
IEEE Technical Presentation hosted jointly by the EMC and CPMT Chapters

An Evening with Power Integrity Experts

Speaker 1: Hisham Abed, P.Eng., Ericsson
Topic : Power Integrity - Best design practices

Speaker 2: Dr. Ihsan Erdin, Celestica
Topic : Power Integrity Optimization amidst MLCC shortage

Date : Wednesday July 17, 2019
Time : 5:00 PM to 7:30 PM
Location : FIDUS SYSTEMS Inc., 375 Terry Fox Dr. Ottawa, ON, K2K 0J8
Parking : Free
Registration: Free, and is on a first to reply basis.
Preference given to IEEE EMC and CPMT society members.
Seating is limited. E-mail Reservation is required.
Pizza and soft drinks will be served.

Organizer: Dr. Syed Bokhari, Chairman, IEEE Ottawa EMC chapter
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Directions: www.fidus.com



Hisham Abed is currently a Signal Integrity Specialist with Ericsson. Hisham received his BSEE degree in Telecommunication from University of Aleppo in Syria. He obtained the Ontario Professional Engineer (P.Eng.) license in 2007. He has held senior engineering positions at Nortel and Ericsson for the last 20 years. His areas of interest include hardware design with focus on high-speed serial links and timing design with high-density synchronous interfaces. He has expertise in the use and automation of Ansys HFSS and SIWave.

Abstract: The presentation will cover basics of PDN design and the three most common problems. Root cause analysis of problems and solutions to mitigate them will be presented. A demonstration using Ansys SI wave will be included if time permits.



Ihsan Erdin received the M. Sc. degree from Middle East Tech. U, Ankara, Turkey in 1993 and the Ph.D. degree from Carleton University in 2001, both in electrical engineering. From 1995 to 1996, he was a research fellow at DRDC Ottawa. From 2000 to 2007, he worked as an SI/PI engineer at Nortel in the Passport Project. Since 2007, he has been working in the same job function at Celestica Engineering Design Services in Ottawa. He is an adjunct faculty member with the Electronics Department of Carleton University since 2007. Dr. Erdin is a member of the Professional Engineers Ontario and a senior member of IEEE. He also serves as a member of Signal and Power Integrity Technical Committee (TC-10) of EMC Society. His research interests are analytical methods in electromagnetics as applied to printed and integrated circuit structures.

Abstract: How does one determine the minimum number of decoupling capacitors required? First, we are facing a shortage of MLCCs today. Secondly there is a widespread deployment of handheld devices. Saving a few components can address both challenges. A new optimization process will be presented to address this problem.