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Utilizarea analizei defectărilor la construirea și evaluarea fiabilității componentelor și sistemelor electronice

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The Use of Failure Analysis in Building and Assessing the Reliablity of Electronic Components and Systems

ABSTRACT

Failure analysis (FA) is the process of determining the cause of failure, collecting and analysing data, and developing conclusions to eliminate the failure mechanism (FM) causing specific device or system failures. Why it is so important to use FA, i.e. to know the cause of product failure, this is what we intend to describe in this paper. Reliability analysis is not at all the only 'customer' of FA. Other fields, such as business management and military strategy are using this term. In order to offer to the reader a more complete picture, we identified the possible applications of FA in various fields (industry, research, etc.), which are detailed in the paper.

Keywords: *failure analysis, reliability, failure mechanisms, physics of failure.*