

# **T1H–PBC Profibus Base Controller GSD File**

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In this Appendix. . . .  
— T1H-PBC GSD File

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## T1H-PBC Profibus DP Base Controller GSD File

This appendix shows the contents of the GSD file for the T1H-PBC Profibus DP Base Controller. It is included for reference only. The electronic data diskette is included with this manual. The latest GSD file is always available for download on the [www.AutomationDirect.com](http://www.AutomationDirect.com) website. It can always be downloaded from the GSD Library located on the Profibus Trade Organization website [www.profibus.com](http://www.profibus.com).

```

=====
; GSD File For AutomationDirect.com T1H-PBC
; using the SPC3 ASIC
; Version: V0.2
=====
#Profibus_DP
GSD_Revision=2

;General parameters
Vendor_Name   = "AutomationDirect.com"
Model_Name    = "T1H-PBC"
Revision      = "V1.2"
Ident_Number  = 0x0607
Protocol_Ident = 0
Station_Type  = 0
FMS_supp     = 0
Hardware_Release= "REV. A"
Software_Release= "REV 1.2"
9.6_supp     = 1
19.2_supp    = 1
45.45_supp   = 1
93.75_supp   = 1
187.5_supp   = 1
500_supp     = 1
1.5M_supp    = 1
3M_supp      = 1
6M_supp      = 1
12M_supp     = 1
MaxTcdr_9.6  = 60
MaxTcdr_19.2 = 60
MaxTcdr_45.45 = 250
MaxTcdr_93.75 = 60
MaxTcdr_187.5 = 60
MaxTcdr_500  = 100
MaxTcdr_1.5M = 150
MaxTcdr_3M   = 250
MaxTcdr_6M   = 450
MaxTcdr_12M  = 800
Redundancy   = 0

```

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Repeater_Ctrl_Sig=0
24V_Pins      = 0
Implementation_Type = "ASIC, SPC3"
Bitmap_Device   = "Bitmap1N"
Bitmap_Diag     = "Bitmap1D"
Bitmap_SF       = "Bitmap1S"
; Slave-Specification:
Freeze_Mode_supp = 1
Sync_Mode_supp   = 1
Set_Slave_Add_Supp = 0
Auto_Baud_supp   = 1
Min_Slave_Intervall = 1
Fail_Safe        = 0
Max_Diag_Data_Len = 244
Modul_Offset     = 1
Slave_Family     = 3@Terminator
Modular_Station  = 1
Max_INPUT_Len    = 244
Max_Output_Len   = 244
Max_Data_len     = 488
Max_Module       = 32

```

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; UserPrmData: Length and Preset:

```

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Max_User_Prm_Data_Len= 160 ; 32 Bytes reserved for profibus module + 4 bytes per slot

```

```

PrmText=0
Text(0)="Outputs Disabled"
Text(1)="Outputs Enabled"
EndPrmText
PrmText=1
Text(0)="Unipolar"
Text(1)="Bipolar"
EndPrmText
PrmText=2
Text(0)="5V Range"
Text(1)="10V Range"
EndPrmText
PrmText=3
Text(0)="0..20mA"
Text(1)="4..20mA"
EndPrmText
PrmText=4
Text(0)="Auto"
Text(1)="Manual"
EndPrmText
PrmText=5
Text(0)="Normal"
Text(1)="Fast"
EndPrmText

```

```
PrmText=6
Text(0)="All Channels Enabled"
Text(1)="Channel 1 Enabled"
Text(2)="Channels 1-2 Enabled"
Text(3)="Channels 1-3 Enabled"
Text(4)="Channels 1-4 Enabled"
Text(5)="Channels 1-5 Enabled"
Text(6)="Channels 1-6 Enabled"
Text(7)="Channels 1-7 Enabled"
Text(8)="Channels 1-8 Enabled"
Text(9)="Channels 1-9 Enabled"
Text(10)="Channels 1-10 Enabled"
Text(11)="Channels 1-11 Enabled"
Text(12)="Channels 1-12 Enabled"
Text(13)="Channels 1-13 Enabled"
Text(14)="Channels 1-14 Enabled"
Text(15)="Channels 1-15 Enabled"
Text(16)="Channels 1-16 Enabled"
EndPrmText

ExtUserPrmData=0 "Status"
Bit(0) 1 0-1
Prm_Text_Ref=0
EndExtUserPrmData

ExtUserPrmData=1 "Unipolar/Bipolar"
Bit(1) 0 0-1
Prm_Text_Ref=1
EndExtUserPrmData

ExtUserPrmData=2 "Voltage Range"
Bit(2) 0 0-1
Prm_Text_Ref=2
EndExtUserPrmData

ExtUserPrmData=3 "Current Range"
Bit(3) 0 0-1
Prm_Text_Ref=3
EndExtUserPrmData

ExtUserPrmData=4 "Hot-Swap Mode"
Bit(0) 0 0-1
Prm_Text_Ref=4
EndExtUserPrmData

ExtUserPrmData=5 "Reserved"
Unsigned8 0 0-255
EndExtUserPrmData

ExtUserPrmData=6 "System Use"
Unsigned8 0 0-255
EndExtUserPrmData
```

ExtUserPrmData=7 "Channels Enabled"  
BitArea(0-4) 0 0-31  
Prm\_Text\_Ref=6  
EndExtUserPrmData

ExtUserPrmData=8 "Response Mode"  
Bit(7) 0 0-1  
Prm\_Text\_Ref=5  
EndExtUserPrmData

Ext\_User\_Prm\_Data\_Const(0) = 0x00  
Ext\_User\_Prm\_Data\_Ref(0)=6

Ext\_User\_Prm\_Data\_Const(1) = 0x00  
Ext\_User\_Prm\_Data\_Ref(1)=4

Ext\_User\_Prm\_Data\_Const(2) = 0x00  
Ext\_User\_Prm\_Data\_Ref(2)=5

Ext\_User\_Prm\_Data\_Const(3) = 0x00  
Ext\_User\_Prm\_Data\_Ref(3)=5

Ext\_User\_Prm\_Data\_Const(4) = 0x00  
Ext\_User\_Prm\_Data\_Ref(4)=5

Ext\_User\_Prm\_Data\_Const(5) = 0x00  
Ext\_User\_Prm\_Data\_Ref(5)=5

Ext\_User\_Prm\_Data\_Const(6) = 0x00  
Ext\_User\_Prm\_Data\_Ref(6)=5

Ext\_User\_Prm\_Data\_Const(7) = 0x00  
Ext\_User\_Prm\_Data\_Ref(7)=5

Ext\_User\_Prm\_Data\_Const(8) = 0x00  
Ext\_User\_Prm\_Data\_Ref(8)=5

Ext\_User\_Prm\_Data\_Const(9) = 0x00  
Ext\_User\_Prm\_Data\_Ref(9)=5

Ext\_User\_Prm\_Data\_Const(10) = 0x00  
Ext\_User\_Prm\_Data\_Ref(10)=5

Ext\_User\_Prm\_Data\_Const(11) = 0x00  
Ext\_User\_Prm\_Data\_Ref(11)=5

Ext\_User\_Prm\_Data\_Const(12) = 0x00  
Ext\_User\_Prm\_Data\_Ref(12)=5

Ext\_User\_Prm\_Data\_Const(13) = 0x00  
Ext\_User\_Prm\_Data\_Ref(13)=5

Ext\_User\_Prm\_Data\_Const(14) = 0x00  
Ext\_User\_Prm\_Data\_Ref(14)=5

Ext\_User\_Prm\_Data\_Const(15) = 0x00  
Ext\_User\_Prm\_Data\_Ref(15)=5

Ext\_User\_Prm\_Data\_Const(16) = 0x00  
Ext\_User\_Prm\_Data\_Ref(16)=5

Ext\_User\_Prm\_Data\_Const(17) = 0x00  
Ext\_User\_Prm\_Data\_Ref(17)=5

Ext\_User\_Prm\_Data\_Const(18) = 0x00  
Ext\_User\_Prm\_Data\_Ref(18)=5

Ext\_User\_Prm\_Data\_Const(19) = 0x00  
Ext\_User\_Prm\_Data\_Ref(19)=5

Ext\_User\_Prm\_Data\_Const(20) = 0x00  
Ext\_User\_Prm\_Data\_Ref(20)=5

Ext\_User\_Prm\_Data\_Const(21) = 0x00  
Ext\_User\_Prm\_Data\_Ref(21)=5

Ext\_User\_Prm\_Data\_Const(22) = 0x00  
Ext\_User\_Prm\_Data\_Ref(22)=5

Ext\_User\_Prm\_Data\_Const(23) = 0x00  
Ext\_User\_Prm\_Data\_Ref(23)=5

Ext\_User\_Prm\_Data\_Const(24) = 0x00  
Ext\_User\_Prm\_Data\_Ref(24)=5

Ext\_User\_Prm\_Data\_Const(25) = 0x00  
Ext\_User\_Prm\_Data\_Ref(25)=5

Ext\_User\_Prm\_Data\_Const(26) = 0x00  
Ext\_User\_Prm\_Data\_Ref(26)=5

Ext\_User\_Prm\_Data\_Const(27) = 0x00  
Ext\_User\_Prm\_Data\_Ref(27)=5

Ext\_User\_Prm\_Data\_Const(28) = 0x00  
Ext\_User\_Prm\_Data\_Ref(28)=5

Ext\_User\_Prm\_Data\_Const(29) = 0x00  
Ext\_User\_Prm\_Data\_Ref(29)=5

```
Ext_User_Prm_Data_Const(30) = 0x00
Ext_User_Prm_Data_Ref(30)=5
```

```
Ext_User_Prm_Data_Const(31) = 0x00
Ext_User_Prm_Data_Ref(31)=5
```

```
FixPresetModules=1
```

```
Module="ON-BOARD-IO 16 DO" 0x21
Preset=1
EndModule
```

```
; DISCRETE INPUT MODULES
Module="8 POINT DISCRETE INPUT" 0x10
EndModule
Module="16 POINT DISCRETE INPUT" 0x11
EndModule
```

```
; DISCRETE OUTPUT MODULES
Module="8 POINT DISCRETE OUTPUT" 0x20
EndModule
Module="16 POINT DISCRETE OUTPUT" 0x21
EndModule
```

```
; ANALOG INPUT MODULES
Module="8 CHANNEL ANALOG INPUT" 0x57
EndModule
Module="14 CHANNEL ANALOG INPUT" 0x5F
EndModule
Module="16 CHANNEL ANALOG INPUT" 0x5F
EndModule
```

```
; Configurable Analog Input Modules
Module="8 CH ANALOG INPUT CONFIGURABLE" 0x41,0x47,0x01
Ext_Module_Prm_Data_Len = 1
Ext_User_Prm_Data_Const(0) = 0x00
Ext_User_Prm_Data_Ref(0) = 7
Ext_User_Prm_Data_Ref(0) = 8
EndModule
Module="14 CH ANALOG INPUT CONFIGURABLE" 0x41,0x4F,0x01
Ext_Module_Prm_Data_Len = 1
Ext_User_Prm_Data_Const(0) = 0x00
Ext_User_Prm_Data_Ref(0) = 7
Ext_User_Prm_Data_Ref(0) = 8
EndModule
```

```
Module="16 CH ANALOG INPUT CONFIGURABLE" 0x41,0x4F,0x01
Ext_Module_Prm_Data_Len = 1
Ext_User_Prm_Data_Const(0) = 0x00
Ext_User_Prm_Data_Ref(0) = 7
Ext_User_Prm_Data_Ref(0) = 8
EndModule
```

```
; ANALOG OUTPUT MODULES
Module="8 CHANNEL ANALOG VOLTAGE OUTPUT" 0x67
Ext_Module_Prm_Data_Len = 1
Ext_User_Prm_Data_Const(0) = 0x00
Ext_User_Prm_Data_Ref(0) = 0
Ext_User_Prm_Data_Ref(0) = 1
Ext_User_Prm_Data_Ref(0) = 2
EndModule
Module="8 CHANNEL ANALOG CURRENT OUTPUT" 0x67
Ext_Module_Prm_Data_Len = 1
Ext_User_Prm_Data_Const(0) = 0x00
Ext_User_Prm_Data_Ref(0) = 0
Ext_User_Prm_Data_Ref(0) = 3
EndModule
```

```
Module="16 CHANNEL ANALOG VOLTAGE OUTPUT" 0x6F
Ext_Module_Prm_Data_Len = 1
Ext_User_Prm_Data_Const(0) = 0x00
Ext_User_Prm_Data_Ref(0) = 0
Ext_User_Prm_Data_Ref(0) = 1
Ext_User_Prm_Data_Ref(0) = 2
EndModule
Module="16 CHANNEL ANALOG CURRENT OUTPUT" 0x6F
Ext_Module_Prm_Data_Len = 1
Ext_User_Prm_Data_Const(0) = 0x00
Ext_User_Prm_Data_Ref(0) = 0
Ext_User_Prm_Data_Ref(0) = 3
EndModule
```

```
; COMBINATION ANALOG INPUT/ANALOG OUTPUT MODULE
Module="8 IN / 4 OUT VOLTAGE ANALOG" 0xC0,0x43,0x47
Ext_Module_Prm_Data_Len = 1
Ext_User_Prm_Data_Const(0) = 0x00
Ext_User_Prm_Data_Ref(0) = 0
Ext_User_Prm_Data_Ref(0) = 1
Ext_User_Prm_Data_Ref(0) = 2
EndModule
```

```
Module="8 IN / 4 OUT CURRENT ANALOG" 0xC0,0x43,0x47
Ext_Module_Prm_Data_Len = 1
Ext_User_Prm_Data_Const(0) = 0x00
Ext_User_Prm_Data_Ref(0) = 0
Ext_User_Prm_Data_Ref(0) = 3
EndModule
```



```
; INPUT MODULES
Module="T1K-08ND3 8PT DISCRETE INPUT" 0x10
EndModule
Module="T1K-16ND3 16PT DISCRETE INPUT" 0x11
EndModule
Module="T1K-08NA-1 8PT DISCRETE INPUT" 0x10
EndModule
Module="T1K-16NA-1 16PT DISCRETE INPUT" 0x11
EndModule

; OUTPUT MODULES
Module="T1K-08TD1 8PT DISCRETE OUTPUT" 0x20
EndModule
Module="T1K-16TD1 16PT DISCRETE OUTPUT" 0x21
EndModule
Module="T1K-16TD2 16PT DISCRETE OUTPUT" 0x21
EndModule
Module="T1K-08TA 8PT DISCRETE OUTPUT" 0x20
EndModule
Module="T1K-08TAS 8PT DISCRETE OUTPUT" 0x20
EndModule
Module="T1K-16TA 16PT DISCRETE OUTPUT" 0x21
EndModule
Module="T1K-08TR 8PT DISCRETE OUTPUT" 0x20
EndModule
Module="T1K-16TR 16PT DISCRETE OUTPUT" 0x21
EndModule
Module="T1K-08TRS 8PT DISCRETE OUTPUT" 0x20
EndModule

; ANALOG INPUT MODULES
Module="T1F-08AD-1 8CH ANALOG INPUT" 0x57
EndModule
Module="T1F-08AD-2 8CH ANALOG INPUT" 0x57
EndModule
Module="T1F-16AD-1 16CH ANALOG INPUT" 0x5F
EndModule
Module="T1F-16AD-2 16CH ANALOG INPUT" 0x5F
EndModule
Module="T1F-14THM 14CH THERMOCOUPLE" 0x5F
EndModule
Module="T1F-16RTD 16CH RTD" 0x5F
EndModule
```

```
; ANALOG OUTPUT MODULES
Module="T1F-08DA-1 8CH ANALOG OUTPUT" 0x67
Ext_Module_Prm_Data_Len = 1
Ext_User_Prm_Data_Const(0) = 0x00
Ext_User_Prm_Data_Ref(0) = 0
Ext_User_Prm_Data_Ref(0) = 3
EndModule

Module="T1F-08DA-2 8CH ANALOG OUTPUT" 0x67
Ext_Module_Prm_Data_Len = 1
Ext_User_Prm_Data_Const(0) = 0x00
Ext_User_Prm_Data_Ref(0) = 0
Ext_User_Prm_Data_Ref(0) = 1
Ext_User_Prm_Data_Ref(0) = 2
EndModule

Module="T1F-16DA-1 16CH ANALOG OUTPUT" 0x6F
Ext_Module_Prm_Data_Len = 1
Ext_User_Prm_Data_Const(0) = 0x00
Ext_User_Prm_Data_Ref(0) = 0
Ext_User_Prm_Data_Ref(0) = 3
EndModule

Module="T1F-16DA-2 16CH ANALOG OUTPUT" 0x6F
Ext_Module_Prm_Data_Len = 1
Ext_User_Prm_Data_Const(0) = 0x00
Ext_User_Prm_Data_Ref(0) = 0
Ext_User_Prm_Data_Ref(0) = 1
Ext_User_Prm_Data_Ref(0) = 2
EndModule

; COMBINATION ANALOG INPUT/ANALOG OUTPUT MODULE
Module="T1F-8AD4DA-1 8I4O CURRENT ANALOG" 0xC0,0x43,0x47
Ext_Module_Prm_Data_Len = 1
Ext_User_Prm_Data_Const(0) = 0x00
Ext_User_Prm_Data_Ref(0) = 0
Ext_User_Prm_Data_Ref(0) = 3
EndModule
Module="T1F-8AD4DA-2 8I4O VOLTAGE ANALOG" 0xC0,0x43,0x47
Ext_Module_Prm_Data_Len = 1
Ext_User_Prm_Data_Const(0) = 0x00
Ext_User_Prm_Data_Ref(0) = 0
Ext_User_Prm_Data_Ref(0) = 1
Ext_User_Prm_Data_Ref(0) = 2
EndModule

; T1H-CTRIO Counter MODULE
; 48 Bytes Output and 40 Bytes Input
Module="T1H-CTRIO Counter Module" 0xC0,0xAF,0xA7
EndModule
```