

Freescale Semiconductor Addendum

Document Number: MSC8157RMAD Rev. 2.1, 04/2013

Errata to MSC8157 Reference Manual, Rev. 2

This errata describes corrections to the *MSC8157 Reference Manual*, Revision 2. For convenience, the section number and page number of the errata item in the reference manual are provided. Items in bold are new since the last revision of this document.

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| Section, Page No. | Changes |
|-------------------|--|
| 5.3.1, 5-16 | In Table 5-9, update RCWLR[29] description to "Reserved. Write to zero for future compatibility." |
| 5.3.1, 5-16 | In Table 5-11, remove Exception '2' from Modes 12, 14, 20, 29, 31, 35, 36, 37, 40, 46, 48, 61, 66, 69, 81, 83, and 102; add Exception '3' to Modes 35, 36, 40, 48, 83, and 84. |
| 15.10.52, 15-95 | Update SRDS Bank 1 Reset Control Register (SRDSB2RSTCTL) figure and table by changing bit 30 to RST_DONE and bit 29 to RST_ERR. Register figure and Table 15-60 appear as: |

| SRDB1RSTCTL SRDS Bank 1 Reset Control Register | | | | | | | | Offset 0000h | | | | | | | | |
|--|------------|--------------|-------------|----|----|----|----|--------------|----|----|----|----|----|----|----|----|
| Bit | 31 | 30 | 29 | 28 | 27 | 26 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 |
| | RST REQ | RST_ DONE | RST_ ERR | | | | | | | _ | | | | | | |
| Туре | | | | | | | | R | /W | | | | | | | |
| Reset | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bit | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
| | | | | | | | | - | _ | | | | | | | |
| Туре | | | | | | | | R | /W | | | | | | | |
| Reset | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Table 15-60. SI | RDSB1RSTCTL | Field Descriptions |
|-----------------|-------------|--------------------|
|-----------------|-------------|--------------------|

| Bits | Description | Settings | | | | |
|----------------|--|----------|---|--|--|--|
| RSTREQ | SerDes Reset Request | 0 | No reset requested. | | | |
| 31 | Resets the SerDes PLL1 lock detection and test circuitry and also resets all logic in all lanes associated with SerDes PLL1. To initiate a SerDes reset, software writes a 1. The reset state machine clears the bit before reset is completed. | 1 | SerDes reset requested. | | | |
| | Note: Software can only set this bit but not clear it. If the bit cleared before reset is complete, the reset state machine ignores the change. | | | | | |
| RST_DONE 30 | SerDes Reset Done from SerDes State Machine | 0 | In the middle of the reset sequence (also during software SerDes reset sequence). | | | |
| | | 1 | SerDes reset sequence done. | | | |
| RST_ERR | SerDes Reset Error | 0 | Normal function. | | | |
| 29 | No PLL lock before counter time_out | 1 | PLL lock did not happen in the expected time period. | | | |
| 28–0 | Reserved. Write to zero for future compatibility. | _ | | | | |

15.10.56, 15-98

Update Lane A–J General Control Register 0 (L[A–J]GCR0) figure and table by changing bit 22 to RRST and bit 21 to TRST. Register figure and Table 15-64 appear as:

| Ρ_ | | | | | | | | | | | | | | | | |
|---|---|----|------|------|-------|----|------|------|----|------|--|--|----|----|----|----|
| Sectior | Section, Page No. Changes | | | | | | | | | | | | | | | |
| LAGC LBGC LDGC LEGC LFGC LGGC LHGC LIGCF | LAGCR0Lane A General Control Register 0LBGCR0Lane B General Control Register 0LCGCR0Lane C General Control Register 0LDGCR0Lane D General Control Register 0LEGCR0Lane E General Control Register 0LFGCR0Lane F General Control Register 0LGGCR0Lane G General Control Register 0LGGCR0Lane G General Control Register 0LGGCR0Lane G General Control Register 0LGCR0Lane H General Control Register 0LIGCR0Lane I General Control Register 0LIGCR0Lane I General Control Register 0 | | | | | | | | | | Offset Offset Offset Offset Offset Offset Offset Offset | 0200h 0240h 0280h 02C0h 0300h 0340h 0380h 0380h 0380h 03C0h 0400h 0440h | | | | |
| | 31 | 30 | 29 | 28 | 27 | 26 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 |
| | | _ | RRAT | _SEL | - | _ | TRAT | _SEL | — | RRST | TRST | | | _ | | |
| Туре | F | 3 | R/ | W | R R/V | | | W | | R | | | R | | | |
| Reset | 0 | 0 | х | Х | 0 | 0 | Х | х | 0 | 1 | 0 | 0 | 1 | х | 1 | х |
| Bit | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
| Туре | | | | | | | | - | R | | | | | | | |
| Reset | 0 | 0 | х | х | х | х | х | х | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Table 15-64. | L[A–J]GCR0 F | ield Descriptions |
|--------------|--------------|-------------------|
|--------------|--------------|-------------------|

| Bits | Reset | Description | | Settings | | | | |
|----------|------------|---|--|------------------|--|--|--|--|
| | 0 | Reserved. Write to zero for future compatibi | erved. Write to zero for future compatibility. | | | | | |
| RRAT_ | Configured | Receiver Speed Selection | 00 | Full speed | | | | |
| SEL | by Reset | Selects the lane receiver speed | 01 | Half speed | | | | |
| 29–28 | | | 10 | Quarter speed | | | | |
| | | | 11 | reserved | | | | |
| | 0 | Reserved. Write to zero for future compatibi | lity. | | | | | |
| TRAT_ | Configured | Transmitter Speed Selection | 00 | Full speed | | | | |
| SEL | by Reset | Selects the lane transmitter speed | 01 | Half speed | | | | |
| 25–24 | | | 10 | Quarter speed | | | | |
| | | | 11 | reserved | | | | |
| 23 | 0 | Reserved. Write to zero for future compatibility. | | | | | | |
| RRST | Configured | Resets Receiver | 0 | Reset | | | | |
| 22 | by Reset | | 1 | Application mode | | | | |
| TRST | Configured | Resets Transmitter | 0 | Reset | | | | |
| 21 | by Reset | Coming out of POR, it is asserted (1'b0) and deasserts at PLL lock. | 1 | Application mode | | | | |
| 200 | 0 | Reserved. Write to zero for future compatibility. | | | | | | |
| 1(170.1) | (10 | | | | | | | |

16.1.7.2, 16-10 Throughout section, replace references to "LmGCR0BnGCRm0" with "L[A–J]GCR0."



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Changes

16.4.2.6, 16-253 In Table 16-124, change bitfield IB*m*T8C*n*DBPR[SIZE] setting 0000h definition to Reserved

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Document Number: MSC8157RMAD Rev. 2.1 04/2013

