Siemens Profibus Network Set up with H2–PBC

In This Appendix....

— Siemens Profibus Network Setup with a H2–PBC

Setup a H2–PBC on Siemens Profibus Network

For those who are using the H2–PBC slave on a Profibus network with a Siemens PLC, the examples on the following pages will step you through the process of setting up your network. The PLC used as Profibus master in this example is a Simatic 300.

Simatic Manager Begin by opening your SIMATIC Manager to configure the Profibus driver.

- 1. Use the hardware configuration to select the PLC processor.
- Open the catalog window by clicking on the Catalog button, and select the proper S7 processor.



After selecting the processor, the DP interface properties window will pop-up.

3. Select <u>N</u>ew, and OK.

Properties	PROFIBUS interface	OP (R0/52.1)			×
General	Parameters				
<u>A</u> ddress:			If a subnet is selected the next available add	l, Iress is suggested.	
<u>S</u> ubnet:					
not	networked			New Properties Delete	
OK 7	k		Ca	ncel Help	

The New subnet window will appear allowing you to name the subnet. The new ID is also in the window.

4. Make the necessary entries, then click **OK**.

Properties - New subn	et PROFIBUS	×
General Network Se	ttings	
<u>N</u> ame: <u>S</u> 7 subnet ID: Project path: Storage location of the project:	PROFIBUS(1) 0026 - screen_captures C:\Siemens\Step7\S7proj\screen_c	1
<u>A</u> uthor:		
Date created: Last modified: <u>C</u> omment:	21.03.2002 17:10:54 21.03.2002 17:10:54	
OK V	Cancel Help	

Appendix E Siemens Network Once the processor has been selected and the DP network is enabled, the configuration window should look like the diagram below.



The GSD file will need to be installed now.

5. Click on **Options** and select **Install New GSD...** in the drop–down window.

🖳 HW Config - SIMATIC 300(1)						_ 8 ×
Station Edit Insert PLC View (Options Window Help					
	Customize	Ctrl+Alt+E				
SIMATIC 300(1) (Configurat	Specify Module Configure Network Symbol Table Report System Error	Ctrl+Alt+T				•
2 CPU 31 X2 DP X1 MP//DP	Edit Catalog Profile Update Catalog					
3 4 5	Install New GSD Import Station GSD	Giateway				
		HM-300 HM-EXTENSII PS-300 RACK-300 SM-300 SIMATIC 400	N			
Slot Module 1 2 CPU 318-2	Order number	SIMATIC PC Base , SIMATIC PC Stati	d Control 300/4 on	00		
X1 A MP1/DP 3 4						
5 6 7						
8	S7-300) and M7-300 CPUs				£ <u><</u>
Installs new CSD files in the system and	lundates the contents of	the catalog				Cha
Start 6 6 5 5 5 5 5 5 5	MATIC Manager - scree	Muntitled - Pair	it	HW Config - SIMATIC 3	5	:13 PM

After installing the GSD file, the drop–down window will show the name of the newly loaded file.

Installing new	# GSD	<u>?</u> ×
Look jn: 🔁) Profibus GSD 💿 🗢 🖻 📸 🎟 🕇	
AUTD0607	7.GSD	
E AUTD0608	asd	
	<u></u>	
I		
File <u>n</u> ame:	AUTD0608.GSD	n
Files of type:	GSD files (*.gs?) ▼ Canc	el

The Configuration window will look like the one below.

6. Now, click on the H2–PBC and drag it to the Profibus network.



When the mouse button is released at the network node, the **Properties** window will appear so the correct node address can be entered. The transmission baud rate can be changed at this time also. Click **OK** when finished.

Properties - PROFIBUS interface H2-PBC		×
General Parameters		
Address:		
Transmission rate: 1.5 Mb		
<u>S</u> ubnet:		
not networked PROFIBILIS(1) 1.5 Mbox	1	ew
	P <u>r</u> o	perties
		Dejete
ОК	ancel	Help

E

Now that the H2–PBC is a node on the Profibus network, the Terminator I/O needs to be added to the DP Base Controller.

7. Open the H2–PBC configuration window by clicking on H2–PBC at the node.



Open the H2–PBC I/O list by clicking on the + sign next to H2–PBC. Now you can chose the I/O modules which are installed in your Terminator base. You have the option of selecting the generic I/O or the Terminator I/O part number. The generic name is selected in this example.

8. Either click on the I/O name that you want and drag it to the configuration table to the left or double click on the I/O name and it will automatically go to the configuration list.



After you have finished configuring the I/O for the H2–PBC DP Slave, the configuration window will look like the example below.

HW Config - [SIMATIC 300(1) (Confi	guration) training]		
	wilcon minuow nep		
Image: Second	PROFIBUS(1): DP master st	system (1)	
(7) H2FBC			•
Slot Module / Order number	I Address Q Address	s Comment	
1 8DI 8 POINT DISCE	NAU256263 256259		
2 16D0 D2-12TA 12PT	DIS 01		
3			
5			
6			
7			

9

E.

8. Now, click on **Station**, then click on **Save and Compile** update your project. This will save the project for downloading to the PLC.

	HW	V Config - [SIMATIC	: 300(1) (Configu	ation)	- training]		
0	St	tation Edit Insert	PLC View Option	ns Windo	ow Help		_ 8 ×
		New	Ctrl+N				
F	-	Open	Ctrl+O	H			-
		Close					
	-	-					
		Save and Compile	Chrl+S				
						DDGEDUC(1), DD analysis (1)	
	_	Properties	• •				
		Import					
	_	Export				音 (7) H2-PBC	
		Consistency Check	Ctrl+A	t+K		DP-NORM	
		Print	Ctrl+P				
		Print Preview					
		Page Setup Print Setup					
	-	Thine Sociapini					-
4	L	1 training(SIMATIC 3 2 training) SIMATIC 3	00(1) 00(2)				Þ
		3 Facts_analog\SIMA	ATIC 300(1)	F			
	•	4 Facts_analog\SIMA	ATIC 300(2)				
		Exit	Alt+F4	s	s Q Address	Comment	
	5	192	F2-U4ADZDA ANA	256263	3 256259		
	$\frac{1}{2}$	1600	D2-12TA 12PT DIS	U	0.1		
	3	1000	DE TENTIEL POR		0		
	4						
	5 6						
	7						
Sav	/es a	and creates all system	data in the current	station.			
1	St	art 🛛 🚮 🏉 😂	SIMATIC Ma	nager - tr	aining 🛛 🖳 HW C	Config - [SIMATIC Yuntitled - Paint	3:33 PM

9. Select **PLC** and **Download...** the hardware setup that was saved.

Цнж	Config - [SIMA	ATIC 300(1) (Configu	ration) tr	aining]		_ 8 ×
🛄 Sta	ation Edit Inse	ert PLC View Optio	ns Window	Help		_ 8 ×
	2 🔓 🖬 🖳	j <u>€</u> Download		Ctrl+L		
				ľ		-
		Haulty Modules.				
		Module Informat	tion	Ctrl+D		-
		Operating Mode		Ctri+I		
		Set Time of Day			PROFIBUS(1): DP master system (1)	
		Prepare Line Dia	ignostics			
		Monitor/Modify				
		Assign Ethernet	Address			
		Assign PROFIBL	IS Address		DP-NORM	
			-			
•						
	17) H2-PB0	-				
		-				
Slot	Module /	Order number	I Address	Q Address	s Comment	
	192 8DI	8 POINT DISCRET	1/206263 10	236233		
2	16D0	D2-12TA 12PT DI	9	01		
3						
4						
6						
7						
Loads th	ne current station	n into the load memory o	of the current	module.		
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