

## Working sample program AC450 + profibus CI801+DI810+DO810+AI810

The user parameter data is filled with a combination from data from the GSD file in the CI801 memory map document (3BSE036959-xxx) You need to check the document if the default from the GSD is correct for your situation or needs to be adjusted.

The value UPRMDLEN parameter needs to correspond with the total number of bytes in the UPRMD1 – UPRMD25. If the number is wrong there will be a \* in front of the parameter in the online builder, also when you change the number of bytes in one of the UPRMD there will be a \* in front of that line and the UPRMDLEN line in the online builder and a message that the configuration cannot be saved. There's a catch however both UPRMDLEN and CFGDLEN must be correct for the star to disappear and the configuration to be saved.

Note: UPRMD1 - UPRMD 25 can be configured as one consecutive string of bytes or as in this example grouped by module.

Configuration of the CI801 is as follows below. This is CI801 with HCIR disabled (HCIR doesn't work for AC450) So we have 9 bytes for CI801 + 3 bytes for CI801 DPV1 status bytes.

```
:UPRMD1      08020000000000000000
:UPRMD2      0000
```

Configuration of the DI810 the yellow 01 is the module position (GSD shows a 0 for this byte!). If using a CI840 the cluster is also encoded in this byte, see the according memory map document for information) The info from this parameter comes from the gsd: *Ext\_User\_Prm\_Data\_Const(0) = 0x01, 0x0a, 0x00, 0xf0, 0x00, 0x00, 0x00*

```
UPRMD3      010a01f00000000
```

Configuration of the DO810 the yellow 02 is the module position (GSD shows a 0 for this byte!). If using a CI840 the cluster is also encoded in this byte, see the according memory map document for information) 020A02f0000000000000

Configuration of the AI810 the yellow 02 is the module position (GSD shows a 0 for this byte!). If using a CI840 the cluster is also encoded in this byte, see the according memory map document for information) The green 01's configure the module for 4..20mA, no filter time and no linearization. With red byte channels can be disabled (all channels are enabled).

```
:UPRMD5      040a0370000101010101
:UPRMD6      010101
```

As with UPRMDLEN the CFGDLEN parameter needs to correspond with the total number of bytes in the CFGD1 – CFGD25. Also the \* will appear when there is a configuration fault.

As before in this example the bytes are split by module but they can also be in one row (:CFGD1 9093B14090 is also correct)

The CI810 is configured with (can be found in the gsd module keyword: *Module = "CI801" 0x90 ; 1 byte out. Must be the first module:)*

```
:CFGD1      90
```

The DI810 is configured with :

:CFGD2            93

The DO810 is configured with :

:CFGD3            B1

The AI810 is configured with :

:CFGD4            4090

PC programm :

PC1.1.1 reads DI810 channels 1-8

PC1.1.2 reads DI810 channels 9-16

PC1.1.3 reads DI810 channels status 1-8

PC1.1.4 reads DI810 channels status 9-16

PC1.1.5 writes DO810 channels 1-8

PC1.1.6 writes DO810 channels 9-16

The main information to look for to configure the PB-R PB-S database elements is the module keyword in the GSD:

Module = "DI810"    0x93; 4 bytes input

The meaning of the 4 bytes can be looked up in the memory map document.

Database source:

PB1	CI541
:NAME	PB1
:BUSNO	1
:POSITION	3
:SUBPOS	2
:SLOTTIME	300
:MAXTSDR	150
:SETTIME	20
:GAPFACTR	1
:MAXRETRY	3

PBSD1	PBSD
:NAME	Slave10
:IDENTNO	H'08D3
:MAXDIAGL	96
:WDFACT1	5
:WDFACT2	10
:MINSINT	20
:UPRMDLEN	42
:UPRMD1	08020000000000000000
:UPRMD2	0000
:UPRMD3	010a01f0000000
:UPRMD4	020A02f0000000000000
:UPRMD5	040a0370000101010101
:UPRMD6	010101
:CFGDLEN	5
:CFGD1	90
:CFGD2	93
:CFGD3	B1
:CFGD4	4090

PBS1	PBS
:NAME	PBS1
:BUS	1
:STATION	10
:REFDESCR	Slave10

PC program:

```
BEGIN PC1
HEADER
PCD-PAGE 1
```

```
PC1 PCPGM (40,1)
  :ON      D=1
  :R       0
  :RUN
```

```
PC1.1 CONTRM (100,1,0)
  :ON      D=1
  :SINGLE   0
  :R       0
  :RUN
  :MODP
```

```
PC1.1.1 PB-R (B,8,0)
  :DBINST  =PBS1
  :VALUENO D=3
  :VALID
  :ERR
  :ERRTYPE
  :VALUE_1
  :VALUE_2
  :VALUE_3
  :VALUE_4
  :VALUE_5
  :VALUE_6
  :VALUE_7
  :VALUE_8
```

```
PC1.1.2 PB-R (B,8,0)
  :DBINST  =PBS1
  :VALUENO D=2
  :VALID
  :ERR
  :ERRTYPE
  :VALUE_1
  :VALUE_2
  :VALUE_3
  :VALUE_4
  :VALUE_5
  :VALUE_6
  :VALUE_7
  :VALUE_8
```

PC1.1.3 PB-R (B,8,0)

:DBINST =PBS1  
:VALUENO D=4  
:VALID  
:ERR  
:ERRTYPE  
:VALUE\_1  
:VALUE\_2  
:VALUE\_3  
:VALUE\_4  
:VALUE\_5  
:VALUE\_6  
:VALUE\_7  
:VALUE\_8

PC1.1.4 PB-R (B,8,0)

:DBINST =PBS1  
:VALUENO D=1  
:VALID  
:ERR  
:ERRTYPE  
:VALUE\_1  
:VALUE\_2  
:VALUE\_3  
:VALUE\_4  
:VALUE\_5  
:VALUE\_6  
:VALUE\_7  
:VALUE\_8

PC1.1.5 PB-S (B,8)

:DBINST =PBS1  
:VALUENO D=2  
:ERR  
:ERRTYPE  
:VALUE\_1 D=1  
:VALUE\_2 D=0  
:VALUE\_3 D=0  
:VALUE\_4 D=1  
:VALUE\_5 D=0  
:VALUE\_6 D=0  
:VALUE\_7 D=0  
:VALUE\_8 D=1

PC1.1.6 PB-S (B,8)

:DBINST	=PBS1
:VALUENO	D=1
:ERR	
:ERRTYPE	
:VALUE_1	D=1
:VALUE_2	D=1
:VALUE_3	D=1
:VALUE_4	D=1
:VALUE_5	D=1
:VALUE_6	D=1
:VALUE_7	D=1
:VALUE_8	D=1

END PC1