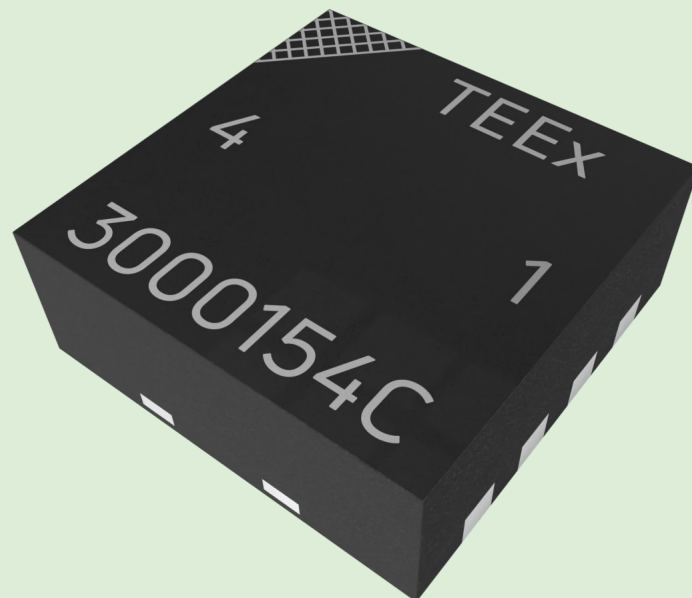




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+ Datasheet TEE301

Digital Temperature Sensor



TEE301

Digital Temperature Sensor

The TEE301 is the next generation of the T series TEE_x01. With a 16-bit unsigned integer value and a different pin assignment compared to TEE501, the TEE301 allows an easy upgrade for your existing application with minimal integration effort.

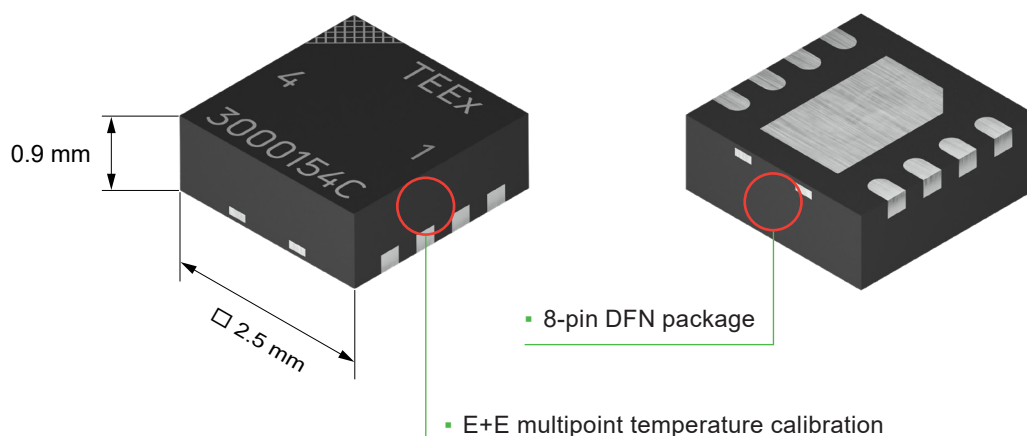
Furthermore the sensor covers a wide application range from -40 to +125 °C. Therefore the TEE301 offers a versatile measuring device for demanding tasks. With a footprint of only 2.5x2.5 mm, an accuracy of 0.2 °C and the expansion of up to 4 I²C addresses, it ensures outstanding performance at an excellent price-performance ratio.

Key Features

- Accuracy up to ± 0.2 °C
- Supply voltage 2.35 - 3.60 V
- 8-pin DFN package
- I²C interface with pin-selectable addresses
- I²C glitch suppression
- Excellent repeatability

Typical Applications

- Automotive industry
- Building automation
- Consumer electronics
- Home appliances
- Industrial automation
- Medical devices
- Smart home
- Wearable devices
- White goods



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| Acronym | Meaning |
|---------|-------------------------------|
| A | Ambient |
| B | Bus |
| CDM | Charged Device Model |
| ESD | Electrostatic Discharge |
| HBM | Human Body Model |
| MEAS | Measurement, Measuring |
| PORI | Power On Reset, Idle Mode |
| PU | Pull-up |
| POR | Power On Reset |
| PORP | Power On Reset, Periodic Mode |
| PUPE | Pull-up external |
| PUPI | Pull-up internal |
| RH | Relative humidity |
| T | Temperature |

Table 1: List of TEE301 specific acronyms

1 Pin Configuration

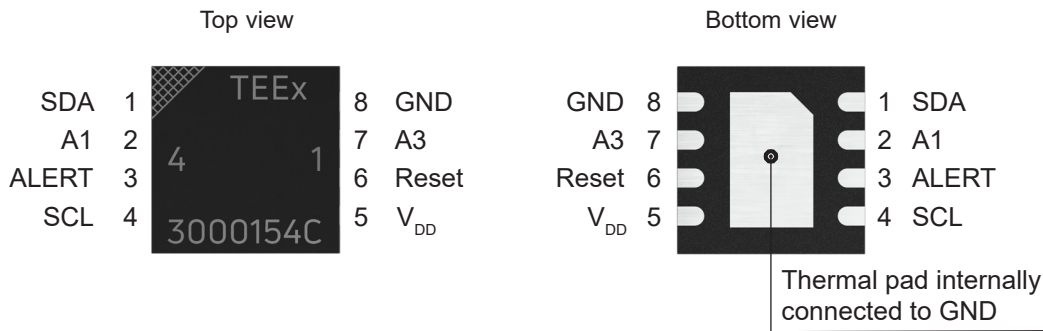


Figure 1: DFN8 pin configuration

| Pin | Name | Pin Type | Description |
|-----|-----------------|-----------------------------|---|
| 1 | SDA | I/O | Serial data line for I ² C communication. The external pull-up resistors (e.g. R _p = 4.7 kΩ) are required to pull the signal high. |
| 2 | A1 | Input high-Z | I ² C device address pin; bit 1 of the 7 bit address; do not leave floating, to be connected to the GND for default I ² C address. |
| 3 | ALERT | Output push-pull | Indicates alarm condition; leave floating if unused. |
| 4 | SCL | I/O | Serial clock line for I ² C communication. The external pull-up resistors (e.g. R _p = 4.7 kΩ) are required to pull the signal high. |
| 5 | V _{DD} | Power | Positive supply pin |
| 6 | Reset | Inverted input with pull-up | Reset pin active low; leave floating if unused; can be connected to V _{DD} with a series resistor of R ≥ 2 kΩ. |
| 7 | A3 | Input high-Z | I ² C device address pin, bit 3 of the 7 bit address; do not leave floating, to be connected to the GND for default I ² C address. |
| 8 | GND | Power | Ground (internally connected to thermal pad) |

Table 2: TEE301 pin assignment

2 Typical Application

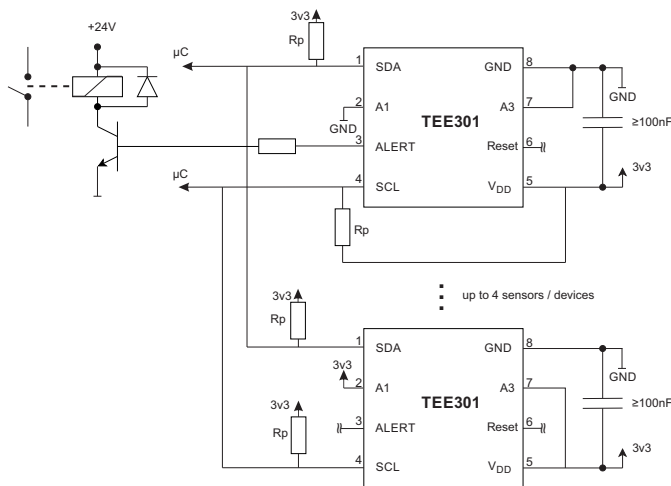


Figure 2: Typical application schematic

3 Specification

3.1 Temperature Sensor

| PARAMETER | CONDITION(S) | MIN | TYP | MAX | UNITS |
|-----------------------------|--------------|-----|-------|--------------|-------|
| Operating range | | -40 | | 125 | °C |
| Accuracy | | | 0.2 | See Figure 3 | °C |
| Resolution ¹⁾ | high | | 0.01 | | °C |
| Repeatability ²⁾ | high | | 0.03 | | °C |
| Response time ³⁾ | τ_{63} | 2 | | | s |
| Long term drift | | | <0.03 | | °C/yr |

1) Resolution is chosen by the corresponding measurement command.

2) The stated "Noise/Repeatability" is 3 times the standard deviation (3σ) of multiple consecutive measurement values at constant environmental conditions.

3) Time for achieving 63 % of a step function, valid at 25°C and 1m/s airflow.

The actual response time in application strongly depends on the surrounding of the sensor in the final application (heat conductivity of sensor substrate, dead volume, ...).

Table 3: Temperature sensor parameters

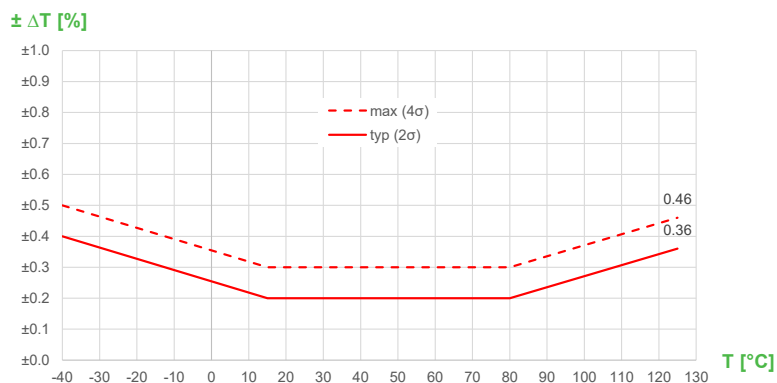


Figure 3: Temperature sensor accuracy

3.2 Recommended Operating Conditions

The TEE301 sensor can be used in the temperature range -40°C...+125°C.

4 Electrical Characteristics

4.1 Absolute Maximum Ratings

The absolute maximum ratings as given in Table 4 are stress ratings only and give additional information. Functional operation of the device at these conditions is not implied. Exposure to absolute maximum rating conditions for extended periods may affect the device reliability (e.g. hot carrier degradation, oxide breakdown).

| PARAMETER | SYMBOL | MIN | MAX | UNIT |
|--------------------------|-------------|------|-----|------|
| Power Supply | V_{DD} | -0.3 | 3.6 | V |
| Digital I/O pins | V_{LOGIC} | -0.3 | 5.0 | V |
| Input current on any pin | I_{IN} | -50 | 50 | mA |
| Storage temperature | T_{STG} | -55 | 150 | °C |
| ESD HBM ¹⁾ | ESD_{HBM} | - | 4 | kV |
| ESD CDM ²⁾ | ESD_{CDM} | - | 750 | V |

1) Human Body Model according to AEC-Q100-002

2) Charged Device Model according to AEC-Q100-011

Table 4: TEE301 absolute maximum ratings

4.2 Electrical Specification

Typical values correspond to $V_{DD} = 3.3\text{ V}$ and $T_A = 25\text{ °C}$.

Min. and max. values are valid in the full temperature range $-40\dots 125\text{ °C}$ and at declared V_{DD} levels, unless otherwise noted.

| PARAMETER | SYMBOL | CONDITION / COMMENT | MIN | TYP | MAX | UNIT |
|---------------------------|------------|--|------|------|------|------|
| Supply Voltage | V_{DD} | | 2.35 | 3.0 | 3.6 | V |
| POR voltage periodic mode | V_{PORP} | Static power supply | 2.10 | 2.20 | 2.35 | V |
| POR voltage idle mode | V_{PORI} | Static power supply | | 1.8 | | V |
| Supply current | I_{DD} | Single mode (idle) ¹⁾ | | 6 | | µA |
| | | Periodic mode ¹⁾ | | 80 | | µA |
| | | Measuring T, Calculation | | 900 | | µA |
| Thermal resistance | R_{TH} | Dependent on PCB layout and environmental conditions | | 150 | | K/W |

1) Without I²C communication and when not measuring.

Table 5: General operation

| PARAMETER | SYMBOL | CONDITION / COMMENT | MIN | TYP | MAX | UNIT |
|---------------------------|--------------------|---|---------------------|------|---------------------|------|
| Input voltage | V _{IL} | Low level | | | 0.3*V _{DD} | V |
| | V _{IH} | High level | 0.7*V _{DD} | | V _{DD} | V |
| Output voltage | V _{OL} | Current into pin: I _{OL} = 4.0 mA | 0 | 0.25 | 0.40 | V |
| | V _{OH} | High level → open drain | | | | |
| Internal pull-up resistor | R _{PUPI} | V _{DD} =3.60 V & pin voltage = 0.7*V _{DD} | | 25 | | kΩ |
| | | V _{DD} =3.30 V & pin voltage = 0.7*V _{DD} | | 27 | | kΩ |
| | | V _{DD} =3.00 V & pin voltage = 0.7*V _{DD} | | 30 | | kΩ |
| | | V _{DD} =2.35 V & pin voltage = 0.7*V _{DD} | | 34 | | kΩ |
| External pull-up resistor | R _{PUIPE} | At I ² C lines, pull-up current ≤4.0 mA @ 3.3 V | 0.725 | 4.7 | | kΩ |
| Capacitive bus load | C _B | Standard | | | 400 | pF |
| | | Fast mode | | | 400 | pF |
| | | Fast mode plus | | | 177 | pF |

Table 6: I²C communication pins SCL & SDA

| PARAMETER | SYMBOL | CONDITION / COMMENT | MIN | TYP | MAX | UNIT |
|-----------------------|------------------|---------------------------------------|---------------------|-----------------|---------------------|------|
| Input voltage | V _{IL} | Low level | | | 0.3*V _{DD} | V |
| | V _{IH} | High level, 5V tolerant input | 0.7*V _{DD} | V _{DD} | 5.0 | V |
| Input leakage current | I _{VDD} | Voltage @pin = 0...V _{DD} | -10 | 0 | +10 | μA |
| | I _{I5V} | Voltage @pin = V _{DD} ...5 V | | TBD | | μA |
| Output resistance | R _{OH} | Voltage @pin = V _{DD} -0.4 V | | 116 | | Ω |
| | R _{OL} | Voltage @pin = 0.4 V | | 100 | | Ω |

Table 7: I/O pins

| PARAMETER | SYMBOL | CONDITION / COMMENT | TYP | UNIT |
|-------------------------|--------------------|---|------|------|
| Power-up time | t _{PWRU} | After V _{DD} > V _{PORP} , exclude measurement at power-up | 1.1 | ms |
| Reset time | t _{RESET} | Any reset except power-up | 0.9 | ms |
| T Measurement | t _T | Low repeatability | 1.7 | ms |
| | | Medium repeatability | 3.3 | ms |
| | | High repeatability | 13.0 | ms |
| Measurement calculation | t _{CALC} | After every measurement | 1.2 | ms |
| SCL SDA input filter | t _{spike} | Short voltage spikes are ignored | 25 | ms |

Table 8: General timing

Subsequently, the typical measurement time with high repeatability is:

$$\begin{aligned}
 t_{MEAS} &= t_T + t_{CALC} \\
 &= 13 + 1.2 \\
 &= 14.2 \text{ ms.}
 \end{aligned}$$

| REPEATABILITY | RESOLUTION [°C] |
|---------------|-----------------|
| High | 0.01 |
| Medium | 0.06 |
| Low | 0.11 |

Table 9: Measurement resolution

5 Interface

5.1 Supply Pins (V_{DD}, GND)

The supply pins must be equipped with a bypass ceramic capacitor of at least 100 nF.

Sensor Power-up

As soon as V_{DD} exceeds the POR voltage V_{PORP}, the device gets initialized. After t_{PWRU}, the initialization procedure is completed.

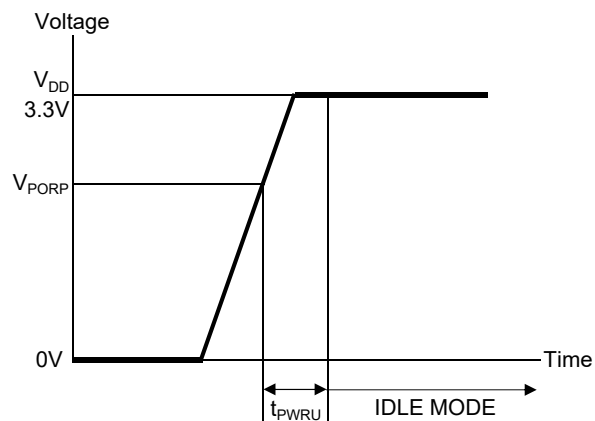


Figure 4: Sensor behaviour at power-up

5.2 I²C Communication

The I²C communication is based on the NXP UM10204 I²C bus specification and user manual¹⁾.

The TEE301 supports the modes “standard” (100 kHz), “fast mode”(400 kHz) and “fast mode plus” (1 000 kHz).

The sensor works as SLAVE and needs to be queried by a MASTER.

5.3 I²C Address Pins (2, 7)

The sensor’s I²C base address is 0x4A (without R/W bit). Pins A1...A3 define the I²C base address.

| Bit # | 7 | 6 | 5 | 4 | PIN 7 | 2 | PIN 2 | R/W | SLAVE Address (unshifted) | SLAVE Address (with W) | SLAVE Address (with R) |
|-------|---|---|---|---|-------|---|-------|-----|---------------------------|------------------------|------------------------|
| | | | | | A3 | | A1 | | | | |
| | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1/0 | 0x4A | 0x94 | 0x95 |
| | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1/0 | 0x4B | 0x96 | 0x97 |
| | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1/0 | 0x4E | 0x9C | 0x9D |
| | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1/0 | 0x4F | 0x9E | 0x9F |

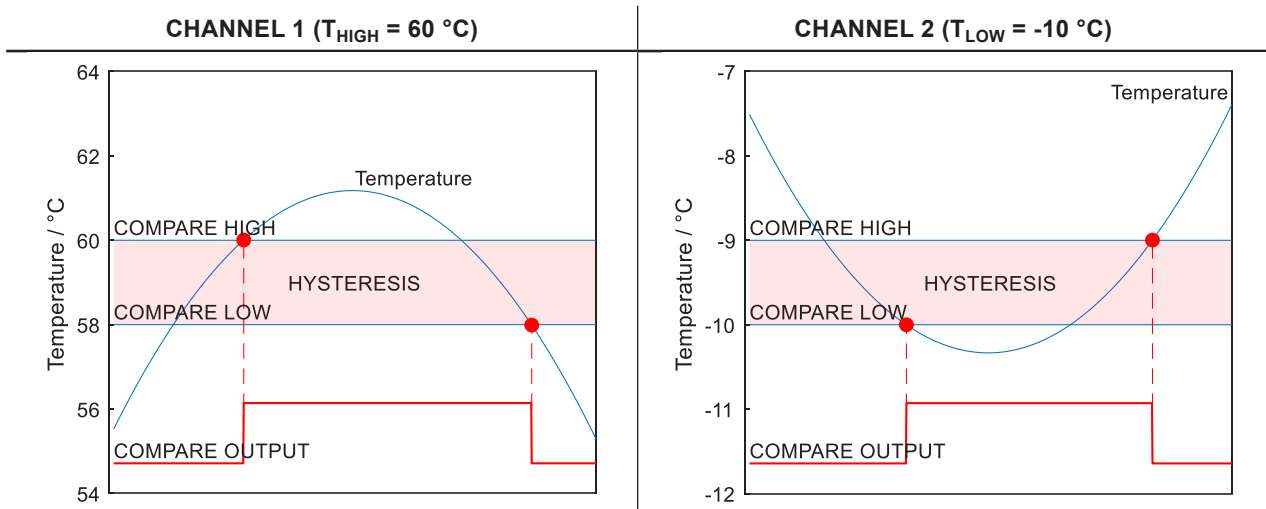
5.4 ALERT Pin (3)

The ALERT pin indicates low when the temperature is in the range:

- T = [T_{LOW}, T_{HIGH}] = [-10 °C, +60 °C]

If any of temperature or relative humidity measurement values goes outside this range the ALERT pin will output high, which will remain high as long as the corresponding value will go back inside the given temperature or humidity range including the hysteresis as shown in the plots below.

1) Revision 7, 1 October 2021, download from <https://www.nxp.com/webapp/Download?colCode=UM10204&location=null>. The document is located behind a login access barrier.



5.5 Reset Pin (6)

As soon as the falling edge on the reset pin is in the logic “0” blue area (low signal), as shown in the diagram below, the device goes into the reset and remains in this state as long as the voltage on the reset pin remains in the logic “0” area. In particular, during this phase, the device is in the cycle of being powered-up and reset immediately after power-up, thus the current consumption corresponds to the power-up current, approximately 1 mA. During the reset time, the device will not respond to any request on the I²C interface and set all digital outputs into a tristate mode.

As soon as the voltage rising edge reaches the logic “1” green area (high signal), the devices will be powered-up properly. The default (non-reset) pin state is high (typically 3.3 V). If unused, the reset pin can be connected to the V_{DD}.

Already short voltage drops (10 ns) on the reset pin will lead to the reset state. Thus, it is recommended to use an appropriate capacitor to avoid unwanted resets.

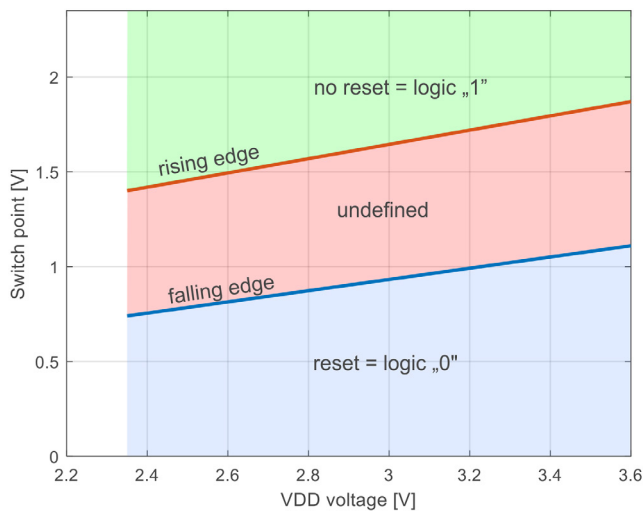


Figure 5: I/O input reset pin behavior versus the V_{DD} voltage

6 Sensor Communication

6.1 Command Overview

Measurement commands

| Measurement mode | Description | CMD Hex Code | | Repeatability |
|------------------|----------------------|-----------------------------------|--------|---------------|
| | | I ² C clock stretching | MSB | |
| Single-shot | enabled | 2C | 06 | High |
| | | | 0D | Medium |
| | | | 10 | Low |
| | disabled | 24 | 00 | High |
| | | | 0B | Medium |
| | | | 16 | Low |
| | Measurement interval | MSB | LSB | |
| Periodic | 0.5 mps | 20 | 32 | High |
| | | | 24 | Medium |
| | | | 2F | Low |
| | 1 mps | 21 | 30 | High |
| | | | 26 | Medium |
| | | | 2D | Low |
| | 2 mps | 22 | 36 | High |
| | | | 20 | Medium |
| | | | 2B | Low |
| | 4 mps | 23 | 34 | High |
| | | | 22 | Medium |
| | | | 29 | Low |
| 10 mps | 27 | 37 | High | |
| | | 21 | Medium | |
| | | 2A | Low | |

Table 10: TEE301 commands

Further commands

| CMD Hex Code | Description |
|--------------|--|
| 0xE000 | Fetch periodic measurement data |
| 0x30A2 | Soft Reset |
| 0x3093 | Break |
| 0x306D | Heater ON |
| 0x3066 | Heater OFF |
| 0x3041 | Clear status register |
| 0xF32D | Readout of status register |
| 0x06 | I ² C Reset at general call address 0x0 |

6.2 Measured Data Format

$$\text{Temperature [}^\circ\text{C]} = -45 + 175 \cdot (\text{Temperature MSB} \cdot 256 + \text{Temperature LSB}) / (2^{16}-1)$$

6.3 Measurement Modes

There are two different operation modes to communicate with the sensor:

1. Single Shot Measurement

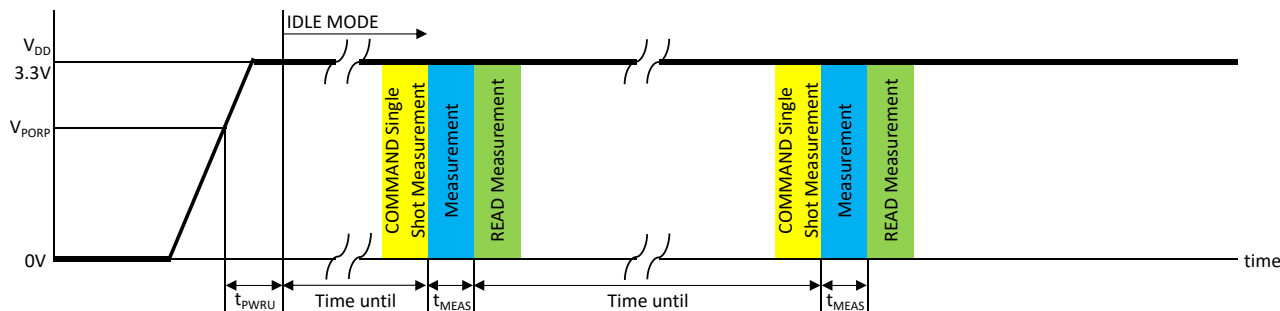


Figure 6: Single shot measurement

2. Periodic Measurement

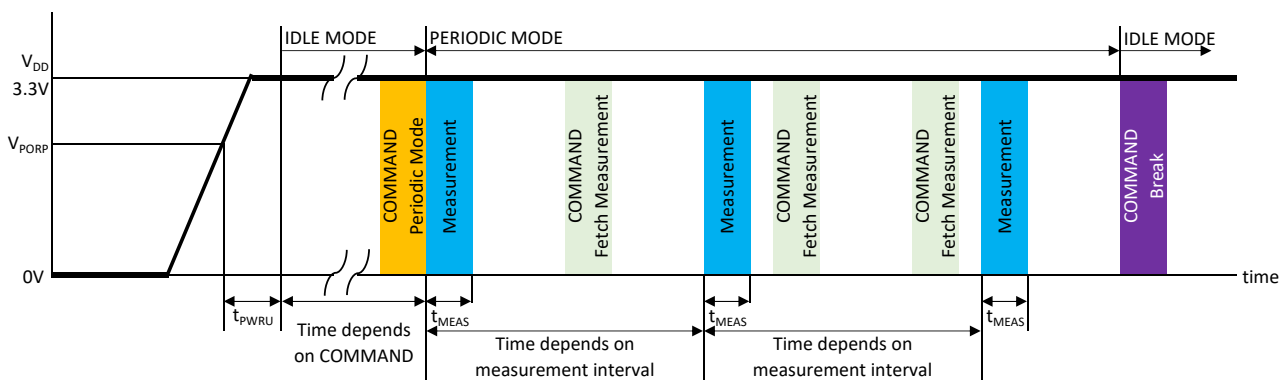


Figure 7: Periodic measurement

6.4 Single Shot Measurement

The command initiates a single measurement, the measured data is available for query after t_{MEAS} . I²C clock stretching enabled: waiting for the end of the measurement during command execution.

| Condition | CMD Hex Code | | Repeatability |
|--|--------------|-----|---------------|
| | MSB | LSB | |
| I ² C clock stretching Enabled | 2C | 06 | High |
| | | 0D | Medium |
| | | 10 | Low |
| I ² C clock stretching Disabled | 24 | 00 | High |
| | | 0B | Medium |
| | | 16 | Low |

Table 11: Single shot measurement with or without clock stretching

A single-shot measurement is started after the command has been received successfully. The readout of the calculated T value is started by sending the I²C address again in read mode:

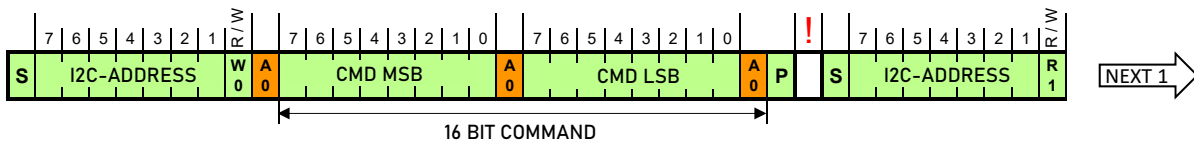


Figure 8: Start single shot measurement readout

In case a command with clock stretching enabled has been issued, the slave holds SCL low until the calculation has been finished:

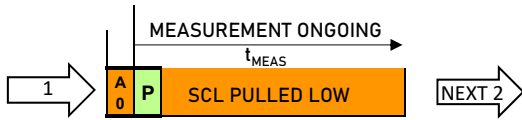


Figure 9: Clock stretching during measurement

In case a command without clock stretching has been issued, the slave does not acknowledge (NACK) a read header as long as the calculation has not been finished:

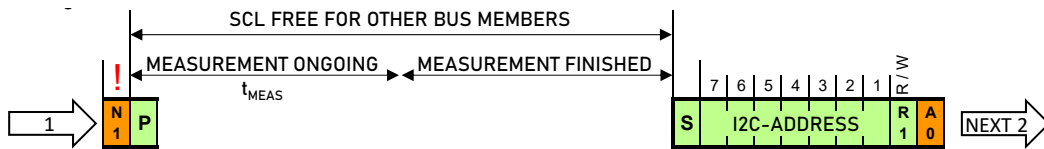


Figure 10: Poll for measuring values until ACK

After the calculation is finished, the slave responds to a read header with a pair of data words, each of them is followed by an 8 bit checksum (CRC8). The first data word contains the temperature value while the second word contains the relative humidity value. The master has to acknowledge each single data byte by an acknowledge (ACK), otherwise the slave will stop sending any further data and wait for a stop condition (P):

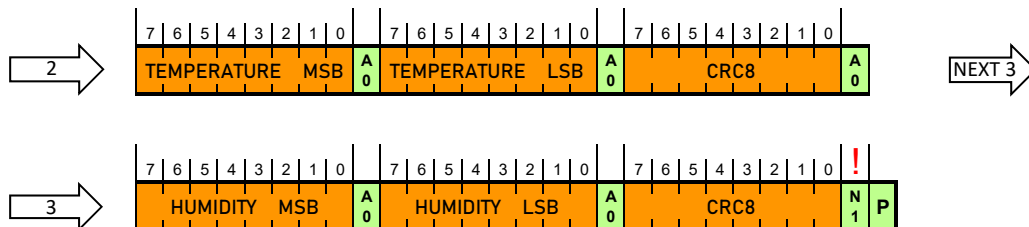


Figure 11: Measured value readout

- Data Bit From Master to Slave
- Data Bit From Slave to Master
- ! = Note the deviation!
- S = Start condition
- P = Stop condition
- A = Acknowledge (SDA low)
- N = Not Acknowledge (SDA high)
- R = Read Bit
- W = Write Bit

6.5 Periodic Measurement

Once issued, measurements and calculations are started automatically with a given measuring interval and resolution. This mode does not support clock stretching.

| Condition | CMD Hex Code | | Repeatability |
|-----------|--------------|-----|---------------|
| | MSB | LSB | |
| 0.5 mps | 20 | 32 | High |
| | | 24 | Medium |
| | | 2F | Low |
| 1 mps | 21 | 30 | High |
| | | 26 | Medium |
| | | 2D | Low |
| 2 mps | 22 | 36 | High |
| | | 20 | Medium |
| | | 2B | Low |
| 4 mps | 23 | 34 | High |
| | | 22 | Medium |
| | | 29 | Low |
| 10 mps | 27 | 37 | High |
| | | 21 | Medium |
| | | 2A | Low |

Table 12: Periodic measurement

i PLEASE NOTE

A short measurement interval can influence the power consumption and therefore the self-heating of the sensor.

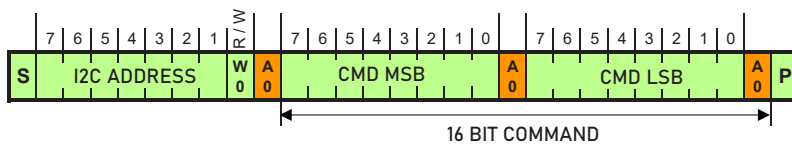


Figure 12: Periodic measurement commands

A periodic measurement command with a different measurement interval/resolution can be issued at any time, but the calculated value will be updated according the new settings earliest after a measurement with the new settings has been performed.

6.6 Fetch Periodic T Measurement Results (0xE000)

Readout of calculation results in periodic measurement mode can be performed using the fetch command. This is similar to the readout of measurement results in single-shot mode, except that clock stretching is always disabled. The slave will answer with NACK if no measurement results are available.

| Command | CMD Hex Code |
|------------|--------------|
| Fetch data | E000 |

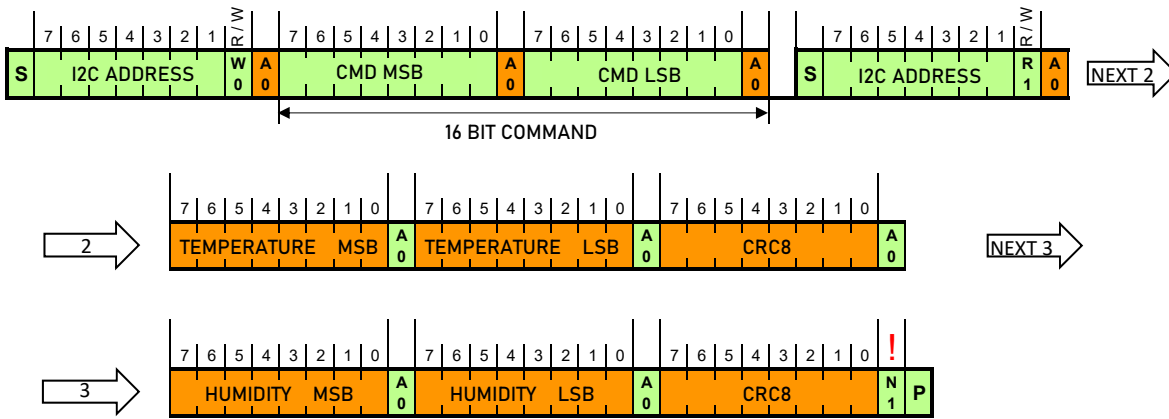


Figure 13: Fetch command

This command is also suitable for reading out the measured data generated by the power-up procedure.

6.7 Break Command (0x3093)

The periodic measurement mode can be stopped using the break command. After finishing an ongoing measurement, the sensor will enter the idle mode. An ongoing measurement can delay the transition into the idle mode.

| Command | CMD Hex Code |
|---------|--------------|
| Break | 3093 |

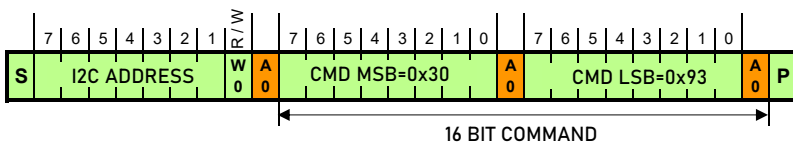


Figure 14: Break command

A single measurement (command) or a reset (command or power-up) both stop the periodic measurement, too.

6.8 Reset Commands (0x30A2, 0x06)

The slave supports multiple commands to reset the device. Once a reset command is received, the device is completely reset, like a reset during power-up. During the reset time, the device will not respond to any request on the I²C interface.

In order to execute the reset on a specific device, the command “Soft Reset” can be used. This forces the system to execute the startup procedure without the need to remove the power supply.

| Command | CMD Hex Code |
|------------|--------------|
| Soft reset | 30A2 |

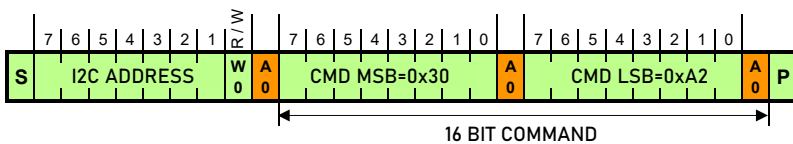


Figure 15: Soft reset

In order to reset all devices on the bus, the master can use the “General call” mode. This generates a reset (system startup) in all devices on the bus which support this function. The effect is the same as for the “Soft Reset” command.

| Command | CMD Hex Code |
|--------------|--------------|
| Address byte | 00 |
| Second byte | 06 |

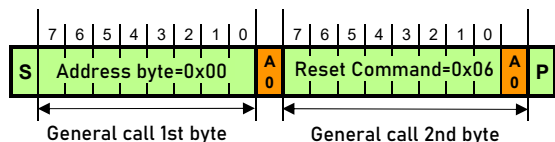


Figure 16: Reset through general call

In order to reset the I²C interface only, keep SDA high while toggling SCL nine times or more. This must be followed by a start condition preceding the next command. This sequence does not affect any configuration, status register or system status.

6.9 Status Register (0xF32D)

The sensor implements a 16 bit status register. Its contents can be read using the following command:

| Command | CMD Hex Code | |
|--------------------------|--------------|-----|
| | MSB | LSB |
| Read out Status Register | F3 | 2D |

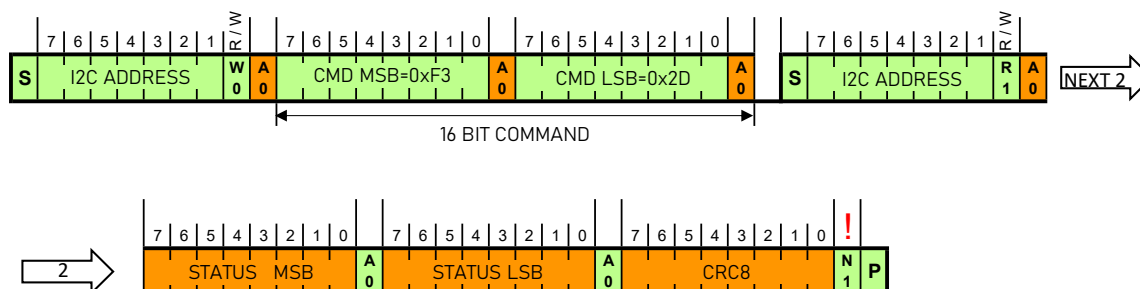


Figure 17: Read out status register

Upon receipt of the following clear command, bits 15, 4 and 3 are cleared in the status register. All other bits remain unaffected:

| Command | CMD Hex Code | |
|-----------------------|--------------|-----|
| | MSB | LSB |
| Clear Status Register | 30 | 41 |

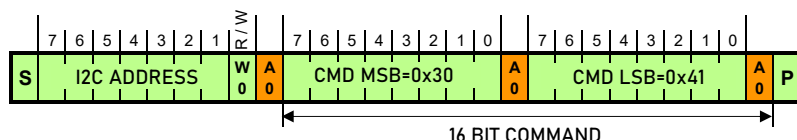


Figure 18: Clear status register

| Bit | Name | Description |
|-----|-----------------------|--|
| 15 | OVERALL_ERROR | 0: none of bits [11:0] set 1: at least one of bits [11:0] set This bit is cleared upon the Clear Status Register command |
| 14 | Reserved | - |
| 13 | Reserved | - |
| 12 | Reserved | - |
| 11 | Reserved | - |
| 10 | T out of RANGE | 0: no alert 1: alert (see ALERT pin) |
| 9 | Reserved | - |
| 8 | Reserved | - |
| 7 | Reserved | - |
| 6 | T > T _{HIGH} | These bits are cleared upon Clear Status Register command |
| 5 | T < T _{LOW} | |
| 4 | System Reset | 0: no reset since status 1 clear 1: POR or I ² C reset This bit is cleared upon the Clear Status Register command |
| 3 | POR | 0: no POR since status 1 clear 1: POR occurred This bit is cleared upon the Clear Status Register command |
| 2 | Reserved | - |
| 1 | Reserved | - |
| 0 | CRC | 1: checksum of the latest write transfer failed |

Table 13: Status register

6.10 CRC Calculation

Response data words/memory write data are protected by a CRC8 checksum:

| Property | Value |
|----------------|---|
| Name | CRC8 |
| Width | 8 bit |
| Polynomial | 0x31 (x ⁸ + x ⁵ + x ⁴ + 1) |
| XOR input | 0xFF |
| Reflect input | False |
| Reflect output | False |
| XOR output | 0x00 |

Table 14: CRC checksum calculation

6.11 Package / Dimensions

The TEE301 sensor is provided as an open-cavity DFN (= Dual Flat No Leads) package.

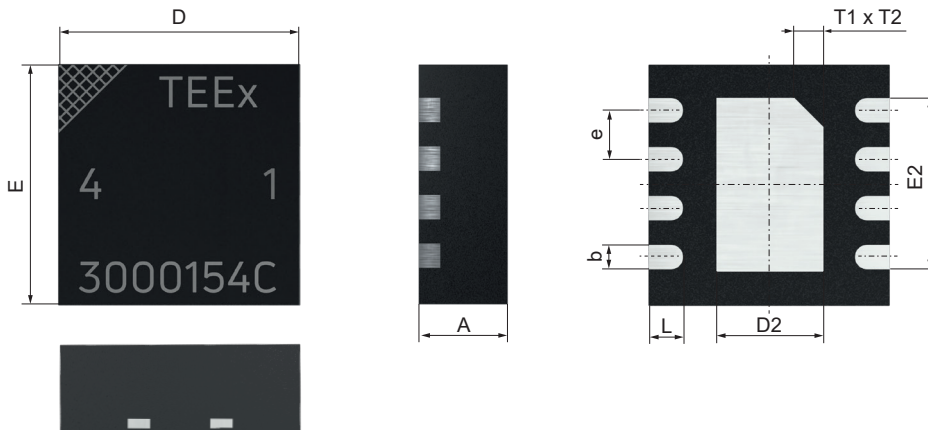


Figure 19: Package layout

| PARAMETER | SYMBOL | MIN. | NOM. | MAX. | UNIT | COMMENT |
|---------------------|--------|------|-----------|------|------|--------------------------|
| Package width | D | 2.40 | 2.50 | 2.60 | mm | |
| Package length | E | 2.40 | 2.50 | 2.60 | mm | |
| Package height | A | 0.80 | 0.90 | 1.00 | mm | |
| Leadframe height | A3 | | 0.20 | | mm | Not shown in the drawing |
| Pad pitch | e | | 0.50 | | mm | |
| Pad width | b | 0.20 | 0.25 | 0.30 | mm | |
| Pad length | L | 0.30 | 0.35 | 0.40 | mm | |
| Thermal pad length | D2 | 1.00 | 1.10 | 1.20 | mm | |
| Thermal pad width | E2 | 1.70 | 1.80 | 1.90 | mm | |
| Thermal pad marking | T1xT2 | | 0.30x0.30 | | mm | Indicates pin 1 |

Table 15: Package dimensions

6.12 Tape and Reel Packaging

The TEE301 has a Moisture Sensitivity Level (MSL) of 1, according to IPC/JEDEC J-STD-020. It is recommended to further process the TEE301 sensors within 1 year after date of delivery.

Dimensions T&R in mm:

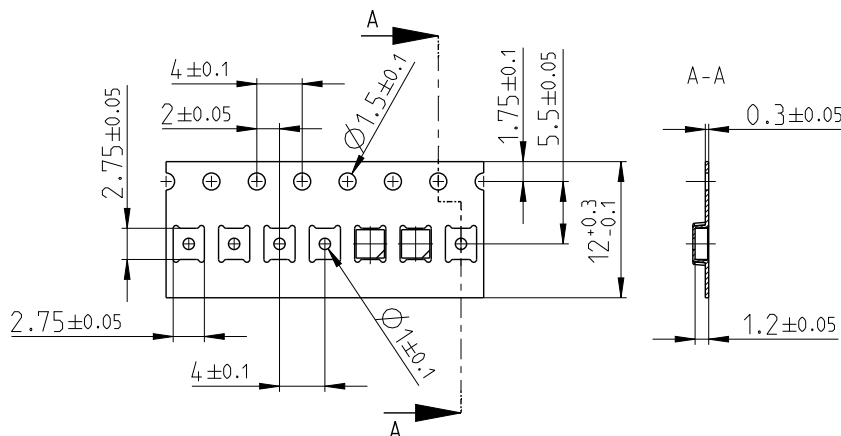


Figure 20: Tape layout

Reel size 330.2 mm (13"), Leader 520 mm (20.5"), Trailer 1240 mm (48.8").

Orientation on the tape:

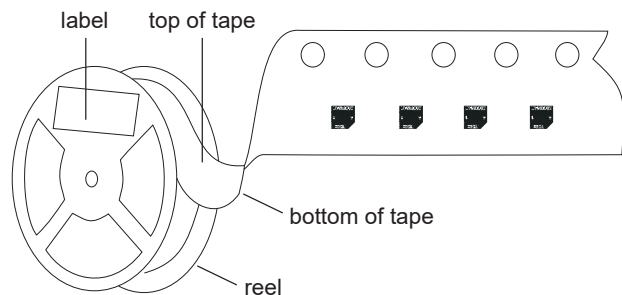


Figure 21: Orientation on the tape

6.13 Traceability

The laser marking upon the sensor's top side can be used for sensor identification / traceability.



A triangular mark at the top left indicates pin 1.

The upper line represents the designation of the component and consists of up to 6 characters. The "x" is a placeholder for the exact type, e.g. 301.

The remaining characters are a tracking code and are used by the manufacturer for identification.

Figure 22: TEEEx laser marking

6.14 Ordering Information

| Feature | Description | Code |
|--------------------------------|--------------------|----------------|
| | | TEE301- |
| Tape and reel packaging | 2500 pcs. per reel | TR2,5 |

Ordering example: **TEE301-TR2,5**

| Feature | Code | Description |
|--------------------------------|---------------|---|
| Model | TEE301 | Digital Humidity and Temperature Sensor |
| Tape and reel packaging | TR2,5 | 2500 pcs. per reel |

6.15 Recommended Layout

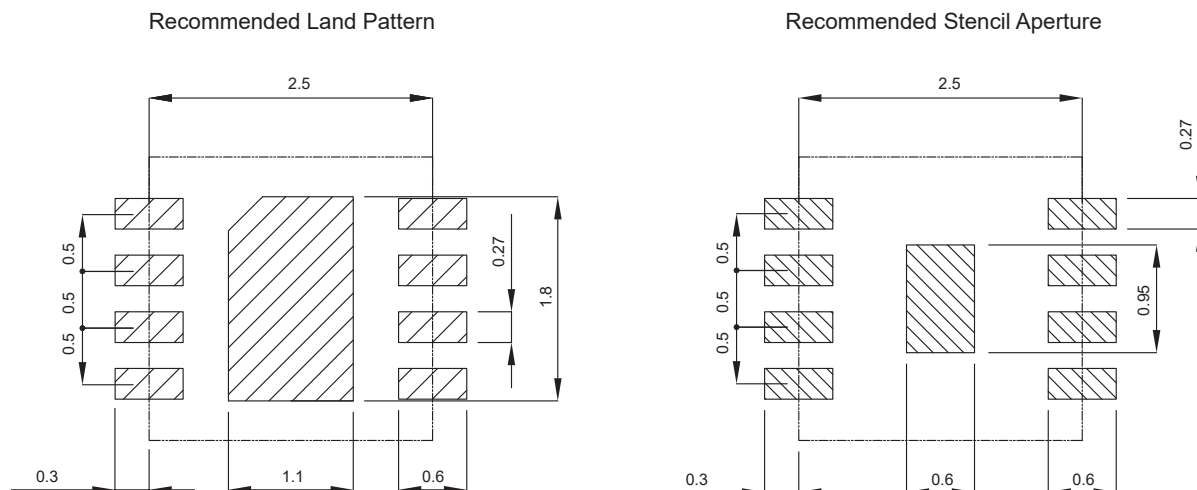


Figure 23: Recommended land pattern and stencil aperture

7 Quality

The TEE301 is qualified for automotive applications according to AEC-Q100 grade 1. In addition, the TEE301 is qualified for industrial and commercial operating environments according to JEDEC JESD47.

8 Additional Documentation

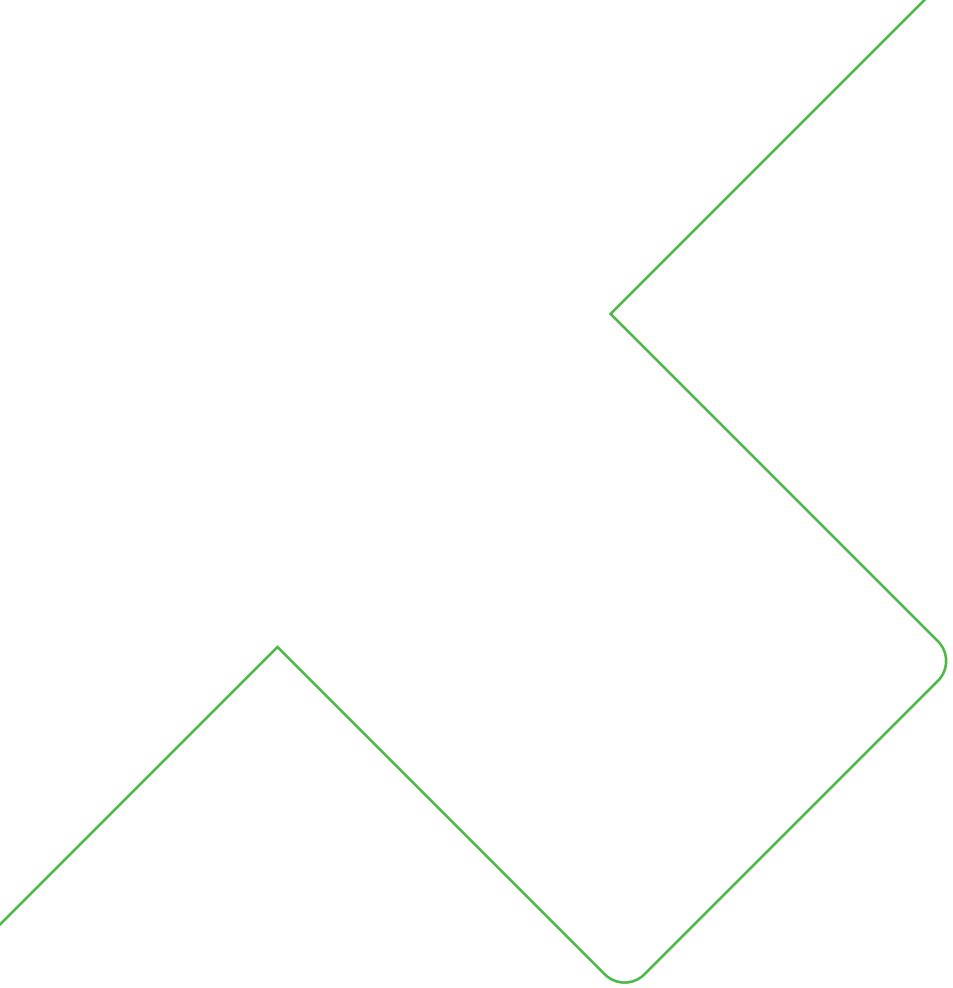
| Document | Description | Link |
|------------------------------|---|---|
| TEE301 Handling Instructions | TEE301 | www.epluse.com/tee301 |
| TEE301 CRC8 Code Example | Code samples for Arduino and Raspberry PI | https://github.com/Epluse |

Table 16: Applicable documentation

9 Revision History

| Date | Version | Page(s) | Changes |
|---------------|---------|---------|--|
| June 2022 | 1.0 | 1-23 | Initial release |
| December 2022 | 1.1 | 1-23 | Chapter 6.14 Ordering Information updated Fig. 21: ASIC orientation on tape corrected Link to NXP's UM10204 updated and hint added |
| June 2023 | 1.2 | 1-25 | Typical Applications: Automotive Industry added Chapter 7: Text on standards improved |
| July 2023 | 1.3 | 1-22 | New Layout Chapter 7: Text concerning AEC-Q100 adapted |

Table 17: Revision history



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