

## **Product Alert Notification (PAN)**

Subject: Product Alert – 64k Parallel EEPROM Memories

Publication Date: 5/13/2016 Effective Date: 5/13/2016

## **Revision Description:**

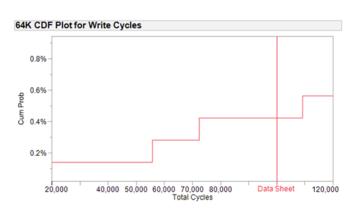
Initial Release

The endurance specification for the products listed in Addendum A of this notice is 100,000 write cycles. Recent qualification testing has revealed that approximately 0.4% of any of these devices will fail to meet this specification. The qualification testing was initiated because the 3<sup>rd</sup> party facility where these parts have historically been manufactured has discontinued production, requiring the transfer of the manufacturing process to a different facility. A description of the testing methodology and results is provided below.

## **Testing Results**

Product for testing was from two, independent qualification lots. 709 units were tested by continuously alternating the state of each memory cells (all 1's to all 0's to all 1's, etc.). Of these test units, 3 (0.42%) of them were unable to complete 100,000 cycles as specified in the datasheets.

Cycles Passed
Prior to Failure
10,000
55,750
72,400



As an additional note, by completely rewriting every cell on every cycle, the testing method is a worst-case scenario for the technology used in these devices. The Intersil "Direct Write" memory cell does not erase and reprogram the cell if the data bits are not changing. Thus, if the use of these products is with a typical data stream where, on average, only half of the data bits are changed with every write operation, the performance of the product would be expected to be roughly double the above results.

Intersil warrants that its products will meet the parameters in the electrical specifications tables set forth in the data sheet, but as stated above the subject products from our new manufacturing facility are unable to meet the cycle endurance parameter. Therefore, purchase of the products listed in the Addendum after receipt of this Product Alert acknowledges acceptance of this condition and waiver of the endurance cycle parameter. If



you have any concerns with this notice or require further assistance, please contact the nearest Intersil Sales Office. We regret any inconvenience this problem may cause you.

Sample availability: 5/13/2016

**Device material declaration:** Available upon request

Questions or requests pertaining to this change notice, including additional data or samples, must be sent to Intersil within 30 days of the publication date.

For additional information regarding this notice, please contact your regional change coordinator (below)					
Americas: PCN-US@INTERSIL.COM	Europe: PCN-EU@INTERSIL.COM	Japan: PCN-JP@INTERSIL.COM	Asia Pac: PCN-APAC@INTERSIL.COM		

## Appendix A - Affected Products List

X28HC64JIZ-12	X28HC64JIZ-90T1	X28HC64PIZ-12	X28HC64SIZ-12T1
X28HC64JIZ-12T1	X28HC64JZ-12	X28HC64PIZ-90	X28HC64SIZ-70
X28HC64JIZ-70	X28HC64JZ-12T1	X28HC64PZ-12	X28HC64SZ-12
X28HC64JIZ-70T1	X28HC64JZ-70	X28HC64PZ-90	X28HC64SZ-70
X28HC64JIZ-90	X28HC64JZ-70T1	X28HC64SIZ-12	X28HC64W