

# IDT82P2284 Data Sheet Change Notice

# **Supplemental Information**

This notice describes the differences between the updated version (Version 6, dated Feb 25, 2008) and its previous version (Version 5, dated April 6, 2007) of the IDT82P2284 Data Sheet. It helps readers to identify the changes when the data sheet is upgraded.

## **Revision History**

Revision Date	PCN Number (if applicable)	Date Code	Changed Items
Feb 25, 2008	-	-	26
April 6, 2007	-	-	25 - 15
April 27, 2004	-	-	14
March 22, 2004	T-0403-06	Zyyww	13 - 4
March 22, 2004		Zbyyww	13 - 1

# **Changed Items**

#### Feb 25, 2008

Item 26: Updated Figure 21~24 and Figure 28~31 to clarify the F-bit in T1/J1 mode. (Page 74, 75, 76, 83, 84, 85)

### April 6, 2007

**Item 25**: Removed the functional descriptions of the SS7 protocol support. (Page 11, 59, 61, 62, 95, 201, 202, 205, 208, 209, 213, 303, 304, 307, 310, 311, 315)

- Item 24: Added section '3.2.1 Line Monitor'. (Page 24, 25, 26)
- Item 23: Changed the E1 mode 'CRCM, SIGEN, GENCRC' bite control table to text description. (Page 285)
- Item 22: Changed the figure 'Read Operation In SPI Mode' and figure 'Write Operation In SPI Mode'. (Page 117)
- Item 21: Added line driver setting to '3.27.2.6 Analog Loopback'. (Page 112)
- Item 20: Changed the paragragh about transmit clock slave mode and transmit clock master mode in '3.18.1 T1/J1 MODE'. (Page 80)
  - Item 19: Changed the paragraph about non-multiplexed mode in '3.17.2 E1 MODE' & '3.18.2 E1 MODE'. (Pages 77, 86)
  - Item 18: Changed the paragraph about receive clock slave mode and receive clock master mode in '3.17.1 T1/J1 MODE'. (Page 71)
  - Item 17: Re-wrote PMON counters description in '3.9.1 T1/J1 MODE' & '3.9.2 E1 MODE'. (Page 53, 56)
  - Item 16: Added bit 'REFH\_LOS' row to Table 5. (Page 27)
  - Item 15: Changed the pin description of REFA\_OUT and REFB\_OUT. (Page 17)

#### April 27, 2004

Item 14: The value of Tprop is changed. (Page 357)

#### March 22, 2004

- Item 13: The description of the DDSINV bit (b3, T1/J1-06FH,...) is changed. A transition from '0' to '1' on this bit will invert one 6-bit DDS pattern and this bit is cleared when the inversion is completed. (Page 70, 167)
- Item 12: The description of the CRCINV bit (b2, T1/J1-06FH,...) is changed. A transition from '0' to '1' on this bit will invert one 6-bit CRC pattern and this bit is cleared when the inversion is completed. (Page 70, 167)
- Item 11: The description of the FsINV bit (b1, T1/J1-06FH,...) is changed. A transition from '0' to '1' on this bit will invert one Fs bit in SF and T1 DM formats, invert one Frame Alignment bit in ESF format or invert one Synchronization Fs bit in SLC-96 format and this bit is cleared when the inversion is completed. (Page 167)
- Item 10: The description of the FtINV bit (b0, T1/J1-06FH,...) is changed. A transition from '0' to '1' on this bit will invert one Ft bit in SF, T1 DM and SLC-96 formats and this bit is cleared when the inversion is completed. (Page 167)
- Item 9: The description of the CRCINV bit (b5, E1-06FH,...) is changed. A transition from '0' to '1' on this bit will invert all 4 calculated CRC bits in one Sub-Multi-Frame and this bit is cleared when the inversion is completed. (Page 72, 292)
- **Item 8**: The description of the CRCPINV bit (b4, E1-06FH,...) is changed. A transition from '0' to '1' on this bit will invert one 6-bit CRC Multi-Frame alignment pattern and this bit is cleared when the inversion is completed. (Page 72, 292)
- Item 7: The description of the CASPINV bit (b3, E1-06FH,...) is changed. A transition from '0' to '1' on this bit will invert one 4-bit Signaling Multi-Frame alignment pattern and this bit is cleared when the inversion is completed. (Page 72, 292)
- **Item 6**: The description of the NFASINV bit (b2, E1-06FH,...) is changed. A transition from '0' to '1' on this bit will invert one NFAS bit and this bit is cleared when the inversion is completed. (Page 72, 292)
- Item 5: The description of the FASALLINV bit (b1, E1-06FH,...) is changed. A transition from '0' to '1' on this bit will invert one 7-bit FAS pattern and this bit is cleared when the inversion is completed. (Page 72, 292)
- **Item 4**: The description of the FAS1INV bit (b0, E1-06FH,...) is changed. A transition from '0' to '1' on this bit will invert one FAS bit and this bit is cleared when the inversion is completed. (Page 292)
- Item 3: The output of the REFA\_OUT pin and the REFB\_OUT pin is changed in case of LOS. The output will be MCLK or high level, as selected by the REFH\_LOS bit (b0, T1/J1-03EH,... / b0, E1-03EH,...). (Page 7)
- Item 2: Reference Clock Output Control register is added to address 03EH, 13EH, 23EH, 33EH for T1/J1 and E1 modes. (Page 101, 107, 140, 256)
- Item 1: The description of the RO1[1:0] bits (b1~0, T1/J1-007H / b1~0, E1-007H) and the RO2[1:0] bits (b4~3, T1/J1-007H / b4~3, E1-007H) is changed. (Page 117, 232)

#### **IMPORTANT NOTICE AND DISCLAIMER**

RENESAS ELECTRONICS CORPORATION AND ITS SUBSIDIARIES ("RENESAS") PROVIDES TECHNICAL SPECIFICATIONS AND RELIABILITY DATA (INCLUDING DATASHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT OF THIRD-PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for developers who are designing with Renesas products. You are solely responsible for (1) selecting the appropriate products for your application, (2) designing, validating, and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, or other requirements. These resources are subject to change without notice. Renesas grants you permission to use these resources only to develop an application that uses Renesas products. Other reproduction or use of these resources is strictly prohibited. No license is granted to any other Renesas intellectual property or to any third-party intellectual property. Renesas disclaims responsibility for, and you will fully indemnify Renesas and its representatives against, any claims, damages, costs, losses, or liabilities arising from your use of these resources. Renesas' products are provided only subject to Renesas' Terms and Conditions of Sale or other applicable terms agreed to in writing. No use of any Renesas resources expands or otherwise alters any applicable warranties or warranty disclaimers for these products.

(Disclaimer Rev.1.01 Jan 2024)

## **Corporate Headquarters**

TOYOSU FORESIA, 3-2-24 Toyosu, Koto-ku, Tokyo 135-0061, Japan www.renesas.com

#### **Trademarks**

Renesas and the Renesas logo are trademarks of Renesas Electronics Corporation. All trademarks and registered trademarks are the property of their respective owners.

#### **Contact Information**

For further information on a product, technology, the most up-to-date version of a document, or your nearest sales office, please visit <a href="https://www.renesas.com/contact-us/">www.renesas.com/contact-us/</a>.