ONFI Technical Errata

Errata ID	**004**
Affected Spec Ver.	**ONFI 1.0**
Corrected Spec Ver.	

Submission info

Name	Company	Date
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Description of the specification technical flaw (add space as needed)

This erratum addresses three issues in the specification.

The first issue is an inconsistency in the specification about how the CRC in the parameter page is calculated. The erratum modifies text to make it clear that the CRC is calculated byte by byte starting with byte 0 of the parameter page.

The second issue is typos specifying the least significant second column address for Figures 44, 45, and 46. The erratum fixes these typos.

The third issue is the definition of standby current and the WP# test condition. The erratum shows that WP# may be either 0 V or Vcc.

Description of the correction

Update section 5.4.1.36 as shown:

5.4.1.36 Byte 254-255: Integrity CRC

The Integrity CRC (Cyclic Redundancy Check) field is used to verify that the contents of the parameters page were transferred correctly to the host. The CRC of the parameter page is a word (16-bit) field. The CRC calculation covers all of data between byte 0 and byte 253 of the parameter page inclusive.

The CRC shall be calculated on ~~word (16-bit)~~ byte (8-bit) quantities starting with ~~bytes 1:0~~ byte 0 in the parameter page. The bits in the ~~16-bit~~ 8-bit quantity are processed from the most significant bit (bit ~~15~~ 7) to the least significant bit (bit 0). ~~Even bytes of the parameter page (i.e. 0, 2, 4, etc) shall be used in the lower byte of the CRC calculation (bits 7:0). Odd bytes of the parameter page (i.e. 1, 3, 5, etc) shall be used in the upper byte of the CRC calculation (bits 15:8).~~

The CRC shall be calculated using the following 16-bit generator polynomial:

G(X) = X16 + X15 + X2 + 1

This polynomial in hex may be represented as 8005h.

The CRC value shall be initialized with a value of 4F4Eh before the calculation begins. There is no XOR applied to the final CRC value after it is calculated. There is no reversal of the data bytes or the CRC calculated value.

Update the definition of $C1_B$-$C2_B$ below Figure 44 in section 6.3 as shown:

$C1_B$-$C2_B$ Column address for page B. ~~$C2_B$~~ $C1_B$ is the least significant byte.

Update the definition of $C1_B$-$C2_B$ below Figure 45 in section 6.4 as shown:

$C1_B$-$C2_B$ Column address for source page B. ~~$C2_B$~~ $C1_B$ is the least significant byte.

Update the definition of $C1_D$-$C2_D$ below Figure 46 in section 6.4 as shown:

$C1_D$-$C2_D$ Column address for destination page D. ~~$C2_D$~~ $C1_D$ is the least significant byte.

Update the definition of ISB1 and ISB2 in Table 6 as shown:

Standby current	ISB1	CE#=VIH, ~~WP#=0 V~~ WP#=0/Vcc	-	-	1	mA
Standby current	ISB2	CE#=Vcc-0.2, ~~WP#=0 V~~ WP#=0/Vcc	-	-	50	µA

Update the definition of ISB1 and ISB2 in Table 7 as shown:

Standby current	ISB1	CE#=VIH, ~~WP#=0 V~~ WP#=0/Vcc	-	-	1	mA
Standby current	ISB2	CE#=Vcc-0.2, ~~WP#=0 V~~ WP#=0/Vcc	-	-	50	µA

Disposition log

3/4/2007	Erratum captured.
4/21/07	Erratum ratified.

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