

SIEMENS

Desigo CC

BA Device S7 SSP EU Extension module for electrical datapoints

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1. About this document

1.1. Purpose

This document describes the content of the BA Device S7 SSP EU Extension module. It helps Project Engineers to get a quick overview of the library content and how to use it in projects.

1.2. Scope

This document applies to the Desigo CC MP3.x and Extension module “BA Device S7 SSP EU”

2. Installation

To install the Extension Module (EM) follow the standard procedure for EMs installation in Desigo CC.

3. Extension Module BA Device S7 SSP EU for electrical data points

The Extension Module (EM) allows S7 data points to be imported as Building Automation DPs in respect to license counting

This EM deploys one Desigo CC library (BA_Device_S7_SSP_EU_101_ZN_1) that contains new S7 object models representing 6 types of data points:

- Analog Input
- Analog output/value
- Digital input
- Digital output/value
- Multistate inputs
- Multistate output/value

4. Library “BA Device S7 SSP EU 101 ZN 1” (BA_Device_S7_SSP_EU_101_ZN_1)

4.1. Object Models

- GMS_S7_BA_SSP_BOOL_RO_1_101 – for binary input DPs
- GMS_S7_BA_SSP_BOOL_RW_1_101 – for binary output/value DPs
- GMS_S7_BA_SSP_ENUM_RO_1_101 – for multistate input DPs
- GMS_S7_BA_SSP_ENUM_RW_1_101 – for multistate output/value DPs
- GMS_S7_BA_SSP_REAL_RO_1_101 – for analog input DPs
- GMS_S7_BA_SSP_REAL_RW_1_101 – for analog output/value DPs

5. Importing Simatic S7 electrical data points with the “BA Device S7 SSP EU” library

The import in Desigo CC for Simatic S7 data points is done via CSV (comma-separated values) file with the configuration data for the DPs. The CSV file is manually created.

In order to use the above mentioned object models (and have DPs counted as BA) the data points have to be defined as “Custom objects”.

For each DP we have a 2 rows definition – first row (“C”) defines the name, description and what Obj.M. the DP will have in DCC while the second row (“P”) defines DP’s address in the PLC memory (Device ID, Area, DBNo), property of the object model that the DP value will be assigned to (in our case “Value”), data type, direction and other relative properties of the point. Example is shown in the picture below:

#S7_Data: T	[DeviceID]	[Area]	[DBNo]	[Address]	[Name]	[Alias]	[Description]	[DataType]	[Direction]
C	1				BO		Binary Output SSP	GMS_S7_BA_SSP_BOOL_RW_1_101	
P	1	DB	12	1	Value			BOOL	O
C	1				BI		Binary Input SSP	GMS_S7_BA_SSP_BOOL_RO_1_101	
P	1	DB	16	2	Value			BOOL	I
C	1				AVAL		Analog Value SSP	GMS_S7_BA_SSP_REAL_RW_1_101	
P	1	DB	10	4	Value			REAL	O
C	1				AI		Analog Input SSP	GMS_S7_BA_SSP_REAL_RO_1_101	
P	1	DB	8	12	Value			REAL	I

More details for the content of the CSV file can be found in the Desigo CC Help following the path:

[Reference](#) ->[Engineering & Operating Reference](#)->[Subsystem Reference](#)->

->[Simatic S7 Reference](#)->[Simatic S7 Items](#)->[S7 Items Definition](#)