時代の流れと OSAT(Outsource Assembly and Test)の注力事業 Focused technologies in near future from OSAT view point

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Abstract

This paper explains indispensable "Key Words" to talk about future and J-DEVICES' approach.

(Keywords: High speed communication and Distributed processing for big data of IoT and Energy conversion efficiency)

Introduction

From relative stock valuation view point of 15 years cycle of electrical industry, 2017 is turning point to create the next application which will be formed in next 15 years. High speed communication, Distributed processing for big data and Energy conversion efficiency will be new key words to talk about next applications.

High speed communication like 5G and WiGig will move in millimeter wave domain. To decrease "Insertion loss" of wiring of semiconductor package at high frequency will be new challenge.

The distributed processing of "Smart Edge Devices", "Smartphone" & "Cloud Computer" will become mainstream. "Smart Edge Devices" will be big biz opportunity and down sizing of module will be continuous challenge.

Energy conversion efficiency consists of to reduce Conduction Loss and Switching Loss. Reduce Resistance and Inductance of semiconductor packaging will realize better Energy conversion efficiency of power devices.

Some OSATs and PCB companies are focusing on Embedded die in substrate technology. This paper explains the purpose of developing Embedded die in substrate technology and necessity of this technology for next application which will be formed in next 15 years.

Conclusion

The demand of Embedded Die in substrate technology like J-DEVICES' PLP will increase to satisfy the requirements from High speed communication, Distributed processing and Energy conversion efficiency.

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