

# TLV493D-A1B6

3D Magnetic Sensor

## Early Problem Notification

July 2015

### Products affected

The described issues have been found on early Engineering Samples of TLV493D-A1B6.

A list of the potentially affected products is given in [Table 1](#).

**Table 1** Potentially affected products

Product name	Ordering code	Marking	Package
TLV493D-A1B6	SP001286056	SA (Engineering Samples)	TSOP-6

Communication Error

## Communication Error

### Problem Description

A communication error can occur during operation. Every mode can be affected.

A communication error can be detected by:

- No ACK from sensor after READ command
- Interruption of communication by sensor

### Corrective Action

In order to avoid communication errors please implement following application circuit:

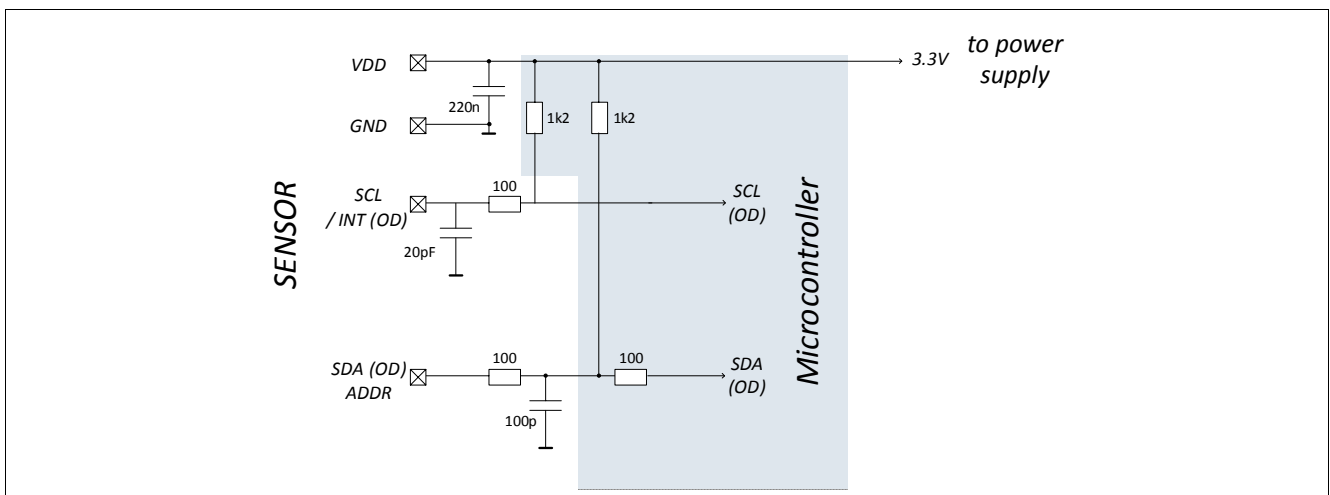


Figure 1

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ADC - hang up in Master Controlled or Fast Mode

## ADC - hang up in Master Controlled or Fast Mode

### Problem Description

In the Master Controlled Mode (MCM) or the Fast Mode (FM) the ADC conversion may hang up in early engineering samples.

A Hang up can be detected by:

- Frame Counter (FRM) counter stuck and does not increment anymore

### Corrective Action

#### Operating Mode, Sensor used in polling mode<sup>1)</sup> / master controlled mode

1. Detect a non incrementing frame counter
2. Send general address 0x00 to reset the sensor (see also power-up/reset behaviour in product data sheet)
3. Re-configure to Master controlled Mode

#### or Operating Mode, Sensor used in Interrupt mode (Fast or Master controlled Mode)

1. Use a system watchdog to detect a missing interrupt
2. Optional: detect a non incrementing frame counter
3. Send general address 0x00 to reset the sensor (see also power-up/reset behaviour in product data sheet)
4. Re-configure to desired Fast or Master controlled Mode

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1) polling:= no /Int is issued, uC reads out sensor in fixed periods

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