

# Siemens S7-300

Supported Series: Siemens S7-300 series PLC

Website: <http://www.siemens.com/entry/cc/en/>

## HMI Setting:

Parameters	Recommended	Options	Notes
PLC type	SIEMENS S7-300		
PLC I/F	RS232		
Baud rate	19200	9600~187.5K	Must be same as the PLC setting. The HMI which has a sticker MPI187.5 on the rear cover supports 187.5K.
Data bits	8		
Parity	Odd		
Stop bits	1		
PLC sta. no.	2		Must be same as the PLC setting.

## Device Address:

Bit/Word	Device type	Format	Range	Memo
B	I	DDDDo	0 ~ 40957	Input (I)
B	Q	DDDDo	0 ~ 40957	Output (O)
B	M	DDDDo	0 ~ 40957	Bit Memory
B	DBnBit	FFFFDDDDo	0 ~ 409681927	Data Register Bit
B	DB0Bit ~ DB99Bit	DDDDo	0 ~ 81927	
W	IW	DDDD	0 ~ 4095	Input (I)
W	QW	DDDD	0 ~ 4095	Output (O)
W	MW	DDDD	0 ~ 4095	Bit Memory
DW	MD	DDDD	0 ~ 4094	
Byte	MB	DDDD	0 ~ 4095	Bit Memory Byte
Byte	DBBn	FFFFDDDD	0 ~ 40968192	Data Register Byte
W	DBn	FFFFDDDD	0 ~ 40968192	Data Register (must be even)

Bit/Word	Device type	Format	Range	Memo
DW	DBDn	FFFFDDDD	0 ~ 40968192	Data Register Double Word (must be multiple of 4)
W	DBn_String	FFFFDDDD	0 ~ 40968192	Data Register Double Word (must be multiple of 4)
DW	DBDn_String	FFFFDDDD	0 ~ 40968192	Data Register Double Word (must be multiple of 4)
W	DB0-DB99	DDDD	0 ~ 8192	Data Register (must be even)

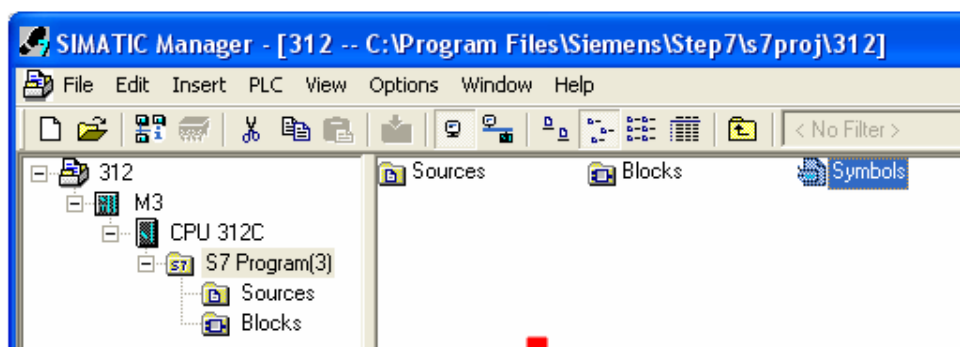

\* Double word and floating point value must use DBDn device type.

## How to Import Tag:

SIEMENS STEP 7 program allows building files of user-defined tag (\*.dif file and \*.AWL file), and import these files in EasyBuilder8000/EasyBuilderPro -> System Parameter Settings. The following describes how to build and import these two types of files.

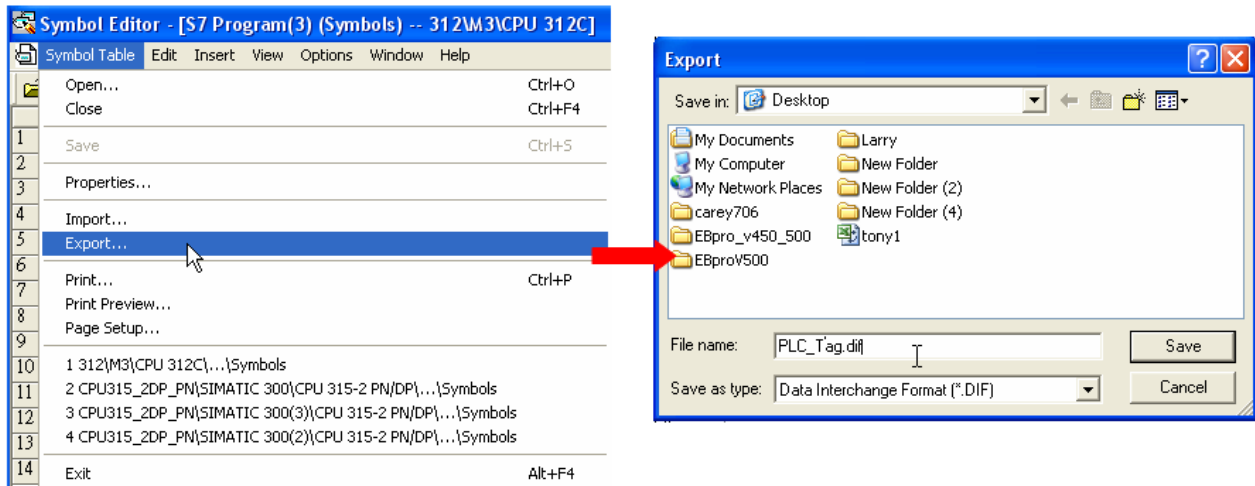
### 1. Building \*.dif File

- a、In “Symbols” create user-defined tag.

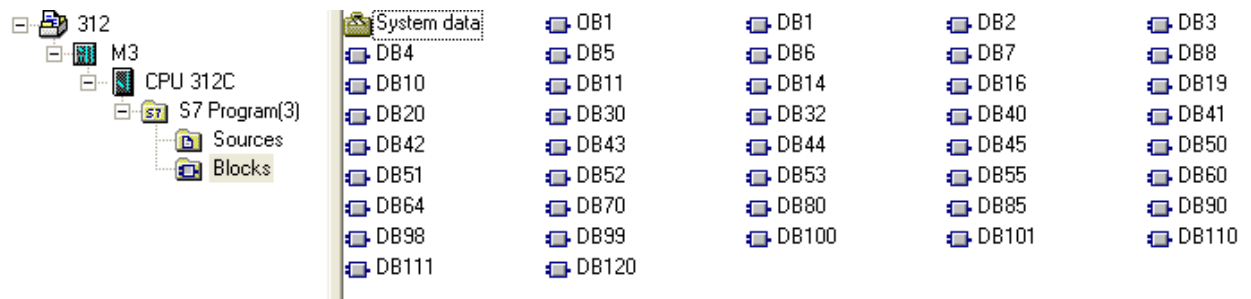
Symbol Table Edit Insert View Options Window Help					
All Symbols					
	Status	Symbol	Address	Data type	Comment
1		I0.0	I 0.0	BOOL	
2		I0.1	I 0.1	BOOL	
3		I0.2	I 0.2	BOOL	
4		I0.3	I 0.3	BOOL	
5		I0.4	I 0.4	BOOL	
6		I0.5	I 0.5	BOOL	
7		I0.6	I 0.6	BOOL	
8		I0.7	I 0.7	BOOL	

b 、 Click **Export** to export the edited file and click **Save**.

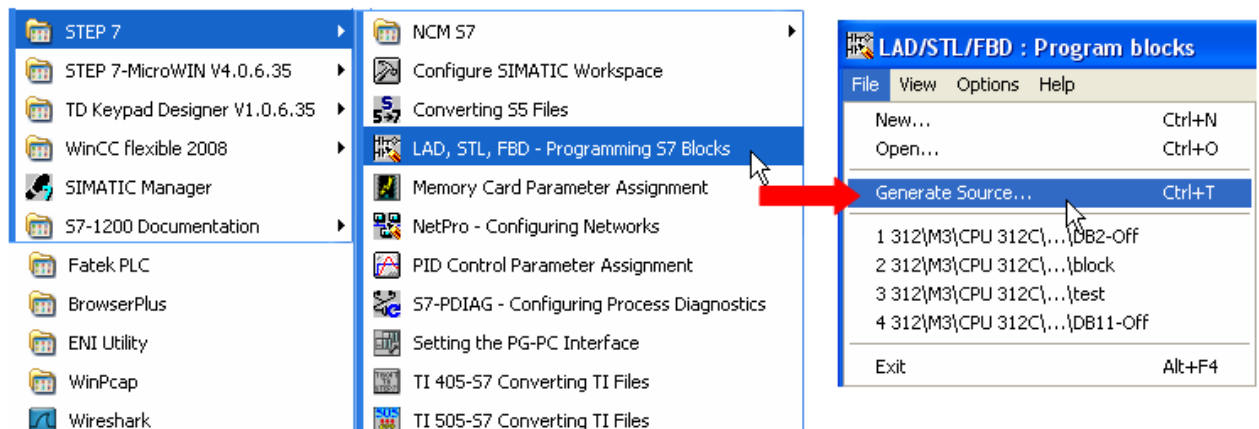


## 2. Building \*.AWF File

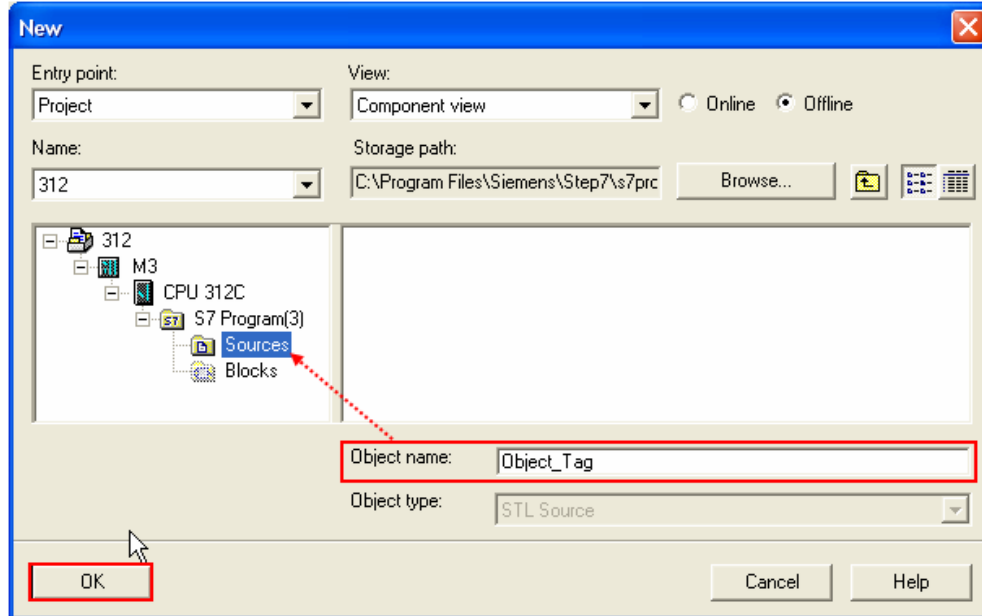
a 、 In **Blocks** create items as shown below:



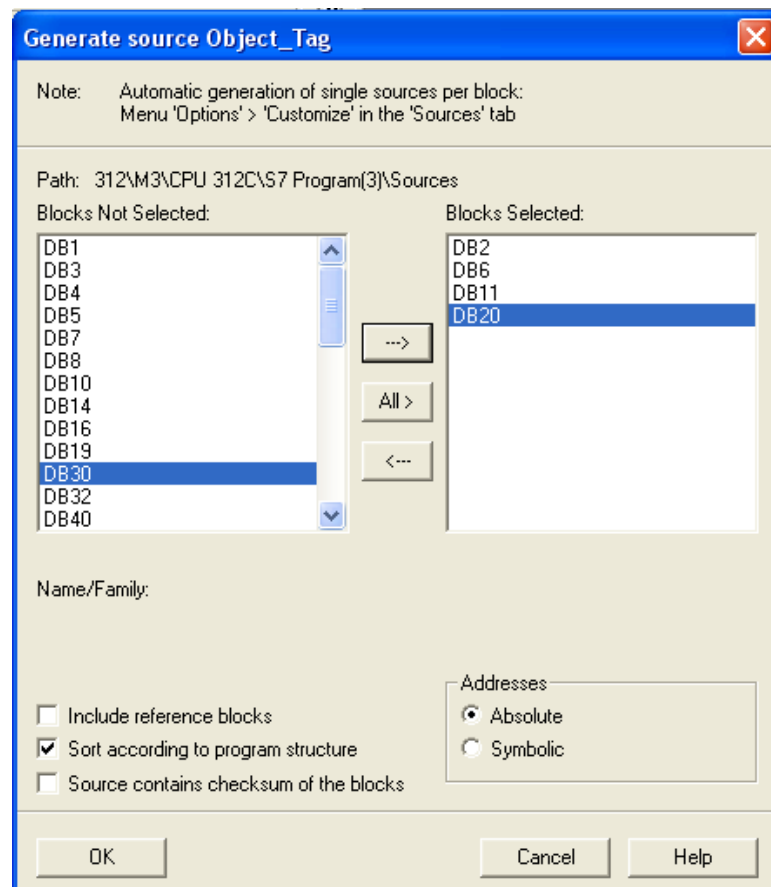
b 、 Open LAD/STL, FBD – Programming S7 Blocks, click **File -> Generate Source**.



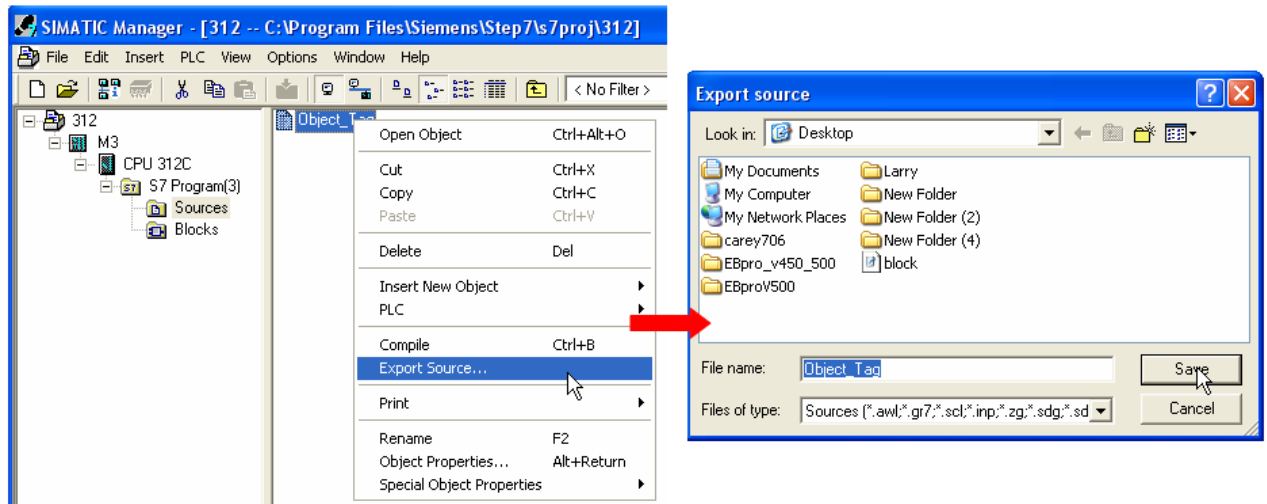
- c、 Select **Sources** as storage path, specify the file name then click **OK**.



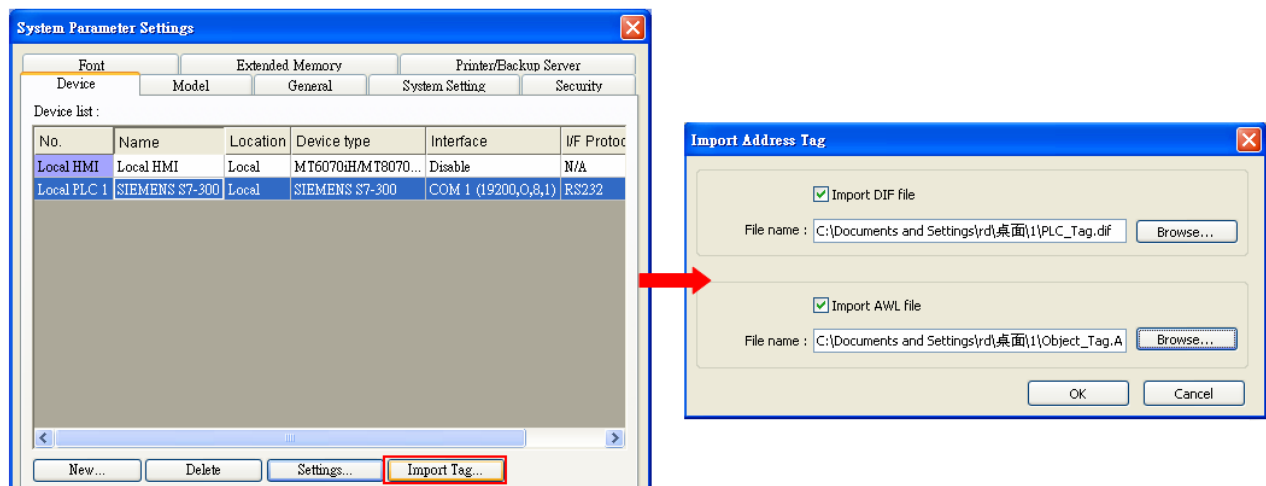
- d、 Select the objects to be exported then click **OK**.



- e、 Under **Sources** there will be names of the saved files, select **Export Source** to build \*.AWL file.



The generated \*.dif and \*.AWL files can be imported in EasyBuilder8000/EasyBuilderPro **System Parameter Settings**, by clicking **Import Tag**.



Tag information successfully imported.






## Wiring Diagram:





The following represents the cable end connector.

Siemens S7-300 PC Adapter : 9P D-Sub to 9P D-Sub:



eMT3000 series

COM1 RS232 9P D-Sub Female	COM3 RS232 9P D-Sub Female		RS232 9P D-Sub Male
2 RX	8 RX		3 TXD
3 TX	7 TX		2 RXD
5 GND	5 GND		5 GND
			7 RTS
			8 CTS
			circuit
			

MT6000/8000 series except MT6050i/MT8050i

COM1 RS232 9P D-Sub Female	COM2 RS232 9P D-Sub Female	COM3 RS232 9P D-Sub Male	RS232 9P D-Sub Male
2 RX	6 RX	8 RX	3 TXD
3 TX	4 TX	7 TX	2 RXD
5 GND	5 GND	5 GND	5 GND
			7 RTS
			8 CTS
			circuit
			




MT6050i/MT8050i

COM1 RS232 9P D-Sub Female			RS232 9P D-Sub Male
9 RX			3 TXD
6 TX			2 RXD
5 GND			5 GND
			7 RTS
			8 CTS
			circuit
			





**The following represents the cable end connector.**

Systeme Helmholz SSW7-TS : 9P D-Sub to 9P D-Sub



eMT3000 series

COM1 RS232 9P D-Sub Female	COM3 RS232 9P D-Sub Female		RS232 9P D-Sub Male	
2 RX	8 RX		3 TXD	
3 TX	7 TX		2 RXD	
5 GND	5 GND		5 GND	
			7 RTS	circuit
			8 CTS	
			4 DTR	circuit
			6 DSR	
				

MT6000/8000 series except MT6050i/MT8050i

COM1 RS232 9P D-Sub Female	COM2 RS232 9P D-Sub Female	COM3 RS232 9P D-Sub Male	RS232 9P D-Sub Male	
2 RX	6 RX	8 RX	3 TXD	
3 TX	4 TX	7 TX	2 RXD	
5 GND	5 GND	5 GND	5 GND	
			7 RTS	circuit
			8 CTS	
			4 DTR	circuit
			6 DSR	
				

**MT6050i/MT8050i**

COM1 RS232 9P D-Sub Female			RS232 9P D-Sub Male
9 RX			3 TXD
6 TX			2 RXD
5 GND			5 GND
			7 RTS
			8 CTS
			4 DTR
			6 DSR
			circuit
			circuit
			

**Driver Version:**

Version	Date	Description
V3.10	May/24/2011	Added registers: MB & DBBn.