

Multichip Packages for Consumer Applications

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Panellists: Herman Casier, Alcatel Mietec, Brussels, Belgium
Urs Fawer, Philips Semiconductors, Zurich, Switzerland
Wolfgang Radlik, Siemens Research, Munich, Germany
Claudio Truzzi, IMEC, Leuven, Belgium

Application of Multichip Packages is becoming more and more interesting for small-sized, light-weight, cost-sensitive portable consumer equipment. After hearing our panellists on marketing, design, testing, substrates, packages, ppm budgets and KGD issues related to MCPs for consumer applications, we like you to join us in a discussion on the pros and cons of this technology.

Since the dark ages of mainframe computers, Multichip Modules have been used for achieving performance targets which couldn't be met with existing Printed Circuit Board technologies. The high costs for design, manufacturing and test of these Multichip Modules were acceptable for professional applications.

Our bright current age, full of portable multimedia consumer applications, also cries out for Multichip Modules, but now the driving forces are small-sizes, light-weight, low power, combination of technologies, time-to-market and low costs.

Our panelists will introduce you to the issues involved with design, technology, manufacturing and test of Multichip Packages for consumer applications.

Wolfgang Radlik will give an overview of the current status of substrates and packages for MCPs, with a focus on consumer applications.

Urs Fawer will present MCM-specific design issues concentrating around availability and infrastructure, its impact on the early stages of design and what strategies are being applied in the US and in Europe to address these issues.

Math Moors will summarize test strategies for obtaining KGDs and MCPs based on underlying requirements for quality and reliability, geared towards cost sensitive consumer products.

Herman Casier will concentrate on design experiences (constraints from sub-contractor/customer, lead time, "design-flow"), examples and ad-hoc solutions.

Claudio Truzzi will take the position that MCPs will only provide a temporary solution, because high volume demands will always lead to a dedicated IC technology, resulting in a single die solution.

Following these introductions, the audience is invited to discuss with the panel the pros and cons of this MCP technology.