多準則決策分析於IC Design House委外測試廠商選擇之應用

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摘要

Taiwan is the leader in the global semiconductors and microelectronics industry, and is the most important place of IC manufacturers of the world as well. The geometric data stream of the IC design house are first carried out by the original equipment manufacturer (OEM), and then sent to the packaging and testing company, and then being presented to the market. In general, whoever brings its new product into the market first could have a better chance to share most of the market. Therefore, they need a good testing company who can offer a good quality of products and deliver the products on time to guarantee that their products will be able to get into the market before other competitors. In this paper, we applied multicriteria decision analysis to find out the most important criteria for the IC design house in outsourcing the testing vendor. It is found that among all those 5 constructs, 46 criteria, the top three criteria are: management has a "defect prevention" attitude to achieve continuous quality improvement; whether the manufacturing process, the process and reaction of dealing with defected products are adequately and effectively; the material specification information has been provided to sub-suppliers, and the calibration has been effectively corrected.

關鍵字:IC Design House、Multi-Criteria Decision、FAHP、FDM、Outsourcing Testing Vendor