

Advantech SE Technical Share Document

Date	2019 / 09 / 20	Related Product		
Category	■ FAQ □ SOP □ Driver Tech Note			
Abstract	How to test PCM-26D1DB-MAE by CODESYS and Siemens CM-1242-5?			
Keyword	CODESYS			
Related OS				
Revision History				
Date	Version	Author	Reviewer	Description
2019/19/20	V1.0	Owen.Chang	Nick.Liu	
2020/12/16	V1.1	Tenjin.Lin	Owen.Chang	

■ Problem Description & Architecture:

This SOP shows How to test PCM-26D1DB-MAE by CODESYS and Siemens CM-1242-5.

■ Brief Solution - Step by Step:

1. Device Topology

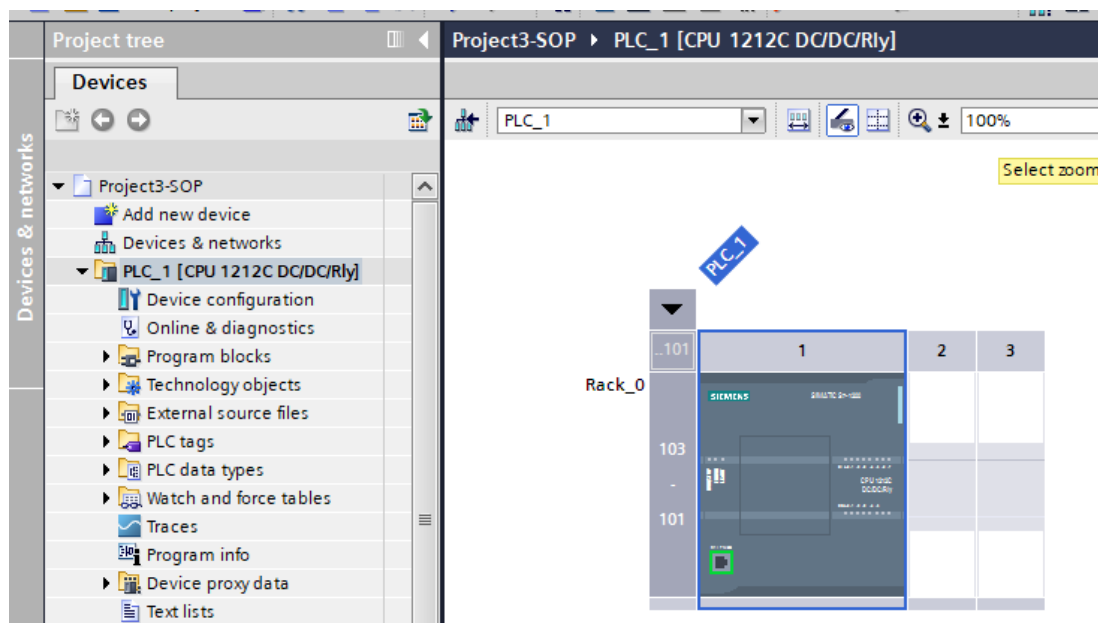
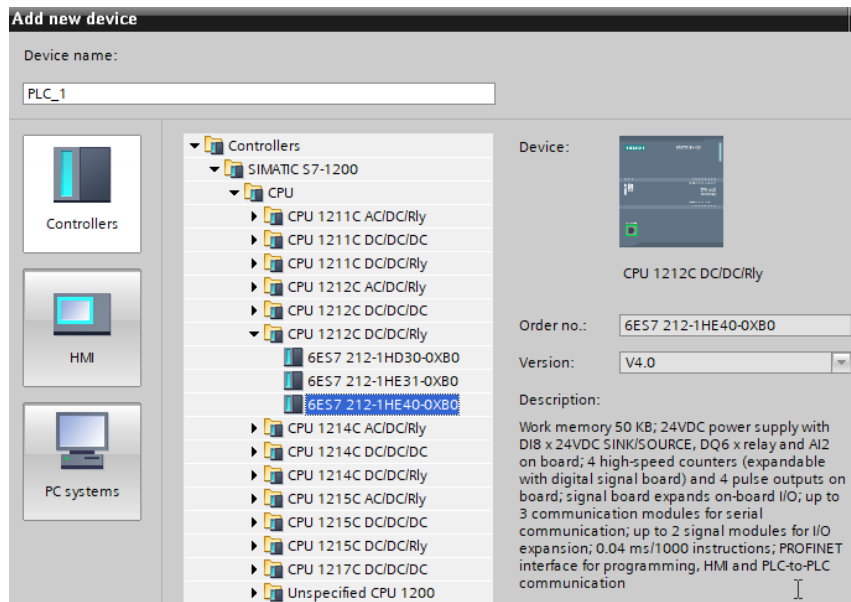
PCM-26D1DB-MAE: Profibus Slave

S7-1200 (CPU 1212C DC/DC/RLY) + CM 1242-5: Profibus Slave

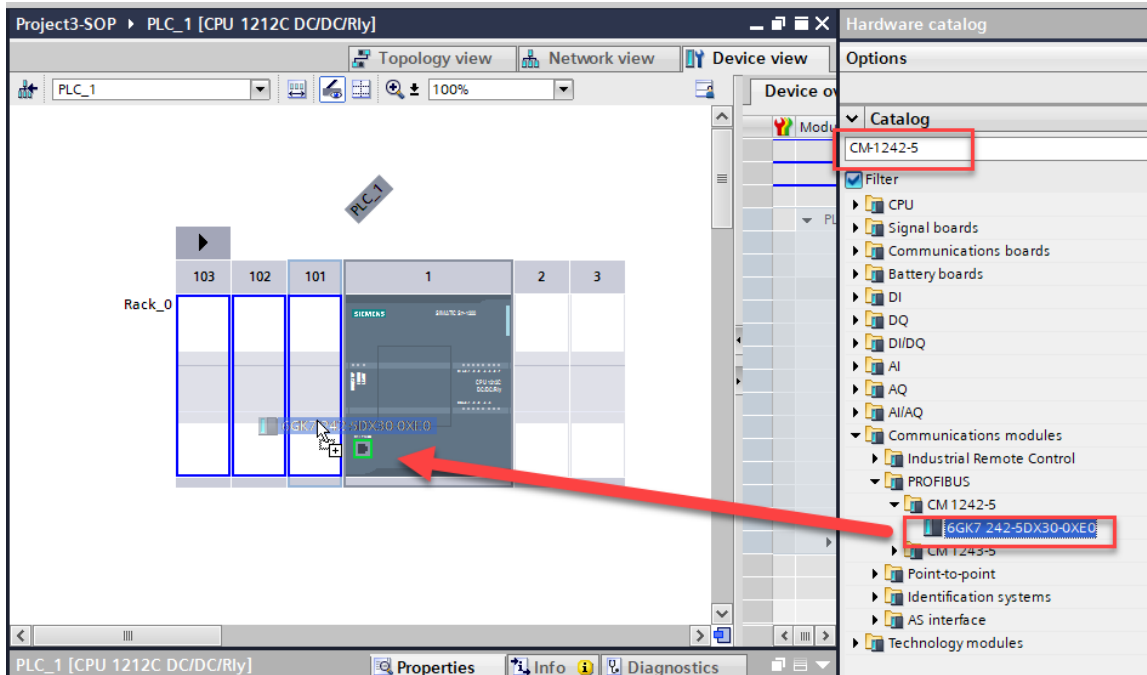




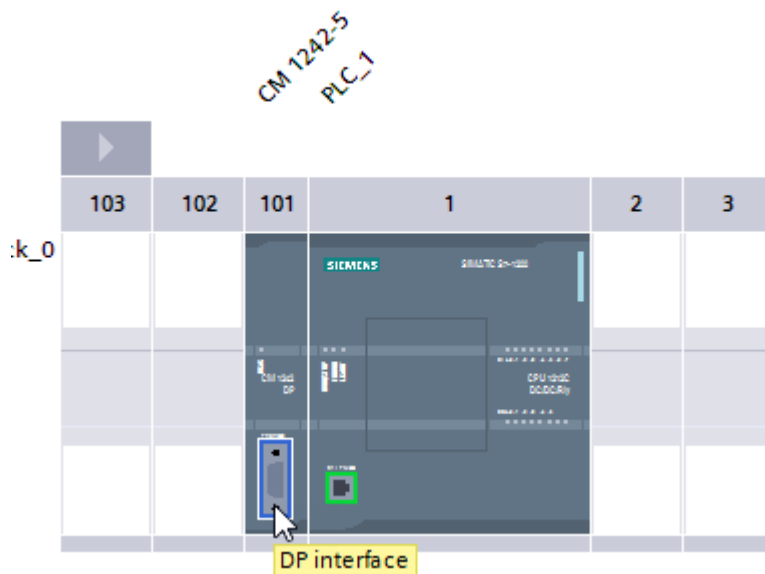
2. Open TIA V13, Select the device



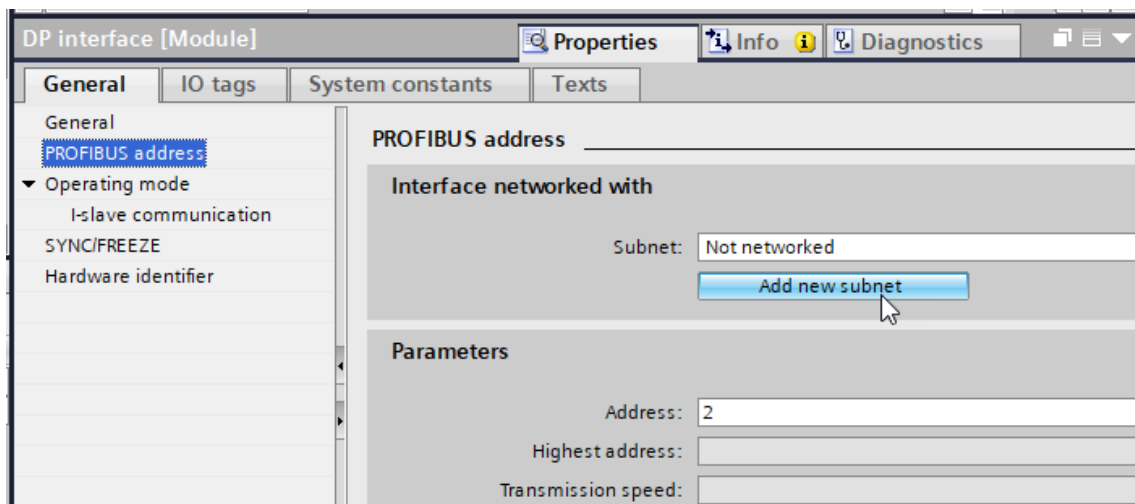
3. Search CM-1242-5 and drop the device to the right position



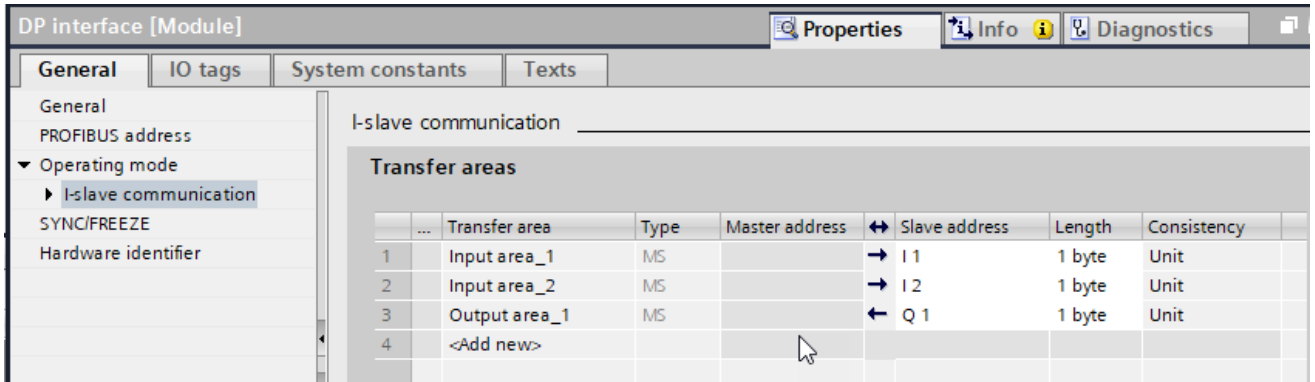
4. Click DP interface



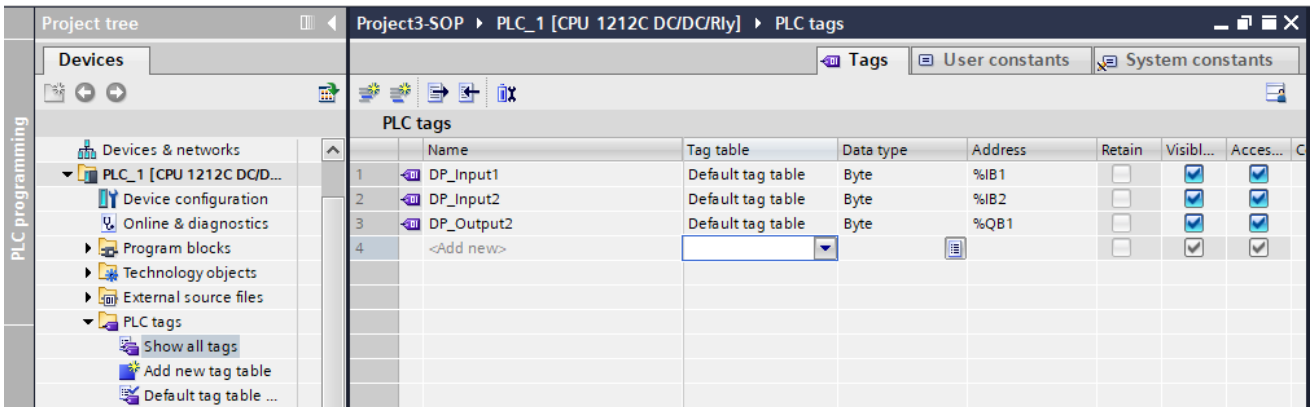
5. In General -> PROFIBUS, click "add new subnet", the profibus address is 2 as setting.



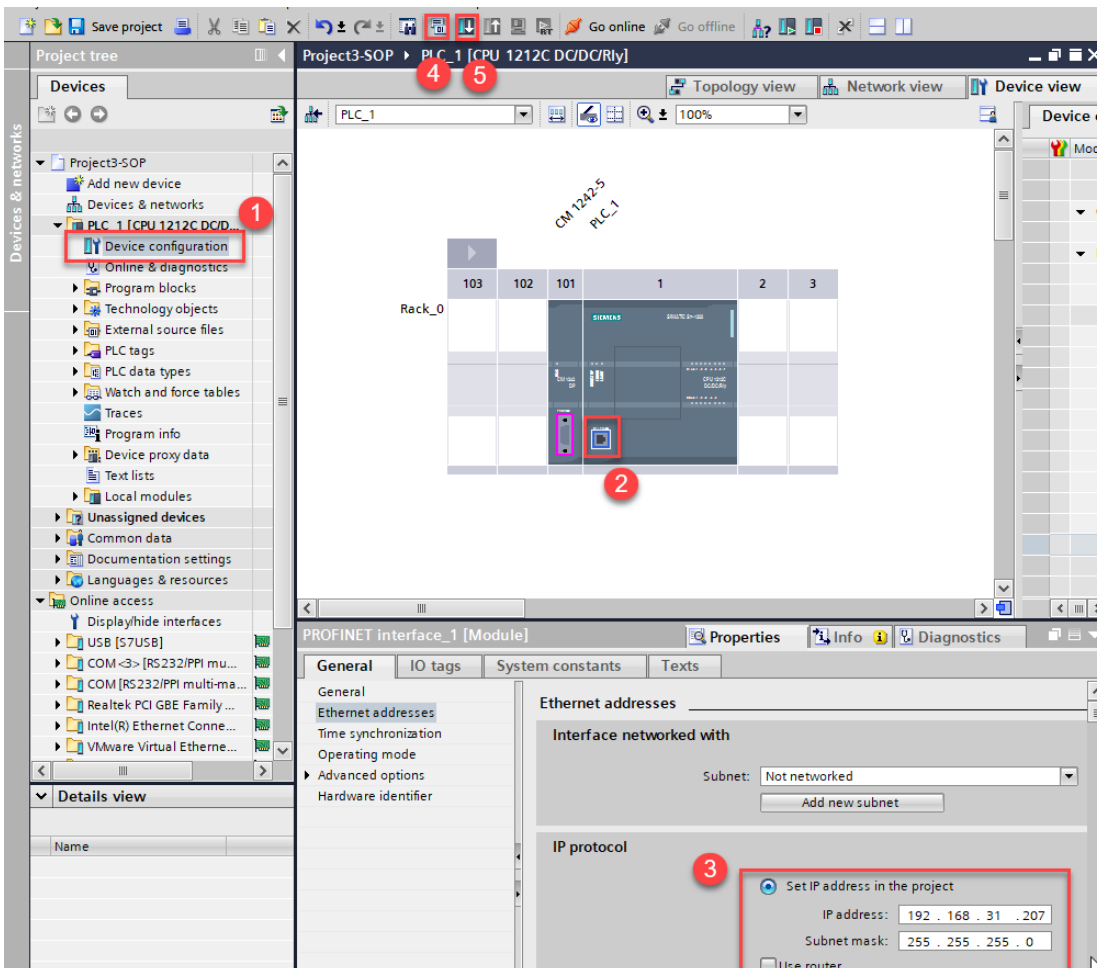
6. In General -> I-slave communication , add two 1 byte input areas and one 1 byte output area

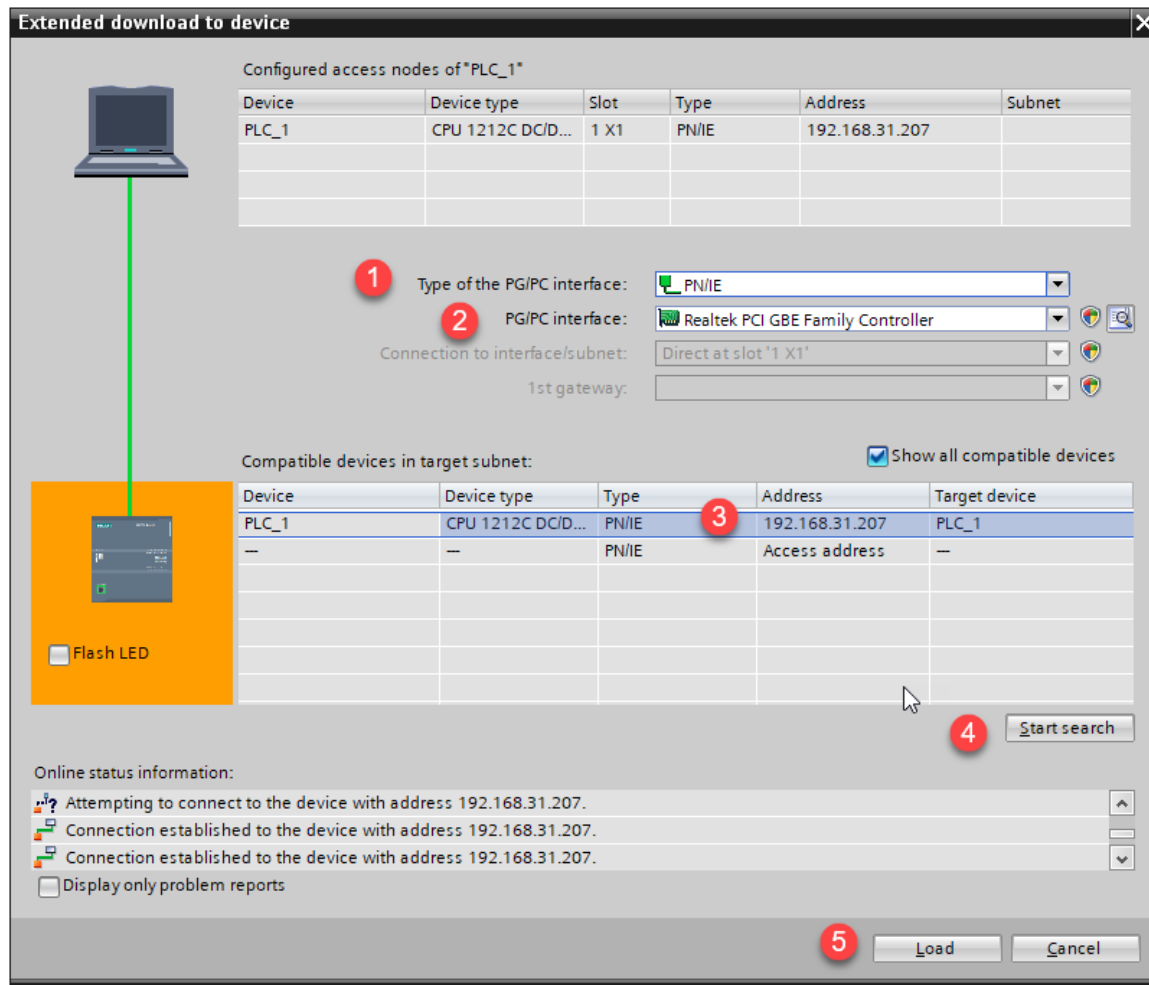


7. Add those addresses with tags to monitoring purpose.



8. Connect to your siemens device and download the project





9. Go online to see this error, unknown reason.

Project1 ▶ PLC_1 [CPU 1212C DC/DC/Rly]

Diagnostics buffer

Events

☒ Display CPU Time Stamps in PG/PC local time

No.	Date and time	Event		
1	4/7/1972 6:00:33.867 AM	Follow-on operating mode change - CPU changes from STARTUP to RUN mode	✓	i
2	4/7/1972 6:00:33.866 AM	New I/O access error during process image update	✗	i
3	4/7/1972 6:00:33.866 AM	New I/O access error during process image update	✗	i
4	4/7/1972 6:00:33.865 AM	New I/O access error during process image update	✗	i
5	4/7/1972 6:00:33.761 AM	Communication initiated request: WARM RESTART - CPU changes from STOP to...	✓	i
6	4/7/1972 6:00:33.761 AM	New startup information - Current CPU operating mode: STOP	✓	i
7	4/7/1972 6:00:29.960 AM	New startup information - Current CPU operating mode: STOP	✓	i
8	4/7/1972 6:00:28.652 AM	New startup information - Current CPU operating mode: STOP	✓	i

Freeze display

Details on event:

Details on event: 2 of 50 Event ID: 16# 02:39B4

Description: CPU error: New I/O access error during process image update
output 1 (1 Bytes) will temporarily not be updated as part of process image PIP 0
↳ HW_ID= 277 - Execution level system

Time stamp: 4/7/1972 6:00:33.866 AM

Module: Transfer area_3

Rack/slot: Rack --- / Slot 3

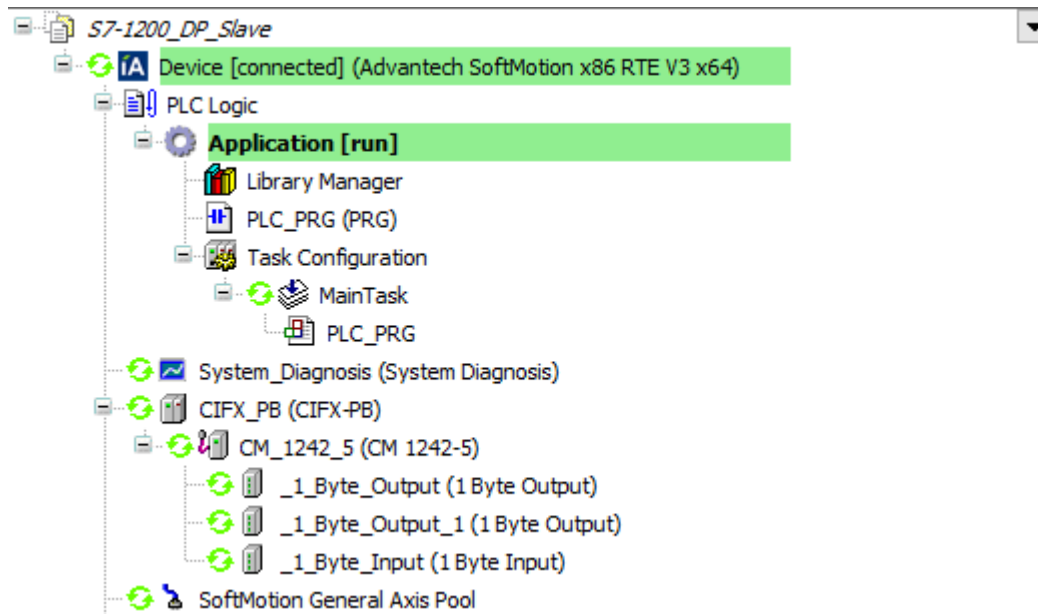
Plant designation:

Location identifier

Priority: Error

Incoming/outgoing: Incoming event

10. Please add the following component in CODESYS. (two 1 byte outputs and one 1 byte input corresponding to Step6)(**Need to follow the order in TIA project EX:input1->input2->output1 CODESYS need to same**)



- **Pin Definition (in case of serial connection):**

- **Reference:**