

1. Record Nr.	UNINA9910139110203321
Titolo	2010 IEEE 14th Workshop on Signal Propagation on Interconnects
Pubbl/distr/stampa	[Place of publication not identified], : I E E E, 2010
ISBN	9781424476107 1424476100
Descrizione fisica	1 online resource
Disciplina	621.382
Soggetti	Signal theory (Telecommunication)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Sommario/riassunto	<p>The paper deals with the problem of the efficient extraction of the impedance matrix for a complex full-package structure. This result applies to ranges from DC to frequencies for which the skin effect is pronounced but the radiation and other full-wave effects are still negligible. The model identifies the impedance matrix by enforcing a physically consistent behavior to the resistance and reactance of the package in the low and high frequency limits. The identification is made by using only 5 frequency samples of the impedance matrix, which could be either given by measurements or numerical simulations. In this paper we have used a commercial 3D electromagnetic code (FastHenry) to provide the 5 starting points and the reference values to validate the procedure. Benchmark tests and case-studies are carried out, confirming the accuracy of the model.</p>