

**Dear Customer,**

With this INFINEON Technologies Information Note we would like to inform you about the following

**Data Sheet Update for TLE9250, TLE9250V, TLE9250X, TLE9251V**

## Data Sheet Update for TLE9250, TLE9250V, TLE9250X, TLE9251V

► **Products affected:**

Please refer to attached affected product list 1\_cip07518

► **Detailed Change Information:**

**Subject:** Data Sheet update with new rev. 1.1

**Reason:** Enhancement of Electrical Parameters, introduction of new Electrical Parameters, descriptive corrections and editorial changes

Description:	<u>Old</u>	<u>New</u>
<b>Data Sheet Rev</b>	<ul style="list-style-type: none"> <li>DS Rev 1.0</li> </ul>	<ul style="list-style-type: none"> <li>DS Rev 1.1</li> </ul>
<b>Update</b>	<ul style="list-style-type: none"> <li>Unspecified parameters <math>t_{d(L),T}</math>, <math>t_{d(L),R}</math>, <math>t_{d(H),T}</math>, <math>t_{d(H),R}</math> mentioned in "Timing diagrams for dynamic characteristics"</li> </ul>	<ul style="list-style-type: none"> <li>Unspecified parameters <math>t_{d(L),T}</math>, <math>t_{d(L),R}</math>, <math>t_{d(H),T}</math>, <math>t_{d(H),R}</math>, removed in Figure "Timing diagrams for dynamic characteristics" in version 1.1. <i>Applicable for all affected products</i></li> </ul>
<b>Update</b>	<ul style="list-style-type: none"> <li>P_9.1.2: <math>I_{CC\_D}</math> max. 60mA</li> </ul>	<ul style="list-style-type: none"> <li>P_9.1.2: <math>I_{CC\_D}</math> max. 48mA <i>Applicable for all affected products</i></li> </ul>
<b>Update</b>	<ul style="list-style-type: none"> <li>P_9.1.18 <math>t_{Delay(UV)}</math> max. 100µs for rising and falling edge</li> </ul>	<ul style="list-style-type: none"> <li>P_9.1.18 divided in <math>t_{Delay(UV), F}</math> max. 30µs for falling edge and <math>t_{Delay(UV), R}</math> max. 100µs for rising edge. Adapted Figure 9 "Undervoltage on the transmitter supply <math>V_{CC}</math>" accordingly. <i>Applicable for TLE9250VSJ, TLE9250VLE, TLE9250XSJ, TLE9250XLE, TLE9251VSJ, TLE9251VLE</i></li> </ul>
<b>Update</b>	<ul style="list-style-type: none"> <li>P_9.1.5 maximum temperature <math>T_J &lt; 125^\circ C</math></li> </ul>	<ul style="list-style-type: none"> <li>P_9.1.5 extended maximum temperature <math>T_J &lt; 150^\circ C</math>. <i>Applicable for TLE9251VSJ / TLE9251VLE</i></li> </ul>
<b>Update</b>	<ul style="list-style-type: none"> <li>Not specified</li> </ul>	<ul style="list-style-type: none"> <li>Introduced new Stand-by Mode current consumption for <math>V_{IO} t &lt; 85^\circ C</math>: max. 12µA (P_9.1.6) <i>Applicable for TLE9251VSJ / TLE9251VLE</i></li> </ul>
<b>Update</b>	<ul style="list-style-type: none"> <li>P_9.1.5 <math>I_{IO\_ (PSM)}</math> max. 15µA at maximum temperature of <math>T_J &lt; 125^\circ C</math>. Typical value <math>I_{IO\_ (PSM)}</math> 7µA</li> </ul>	<ul style="list-style-type: none"> <li>P_9.1.5 <math>I_{IO\_ (PSM)}</math> reduced to maximum 14µA at extended maximum temperature of <math>T_J &lt; 150^\circ C</math>. Typical value of <math>I_{IO\_ (PSM)}</math> reduced to 5µA <i>Applicable for TLE9250VSJ / TLE9250VLE</i></li> </ul>

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<b>Update</b>	<ul style="list-style-type: none"> <li>■ P_9.1.4 <math>I_{CC\_(\text{PSM})}</math> max. 20<math>\mu\text{A}</math> at maximum temperature of <math>T_J &lt; 125^\circ\text{C}</math>.</li> </ul>	<ul style="list-style-type: none"> <li>■ P_9.1.4 <math>I_{CC\_(\text{PSM})}</math> reduced to maximum 17<math>\mu\text{A}</math> at extended maximum temperature of <math>T_J &lt; 150^\circ\text{C}</math>. Introduced typical value of <math>I_{CC\_(\text{PSM})}</math>: 5<math>\mu\text{A}</math> <i>Applicable for TLE9250SJ / TLE9250LE</i></li> </ul>
<b>Update</b>	<ul style="list-style-type: none"> <li>■ Table 2 “Modes of Operation” NEN pin in Receive-only Mode “X” and NRM pin described as “on”</li> <li>■ Table 2 “Mode of Operation” NRM pin described as “on”</li> </ul>	<ul style="list-style-type: none"> <li>■ Corrected description in Table 2 “Modes of Operation” for NEN in Receive-only Mode “low” and changed description of NRM pin “low”</li> <li>■ Table 2 “Mode of Operation” for NRM pin described as “high” <i>Applicable for TLE9250SJ / TLE9250LE</i></li> </ul>
<b>Update</b>	<ul style="list-style-type: none"> <li>■ Table 2 “Modes of Operation” NEN pin in Forced-receive-only Mode: “X”</li> </ul>	<ul style="list-style-type: none"> <li>■ Corrected description in Table 2 “Modes of Operation” for NEN in Forced-receive-only Mode: “low” <i>Applicable for TLE9250VSJ / TLE9250VLE</i></li> </ul>
<b>Update</b>	<ul style="list-style-type: none"> <li>■ In Chapter 4 it is mentioned the device supports bus wake-up function.</li> </ul>	<ul style="list-style-type: none"> <li>■ Since the device does not support bus wake-up function this sentence has been removed in order to avoid confusion. <i>Applicable for TLE9250VSJ / TLE9250VLE / TLE9250SJ / TLE9250LE / TLE9250XSJ / TLE9250XLE</i></li> </ul>

- **Product Identification:** Independent of date code. No product change.
- **Impact of Change:** No change of chip design or any product property. Update and correction of description in DS.
- **Attachments:**  
1\_cip07518  
3\_cip07518 Data Sheet Rev 1.1
- **Intended start of delivery:** Not applicable; documentation update only.

If you have any questions, please do not hesitate to contact your local Sales office.

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Data Sheet Update for TLE9250, TLE9250V, TLE9250X, TLE9251V



<b>Sales Name</b>	<b>SP number</b>	<b>OPN</b>	<b>Package</b>
TLE9250LE	SP001631572	TLE9250LEXUMA1	PG-TSON-8
TLE9250SJ	SP001358154	TLE9250SJXUMA1	PG-DSO-8
TLE9250VLE	SP001631590	TLE9250VLEXUMA1	PG-TSON-8
TLE9250VSJ	SP001358156	TLE9250VSJXUMA1	PG-DSO-8
TLE9250XLE	SP001631594	TLE9250XLEXUMA1	PG-TSON-8
TLE9250XSJ	SP001358158	TLE9250XSJXUMA1	PG-DSO-8
TLE9251VLE	SP001631598	TLE9251VLEXUMA1	PG-TSON-8
TLE9251VSJ	SP001358162	TLE9251VSJXUMA1	PG-DSO-8