Data sheet

996-01000

# IDT 3-S-B2-PSL-KM3

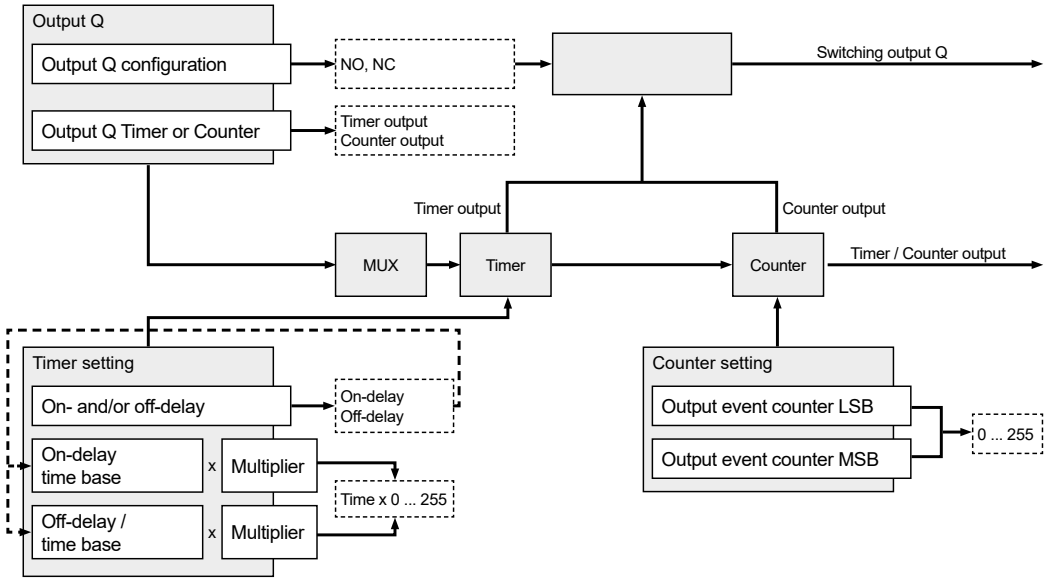
096-00047 09.03.2021-00
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| GENERAL INFORMATION | |
|---|---|
| Communication mode IO-Link | COM 2 |
| Min. cycle time | 10.4 ms |
| SIO mode | Supported |
| Length process data | 2 Bit |
| Vendor ID | 347 (0x01 0x5B) |
| Device ID | 26881 |
| Specification IO-Link | 1.1 |
| ISDU | Not supported |

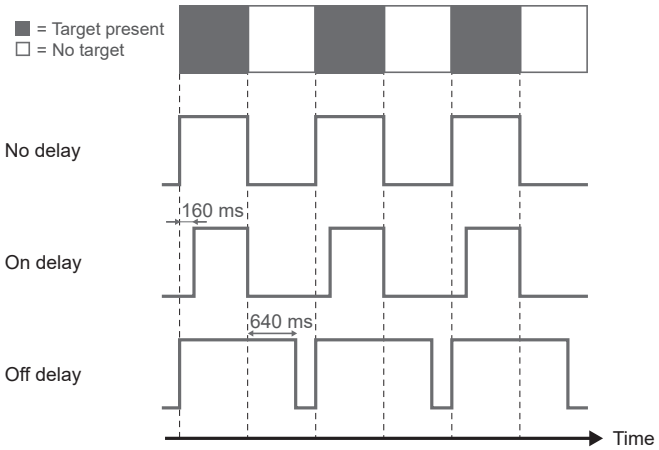
## PROCESS DATA

| | Bit | Name | Description |
|---|---|---|---|
| Byte 0 | 1 | Switching point 2 (80 %) | Value "True" = object is detected with margin<br>Value "False" = no detection with margin |
| | 0 | Switching point 1 (100 %) | Value "True" = object is detected<br>Value "False" = no detection |

## SIGNAL FLOW CHART




## TIMER PARAMETER



| DEVICE-SPECIFIC PARAMETER DATA TABLE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Direct parameter page 2 address dec / hex** | **Index dec / hex** | **Subindex dec / hex** | **Length** | **Bit offset** | **Access** | **Default value** | **Range** | **Description** | **Comment** |
| 16 / 0x10 | 1 / 0x01 | 1 / 0x01 | 2 Bit | 3 Bit | Read / write | 0 | 0 ... 3 | On-delay and/or off-delay time base | 0 = 0.1 ms<br>1 = 0.4 ms<br>2 = 1.6 ms<br>3 = 6.4 ms |
| | 1 / 0x01 | 1 / 0x01 | 2 Bit | 1 Bit | Read / write | 0 | 0 ... 3 | On-delay and/or off-delay | Off-delay or On-delay<br>Switching timer mode<br>0 = no timer<br>1 = Off-delay<br>2 = On-delay<br>3 = Off-delay and On-delay on |
| | 1 / 0x01 | 1 / 0x01 | 1 Bit | 0 | Read / write | 1 | 0 ... 1 | Output function | 0 = NC<br>1 = NO |
| 17 / 0x11 | 1 / 0x01 | 2 / 0x02 | 8 Bit | 0 | Read / write | 0 | 0 ... 255 | On-delay and/or off-delay multiplier | Multiplier for the on delay timer.<br>Example: A value of 100 and an on delay of 1.6 ms (parameter: on delay = 2) generates a delay of 160 ms. |
| 18 / 0x12 | 1 / 0x01 | 3 / 0x03 | 8 Bit | 0 | Read / write | 0 | 0 ... 255 | Output event counter LSB | LSB value of the 16 bit detection counter (max. 65.536 cycles). Any write operation resets the counter to 0. |
| 19 / 0x13 | | 4 / 0x04 | | 0 | Read / write | 0 | 0 ... 255 | Output event counter MSB | MSB value of the 16 bit detection counter (max. 65.536 cycles). Any write operation resets the counter to 0. |
| | | | | | | | | | Example:<br>200 switching cycles needed:<br>LSB = 200, MSB = 0<br><br>400 switching cycles needed:<br>LSB = 144, MSB = 1 |
| 20 / 0x14 | 1 / 0x01 | 5 / 0x05 | 8 Bit | 0 | Read | 171 | 0 ... 255 | Temperature threshold | Temperature threshold value<br>Set to 171 (70°C) by default.<br>Real_Temp [°C] = (Max_Temp-128)/(128*0.01206)+42.5 |
| 21 / 0x15 | 1 / 0x01 | 6 / 0x06 | 8 Bit | 0 | Read | | 0 ... 255 | Current temperature | Actual sensor temperature.<br>Real temp [°C] = (Act_Temp-128)/(128*0.01206)+42.5 |

| EVENT | | |
|---|---|---|
| **Bit** | **Name** | **Description** |
| 7 | Event details | **Always 0, no event detail** |
| 6 | Invalid process data | 1 if LC oscillator is not running |
| 5 | Reserved | Always 0 |
| 4 | Communicator error | Always 0 |
| 3 | Device error | 1 if LC oscillator is not running |
| 2 | Parameter error | Always 0 |
| 1 | Device warning | 1 if under voltage |
| 0 | Device message | Always 0 |