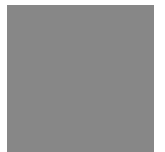


BALLUFF

Software- Description

BIS VU-

Sample Program S7-300/400





Sample Program description for BIS VU

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Sample Program description for BIS VU

1 BIS VU SAMPLE PROGRAMM

The S7 project **BIS VU Sample** contains in FB10 an example call of FB42 for BIS V-610*. Configured is a S7 CPU 315-2PN/DP. I/O module length 64 Byte, Periphery HW start address: E/A 256. All input parameters are set suitable to hardware configuration. The FB is initialized automatically by the program. The flag bit M100.0 "BIS U Init" is set in the OB100 at PLC startup. For controlling the example, the variable table "VAT_BIS_VU_IBN" is available.

1.1 Sample functions

The following commandos are supported in the demo program:

- Read data carrier (USER-data)
- Write data carrier (USER-data)
- Store Auto Read start address
- Type and serial number
- Copy data between data carrier
- Initialize CRC_16 data check
- Write constant value to data carrier
- Select tag
- Unselect tag
- Read EPC
- Write EPC
- Read TID
- Write antenna power
- Read antenna power
- Read multiple tags
- Write parameter
- Read parameter
- Bulk read
- Bulk write
- Read number of tags
- Get RSSI
- Lock tag
- Activate custom parameter

ATTENTION

Please test carefully if the used commandos are supported by the BIS V processor and the read/write head! The maximum read/write length of the FB is 65,534 byte.

1 BIS VU SAMPLE PROGRAMM

1.2 General Data

Program name:	BIS_VU_Sample
Invoked blocks:	FB10, FB42
Reserved memory bits:	MB0 – 2, MB10, MB100-MB135
Reserved Timers:	none
Reserved Counters:	none
Configured I/O Range	64 Byte
Invoke:	absolute
Device compatibility:	Siemens Simatic® S7-300 CPU 315 2PN/DP with S7 V5.5

1.3 Control and watch options with the variable table

Description of FB input parameters:

- "M100.1 BIS VU Start" start commando
- "M100.2 BIS VU ProcReset" reset processor and FB
- "M100.4 Default BISVU" set FB parameters to default values
- "MW104 CommandNo" pretends the actual command
- „MD106 BIS VU Offset Send“ Offset send data
- „MD136 BIS VU Offset Rece “ Offset receive data
- "MD110 TAG_StartAddr_PaN" pretends start address or parameter number
- "MD114 TAG_NumbOfByte_PaB" pretends number of bytes to read or parameter length
- "MW118 Sel_EPCNo" pretends EPC for select tag function
- "MW120 EPC DB Offset" pretends the EPC offset in "DB_MultiEPC"
- "MB124 Type_EPC_TID" parameter for command 40_{hex}
- "MD130 CopTargetAddr" Copy command target address
- "MW134 CopRW_HeadNo" Copy command head number

Sample Program description for BIS VU

1 BIS VU SAMPLE PROGRAMM

VAT_BIS_VU_IB -- BIS_VU_Sample\SIMATIC 300(1)\CPU 315-2 PN\DP\S7-Programm(1)					
	Operand	Symbol	Anzeigeformat	Statuswert	Steuerwert
1	// FB Input Parameter Bit's				
2	M 100.1	"M100.1 BIS VU Start"	BIN		
3	M 100.2	"M100.2 BIS VU ProcReset"	BIN		
4	M 100.4	"M100.4 Default BISVU"	BOOL		
5	M 100.0	"M100.0 BIS VU Init"	BOOL		
6	// FB Input Parameter Words				
7	// CommandNo 81 Read, 82 Write, 42 Read EPC, 43 Write EPC, 44 Read TID ...				
8	MW 104	"MW104 CommandNo"	HEX		W#16#0047
9	MD 106	"MD106 BIS VU Offset Send"	DEZ		
10	MD 136	"MD136 BIS VU Offset Rece"	DEZ		
11	MD 110	"MD110 TAG_StartAddr_PaN"	HEX		DW#16#00000000
12	MD 114	"MD114 TAG_NumbOfByte_PaB"	DEZ		L#10
13	MW 118	"MW118 Sel_EPCNo"	DEZ		1
14	MW 120	"MW120 EPC DB Offset"	HEX		W#16#0000
15	MB 124	"MB124 Type_EPC_TID"	HEX		B#16#00
16	MD 130	"MD130 CopTargetAddr"	DEZ		
17	MW 134	"MW134 CopRW_HeadNo"	DEZ		2
18	// FB Output Parameter Bit's				
19	M 101.0	"M101.0 BIS VU Ready"	BOOL		
20	M 101.1	"M101.1 BIS VU Error"	BOOL		
21	M 101.3	"M101.3 BIS VU DatCarrPr"	BOOL		
22	// FB Output Parameter Words				
23	MW 122	"MW122 BIS VU ErrorCode"	HEX		
24	MB 126	"MB126 Tags Located"	HEX		
25	MB 127	"MB127Active Tag"	HEX		

Description of FB output parameters:

- "M101.0 BIS VU Ready" Job done
- "M101.1 BIS VU Error" Job done with errors
- "M102.3 BIS VU DataCarrPres" Data carrier present
- "MW122 BIS VU ErrorCode" Error number processor and FB
- "MB126 Tags Located" for Bulk write commando
- "MB127 Active Tag" for Bulk write commando

1 BIS VU SAMPLE PROGRAMM

1.4 Disclaimer of Liability sample program:

This demo program is free of charge and is a universal application example. This demo program shall help program and configure PLC applications and shall provide possible solutions.

The user is not entitled to claim for warranty, error correction and updates. In particular there is excluded any claims against Balluff GmbH for damages that might result from the use of this demo program. Excluded from this limitation of liability shall be (a) those damages that are based on injury to life, limb or health, (b) a liability according to the Produkthaftungsgesetz (German Product Liability Law) and (c) cases of willful intent.

Please check if the demo program is intended for your application before adapting it in plants and machineries.

By using the S7 sample, made available free of charge you accept the limitation of warranty and liability!

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