

Version: V2.4.1

Release Date: 2012-12-10

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TN

Vendor ID 310 / 0x0136 - Bytes: 01 54 / 0x01 0x36
Vendor Name ifm electronic gmbh
Vendor Text www.ifm.com
Vendor URL http://www.ifm.com/ifmgb/web/io-link_down.htm
Device ID 87 / 0x000057 - Bytes: 00 00 87 / 0x00 0x00 0x57



Communication

IO-Link Revision V1.0
Minimum Cycle Time 2.300 ms

SIO Mode Supported Yes

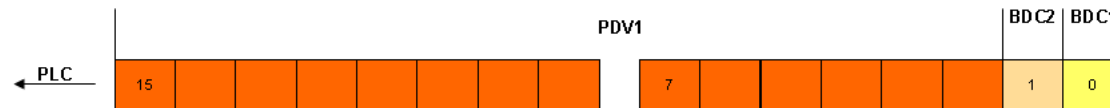
Device Variant

TN2531	Temperature sensor, -40°C to 150°C		
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Process Data
(ProcessDataIn)

Total BitLength = 16

Name	Description	Datatype	Bitoffset	Bitlength	Value Range	Gradient	Offset	Unit	Single Value
Temperature	Fig. PDV1. Current system temperature The real pressure can be calculated as follows: $P_real = (PDV1 \gg Bitoffset) * Gradient + Offset$. ('>>' means Bitshift to the right)	IntegerT	2	14	-400 to 1500	0.1	0	°C	
Switchstate [OUT 2]	Fig. BDC2. Bit not applicable, [OUT 2] is an analog output.	BooleanT	1		0 to 1				
Switchstate [OUT 1]	Fig. BDC1.State depends on [OU1].	BooleanT	0		0 to 1				



Variables

Name	Description	Index	Subindex bitOffset	Length	Access Rights	Default	Value Range	Gradient	Offset	Unit	Single Value
Vendor Name		16	Sub 0		ro	ifm electronic GmbH					
Vendor Text		17	Sub 0		ro	www.ifm.com					
Product Name		18	Sub 0		ro	TN2531					
Product ID		19	Sub 0		ro	TN2531					
Serial Number		21	Sub 0		ro						
Hardware Revision		22	Sub 0		ro						
Firmware Revision		23	Sub 0		ro						
Application Specific Name		24	Sub 0	30 Byte	rw						
SP1	Switch point 1, [SP1] shall be greater than [rP1]	67	Sub 0	16 Bit	rw	-8235	-19976 to 2353	0.0085	130	°C	
rP1	Reset point 1, [rP1] shall be smaller than [SP1]	68	Sub 0	16 Bit	rw	-9412	-20000 to 2329	0.0085	130	°C	
OU1	Output configuration 1, signal output	71	Sub 0	16 Bit	rw	4					(4) Hno (8) Hnc (16) Fno (32) Fnc
OU2	Output configuration 2, signal / diagnosis output	72	Sub 0	16 Bit	rw	1					(1) I (2) U
ASP	Analog Start Point	73	Sub 0	16 Bit	rw	-20000	-20000 to 1765	0.0085	130	°C	

Variables

Name	Description	Index	Subindex bitOffset	Length	Access Rights	Default	Value Range	Gradient	Offset	Unit	Single Value
AEP	Analog End Point	74	Sub 0	16 Bit	rw	2353	-19412 to 2353	0.0085	130	°C	
HI	Highest measured value	78	Sub 0	16 Bit	ro	-32000	-32000 to 32000 (Datatype temperature range)	0.0085	130	°C	
LO	Lowest measured value	79	Sub 0	16 Bit	ro	32000	-32000 to 32000 (Datatype temperature range)	0.0085	130	°C	
COF	Nullpunkt-Kalibrierung (Calibration offset)	82	Sub 0	16 Bit	rw	0	-1176 to 1176	0.008503	0	°C	
dS1	Switch-On delay [OUT 1]	83	Sub 0	16 Bit	rw	0	0 to 50000	0.001	0	s	
dr1	Switch-Off delay [OUT 1]	84	Sub 0	16 Bit	rw	0	0 to 50000	0.001	0	s	
FOU 1	Output response [OUT1] in case of fault	87	Sub 0	8 Bit	rw	0					(0) OFF (1) ON
FOU 2	Output response [OUT 2] in case of fault	88	Sub 0	8 Bit	rw	0					(0) OFF (1) ON

Variables

Name	Description	Index	Subindex bitOffset	Length	Access Rights	Default	Value Range	Gradient	Offset	Unit	Single Value
diS	Display settings	90	Sub 0	16	rw						
Display ON / OFF			bitOffs 7	Bit		false					(false) ON (true) OFF
Display rotated yes / no			bitOffs 6	Bit		false					(false) Not rotated (true) Rotated
Display update rate			bitOffs 0	3 Bit		2					(1) Fast update (d1) (2) Medium update (d2) (4) Slow update (d3)
Uni	Selection of the unit on the sensor display.	91	Sub 0	8 Bit	rw	0					(0) °C (1) °F
S.Loc	S.Loc locks the local user interface to prevent unintentional changes, [S.Loc] is only resettable via communication.	103	Sub 0	8 Bit	rw	1					(0) locked (1) unlocked
Message	Performs action on the connected sensor.	241	Sub 0	8 Bit	wo	253					(253) Factory reset

Events

Code	Name	Type	Mode	Description
0	No malfunction	Message	SingleShot	-
4096	General malfunction	Error	AppearDisappear	-