

1. Introduction

In order to guarantee the high standards of reliability and quality in ICs supplied by Winbond, we have established an on-going reliability and quality monitoring program. Monitor testing is performed across all product lines in a regular basis. Test results are subsequently made available in a quarterly report. This re-port details all the test results performed in the previous one quarter, outlining the reliability data associated with all process/package family types.

Since it was founded in September 1987, Winbond has stressed product research and development (R&D), investing an average of 10% of annual revenues in R&D. The R&D staff includes

individuals with expertise in the design of memory ICs, microcomputer and peripherals ICs, communications ICs, and many other product areas. This wide range of expertise enables Winbond's R&D team to develop more than twenty new products each year.

Winbond strives to continuously improve the quality and reliability of its products by conducting failure analysis on failed parts identified in reliability tests and by customers to discover failure modes and propose corrective action. To this end, a sophisticated failure analysis laboratory has been set up at Winbond headquarters. Detailed information on failure analysis procedures will be presented in this report.