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| PCN Number: | | 20241114000.0 | PCN Date: | | November 18, 2024 |
| Title: | Datasheet for TUSB2E221, TLV320AIC3104-Q1, DP83TC812x-Q1, TPS389006/08-Q1, TPS389R0-Q1 | | | | |
| Customer Contact: | | Change Management team | Dept: | Quality Services | |
| Change Type: | | Electrical Specification | | | |
| PCN Details | | | | | |
| Description of Change: | | | | | |
| Texas Instruments Incorporated is announcing an information only notification. The product datasheet(s) is being updated as summarized below. The following change history provides further details. | | | | | |
|  | | TUSB2E221 SNLS757B – JUNE 2024 – REVISED NOVEMBER 2024 | | | |
| Changes from Revision A (October 2024) to Revision B (November 2024) | | | | | Page |
| • Added RAP address for writes..... | | | | | 31 |
|  | | TLV320AIC3104-Q1 SLAS715D – JUNE 2010 – REVISED OCTOBER 2024 | | | |
| Changes from Revision C (January 2023) to Revision D (October 2024) | | | | | Page |
| • Updated formatting throughout data sheet. | | | | | 1 |
| • Updated Junction Temperature Max Rating | | | | | 6 |
|  | | DP83TC812S-Q1, DP83TC812R-Q1 SNLS654C – APRIL 2021 – REVISED NOVEMBER 2024 | | | |
| Changes from Revision B (January 2023) to Revision C (November 2024) | | | | | Page |
| • Updated Pin 9 and Pin 21 pin descriptions and package label..... | | | | | 5 |
| • Table 5-1 Pin Functions: Updated MDIO pin description to include link to Compliance Test Modes section..... | | | | | 5 |
| • Table 6-1 Pin Functions: Updated description for RX_D3 for SGMII mode..... | | | | | 5 |
| • Table 6-1 Pin Functions: Updated Pin 15 description to include register writes for programming Pin 15 as RX_DV and CRS_DV..... | | | | | 5 |
| • Table 6-1 Pin Functions: Clarified that RX_D3 and RX_D2 are not used in RMII Slave mode..... | | | | | 5 |
| • Removed RGMII Timing Diagrams for Internal Delay Enabled and Internal Delay Disabled modes and created a new RGMII Transmit Timing Diagram for clarity..... | | | | | 27 |
| • Corrected description for register 0x310 Bit 6..... | | | | | 37 |
| • Corrected order of register writes for enabling data generator/checker..... | | | | | 40 |
| • Corrected RGMII Transmit Encoding table for Normal Data Transmission and Transmit Error Propagation .. | | | | | 54 |
| • Updated Serial Management Interface section with better wording and clarity..... | | | | | 56 |
| • Table 7-25. PHY Address Bootstraps: Corrected binary representations of PHY addresses 0xC and 0xD..... | | | | | 60 |
| • Register 0x18, Bit 15 has been removed..... | | | | | 65 |
| • Register 0x60B has been removed..... | | | | | 65 |
| • Register 0x609 has been removed..... | | | | | 65 |
| • Register 0x603 has been removed..... | | | | | 65 |
| • Register 0x456, clarified Bit Description..... | | | | | 65 |
| • Register 0x12, Bit 7 has been removed..... | | | | | 65 |
| • Register 0x1F, clarified Bit 15 and Bit 14 Description..... | | | | | 65 |
| • Added general typical application diagram..... | | | | | 173 |
| • Updated RGMII Typical Application diagram to include 25MHz input..... | | | | | 173 |
| • Simplified and updated the Detailed Design Procedure and added a link to the Schematic Checklist..... | | | | | 179 |

Changes from Revision C (October 2024) to Revision D (October 2024)
Page

- Updated part number to match GPN for product folder..... **1**

Changes from Revision B (May 2023) to Revision C (October 2024)
Page

- Updated pinout and ordering code nomenclature..... **4**
- Added pinout and pin description for TPS389008-Q1 and TPS389R0-Q1..... **6**
- Updated Abs max for ACT,SLEEP,SCL,SDA from VDD+0.3V to 6V and added NRST to Abs max and Recommended Operating Conditions..... **8**
- Updated abs max to 6V from VDD+0.3..... **8**
- Pin current max updated..... **8**
- Updated recommended operating max to 5.5V from VDD..... **8**
- Added electrical characteristics for NRST pin..... **9**
- Added electrical characteristic for NRST pin..... **9**
- Added timing characteristics for NRST pin..... **11**
- Removed max numbers for t_{HD-DAT} to confirm to I²C standard..... **11**
- NRST pin description added..... **24**
- Added Device Thresholds and Configuration table details for TPS389R0-Q1 and TPS389008-Q1..... **131**

The datasheet number will be changing.

| Device Family | Change From: | Change To: |
|-----------------------------|--------------|-----------------|
| TUSB2E221 | SNLS757A | SNLS757B |
| TLV320AIC3104-Q1 | SLAS715C | SLAS715D |
| DP83TC812x-Q1 | SNLS654B | SNLS654C |
| TPS389006/08-Q1,TPS389R0-Q1 | SNVSBM4B | SNVSBM4D |

These changes may be reviewed at the datasheet links provided.

<http://www.ti.com/product/TUSB2E221>
<http://www.ti.com/product/TLV320AIC3104-Q1>
<http://www.ti.com/product/DP83TC812x-Q1>
<http://www.ti.com/product/TPS389006>

Reason for Change:

To accurately reflect device characteristics.

Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):

No anticipated impact.

Changes to product identification resulting from this PCN:

None.

Product Affected:

| | | | |
|--------------------|--------------------|------------------|--------------------|
| TUSB2E2211001YCGR | 6PAIC3104IRHBRQ1 | 6PAIC3104TRHBRQ1 | DP83TC812RRHARQ1 |
| DP83TC812RRHATQ1 | DP83TC812SRHARQ1 | DP83TC812SRHATQ1 | TPS389006004RTERQ1 |
| TPS38900603NRTERQ1 | TPS389006ADJRTERQ1 | | |

For questions regarding this notice, e-mails can be sent to the Change Management team or your local Field Sales Representative.

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