Siemens S7-1200 (Ethernet)

Supported Series: Siemens S7-1200 series Ethernet.
Website: http://www.siemens.com/entry/cc/en/

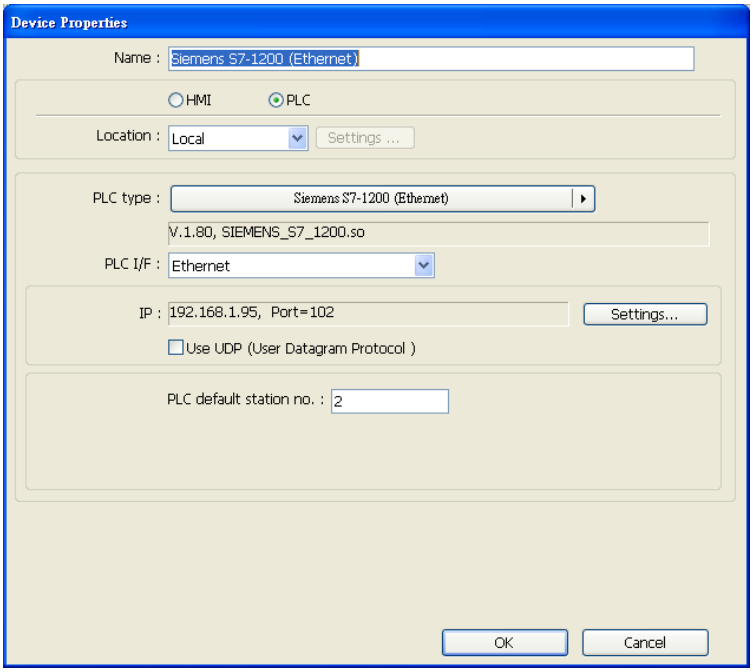
HMI Setting:

Parameters	Recommended	Options	Notes
PLC type	SIEMENS S7-1200 (Ethernet)	Siemens S7-400 (Ethernet)	
PLC I/F	Ethernet	Ethernet	
Port no.	102	102	
PLC sta. no.	2	2	
Rack	-	0	
CPU slot	-	1	

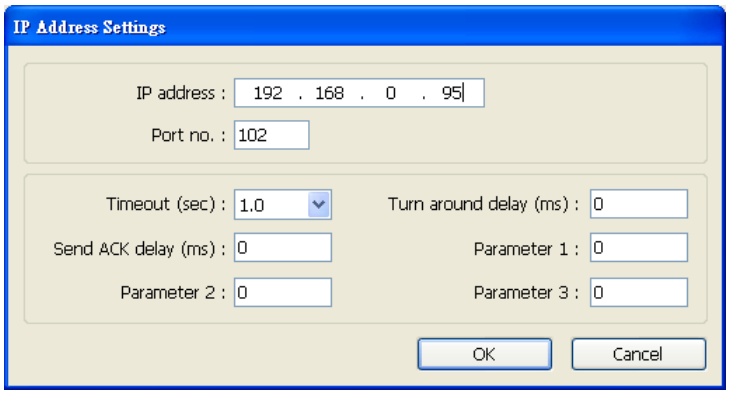
On-line simulator	Yes	Multi-PLC connect	Yes

PLC Setting:

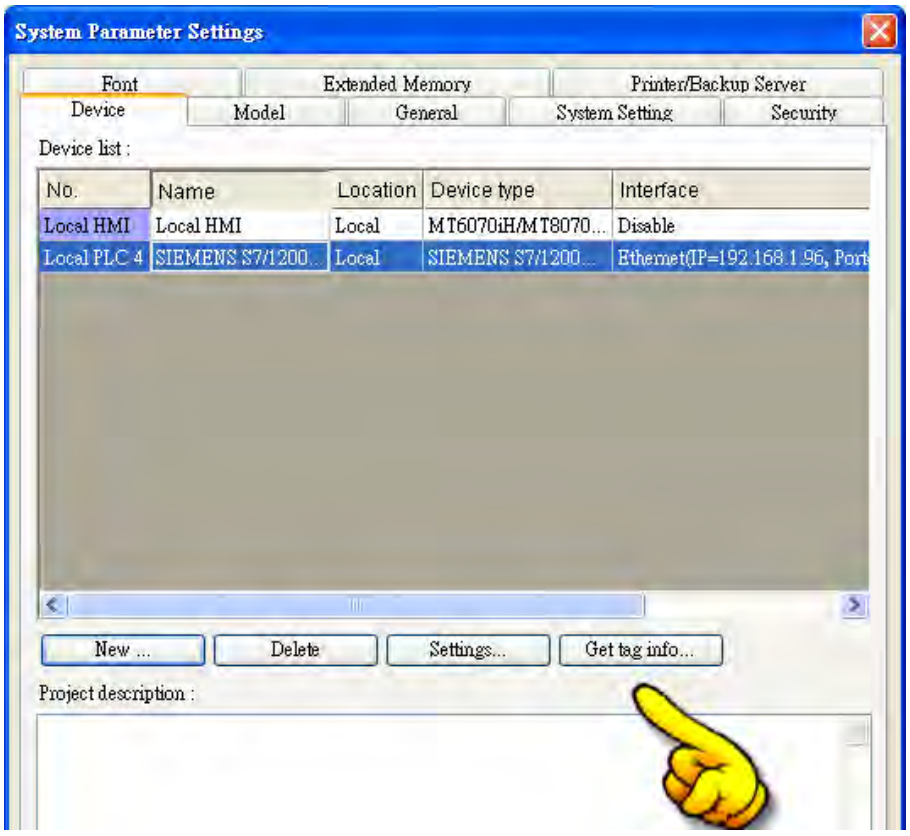
1. In S7-1200 program software create PLC program and tag and then download to PLC.
2. Select Go offline, EasyBuilder will connect to PLC and get tag data. In PLC type select “SIEMENS S7-1200 (Ethernet)”.



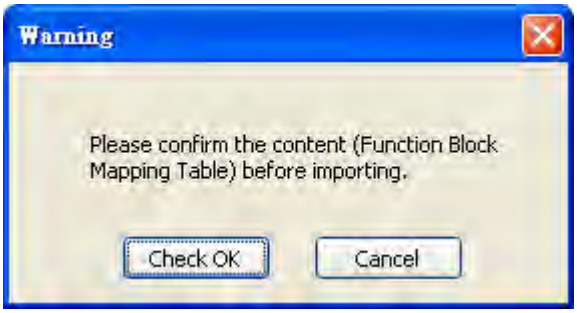
3. Click “Settings…”, input PLC IP address.

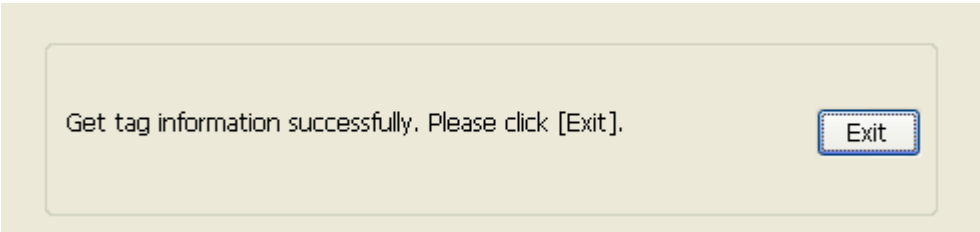


4. Check the PLC that is not connected to any PC. Click “Get tag info…”.

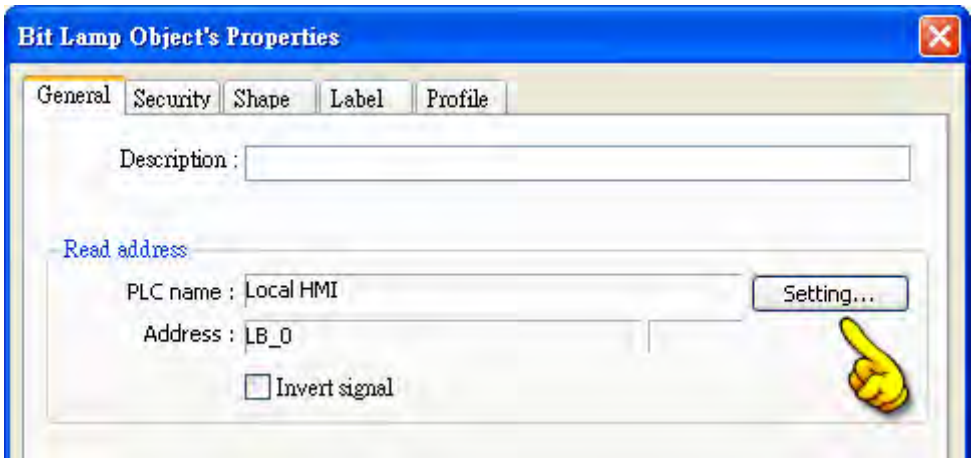


5. If the software used is a version later than TIA Portal V11，SP2, a dialog of FunctionBlock directory will be shown, users have to define the mapping from FB to DB in this directory then click “Check OK”. The tag information will be gained and a successful message is shown.

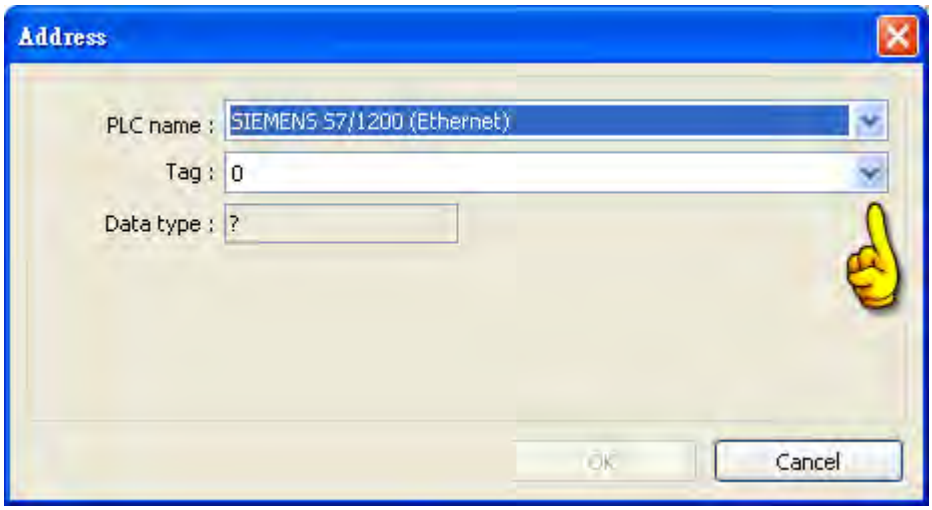




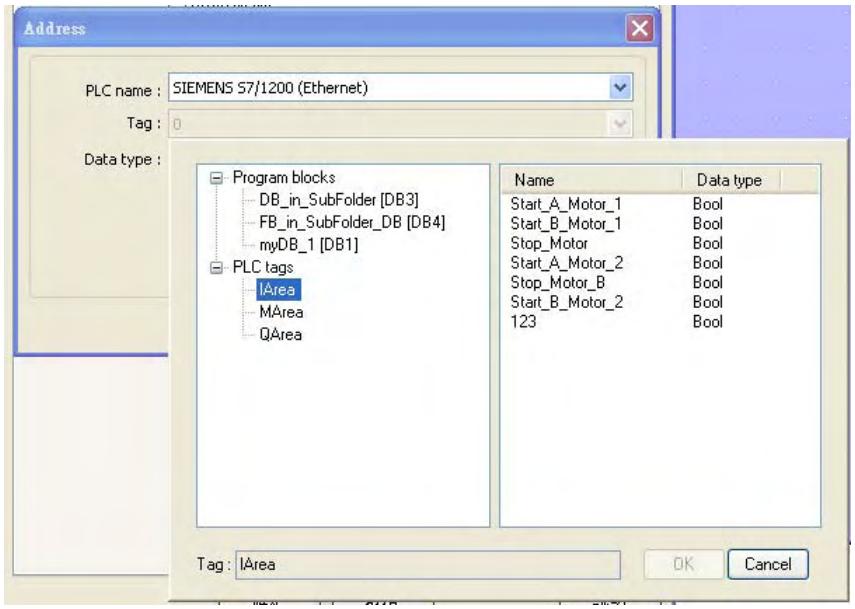
6. Create an object and click read address “Setting…”



7. In PLC name select S7-1200 then click Tag.



8. Select PLC tag.



Support Device Type:

S7-1200 data type	EasyBuilder data format	Memo
Bool	bit	
Byte	16-bit BCD, Hex, Binary, Unsigned	8-bit
SInt	16-bit BCD, Hex, Binary, Signed	8-bit
USInt	16-bit BCD, Hex, Binary, Unsigned	8-bit
Word	16-bit BCD, Hex, Binary, Unsigned	16-bit
Int	16-bit BCD, Hex, Binary, Signed	16-bit
UInt	16-bit BCD, Hex, Binary, Unsigned	16-bit
DWord	32-bit BCD, Hex, Binary, Unsigned	32-bit
DInt	32-bit BCD, Hex, Binary, Signed	32-bit
Real	32-bit Float	32-bit
UDInt	32-bit BCD, Hex, Binary, Unsigned	32-bit
Array	Word array for ASCII input and ASCII display	Length=word

Wiring Diagram:

Direct connect (crossover cable):

HMI RJ45 Male	Wire Color	Wire Color	PLC RJ45 Male
1 TX+	White/Orange	White/Green	3 RX+
2 TX-	Orange	Green	6 RX-
3 RX+	White/Green	White/Orange	1 TX+
4 BD4+	Blue	Blue	4 BD4+
5 BD4-	White/Blue	White/Blue	5 BD4-
6 RX-	Green	Orange	2 TX-
7 BD3+	White/Brown	White/Brown	7 BD3+
8 BD3-	Brown	Brown	8 BD3-

Through a hub:

HMI RJ45 Male	Wire Color	Wire Color	PLC RJ45 Male
1 TX+	White/Orange	White/Orange	1 RX+
2 TX-	Orange	Orange	2 RX-
3 RX+	White/Green	White/Green	3 TX+
4 BD4+	Blue	Blue	4 BD4+
5 BD4-	White/Blue	White/Blue	5 BD4-
6 RX-	Green	Green	6 TX-
7 BD3+	White/Brown	White/Brown	7 BD3+
8 BD3-	Brown	Brown	8 BD3-

Driver Version:

Version	Date	Description
V1.70	Oct/7/2011	Add data type: Byte,SInt,UInt,UDInt
V1.90	Apr/26/2012	Add data type: USInt