Objective

To configure a gsd file to import into a Siemens PLC™ S7-315™ hardware Master for communications to Eurotherm Drives Profibus TechBox.

Equipment

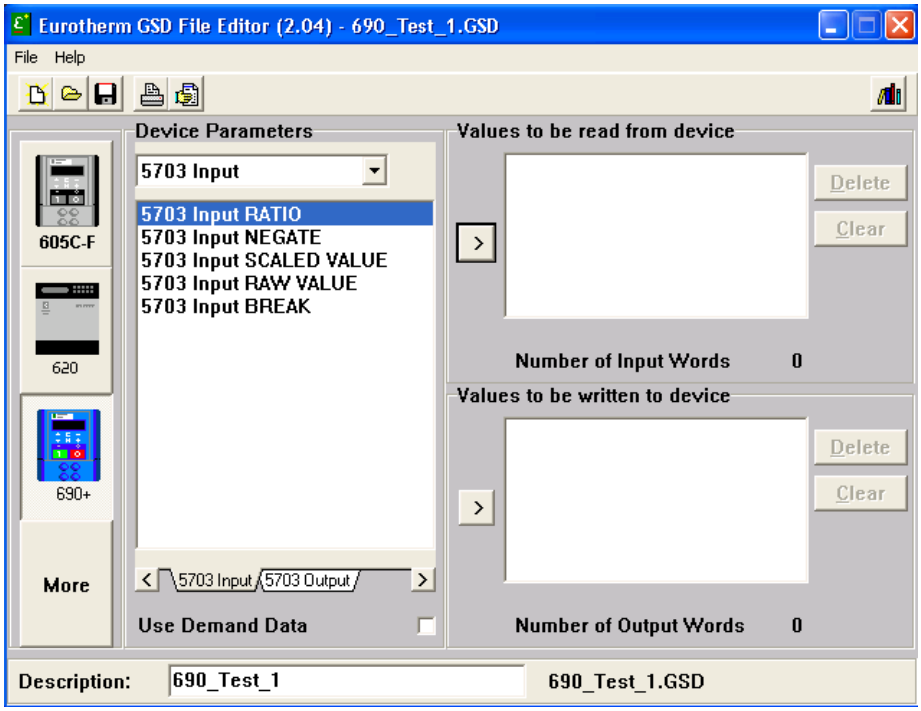
- S7 PLC, Simatic™ Manager Step 7 Software, 690+ drive, 6055-Prof-00 (*Frame B 6053-Prof-00*)

Procedure

1. Down load the GSD Editor from http://www.eurotherm.com/profibus.htm.

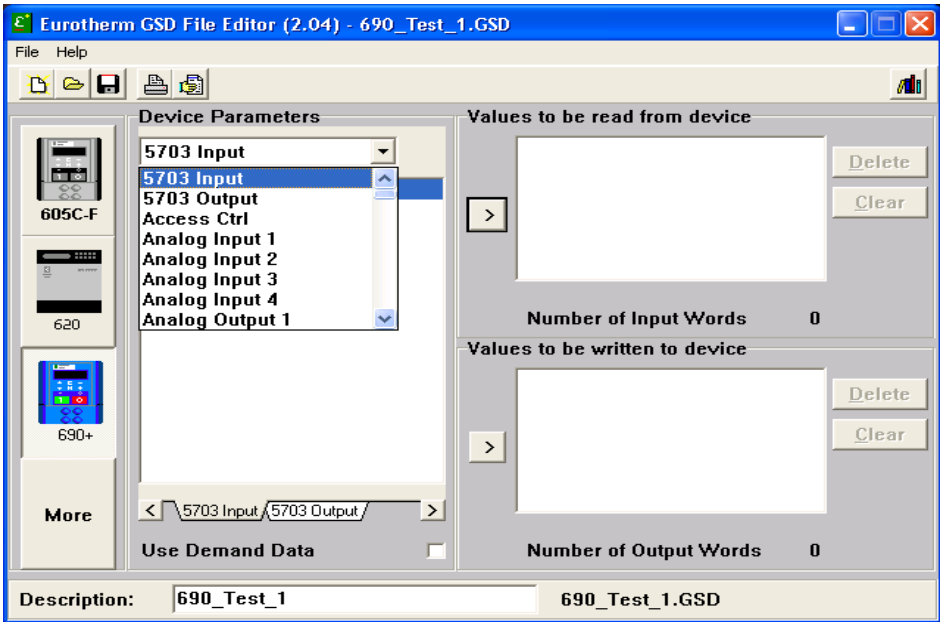
2. Initialize the GSD Editor program.
3. Select the desired drive icon to implement the correct variables to configure the gsd file.

   Note: Clicking the “More” button will scroll through the different controllers.



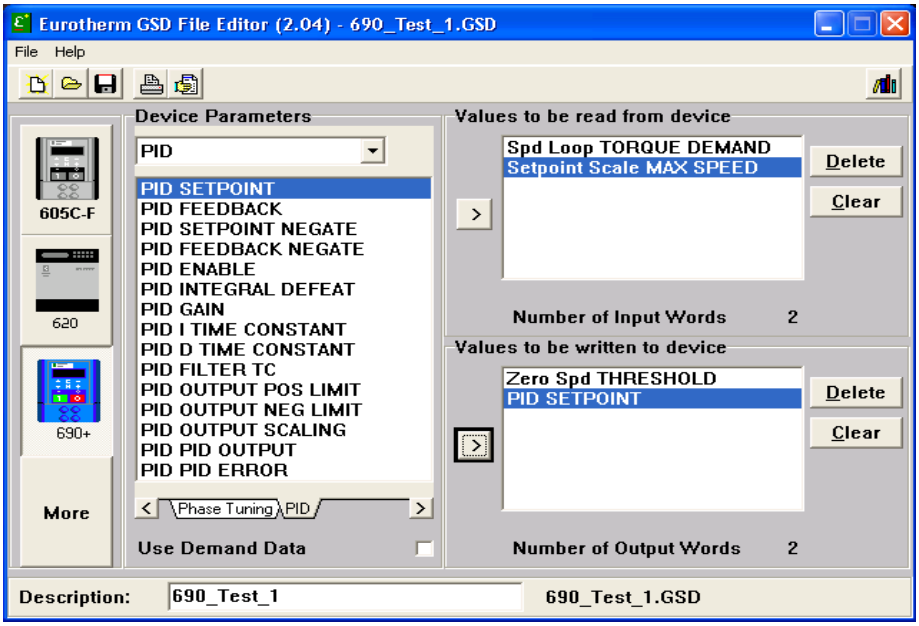
If you have questions, please call the Product Support Group at (704) 588-3246.

4. Scroll through the Device Parameter list to pick the values to be written and read for the gsd file.



Note: The individual parameters are under main headings. Examples of the main headings are Setpoint Sum 1, Speed Loop, and Current Loop.

5. After the main headings have been selected, click the arrows for individual parameters to be written or read for the PLC.



6. After all parameters have been selected, save the file as 690_Test_1.gsd to the C:.

Note: Verify the Description name and saved file name match.

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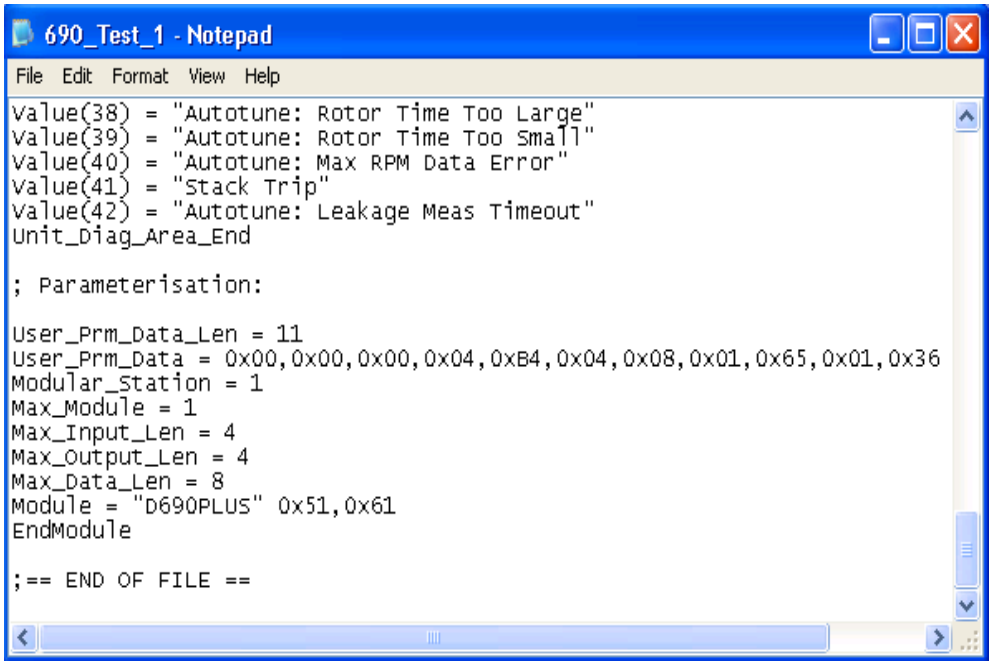
7. After the file has been saved, open the file with Notepad.
8. Scroll down towards the bottom of the DOC file to verify that the Parameterization section has “Hex Values” that relate to the tag values picked for the gsd file.

Remember: The gsd file forces all parameters to be transferred as 16-bits.



Note: Due to Hardware settings in the Profibus TechBox, the first three bytes are not used. The gsd file uses two sequential comma packets to generate the hex value equivalent of the drive parameter tag number.

9. Below is the User_Prm_Data conversion to drive tag parameter for the gsd file above.

   0x04,0xB4 = Tag 1204 (Speed Loop::Torque Demand)

   0x04,0x08 = Tag 1032 (Setpoint Scale::Max Speed)

   0x01,0x65 = Tag 357 (Zero Speed::Threshold)

   0x01,0x36= Tag 310 (PID::Setpoint)

Note: The parameterization values install the “Read from the Device” values first and then the “Written to Device” values in the gsd file.

10. Close Notepad and proceed to import the gsd file into the PLC hardware.

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