								
Startup if preset configuration does not match actual configuration	True		Startup after POWER ON	Warm restart				
Startup\Monitoring time for								
Ready message from modules	650x 100 ms		Parameter transfer to modules	100x 100 ms				
Cycle								
Cycle monitoring time	150ms		Cycle load due to communication	20%				
Size of the process image input:	128		Size of the process image output:	128				
OB85 call if I/O access error occurs	No OB85 call							
Clock memory								
Memory byte	0							
Clock memory\Clock memory								
Clock memory	False							

Totally Integrated Automation Portal			
\Time-of-day interrupts\			
OB number	Priority	Activated	Interval
OB 10:	2	False	None
			Start time
			1994-01-01 00:00:00.000
\Time-delay interrupts\			
OB number	Priority	Process image partition(s)	
OB 20:	3	None	
OB 21:	4	None	
\Cyclic interrupts\			
OB number	Priority	Interval	Phase offset
OB 32:	9	1000	0
OB 33:	10	500	0
OB 34:	11	200	0
OB 35:	12	100	0
			ms
			ms
			ms
			ms
\Hardware interrupts\			
OB number	Priority		
OB 40:	16		
\Asynchronous error interrupts\			
OB number	Priority		
OB 82:	26		
OB 85:	26		
OB 87:	26		
Diagnostics system			
Number of alarms in the diagnostics buffer	10		
Diagnostics system\Report cause of STOP			
Report cause of STOP	True		
System diagnostics\General			
Activate system diagnostics for this PLC	True		
System diagnostics\Alarm settings			
Category	Alarm	Acknowledgement	Alarm class
Fault	True	False	No Acknowledgement
Maintenance demanded	True	False	No Acknowledgement
Maintenance required	True	False	No Acknowledgement
Info	True	False	No Acknowledgement
System diagnostics\Diagnostic support			
Query for status "activated/deactivated" after startup	False	Send alarm if status changes from/to activated or deactivated	False
Additional blocks for diagnostic data	Create	Block name	Block number
Diagnostic status DB:	True	RSE_DIAGNOSTIC_STATUS_DB	127
System diagnostics\System diagnostic blocks			
System diagnostic blocks	Block name		Block number
FB:	RSE_FB		49
DB:	RSE_DB		49
Global DB:	RSE_GLOBAL_DB		50
FC:	RSE_FC		49
Time of day			
Correction factor	0ms		
Time of day\Synchronization on PLC			
Type of synchronization	None		Time interval
			None
Time of day\Synchronization on MPI			
Type of synchronization	None		Time interval
			None

Totally Integrated Automation Portal		
Retentive memory\		
Number of memory bytes starting at MB 0	16	Number of S7 timers starting at T 0
		0
Number of S7 counters starting at C 0	8	
Protection\		
Level of protection	No protection	
Protection\ \Can be canceled with password		
Can be canceled with password	False	
Protection\Password for read/write access		
Password	••••••••	Confirm password
		••••••••
Anchor (ParameterCommunicationMenu)		
The TreeNode ParameterCommunicationMenu was not filled by some ACF		
Anchor (AddressesOverviewMenu)		
The AddressesOverviewMenu was not filled by some ACF		

PLC_1 [CPU 313C] / Program blocks

FC1 [FC1]

FC1 Properties

General

Name	FC1	Number	1	Type	FC
Language	LAD				

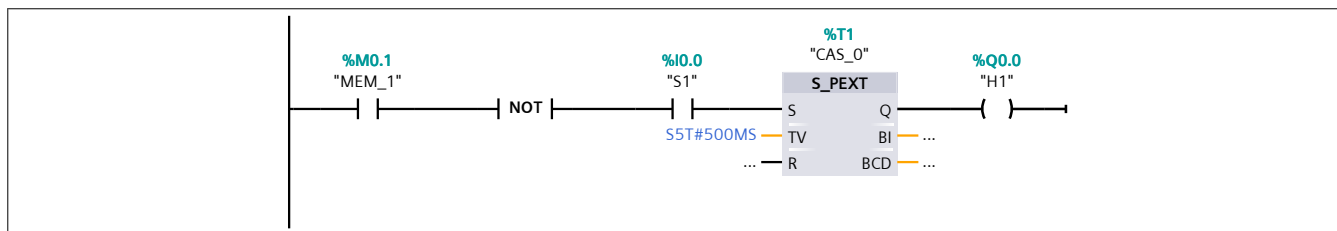
Information

Title		Author		Comment	Toto je volaný blok FC z cyklicky systémově spouštěného bloku OB1.
Family		Version	0.1	User-defined ID	

Name	Data type	Offset	Comment
▼ Input			
Input_1			
▼ Output			
Output_1			
InOut			
Temp			
▼ Return			
FC1	Void		

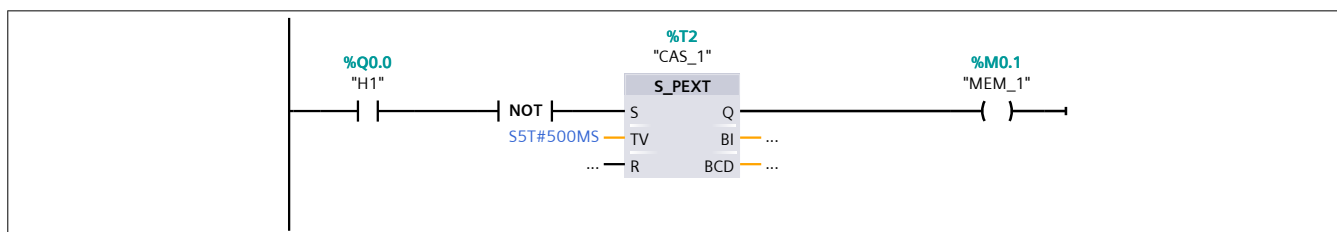
Network 1:

Blikání žárovky H1 po stisknutí tlačítka S1. navození frekvence 2 Hz se provedlo pomocí dvou časovačů zapojených do invertní smyčky. Časovač CAS_0 spouští svým ukončení druhý časovač CAS_1 a následně zase spuštění časovače CAS_0 v nekonečné smyčce. Spuštění prvního časovače CAS_0 je navíc podmíněné aktivací tlačítka S1.



Symbol	Address	Type	Comment
"MEM_1"	%M0.1	Bool	boole paměť 0.1
"CAS_0"	%T1	Timer	časovač č. 0 typ časovače S_PEXT
"H1"	%Q0.0	Bool	žárovka H1
"S1"	%I0.0	Bool	ručně ovládané tlačítko S1

Network 2:



Symbol	Address	Type	Comment
"MEM_1"	%M0.1	Bool	boole paměť 0.1
"H1"	%Q0.0	Bool	žárovka H1
"CAS_1"	%T2	Timer	časovač č. 1 typ časovače S_PEXT

PLC_1 [CPU 313C] / Program blocks

OB1 [OB1]

OB1 Properties

General

Name	OB1	Number	1	Type	OB
Language	STL				

Information

Title		Author		Comment	Cyklicky spouštěný blok OB1.
Family		Version	0.1	User-defined ID	

Name	Data type	Offset	Comment
▼ Temp			
Temp_0	Byte	0.0	
Temp_1	Byte	1.0	
Temp_2	Byte	2.0	
Temp_3	Byte	3.0	
Temp_4	Byte	4.0	
Temp_5	Byte	5.0	
Temp_6	Int	6.0	
Temp_7	Int	8.0	
Temp_8	Int	10.0	
Temp_9	Date_And_Time	12.0	

Network 1:

OB1 jako podprogram volá funkci FC1.

```
0001      CALL  "FC1"
0002          Input_1  :=
0003          Output_1 :=
```

Symbol	Address	Type	Comment
"FC1"	%FC1	Block_FC	







PLC_1 [CPU 313C]

Technology objects

This folder is empty.

PLC_1 [CPU 313C] / PLC tags / Default tag table [6]

PLC tags

PLC tags							
Name	Data type	Address	Retain	Visible in HMI	Accessible from HMI	Comment	
 S1	Bool	%I0.0		True	True	ručně ovládané tlačítko S1	
 MEM_0	Bool	%M0.0		True	True	boole paměť 0.0	
 MEM_1	Bool	%M0.1		True	True	boole paměť 0.1	
 CAS_0	Timer	%T1		True	True	časovač č. 0 typ časovače S_PEXT	
 CAS_1	Timer	%T2		True	True	časovač č. 1 typ časovače S_PEXT	
 H1	Bool	%Q0.0		True	True	žárovka H1	

PLC_1 [CPU 313C] / PLC tags / Default tag table [6]

User constants

User constants

Name	Data type	Value	Comment
------	-----------	-------	---------

PLC_1 [CPU 313C]

PLC data types

This folder is empty.

PLC_1 [CPU 313C] / Watch and force tables

Force table

Name	Address	Display format	Force value	Comment
------	---------	----------------	-------------	---------

PLC_1 [CPU 313C] / PLC alarms

PLC alarms

PLC alarms

no entries

PLC_1 [CPU 313C] / PLC alarms

User diagnostics alarms

User diagnostics alarms

no entries

PLC_1 [CPU 313C] / PLC alarms

System diagnostics alarms

System diagnostics alarms

no entries

PLC_1 [CPU 313C]

Text lists

This folder is empty.

PLC_1 [CPU 313C] / Local modules

CP 343-2_1 [CP 343-2]

CP 343-2_1

General

Name	CP 343-2_1	Author	ucitel
Comment		Rack	0
Slot	4		

General\Catalog information

Short designation	CP 343-2	Description	Firmware V3.0/V3.1. Basic module for AS-i attachment. Support of AS-i A/B slaves and AS-i-7.3/7.4 analog slaves.
Order number	6GK7 343-2AH01-0XA0	Firmware version	V3.1

I/O addresses\Input addresses

Start address	29	End address	44
Process image	OB1-PI		

I/O addresses\Output addresses

Start address	29	End address	44
Process image	OB1-PI		

Anchor (AsiCMAAddressesOverviewMenu)

I address	O address	AS-i address
		0
29.0 ...29.3	29.0 ...29.3	1A
30.4 ...30.7	30.4 ...30.7	2A
30.0 ...30.3	30.0 ...30.3	3A
31.4 ...31.7	31.4 ...31.7	4A
31.0 ...31.3	31.0 ...31.3	5A
32.4 ...32.7	32.4 ...32.7	6A
32.0 ...32.3	32.0 ...32.3	7A
33.4 ...33.7	33.4 ...33.7	8A
33.0 ...33.3	33.0 ...33.3	9A
34.4 ...34.7	34.4 ...34.7	10A
34.0 ...34.3	34.0 ...34.3	11A
35.4 ...35.7	35.4 ...35.7	12A
35.0 ...35.3	35.0 ...35.3	13A
36.4 ...36.7	36.4 ...36.7	14A
36.0 ...36.3	36.0 ...36.3	15A
37.4 ...37.7	37.4 ...37.7	16A
37.0 ...37.3	37.0 ...37.3	17A
38.4 ...38.7	38.4 ...38.7	18A
38.0 ...38.3	38.0 ...38.3	19A
39.4 ...39.7	39.4 ...39.7	20A
39.0 ...39.3	39.0 ...39.3	21A
40.4 ...40.7	40.4 ...40.7	22A
40.0 ...40.3	40.0 ...40.3	23A
41.4 ...41.7	41.4 ...41.7	24A
41.0 ...41.3	41.0 ...41.3	25A
42.4 ...42.7	42.4 ...42.7	26A
42.0 ...42.3	42.0 ...42.3	27A
43.4 ...43.7	43.4 ...43.7	28A
43.0 ...43.3	43.0 ...43.3	29A
44.4 ...44.7	44.4 ...44.7	30A
44.0 ...44.3	44.0 ...44.3	31A