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Employment

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1 Mar 2014 → present

Research output

Performance evaluation of the FastIC readout ASIC with emphasis on Cherenkov emission in TOF-PET

Piller, M., Castilla, A. M., Terragni, G., Alozy, J., Auffray, E., Ballabriga, R., Campbell, M., Deutschmann, B., Gascon, D., Gola, A., Merzi, S., Michalowska-Forsyth, A., Penna, M., Gómez, S. & Kratochwil, N., 7 Jun 2024, In: *Physics in Medicine and Biology*. 69, 11, 115014.

A modular and scalable system for electromagnetic compatibility testing of integrated circuits

Kircher, D., Profanter, S. & Deutschmann, B., Mar 2024, In: *Elektrotechnik und Informationstechnik*. 141, 1, p. 47-55 9 p.

Bias dependence in statistical random telegraph noise analysis based on nanoscale CMOS ring oscillators

Ramazanoglu, S., Michalowska-Forsyth, A. & Deutschmann, B., Mar 2024, In: *Elektrotechnik und Informationstechnik*. 141, 1, p. 37-46 10 p.

Electromagnetic emission of integrated circuits induced by ionizing radiation and its measurement uncertainties

Czepl, N., Juch, N. & Deutschmann, B., Mar 2024, In: *Elektrotechnik und Informationstechnik*. 141, 1, p. 56-65 10 p.

Influence of the IC power supply and decoupling capacitor arrangement on the electromagnetic emission

Deutschmann, B. & Juch, N., Mar 2024, In: *Elektrotechnik und Informationstechnik*. 141, 1, p. 66-75 10 p.

Fast28 a low-power fast readout design for SiPMs in 28nm CMOS

Piller, M., Ballabriga, R., Bandi, F. N., Campbell, M., Deutschmann, B., Fernández-Tenllado, J. M., Gascon, D., Gomez, S., Michalowska-Forsyth, A. M. & Mauricio, J., Nov 2023, *Proceedings of 2023 IEEE Nuclear Science Symposium, Medical Imaging Conference and International Symposium on Room-Temperature Semiconductor Detectors (NSS MIC RTSD)*. IEEE Xplore

ICEM-CE Modeling at SPICE-Level

Odreitz, K., Minichmair, F., Maier, C., Juch, N. & Deutschmann, B., 27 Sept 2023.

A Modular Approach of an Electromagnetic Compatibility Test System for Integrated Circuits

Kircher, D., Deutschmann, B. & Profanter, S., 21 Sept 2023, *2023 Austrochip Workshop on Microelectronics, Austrochip 2023 - Proceedings*. ACM/IEEE, p. 19-22 4 p. 10285156

Evaluation of Using Kelvin Contacts for Integrated Circuit Decoupling Capacitors

Juch, N. & Deutschmann, B., Sept 2023.

Importance of Power Supply Pinning for Electromagnetic Emission Reduction in Modern IC Packaging
Deutschmann, B. & Juch, N., Sept 2023.

Framework to Simulate and Analyse the Electromagnetic Emission of Integrated Circuits under Electromagnetic Interference

Zupan, D., Kircher, D., Czepl, N. & Deutschmann, B., 5 Jul 2023, *2023 19th International Conference on Synthesis, Modeling, Analysis and Simulation Methods and Applications to Circuit Design (SMACD)*. ACM/IEEE, 4 p. 10192236

A Sub-100 mV AC/DC Converter with Impedance Matching for Magnetic Field Energy Harvesting

Dillersberger, H., Tham, D. & Deutschmann, B., 18 Jun 2023, *PRIME 2023 - 18th International Conference on Ph.D Research in Microelectronics and Electronics, Proceedings*. Institute of Electrical and Electronics Engineers, p. 357-360 4 p.

Procedure for the Selection of Decoupling Capacitors

Deutschmann, B., Juch, N. & Winkler, G., 25 May 2023, *2023 Joint Asia-Pacific International Symposium on Electromagnetic Compatibility and International Conference on ElectroMagnetic Interference and Compatibility, APEMC/INCEMIC 2023*. ACM/IEEE, 4 p. 10217536. (2023 Joint Asia-Pacific International Symposium on Electromagnetic Compatibility and International Conference on ElectroMagnetic Interference and Compatibility, APEMC/INCEMIC 2023).

Effiziente Modellierung der Elektromagnetischen Interferenz einer Gallium-Nitrid-Halbbrücke

Hansen, J. & Deutschmann, B., Feb 2023, In: *Elektrotechnik und Informationstechnik*. 140, 1, p. 95-102 8 p.

A Method to Measure the Electromagnetic Emission Induced by Electromagnetic Interference of Integrated Circuits

Kircher, D., Czepl, N., Zupan, D. & Deutschmann, B., 2023, (E-pub ahead of print) *2023 Joint Asia-Pacific International Symposium on Electromagnetic Compatibility and International Conference on ElectroMagnetic Interference and Compatibility, APEMC/INCEMIC 2023*. Institute of Electrical and Electronics Engineers, 4 p.

Characterizing the Electromagnetic Immunity of Operational Amplifiers based on EMIRR and DPI

Deutschmann, B. & Winkler, G., 2023, *2023 International Symposium on Electromagnetic Compatibility - EMC Europe, EMC Europe 2023*. Institute of Electrical and Electronics Engineers, 4 p.

Impact of Dual-Tone Interference on an Automotive Smart Power High-Side Switch using Direct Power Injection

Kircher, D., Rosenmayr, F. & Deutschmann, B., 2023, (E-pub ahead of print) *2023 International Symposium on Electromagnetic Compatibility - EMC Europe, EMC Europe 2023*. Institute of Electrical and Electronics Engineers, 5 p.

Impact of Power Supply Arrangement on Electromagnetic Emission from ICs

Deutschmann, B. & Juch, N., 2023, *2023 Austrochip Workshop on Microelectronics, Austrochip 2023 - Proceedings*. p. 31-34

Impact of Supply Voltage and Operating Point in IC PDN Modeling

Odreitz, K., Maier, C., Minichmair, F. & Deutschmann, B., 2023, *2023 International Symposium on Electromagnetic Compatibility - EMC Europe, EMC Europe 2023*. Institute of Electrical and Electronics Engineers, (IEEE International Symposium on Electromagnetic Compatibility; vol. 2023-September).

Interference-induced Electromagnetic Emission in Functioning Operating States of Integrated Circuits

Czepl, N., Kircher, D. & Deutschmann, B., 2023, (E-pub ahead of print) *2023 International Symposium on Electromagnetic Compatibility - EMC Europe, EMC Europe 2023*. Institute of Electrical and Electronics Engineers, 4 p.

Investigating the Use of Frequency-Modulated Disturbance Injection in Electromagnetic Immunity Testing of Integrated Circuits

Kircher, D., Rosenmayr, F. & Deutschmann, B., 2023, (E-pub ahead of print) *2023 Joint Asia-Pacific International Symposium on Electromagnetic Compatibility and International Conference on ElectroMagnetic Interference and Compatibility, APEMC/INCEMIC 2023*. Institute of Electrical and Electronics Engineers, 4 p.

Nanoscale CMOS Ring Oscillators for Statistical Characterization of Random Telegraph Noise

Ramazanoglu, S., Michalowska-Forsyth, A. & Deutschmann, B., 2023, *2023 Austrochip Workshop on Microelectronics, Austrochip 2023 - Proceedings*. Institute of Electrical and Electronics Engineers, p. 27-30 4 p.

Electromagnetic Emission of ICs Measured with a TEM Cell

Deutschmann, B. & Juch, N., 21 Sept 2022, p. 7-7.

Investigation of the Connection of Decoupling Capacitors with Regard to Electromagnetic Emission

Deutschmann, B. & Juch, N., 21 Sept 2022, p. 6-6.

Reduction of conducted emission through optimum placement and selection of decoupling capacitors

Deutschmann, B., Juch, N. & Winkler, G., 21 Sept 2022, *19. EMV-Fachtagung 2022*. Winkler, G. (ed.). OVE, p. 53-62 (OVE Schriftenreihe ; vol. 107).

SSCS Austria Chapter Welcomes Distinguished Lecturer Prof. Bernhard Wicht

Hueber, G. & Deutschmann, B., 10 Jul 2022, *IEEE Solid-State Circuits Magazine*, 14, 2, p. 86.

Der Fachkräftemangel in der Electronics Based Systems-Industrie: Gastkommentar

Deutschmann, B., May 2022, *Elektrotechnik und Informationstechnik*, 139, 3, p. 11-11.

A Fault Tree Approach Focusing on Electromagnetic Interference

Hörmaier, K., Zangl, H., Kircher, D. & Deutschmann, B., 11 Mar 2022, *2021 13th International Workshop on the Electromagnetic Compatibility of Integrated Circuits, EMC Compo 2021*. Institute of Electrical and Electronics Engineers, p. 133-138 6 p.

Influence of Layout Parasitics on EMI Improved Folded Cascode Amplifier Input Stages Using Compensation Methods

Zupan, D., Czepl, N. & Deutschmann, B., 9 Mar 2022, *2021 13th International Workshop on the Electromagnetic Compatibility of Integrated Circuits (EMC Compo)*. Institute of Electrical and Electronics Engineers, p. 9-12 4 p.

Reduction of Electromagnetic Emission from ICs Using Soft Flexible Ferrite Sheets

Deutschmann, B., Khan, J. S., Winkler, G. & Victoria, J., 9 Mar 2022.

Functional Safety Risks of Smart Power Devices due to EMI

Deutschmann, B. & Kircher, D., 2022, *Proceedings EMV Kongress 2022*. Aachen: Apprimus Verlag, p. 201-207 7 p.

Generic Analog 8 Bit DAC IP Block in 28nm CMOS for the High Energy Physics Community

Piller, M., Ballabriga, R., Bandi, F. N., Borghello, G., Ceresa, D., Pejasinovic, R., Sriskaran, V., Michalowska-Forsyth, A. & Deutschmann, B., 2022, *Austrochip 2022 - 30th Austrochip Workshop on Microelectronics*. Institute of Electrical and Electronics Engineers, p. 5-8 4 p.

Influence of Radio Frequency Interference on the Electromagnetic Emission of Integrated Circuits

Kircher, D., Deutschmann, B. & Czepl, N., 2022, *2022 International Symposium on Electromagnetic Compatibility - EMC Europe, EMC Europe 2022*. Institute of Electrical and Electronics Engineers, p. 257-261 5 p.

Hot electron effects in AlGaN/GaN HEMTs during hard-switching events

Minetto, A., Modolo, N., Meneghini, M., Zanoni, E., Sayadi, L., Sicre, S., Deutschmann, B. & Häberlen, O., Nov 2021, In: *Microelectronics Reliability*. 126, 114208.

Impact of place and route strategy on FPGA electromagnetic emission

Lara, E. L., Constante, A. A., Benfica, J., Vargas, F., Boyer, A., Dhia, S. B., Gleinser, A., Winkler, G. & Deutschmann, B., Nov 2021, In: *Microelectronics Reliability*. 126, 114333.

Influence of ionizing radiation on the conducted electromagnetic emission of integrated circuits

Czepl, N., Deutschmann, B. & Michalowska-Forsyth, A., Nov 2021, In: *Microelectronics Reliability*. 126, 114335.

Drain Field Plate Impact on the Hard-Switching Performance of AlGaIn/GaN HEMTs

Minetto, A., Modolo, N., Sayadi, L., Koller, C., Ostermaier, C., Meneghini, M., Zanoni, E., Prechtl, G., Sicre, S., Deutschmann, B. & Haberlen, O., Oct 2021, In: IEEE Transactions on Electron Devices. 68, 10, p. 5003 - 5008 6 p.

Square Wave Shaper with Filter Characteristics to Reduce EMI and Passive Component Count

Nadgouda, R., Hackl, H. & Deutschmann, B., 26 Jul 2021, *2021 Joint IEEE International Symposium on Electromagnetic Compatibility Signal and Power Integrity, and EMC Europe, EMC/SI/PI/EMC Europe 2021*. Institute of Electrical and Electronics Engineers, p. 783-786 4 p.

Preliminary Study on the Impact of Place and Route Strategy on FPGA Electromagnetic Emission

Lara, E. L., Constante, A. A., Benfica, J., Vargas, F., Boyer, A., Dhia, S. B., Gleinser, A., Winkler, G. & Deutschmann, B., 11 Mar 2021, *2021 Argentine Conference on Electronics - Congreso Argentino de Electronica 2021, CAE 2021*. Institute of Electrical and Electronics Engineers, p. 88-92 5 p. 9397567

Fast and simple model generation for superjunction power MOSFETs: An easy way to get accurate SPICE models even without exact information from the datasheet

Fuchs, M., Spielberger, L., Odreitz, K. & Deutschmann, B., Feb 2021, In: *Elektrotechnik und Informationstechnik*. 138, 1, p. 48-52 5 p.

Leistungselektronik/Leistungshalbleiter – Anwendungen von Milliwatt bis Megawatt, vom Mikrochip bis zum System

Deutschmann, B., Feb 2021, In: *Elektrotechnik und Informationstechnik*. 138, 1

Influence of Layout Parasitics on EMI Improved Folded Cascode Amplifier Input Stages Using Filtering and Linearisation Methods

Zupan, D., Czepl, N. & Deutschmann, B., 2021, *Proceedings of the 2021 Asia-Pacific International Symposium on Electromagnetic Compatibility, APEMC 2021*. Institute of Electrical and Electronics Engineers, p. 1-4

Reduction of Electromagnetic Emission from ICs Using Soft Flexible Ferrite Sheets

Deutschmann, B., Khan, J. S., Winkler, G. & Victoria, J., 2021, *2021 13th International Workshop on the Electromagnetic Compatibility of Integrated Circuits, EMC Compo 2021*. Institute of Electrical and Electronics Engineers, p. 19-24 6 p.

Hot-Electron Effects in AlGaIn/GaN HEMTs under Semi-ON DC Stress

Minetto, A., Deutschmann, B., Modolo, N., Nardo, A., Meneghini, M., Zanoni, E., Sayadi, L., Prechtl, G., Sicre, S. & Haberlen, O., Nov 2020, In: IEEE Transactions on Electron Devices. 67, 11, p. 4602-4605 4 p., 9214895.

Monitoring of parameter stability of SiC MOSFETs in real application tests

Sievers, M., Findenig, B., Glavanovics, M., Aichinger, T. & Deutschmann, B., Nov 2020, In: *Microelectronics Reliability*. 114, 6 p., 113731.

System-level evaluation of dynamic effects in a GaN-based class-E power amplifier

Minetto, A., Deutschmann, B., Häberlen, O. & Curatola, G., Nov 2020, In: *Integration: the VLSI Journal*. 75, p. 11-18 8 p.

A bipolar ± 13 mV self-starting and 85% peak efficiency DC/DC converter for thermoelectric energy harvesting

Dillersberger, H., Deutschmann, B. & Tham, D., 20 Oct 2020, In: *Energies*. 13, 20, 11 p., 5501.

Comparison of EMI Improved Differential Input Pair Structures within an Integrated Folded Cascode Operational Transconductance Amplifier

Zupan, D. & Deutschmann, B., 7 Oct 2020, *Proceedings - 2020 Austrochip Workshop on Microelectronics, Austrochip 2020*. Institute of Electrical and Electronics Engineers, p. 47-52 6 p. 9232994

Investigation of High Frequency EMI Propagation in Current Mirror Structures using a Post-Processing Framework

Zupan, D. & Deutschmann, B., 1 Oct 2020.

EMI-optimized driver for high-frequency boost converter

Subotskaya, V., Bodano, E. & Deutschmann, B., 1 Apr 2020, In: *Elektrotechnik und Informationstechnik*. 137, 2, p. 100-106 7 p.

Herausforderungen bei der Durchführung von reproduzierbaren BCI-Messungen

Deutschmann, B. & Winkler, G., 17 Mar 2020, *EMV 2020 - Internationale Fachmesse und Kongress für Elektromagnetische Verträglichkeit*. Garbe, H. (ed.). Mesago Messe Frankfurt GmbH, p. 213-220 8 p.

Comparison of EMI effects on different current mirror structures using a post-processing framework

Zupan, D. & Deutschmann, B., 10 Mar 2020, In: *Elektrotechnik und Informationstechnik*. 137, 2, p. 93–99 7 p.

Voltage Dependence and Characterization of Ceramic Capacitors Under Electrical Stress

Fuchs, M., Sievers, M. & Deutschmann, B., Mar 2020, *APEC 2020 - 35th Annual IEEE Applied Power Electronics Conference and Exposition*. Institute of Electrical and Electronics Engineers, p. 2815-2821 7 p. 9124365

Electromagnetic Compatibility of Electronics Based Systems Affects Us All

Deutschmann, B., Jan 2020, In: *TU Graz Research*. 2020, 23, p. 24-26

Comparison of Harmonic Suppression Techniques

Nadgouda, R. & Deutschmann, B., 1 Oct 2019, *EMC COMPO 2019 - 2019 12th International Workshop on the Electromagnetic Compatibility of Integrated Circuits*. Institute of Electrical and Electronics Engineers, p. 272-274 3 p. 8919834

Comparison of BBSPICE to PEEC Equivalent Circuit Models for Simulation of Floating PCB above Ground Plane

Hackl, H., Ibel, M., Auinger, B., Stockreiter, C. & Deutschmann, B., 1 Sept 2019, *2019 International Symposium on Electromagnetic Compatibility - EMC EUROPE*. Institute of Electrical and Electronics Engineers, p. 19-24 6 p. 8872031. (EMC Europe 2019 - 2019 International Symposium on Electromagnetic Compatibility).

Optimal current slew rate control for a three-phase MOSFET inverter driving a PMSM

Büchl, D., Kemmetmüller, W., Glück, T., Deutschmann, B. & Kugi, A., 1 Sept 2019, In: *IFAC-PapersOnLine*. 52, 15, p. 85-90 6 p.

A new method for measuring parasitics of super junction power MOSFETs

Fuchs, M., Spielberger, L., Sygulla, C. & Deutschmann, B., Sept 2019, *2019 21st European Conference on Power Electronics and Applications, EPE 2019 ECCE Europe*. Institute of Electrical and Electronics Engineers, 8915539

Advanced Scopes And Probes Help Optimize SMPS Gate Drives For EMC

Fuchs, M., Auinger, B., Pichler, L., Herdin, M. & Deutschmann, B., 1 Aug 2019, *How2Power: Answering Questions About Power Design*. 8 p.

Band Specific Suppression of Harmonics and its Effects on Power Efficiency

Nadgouda, R. & Deutschmann, B., 1 Jul 2019, *PRIME 2019 - 15th Conference on Ph.D. Research in Microelectronics and Electronics, Proceedings*. Institute of Electrical and Electronics Engineers, p. 169-172 4 p. 8787844

Identification of EMI Induced Changes during the Design of ICs using a Post-Processing Framework

Zupan, D. & Deutschmann, B., 1 Jul 2019, *SMACD 2019 - 16th International Conference on Synthesis, Modeling, Analysis and Simulation Methods and Applications to Circuit Design, Proceedings*. Institute of Electrical and Electronics Engineers, p. 201-204 4 p. 8795218

A dynamic model of power metal-oxide-semiconductor field-effect transistor half-bridges for the fast simulation of switching induced electromagnetic emissions

Büchl, D., Kemmetmüller, W., Glück, T., Deutschmann, B. & Kugi, A., 4 May 2019, In: *Mathematical and Computer Modelling of Dynamical Systems*. 25, 3, p. 242-260 19 p.

Survey on the generation of equivalent circuit cable models for transient simulation

Ibel, M., Hackl, H., Auinger, B., Stockreiter, C. & Deutschmann, B., 1 May 2019, *2019 42nd International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2019 - Proceedings*. Skala, K., Car, Z., Pale, P., Huljenic, D., Janjic, M., Koracic, M., Sruk, V., Ribaric, S., Grbac, T. G., Butkovic, Z., Cicin-Sain, M., Skvorc, D., Mauher, M., Babic, S., Gros, S., Vrdoljak, B. & Tijan, E. (eds.). Institute of Electrical and Electronics Engineers, p. 102-107 6 p. 8757048. (2019 42nd International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2019 - Proceedings).

Investigation of SPICE Models for Overvoltage Protection Devices With Respect to Fast Transients

Bauer, S. M., Renhart, W., Biro, O., Tuerk, C., Maier, C., Winkler, G. & Deutschmann, B., 22 Apr 2019, In: *IEEE Letters on Electromagnetic Compatibility Practice and Applications*. 1, 1, p. 20-25

Gate Driver Optimization to Reduce Conducted Emissions

Dobersberger, S., Sekerija, Z., Büchl, D., Winkler, G. & Deutschmann, B., 27 Feb 2019. 1 p.

Optimizing Filter Circuits for DC/DC Converters to Reduce Conducted Emissions

Sekerija, Z., Dobersberger, S., Winkler, G. & Deutschmann, B., 27 Feb 2019. 1 p.

Post-Processing Framework for Identification of EMI Induced Changes

Zupan, D. & Deutschmann, B., 27 Feb 2019.

Semi-Automatic Generation of Lumped Element Transmission Line Circuits from 2D Cross Section

Ibel, M. G., Hackl, H., Auinger, B., Stockreiter, C. & Deutschmann, B., 27 Feb 2019. 1 p.

A temperature analysis for NFC-powered smart lab-on-chip devices

Kollegger, C., Steffan, C., Greiner, P., Rabl, C., Lugitsch, D., Holweg, G. & Deutschmann, B., 22 Jan 2019, *2018 IEEE 61st International Midwest Symposium on Circuits and Systems, MWSCAS 2018*. Institute of Electrical and Electronics Engineers, Vol. 2018-August. p. 1058-1061 4 p. 8623976

BCI-Tests - Durchführung und Herausforderung

Winkler, G. & Deutschmann, B., 2019, *17. EMV-Fachtagung*. Winkler, G. (ed.). Wien: Österreichischer Verband für Elektrotechnik, p. 127 - 139 (OVE-Schriftenreihe; vol. 98).

Erratum to: Design and theoretical comparison of input ESD devices in 180 nm CMOS with focus on low capacitance (e & i Elektrotechnik und Informationstechnik, (2018), 135, 1, (69-75), 10.1007/s00502-017-0569-0)

Michalowska-Forsyth, A., Schrey, P. & Deutschmann, B., 2019, In: *Elektrotechnik und Informationstechnik*. 136, 2, p. 224

System-Level Assessment of Dynamic Effects in GaN-based Power Converters

Minetto, A., Deutschmann, B., Haberlen, O. & Curatola, G., 2019, *PRIME 2019 - 15th Conference on Ph.D. Research in Microelectronics and Electronics, Proceedings*. Institute of Electrical and Electronics Engineers, p. 281-284 4 p. 8787795

Investigation of Spice Models for Overvoltage Protection Devices with Respect to Fast Transients

Bauer, S., Renhart, W., Biro, O., Turk, C., Maier, C., Winkler, G. & Deutschmann, B., 17 Oct 2018, *2018 IEEE Symposium on Electromagnetic Compatibility, Signal Integrity and Power Integrity, EMC, SI and PI 2018*. Institute of Electrical and Electronics Engineers, 8495349

Introduction to Robust Automotive IC Design and Electromagnetic Compatibility of ICs

Deutschmann, B. & Winkler, G., 3 Sept 2018, *Tutorial Automotive Design: 44th European Solid-State Circuits Conference*. Dresden, p. 1-42

Investigation of Spice Models for Overvoltage Protection Devices with Respect to Fast Transients

Bauer, S., Renhart, W., Biro, O., Türk, C., Maier, C., Winkler, G. & Deutschmann, B., 3 Aug 2018, *2018 IEEE Symposium on Electromagnetic Compatibility Signal Integrity and Power Integrity*. IEEE Publications, p. 1-1 1 p. 8495349

Emission reduction with spread spectrum clocking for switched capacitor buck converter

Subotskaya, V., Cherniak, K., Hoermaier, K. & Deutschmann, B., 22 Jun 2018, *2018 IEEE International Symposium on Electromagnetic Compatibility and 2018 IEEE Asia-Pacific Symposium on Electromagnetic Compatibility, EMC/APEMC 2018*. Institute of Electrical and Electronics Engineers, p. 297-302 6 p.

The shielding effect of a multi-cable harness as function of IC output termination impedance

Hackl, H., Auinger, B., Deutschmann, B. & Gheonjian, A., 22 Jun 2018, *2018 IEEE International Symposium on Electromagnetic Compatibility and 2018 IEEE Asia-Pacific Symposium on Electromagnetic Compatibility, EMC/APEMC 2018*. Institute of Electrical and Electronics Engineers, p. 707-712 6 p.

Time domain FEM computational approach for calibration of surface scan method

Bauer, S., Biro, O., Koczka, G., Gleinser, A., Winkler, G. & Deutschmann, B., 22 Jun 2018, *2018 IEEE International Symposium on Electromagnetic Compatibility and 2018 IEEE Asia-Pacific Symposium on Electromagnetic Compatibility, EMC/APEMC 2018*. Institute of Electrical and Electronics Engineers, p. 866-871 6 p.

Characterization of Passive Components based on a Power Converter Filter Circuit

Odreizt, K., Auinger, B., Fuchs, M., Winkler, G. & Deutschmann, B., 12 Jun 2018.

Employing Mixed-Mode S-parameters for Characterizing Mode Conversions in Power Converter PCBs

Auinger, B., Odreizt, K., Fuchs, M., Winkler, G. & Deutschmann, B., 12 Jun 2018.

Improving SiC Power MOSFET Simulation Models for EMC Applications

Fuchs, M., Sygulla, C., Auinger, B., Eberl, J., Javoric, H., Winkler, G. & Deutschmann, B., 12 Jun 2018.

Improving SiC Power MOSFET Simulation Models for EMC Applications

Fuchs, M., Sygulla, C., Auinger, B., Eberl, J., Winkler, G. & Deutschmann, B., 12 Jun 2018, *16. EMV Fachtagung: störungsfreie Elektronik und Geräte.* (OVE-Schriftenreihe ; vol. 92).

Using Gate Signal Shaping to Lower Conducted Emissions of a Power Converter

Auinger, B., Pichler, L., Fuchs, M., Winkler, G. & Deutschmann, B., 12 Jun 2018.

Wie „smart“ ist Smart Power Leistungselektronik unter Störbeeinflussung

Deutschmann, B., Winkler, G. & Kastner, P., 12 Jun 2018, *16. EMV-Fachtagung*. Lamedschwandner, K. (ed.). Wien: Österreichischer Verband für Elektrotechnik, Vol. 92. p. 177-188

Herausforderung EMV in der Leistungselektronik

Fuchs, M., Auinger, B., Pichler, L., Herdin, M. & Deutschmann, B., May 2018, In: *Elektronik. Sonderh. Power*, p. 12-17

Großes Interesse an winzigen Bauelementen

Deutschmann, B., 18 Feb 2018, In: *Elektrotechnik und Informationstechnik*. 1, p. 12-14

Entwicklung von Simulationmethoden für die Bestimmung der Schirmdämpfung von realen Gerätegehäusen

Cecil, S., Lamedschwandner, K., Auinger, B., Deutschmann, B., Winkler, G., Ritzberger, G. & Boxleitner, P., 1 Jan 2018, *EMV 2018 - Internationale Fachmesse und Kongress für Elektromagnetische Vertraglichkeit*. Mesago Messe Frankfurt GmbH, Vol. 2018-February. p. 199-206 8 p.

Design and theoretical comparison of input ESD devices in 180 nm CMOS with focus on low capacitance

Michalowska-Forsyth, A. M., Schrey, P. & Deutschmann, B., 2018, In: *Elektrotechnik und Informationstechnik*. 135, p. 69-75

Development of simulation methods for the determination of the shielding effectiveness of real instrument housings

Cecil, S., Lamedschwandner, K., Auinger, B., Deutschmann, B., Winkler, G., Ritzberger, G. & Boxleitner, P., 2018, *EMV 2018 - Internationale Fachmesse und Kongress für Elektromagnetische Vertraglichkeit*.

Fault state behavior of smart power devices during electromagnetic interference

Deutschmann, B., Kastner, P. & Winkler, G., 2018, *2018 IEEE International Symposium on Electromagnetic Compatibility and 2018 IEEE Asia-Pacific Symposium on Electromagnetic Compatibility, EMC/APEMC 2018*. Institute of Electrical and Electronics Engineers, p. 44-49 6 p.

Impact of electromagnetic interference on the functional safety of smart power devices for automotive applications

Deutschmann, B., Winkler, G. & Kastner, P., 2018, In: *Elektrotechnik und Informationstechnik*. 135, 4-5, p. 352-359 8 p.

Innovativer HVDC-DC-Wandler für Hochspannungs-Gleichstrom-Netze – Grundsätzliche Überlegungen zu Topologie, Regelung und elektromagnetischer Verträglichkeit

Renner, H., Schichler, U., Krischan, K., Deutschmann, B., Auinger, B., Horn, M., Reichhartinger, M. & Vollmaier, F., 2018, In: *Elektrotechnik und Informationstechnik*. 135, 8, p. 497-506 10 p.

Intelligent NFC potassium measurement strip with hemolysis check in capillary blood

Kollegger, C., Greiner, P., Siegl, I., Steffan, C., Wiessflecker, M., Pecec, B., Hajnsek, M., Sinner, F., Holweg, G. & Deutschmann, B., 2018, In: *Elektrotechnik und Informationstechnik*. 135, p. 83-88 6 p.

Mikroelektronik aus Österreich – Grundlage für Österreichs Innovations- und Wettbewerbsfähigkeit

Deutschmann, B., 2018, In: *Elektrotechnik und Informationstechnik*. 135, 1, p. 1-2 2 p.

On the Robustness of CMOS-Chopped Operational Amplifiers to Conducted Electromagnetic Interferences

Lavarda, A., Petrucci, L., Radez, N. & Deutschmann, B., 2018, In: *IEEE Transactions on Electromagnetic Compatibility*. 60, 2, p. 478-486

Optimized gate driver for high-frequency buck converter

Subotskaya, V., Mihal, V., Tulupov, M. & Deutschmann, B., 2018, In: *Elektrotechnik und Informationstechnik*. 135, p. 40-47

Computing the electromagnetic emission spectrum of pulses by convolution in frequency domain

Hackl, H. & Deutschmann, B., 2 Nov 2017, *2017 International Symposium on Electromagnetic Compatibility - EMC EUROPE 2017, EMC Europe 2017*. Institute of Electrical and Electronics Engineers, 8094699

Elimination of electromagnetic interference in communication channels by using spread spectrum techniques

Auinger, B., Deutschmann, B. & Winkler, G., 2 Nov 2017, *2017 International Symposium on Electromagnetic Compatibility - EMC EUROPE 2017, EMC Europe 2017*. Institute of Electrical and Electronics Engineers, 8094666

A system-on-chip NFC bicycle tire pressure measurement system

Kollegger, C., Greiner, P., Steffan, C., Froehlich, H., Kautzsch, T., Holweg, G. & Deutschmann, B., 27 Sept 2017, *2017 IEEE 60th International Midwest Symposium on Circuits and Systems, MWSCAS 2017*. Institute of Electrical and Electronics Engineers, Vol. 2017-August. p. 60-63 4 p. 8052860

Autonomous maximum power point tracking algorithm for ultra-low power energy harvesting

Steffan, C., Greiner, P., Kollegger, C., Siegl, I., Holweg, G. & Deutschmann, B., 27 Sept 2017, *2017 IEEE 60th International Midwest Symposium on Circuits and Systems, MWSCAS 2017*. Institute of Electrical and Electronics Engineers, Vol. 2017-August. p. 1372-1375 4 p. 8053187

Adaptive current source driver for high-frequency boost converter

Subotskaya, V., Bodano, E. & Deutschmann, B., 31 Jul 2017, *Proceedings of the 2017 11th International Workshop on the Electromagnetic Compatibility of Integrated Circuits, EMCCompo 2017*. Institute of Electrical and Electronics Engineers, p. 85-90 6 p. 7998087

Enhancement of the DPI method for IC immunity characterization

Lavarda, A., Deutschmann, B. & Haerle, D., 6 Jul 2017, *Proc. of International Workshop on the Electromagnetic Compatibility of Integrated Circuits (EMC Compo 2017)*. p. 178-183

Spread spectrum parameter optimization to suppress certain frequency spectral components

Deutschmann, B., Auinger, B. & Winkler, G., 6 Jul 2017, *Proc. of International Workshop on the Electromagnetic Compatibility of Integrated Circuits (EMC Compo 2017)*. p. 39-44

Adaptive current source driver for high-frequency boost converter to reduce EMI generation

Subotskaya, V. & Deutschmann, B., 14 Jun 2017, *Proc. 13th Conference on Ph.D. Research in Microelectronics and Electronics (PRIME) 2017*. p. 333-336

Pre-estimating the Electromagnetic Interference (EMI) of Electronic Systems

Auinger, B., Deutschmann, B., Winkler, G., Cecil, S. & Lamedschwandner, K., 27 Apr 2017, p. 15. 1 p.

Störemission von Leistungselektronik

Deutschmann, B., Winkler, G. & Auinger, B., 27 Apr 2017, *15. EMV Fachtagung*. Winkler, G. (ed.). 1. ed. Wien: Österreichischer Verband für Elektrotechnik, Vol. 87. p. 222 229 p. (OVE-Schriftenreihe; vol. 87).

Electromagnetic Emission Scanning at the Surface of ICs

Deutschmann, B., Gleinser, A. & Reitter, P., 26 Apr 2017, *15. EMV-Fachtagung: OVE Schriftenreihe Nr. 87*. Winkler, G. (ed.). Wien: Österreichischer Verband für Elektrotechnik, Vol. 87. p. 16 1 p.

ESD Robustheit und Wunsch-Bell Charakteristik

Schrey, P., Deutschmann, B. & Winkler, G., 26 Apr 2017, *15. EMV-Fachtagung: OVE Schriftenreihe Nr. 87*. Winkler, G. (ed.). Wien: Österreichischer Verband für Elektrotechnik, Vol. 87. p. 21

GridConv: HVDC-DC Converter for High Voltage Direct Current Transmission Systems – Background and Design

Krischan, K., Schichler, U., Deutschmann, B., Reichhartinger, M., Auinger, B., Vollmaier, F., Horn, M. & Renner, H., 26 Apr 2017, *15. EMV-Fachtagung / Leistungselektronikschau: OVE Schriftenreihe Nr. 87*. Winkler, G. (ed.). Wien: Österreichischer Verband für Elektrotechnik, Vol. 87. p. 41 1 p.

GridConv: HVDC-DC Converter for High Voltage Direct Current Transmission Systems – Background and Design

Krischan, K., Schichler, U., Deutschmann, B., Reichhartinger, M., Auinger, B., Vollmaier, F., Horn, M. & Renner, H., 26 Apr 2017. 1 p.

GridConv: HVDC-DC Converter for High Voltage Direct Current Transmission Systems – The Electronic System

Deutschmann, B., Auinger, B., Vollmaier, F., Krischan, K., Schichler, U., Horn, M., Reichhartinger, M. & Renner, H., 26 Apr 2017, *15. EMV-Fachtagung / Leistungselektronikschau: OVE Schriftenreihe Nr. 87*. Winkler, G. (ed.). Wien: Österreichischer Verband für Elektrotechnik, Vol. 87. p. 42 1 p.

GridConv: HVDC-DC Converter for High Voltage Direct Current Transmission Systems – The Electronic System

Deutschmann, B., Auinger, B., Vollmaier, F., Krischan, K., Schichler, U., Horn, M., Reichhartinger, M. & Renner, H., 26 Apr 2017, p. 42. 1 p.

Robustheitsuntersuchung von Leistungselektronik

Schrey, P., Deutschmann, B. & Winkler, G., 26 Apr 2017, *15. EMV-Fachtagung: OVE Schriftenreihe Nr. 87*. Winkler, G. (ed.). Wien: Österreichischer Verband für Elektrotechnik, Vol. 87. p. 47

Design of a NFC Bicycle Tire Pressure Measurement System

Kollegger, C., Holweg, G., Fröhlich, H., Kautzsch, T. & Deutschmann, B., 27 Oct 2016.

Solar Harvestign with On-Chip PV Cells and Maximum Power Point Tracking

Steffan, C., Holweg, G. & Deutschmann, B., 27 Oct 2016.

An EMI receiver model to minimize simulation time of long data transmissions

Hackl, H. & Deutschmann, B., 19 Oct 2016, *Proceedings - 2016 24th Austrian Workshop on Microelectronics, Austrochip 2016*. p. 57-62 6 p.

EMI Rejection of Operational Amplifiers

Winkler, G. & Deutschmann, B., 12 Apr 2016, *14. EMV-Fachtagung*. Lamedschwandner, K. (ed.). Wien: Österreichischer Verband für Elektrotechnik, Vol. 82. p. 62-81

Obstacles in Predicting ESD Robustness according to ISO10605 of Electronic Systems with Automotive Examples

Ammer, M. & Deutschmann, B., 9 Mar 2016, *Proceedings of SSI 2016: International Conference and Exhibition on Integration Issues of Miniaturized Systems*. Mesago GmbH, p. 61 - 70

Placement of Components for DC-DC-Converters

Deutschmann, B. & Winkler, G., 19 Feb 2016.

Placement of Components for DC-DC-Converters (Live Demo)

Deutschmann, B. & Winkler, G., 18 Feb 2016.

Elektromagnetische Verträglichkeit und Robustheit elektronischer Systeme als Herausforderung des Technologiezeitalters

Deutschmann, B., 2016, In: *Elektrotechnik und Informationstechnik*. 133, 1, p. 1-2

Highlighting the distribution path of transient disturbances by near field scanning techniques

Deutschmann, B., Schindlbacher, S. & Winkler, G., 2016, In: *Elektrotechnik und Informationstechnik*. 133, 1, p. 18-24

Intelligent plaster for accurate body temperature monitoring and investigations regarding EMI using near-field magnetic scan

Kollegger, C., Steffan, C., Greiner, P., Wiessflecker, M., Holweg, G. & Deutschmann, B., 2016, In: *Elektrotechnik und Informationstechnik*. 133, 1, p. 25-31

Von der Blitzentladung bis zu ESD-Testverfahren: Beanspruchungen von Geräten und integrierten Schaltungen sowie normative Anforderungen

Deutschmann, B., Winkler, G. & Pack, S., 2016, In: *Elektrotechnik und Informationstechnik*. 133, 1, p. 3-10

NFC in medizinischen Anwendungen

Kollegger, C., Deutschmann, B., Winkler, G. & Steffan, C., 19 Nov 2015.

Characterization of the immunity of integrated circuits (ICs) at wafer level

Lavarda, A., Amschl, D., Bauer, S. & Deutschmann, B., 13 Nov 2015, *2015 10th International Workshop on the Electromagnetic Compatibility of Integrated Circuits (EMC Compo)*. IEEE Publications, p. 196-201 6 p. 7358356

EMI improved chopped operational amplifier

Lavarda, A. & Deutschmann, B., 13 Nov 2015, *2015 10th International Workshop on the Electromagnetic Compatibility of Integrated Circuits (EMC Compo)*. IEEE Publications, p. 72-76 5 p. 7358333

Emission reduction in Class D audio amplifiers by optimizing spread spectrum modulation

Deutschmann, B., Winkler, G. & Karaca, T. D., Nov 2015, *2015 10th International Workshop on the Electromagnetic Compatibility of Integrated Circuits (EMC Compo)*. Institute of Electrical and Electronics Engineers, 6 p.

Messbeispiele zu den wichtigsten EMV-Messverfahren

Deutschmann, B. & Winkler, G., 29 Sept 2015.

Elektromagnetische Verträglichkeit auf Leiterplatten- und IC-Ebene

Deutschmann, B. & Winkler, G., 28 Sept 2015.

EMC-aware Component Placement

Deutschmann, B. & Winkler, G., 24 Sept 2015.

Platzierung von Komponenten im DCDC Wandler

Deutschmann, B. & Winkler, G., 24 Sept 2015.

Introduction to EMC at the IC level

Deutschmann, B. & Winkler, G., 18 Sept 2015.

IC Shielding with Soft Magnetics

Deutschmann, B. & Winkler, G., 16 Aug 2015.

EMV-Schnuppertraining

Deutschmann, B. & Winkler, G., 29 Apr 2015.

Richtige Auswahl und Anwendung von Kondensatoren

Winkler, G. & Deutschmann, B., 16 Apr 2015.

Autonomous Sense and Identification Grain - A Sensor Interface Applicable for Biomedical Purposes

Kollegger, C., Holweg, G. & Deutschmann, B., 2015.

Electromagnetic Evaluation of Class-D Switching Schemes

Karaca, T. D. & Deutschmann, B., 2015, *2015 11th Conference on Ph.D. Research in Microelectronics and Electronics (PRIME)*. Institute of Electrical and Electronics Engineers, p. 113-116

EMI-Receiver Simulation Model with Quasi-Peak Detector

Karaca, T. D., Deutschmann, B. & Winkler, G., 2015, *2015 IEEE International Symposium on Electromagnetic Compatibility (EMC)*. Institute of Electrical and Electronics Engineers, p. 891-896

Energy harvesting with on-chip solar cells and integrated DC/DC converter

Steffan, C., Deutschmann, B., Greiner, P., Kollegger, C. & Holweg, G., 2015, *ESSDERC 2015 - 45th European Solid State Device Research Conference*. Institute of Electrical and Electronics Engineers, p. 142-145

Energy Harvesting with on-chip Solar Cells embodiment and performance of solar cells in the 0.13 µm process

Steffan, C., Holweg, G. & Deutschmann, B., 2015.

Prediction of the robustness of integrated circuits against EFT/BURST

Bauer, S. M., Deutschmann, B. & Winkler, G., 2015, *2015 IEEE International Symposium on Electromagnetic Compatibility (EMC)*. Institute of Electrical and Electronics Engineers, p. 45-49

Richtige Auswahl und Anwendung von Kondensatoren

Deutschmann, B. & Winkler, G., 2015, *13. EMV-Fachtagung*. 1010 Wien: Österreichischer Verband für Elektrotechnik, Vol. 79. p. 189-200 (OVE Schriftenreihe).

Simulation of radiated emission during the design phase based on scattering parameter measurement

Hackl, H., Winkler, G. & Deutschmann, B., 2015, *EMC Compo 2015 - 2015 10th International Workshop on the Electromagnetic Compatibility of Integrated Circuits*. Institute of Electrical and Electronics Engineers, p. 228-231 4 p. 7358362

Design-Guidelines zur EMV-gerechten PCB-Entwicklung

Deutschmann, B. & Winkler, G., 2 Oct 2014.

EMV-gerechtes Printplattendesign - Störemission

Deutschmann, B. & Winkler, G., 25 Sept 2014.

EMV-gerechtes Printplattendesign - Störfestigkeit

Winkler, G. & Deutschmann, B., 25 Sept 2014.

Reducing the Electromagnetic Emission of DC/DC Converters

Winkler, G. & Deutschmann, B., 4 Apr 2014.

Abhängigkeit der Pulsfestigkeitsergebnisse von Kfz-Komponenten von den verwendeten Testpulsenergiegeneratoren

Deutschmann, B., Klotz, F. & Wahl, A., 2014, *Elektromagnetische Verträglichkeit in der KFZ-Technik, GMM-Fachtagung 2014*. Berlin: VDE Verlag GmbH, p. 707-714

Impact of Spread Spectrum EMI-Reduction on Audio Performance of Filterless Class-D Amplifiers

Karaca, T. D., Auer, M., Winkler, G. & Deutschmann, B., 2014, *22nd Austrian Workshop on Microelectronics (Austrochip)*. Institute of Electrical and Electronics Engineers, p. 47-52

Reducing the Electromagnetic Emission of DC/DC Converters

Deutschmann, B. & Winkler, G., 2014, *12. EMV-Fachtagung*. 1010 Wien: Österreichischer Verband für Elektrotechnik, Vol. 75. p. 261-274 (OVE Schriftenreihe).

EMV gerechtes Leiterplattendesign aus der Sicht von Geräteentwicklern

Deutschmann, B. & Winkler, G., 2013, *11. EMV-Fachtagung*. 1010 Wien: Österreichischer Verband für Elektrotechnik, Vol. 70. p. 149-165 (OVE Schriftenreihe).

ISO Kfz-Pulsenergiegeneratoren - Verifikationsergebnisse und Erweiterung des Standards

Klotz, F., Deutschmann, B., Wahl, A. & Oberjatzas, G., 2013, *Elektromagnetische Verträglichkeit in der KFZ-Technik, GMM-Fachtagung 2013*. Berlin ; Offenbach: VDE Verlag GmbH, p. 63-68

Spread Spectrum Clocking for Emission Reduction of Charge Pump Applications

Deutschmann, B., 2013, *2013 9th International Workshop on Electromagnetic Compatibility of Integrated Circuits (EMC Compo)*. , p. 123-128

Impulsförmige Störgrößen: Auswahl und Bestimmung der Zerstörgrenze von Schutzelementen

Deutschmann, B. & Winkler, G., 2012, *10. EMV-Fachtagung*. 1010 Wien: Österreichischer Verband für Elektrotechnik, Vol. 62. p. 185-200 (OVE Schriftenreihe).

Neue Pulsanforderungen und deren Auswirkung auf die Kfz-Elektronik

Deutschmann, B. & Klotz, F., 2012, *Elektromagnetische Verträglichkeit, EMV 2012: Internationale Fachmesse und Kongress für Elektromagnetische Verträglichkeit*. Berlin: VDE Verlag GmbH, p. 169-174

Radiated Immunity Testing of Integrated Circuits in Reverberation Chambers

Heinrich, R., Bechly, R. & Deutschmann, B., 2012, *International Symposium on Electromagnetic Compatibility*. Piscataway, NY: Institute of Electrical and Electronics Engineers, p. 1-4

Correlation between systemlevel robustness and TLP results of ESD devices

Deutschmann, B., Magrini, F., Cao, Y. & Mayerhofer, M., 2011, *International Electrostatic Discharge Workshop*. , p. ---

Edge Shaping to Reduce the Electromagnetic Emissions

Deutschmann, B., Illing, R. & Auer, B., 2011, *EMC Europe 2011 York*. Piscataway, NY: Institute of Electrical and Electronics Engineers, p. 742-745

Einsatz von Spread Spectrum zur "Verringerung" elektromagnetischer Störemissionen

Deutschmann, B. & Winkler, G., 2011, *9. EMV-Fachtagung*. 1010 Wien: Österreichischer Verband für Elektrotechnik, Vol. 60. p. 137-144 (OVE Schriftenreihe).

EMC Robust Design for Smart Power High Side Switches

Deutschmann, B. & Del Croce, P., 2011, *Analog circuit design*. Casier, H. (ed.). Berlin [u.a.]: Springer, p. 89-104

Internal IC Protection Structures in Relation to New Automotive Transient Requirements

Deutschmann, B., Magrini, F. & Klotz, F., 2011, *EMC Compo 2011 proceedings*. Piscataway, NJ: Institute of Electrical and Electronics Engineers, p. 47-52

Störfestigkeit gegen transiente Störgrößen

Winkler, G. & Deutschmann, B., 18 Mar 2010.

Flankensteilheitsdefinition kontra EMV Messung

Deutschmann, B. & Klotz, F., 2010, *Elektromagnetische Verträglichkeit*. Berlin [u.a.]: VDE Verlag GmbH, p. 519-526

Robustness of ESD Protection Structures against Automotive Transient Disturbances

Deutschmann, B., Magrini, F. & Cao, Y., 2010, *Asia-Pacific Symposium on Electromagnetic Compatibility*. Piscataway, NY: Institute of Electrical and Electronics Engineers, p. 1039-1042

EMV-gerechtes Filterdesign

Winkler, G. & Deutschmann, B., 23 Apr 2009.

Electromagnetic immunity design of smart power high side switches

Deutschmann, B. & Del Croce, P., 2009, *International Workshop on Electromagnetic Compatibility of Integrated Circuits*. , p. ---

Simulation und Messung der Störemission von Schaltungen mit periodischen Störquellen

Winkler, G. & Deutschmann, B., 17 Apr 2008.

Analysis of conducted emissions in CAN bus systems with VHDL-AMS

Gürsoy, M., Jahn, S., Deutschmann, B. & Pelz, G., 2008, *International Symposium on Electromagnetic Compatibility*. Piscataway, NJ: Institute of Electrical and Electronics Engineers, p. 147-152

Application of GTEM Cells for IC EMC Testing

Heinrich, R., Müllerwiebus, V., Lange, A., Deutschmann, B., Karsten, U. & Klotz, F., 2008, *Asia-Pacific Symposium on Electromagnetic Compatibility*. , p. 267-270

EMV elektronischer Unterbaugruppen und integrierter Schaltkreise im Kraftfahrzeug

Lamedschwandner, K., Preineder, H., Winkler, G., Deutschmann, B. & Ostermann, T., 2008, In: HF-Report. 123, 1/2, p. 40-44

Error of Emission Measurement of ICs due to Imperfect Termination of TEM Cell

Müllerwiebus, V., Deutschmann, B. & Klotz, F., 2008, *International Symposium on Electromagnetic Compatibility*. Piscataway, NJ: Institute of Electrical and Electronics Engineers, p. 263-267

Methodology to Predict EME Effects in CAN Bus Systems Using VHDL-AMS

Gürsoy, M., Jahn, S., Deutschmann, B. & Pelz, G., 2008, In: IEEE Transactions on Electromagnetic Compatibility. 50, 4, p. 993-1002

Tipps zum EMV-gerechten Schaltungs- und Leiterplattenentwurf

Deutschmann, B. & Winkler, G., 12 Jun 2007.

Estimation of the Conducted Emissions of High Side Switches by Using Circuit Simulations

Deutschmann, B., 2007, *International Workshop on Electromagnetic Compatibility of Integrated Circuits*. , p. 19-24

Störfestigkeit integrierter Schaltungen gegenüber hochfrequenten leitungsgeführten Störgrößen

Winkler, G. & Deutschmann, B., 4 May 2006.

Die ESD Prüfung von integrierten Schaltungen als Teilbereich der EMV Anforderungen an elektronische Komponenten im KFZ

Deutschmann, B., Lamedschwandner, K., Winkler, G. & Ostermann, T., 2006, *Tagungsband Austrochip*. Wien: Fachhochschule Technikum Wien, p. 75-81

Electrostatic Discharge Models

Deutschmann, B., 2006, *Electromagnetic Compatibility of Integrated Circuits: Techniques for Low Emission and Susceptibility*. 1 ed. New York, NY: Springer, p. 189-200

EMV elektronischer Unterbaugruppen und integrierter Schaltkreise im Kraftfahrzeug

Lamedschwandner, K., Preineder, H., Winkler, G., Deutschmann, B. & Ostermann, T., 2006, *Elektromagnetische Verträglichkeit*. Berlin Offenbach: VDE Verlag GmbH, p. 373-380

EMV elektronischer Unterbaugruppen und integrierter Schaltkreise im Kraftfahrzeug

Lamedschwandner, K., Preineder, H., Winkler, G., Deutschmann, B. & Ostermann, T., 2006, *EMC 2006 - International Trade Fair and Conference on Electromagnetic Compatibility*.

ICs als Quelle der Störemissionen von elektronischen Geräten und Systemen?

Deutschmann, B., 2006, In: *Elektrotechnik und Informationstechnik*. 123, 1/2, p. 15-21

On the Effects of Transient Electromagnetic Interference on Integrated Circuits

Deutschmann, B., Sicard, E. & Ben Dhia, S., 2006, In: *Electronic Device Failure Analysis*. 8, 4, p. 16-24

Vergleichende EMV-Untersuchungen auf Geräte- und IC-Ebene

Lamedschwandner, K., Deutschmann, B., Winkler, G. & Ostermann, T., 2006, In: *Elektrotechnik und Informationstechnik*. 123, 1-2, p. 9-14

Störfestigkeit integrierter Schaltungen gegen leitungsgeführte transiente Störgrößen

Deutschmann, B. & Winkler, G., 31 Mar 2005.

A Comparison of Conducted Transient Disturbances and Failure Signatures for CMOS Integrated Circuits

Deutschmann, B., 2005, *International Workshop on Electromagnetic Compatibility of Integrated Circuits*. ., p. 151-156

Design Methods Implicating Electromagnetic Compatibility for Systems in Package

Loipold, G. & Deutschmann, B., 2005, *International Workshop on Electromagnetic Compatibility of Integrated Circuits*. ., p. 73-78

Digital Output Cell with Reduced Slew Rate and Smooth Signal Transition

Ostermann, T., Bacher, C. & Deutschmann, B., 2005, *International Workshop on Electromagnetic Compatibility of Integrated Circuits*. ., p. 69-72

EMC awareness for multi chip modules

Loipold, G. & Deutschmann, B., 2005, In: *Elektrotechnik und Informationstechnik*. 122, 12, p. 460-465

EMC Aware Programming of Micro Controller Based Systems

Steiner, M., Deutschmann, B. & Lamedschwandner, K., 2005, *International Workshop on Electromagnetic Compatibility of Integrated Circuits*. ., p. 63-68

IC- versus Systemlevel-EMV

Deutschmann, B. & Pitsch, H., 2005, In: E&E-Kompodium. 2005/06, p. 211-213

Modeling of Transient Automotive Pulses According to ISO 7637

Deutschmann, B. & Maier, D., 2005, *International Workshop on Electromagnetic Compatibility of Integrated Circuits.* .., p. 225-229

Modellierung transienter Störgrößen

Deutschmann, B. & Maier, D., 2005, In: E&E-Kompodium. 2005/06, p. 240-242

Near Field Measurements to Predict the Electromagnetic Emission of Integrated Circuits

Deutschmann, B., Pitsch, H. & Langer, G., 2005, *International Workshop on Electromagnetic Compatibility of Integrated Circuits.* .., p. 27-32

Störemission von integrierten Schaltungen auf Leiterplatten

Winkler, G. & Deutschmann, B., 21 Apr 2004.

AS2522: starter kit for communications device manufacturers

Deutschmann, B., 2004, In: Electronic Engineering & Product World. 2004, 21, p. 125-126

Auf den richtigen Schaltzeitpunkt kommt es an (die Reduzierung von Ground Bounce und Ringing durch Skewing der Schaltzeitpunkte)

Deutschmann, B. & Winkler, G., 2004, In: D&V-Kompodium. 2004/05, p. 237-239

Characterization of the Radiated Electromagnetic Emission of Clock Trees

Ostermann, T., Lackner, B. & Deutschmann, B., 2004, *International Workshop on Electromagnetic Compatibility of Integrated Circuits.* .., p. 188-193

Characterizing the Immunity of Integrated Circuits against Electrical Fast Transient Disturbances

Deutschmann, B., Langer, G. & Auderer, G., 2004, *International Workshop on Electromagnetic Compatibility of Integrated Circuits.* .., p. 150-153

Das „Missing Link“ der EMV zwischen Geräte- und IC-Ebene

Ostermann, T., Lamedschwandner, K., Deutschmann, B. & Winkler, G., 2004, *Austrochip-Tagung 2004.* .., p. 111-117

Electromagnetic Emissions: IC-Level versus System-Level

Deutschmann, B., Winkler, G., Ostermann, T. & Lamedschwandner, K., 2004, *IEEE Symposium on Electromagnetic Compatibility 2004.* .., p. 169-173

Electromagnetic Immunity: System- versus Chip-Level

Deutschmann, B., Winkler, G., Ostermann, T. & Lamedschwandner, K., 2004, *EMC Europe, International Symposium on Electromagnetic Compatibility / Vol. 2.* Eindhoven: Technische Universiteit Eindhoven, p. 843-848

EMV auf Geräte-, System- und IC-Ebene - Das EMV-Verhalten von Geräten und Systemen im Vergleich zur EMV-Charakterisierung auf IC-Ebene

Ostermann, T., Winkler, G., Lamedschwandner, K. & Deutschmann, B., 2004, In: D&V-Kompodium. 2004/05, p. 288-291

EMV-Charakterisierung von Integrierten Sensorschaltungen

Ostermann, T. & Deutschmann, B., 2004, *Sensoren und Messsysteme 2004.* Düsseldorf: VDI, Vol. 1829. p. 859-862 (VDI-Berichte).

Gegenüberstellung der messtechnischen und normativen EMV-Anforderungen auf IC- und Geräteebe

Ostermann, T., Lamedschwandner, K., Deutschmann, B. & Winkler, G., 2004, *12. Internationale Fachmesse und Kongress für Elektromagnetische Verträglichkeit/EMV 2004.* Berlin Offenbach: VDE Verlag GmbH, p. 421-427

Influence of the Power Supply on the Radiated Electromagnetic Emission of Integrated Circuits

Ostermann, T., Deutschmann, B. & Bacher, C., 2004, In: *Microelectronics Journal*. 35, 6, p. 525-530

Measuring the Electromagnetic Emissions of Integrated Circuits with IEC 61967-4

Deutschmann, B., Winkler, G. & Jungreithmair, R., 2004, *Symposium record ; vol. 1*. Piscataway, NY: Institute of Electrical and Electronics Engineers, p. 12-17

Neues Burst-Messverfahren - Charakterisierung der Störfestigkeit von ICs gegen Bursts

Deutschmann, B., Langer, G. & Auderer, G., 2004, In: *D&V-Kompodium*. 2004/05, p. 282-284

Starter kits reduce time to market

Deutschmann, B., 2004, In: --Fachzeitschrift nicht gefunden--. p. 96-97

The Right Pinning to Reduce the Electromagnetic Emission of Integrated Circuits

Deutschmann, B., Winkler, G., Ostermann, T. & Tanda, A., 2004, *Euro electromagnetics : book of abstracts*. Univ. Magdeburg, p. 107-107

Using Device Simulations to Optimize ESD Protection Circuits

Fankhauser, B. & Deutschmann, B., 2004, *International Symposium on Electromagnetic Compatibility*. , p. 963-968

EMV-Anforderungen an informationstechnische Einrichtungen (EN55024)

Deutschmann, B. & Winkler, G., 26 Feb 2003.

A Measurement Example to Show the Relationship between the electromagnetic emission And The Ground bounce Voltage of an Integrated Circuit

Deutschmann, B., Ostermann, T., Bacher, C. & Jungreithmair, R., 2003, *IEEE International Symposium on Design and Diagnostics of Electronic Circuits & Systems*. , p. 195-200

A Test-Chip to Characterize the Benefit of On-chip Decoupling to Reduce the Electromagnetic Emission of Integrated Circuits

Ostermann, T., Bacher, C., Schneider, D., Gut, W., Lackner, C., Koessl, R., Hagelauer, R., Deutschmann, B. & Jungreithmair, R., 2003, *International Symposium on Electromagnetic Compatibility*. , p. 44-47

Characterization of the EME of Integrated Circuits with the Help of the IEC Standard 61967

Ostermann, T. & Deutschmann, B., 2003, *European Test Workshop*. Los Alamitos, Calif.: IEEE Computer Soc., p. 132-137

Characterization of the EME of Integrated Circuits with the Help of the IEC Standard 61967

Ostermann, T. & Deutschmann, B., 2003, *Digest of papers*. , p. 269-274

Characterization of the EME of integrated circuits with the help of the IEC standard 61967 [electromagnetic emission]

Ostermann, T. & Deutschmann, B., 2003, *Proceedings of the European Test Workshop*.

CMOS Output Driver with Reduced Ground Bounce and Electromagnetic Emission

Deutschmann, B. & Ostermann, T., 2003, *ESSCIRC 2004 - 29th European Solid-State Circuits Conference*. Piscataway, NY: Institute of Electrical and Electronics Engineers, p. 537-540

Darstellung der TEM-Zellen und der Surface Scan Messmethode zur Untersuchung des Einflusses von On-Chip Decoupling Kapazitäten auf die Störemission von Integrierten Schaltungen

Ostermann, T., Deutschmann, B., Schneider, D. & Jungreithmair, R., 2003, *ITG-Workshop Testmethods and Reliability of Circuits and Systems*. , p. 66-69

Direct Power Injection (DPI) to Measure the Immunity of Integrated Circuits Against Conducted Disturbances
Deutschmann, B. & Ostermann, T., 2003, *International Mixed-Signal Testing Workshop*. , p. 264-267

Effects of Skewing Output Driver Switching on the Electromagnetic Emission

Deutschmann, B., Jungreithmair, R. & Winkler, G., 2003, *IEEE Symposium on Electromagnetic Compatibility 2003*. , p. 236-241

EMV-Charakterisierung von ICs (Die neuen Normen zur Charakterisierung der EMV integrierter Schaltungen)

Deutschmann, B., Winkler, G. & Jungreithmair, R., 2003, In: *Test-Kompodium*. 2003, p. 35-37

EMV in der Kraftfahrzeugtechnik (EMV-Anforderungen an elektrische/elektronische Komponenten und integrierte Schaltungen)

Lamedschwandner, K. & Deutschmann, B., 2003, In: *EMC-Kompodium*. p. 196-199

EMV-Messungen auf IC-Ebene gemäß den Normen IEC 61967 und IEC 62132

Ostermann, T. & Deutschmann, B., 2003, *ITG Diskussionssitzung Messverfahren der EMV (FA 9.1)*. , p. 70-73

Ground Bounce und Simultaneous Switching Noise

Ostermann, T., Tanda, A. & Deutschmann, B., 2003, *Beiträge der Informationstagung Mikroelektronik 2003*. Wien: Österreichischer Verband für Elektrotechnik, Vol. 33. p. 449-453 (ÖVE-Schriftenreihe).

Improvement of system robustness through EMC optimization

Deutschmann, B., 2003, *Analog Circuit Design: Fractional-N Synthesizers, Design for Robustness, Line and Bus Drivers*. Roermund, A., Steyaert, M. & Huijsing, J. H. (eds.). 1 ed. Boston, Mass. [u.a.]: Kluwer, p. 227-242

Measures to Reduce the Electromagnetic Emission of a SoC

Ostermann, T., Deutschmann, B., Gut, W. & Bacher, C., 2003, *VLSI-SoC 2013*. Darmstadt: Technische Universität Darmstadt, p. 31-36

Messmethode zur Messung der leitungsgeführten Störemission von ICs (Die Probleme mit der 150 Ohm Methode, IEC 61967-4)

Deutschmann, B., Winkler, G. & Jungreithmair, R., 2003, In: *EMC-Kompodium*. 2003, p. 174-176

Neue Burst-Generatoren zur Prüfung der Störfestigkeit von integrierten Schaltkreisen

Deutschmann, B., Langer, G. & Auderer, G., 2003, *Austrochip*. Linz: Inst. für Integrierte Schaltungen, Johannes-Kepler-Univ., p. 9-12

Störemission integrierter Schaltungen im Vergleich zur Störstrahlung elektronischer Geräte

Winkler, G., Deutschmann, B., Lamedschwandner, K. & Ostermann, T., 2003, *Beiträge der Informationstagung Mikroelektronik 2003*. Wien: Österreichischer Verband für Elektrotechnik, Vol. 33. p. 221-226 (ÖVE-Schriftenreihe).

TEM-Cell and Surface Scan to Identify the Electromagnetic Emission of Integrated Circuits

Ostermann, T. & Deutschmann, B., 2003, *VLSI in the nanometer era*. New York, NY: Association of Computing Machinery , p. 76-79

Visualizing the Electromagnetic Emission at the Surface of ICs

Deutschmann, B. & Jungreithmair, R., 2003, *Symposium record ; Vol. 2*. Piscataway, NY: Institute of Electrical and Electronics Engineers, p. 1125-1128

Bitte nicht stören! Störemission und Störfestigkeit von Kfz

Deutschmann, B. & Lamedschwandner, K., 2002, In: *Design & Elektronik*. 3, p. 59-62

Characterization of Integrated Circuits Electromagnetic Emission with IEC 61967-4

Deutschmann, B., Winkler, G. & Jungreithmair, R., 2002, *International Symposium on Electromagnetic Compatibility.* , p. 493-497

Characterization of the influence of different power supply styles on the electromagnetic emission of ICs by using the TEM-Cell method (IEC 61967-2)

Ostermann, T., Schneider, D., Bacher, C., Deutschmann, B., Jungreithmair, R., Gut, W., Lackner, C., Koessl, R. & Hagelauer, R., 2002, *International Workshop on Electromagnetic Compatibility of Integrated Circuits.* , p. 57-60

EMV-Prüfungen für Kraftfahrzeuge

Lamedschwandner, K. & Deutschmann, B., 2002, In: *Elektronik-Report.* 11, p. 6-7

Let's get started, Starterkits erleichtern Elektronikentwicklung

Deutschmann, B. & Greimel-Rechling, B., 2002, In: *Design & Elektronik.* 5, p. 35-36

Measuring the Electromagnetic Emissions of Integrated Circuits with IEC 61967-4 ((The Measuring Method and its Weaknesses)

Deutschmann, B., Winkler, G. & Jungreithmair, R., 2002, *Symposium record ; vol. 1.* Piscataway, NY: Institute of Electrical and Electronics Engineers, p. 407-412

Surface scan to pinpoint EMC problems

Deutschmann, B. & Jungreithmair, R., 2002, *Austrochip 2002.* Graz: Inst. für Elektronik, Techn. Univ. Graz, p. 73-77

Ungestörtes Fahrvergnügen? - EMV von Kfz-Elektronik

Deutschmann, B., 2002, *Begleittexte zum Entwicklerforum Kfz-Elektronik.* Poing: Design & Elektronik, p. 223-231

Untersuchung des Einflusses von On-Chip Decoupling Kapazitäten auf die Verringerung der Störemission von Integrierten Schaltungen

Ostermann, T., Schneider, D., Bacher, C., Deutschmann, B., Jungreithmair, R., Lackner, C., Koessl, R., Gut, W., Bauernfeind, T. & Hagelauer, R., 2002, *Kleinheubacher Tagung 2002.* , p. ?-?

EMV-gerechte Entwicklung von integrierten Schaltkreisen

Deutschmann, B., 2001, In: *EMV-ESD.* 12, p. 11-13

EMV-gerechte Entwicklung von ITE-Geräten

Deutschmann, B. & Lamedschwandner, K., 2001, In: *Design & verification.* 12, 3, p. 22-25

EMV-gerecht Entwicklung von ITE-Geräten

Deutschmann, B. & Lamedschwandner, K., 2001, In: *Telematik.* 7, 1, p. 32-33

Moderate Slew Rate for Reducing the High Frequency Content

Deutschmann, B. & Winkler, G., 2001, *ISTET 01 ; Vol. 2.* Linz: ., p. 154-157

Moderate Slew Rate zur Reduzierung hochfrequenter Spektralanteile

Deutschmann, B. & Winkler, G., 2001, *Beiträge der Informationstagung ME 01.* Wien: Eigenverl. des Österr. Verb. für Elektrotechnik, Vol. 26. p. 333-338 (ÖVE-Schriftenreihe).

The Mythos Ground Bounce

Deutschmann, B., 2001, *Tagungsband.* Wien: Inst. für Computertechnik, TU Wien, p. 33-40

Activities

20. EMV-Fachtagung

Daniel Kircher (Participant), Nikolaus Czepl (Participant), Dominik Zupan (Participant) & Bernd Deutschmann (Participant)
27 Sept 2023 → 28 Sept 2023

2023 International Symposium and Exhibition on Electromagnetic Compatibility

Daniel Kircher (Participant), Nikolaus Czepl (Participant), Dominik Zupan (Participant) & Bernd Deutschmann (Participant)
4 Sept 2023 → 8 Sept 2023

2023 Joint Asia-Pacific International Symposium on Electromagnetic Compatibility and International Conference on ElectroMagnetic Interference and Compatibility

Daniel Kircher (Participant), Nikolaus Czepl (Participant), Bernd Deutschmann (Participant) & Jan Carsten Hansen (Participant)
22 May 2023 → 25 May 2023

Industry Strategy Symposium Europe 2023

Bernd Deutschmann (Participant) & Clara Haubenwallner (Participant)
15 Feb 2023 → 16 Feb 2023

Combined Investigations of Electromagnetic Compatibility and Environmental Effects

Bernd Deutschmann (Speaker)
26 Nov 2022

Electronica 2022

Bernd Deutschmann (Participant), Dominik Zupan (Participant), Clara Haubenwallner (Participant), Sabrina Koffler (Participant), Nikolaus Czepl (Participant) & Daniel Kircher (Participant)
15 Nov 2022 → 18 Nov 2022

SEMICON Europa 2022

Bernd Deutschmann (Participant), Dominik Zupan (Participant), Clara Haubenwallner (Participant), Sabrina Koffler (Participant), Nikolaus Czepl (Participant) & Daniel Kircher (Participant)
15 Nov 2022 → 18 Nov 2022

Reduction of conducted emission through optimum placement and selection of decoupling capacitors

Bernd Deutschmann (Speaker) & Gunter Winkler (Speaker)
21 Sept 2022

19. EMV-Fachtagung 2022

Dominik Zupan (Organiser), Gunter Winkler (Organiser), Bernd Deutschmann (Organiser), Ko Odreitz (Organiser), Daniel Kircher (Participant), Nikolaus Czepl (Participant), Sabrina Koffler (Participant) & Clara Haubenwallner (Participant)
20 Sept 2022 → 22 Sept 2022

IEEE EMC PhD Student Day 2022

Ko Odreitz (Organiser), Ömer Faruk Yildiz (Organiser), Christian Schuster (Organiser), Bernd Deutschmann (Organiser), David Johannes Pommerenke (Organiser), Nikolaus Czepl (Participant), Hamideh Esmaeili (Participant), Gabriel Fellner (Participant), Mehdi Gholizadeh (Participant), Samikshya Ghosalkar (Participant), Daniel Kircher (Participant), Rui Mi (Participant), Leonhard Petzel (Participant), Youssef Rammal (Participant), Morten Schierholz (Participant), Michael Wulff (Participant), Maoxing Zhang (Participant) & Dominik Zupan (Participant)
20 Sept 2022 → 21 Sept 2022

2022 International Symposium on Electromagnetic Compatibility

Daniel Kircher (Participant), Bernd Deutschmann (Participant), Dominik Zupan (Participant), Nikolaus Czepl (Participant), Gabriel Fellner (Participant), Leonhard Petzel (Participant) & David Johannes Pommerenke (Participant)
5 Sept 2022 → 8 Sept 2022

Spread Spectrum Clocking (SSC) to Overcome EMI Issues

Bernd Deutschmann (Speaker)
5 Sept 2022

Functional Safety Risks of Smart Power Devices due to EMI

Bernd Deutschmann (Speaker) & Daniel Kircher (Speaker)
13 Jul 2022

2022 International Exhibition and Conference on Electromagnetic Compatibility

Daniel Kircher (Participant) & Bernd Deutschmann (Participant)
12 Jul 2022 → 14 Jul 2022

17th International Conference on PhD Research in Microelectronics and Electronics (Event)

Bernd Deutschmann (Member)
12 Jun 2022 → 15 Jun 2022

Electromagnetic Emissions in Combination with TID Stress – Physical Background, Test Setup and First Results

Alicja Malgorzata Michalowska-Forsyth (Speaker), Nikolaus Czepl (Speaker) & Bernd Deutschmann (Speaker)
26 Apr 2022

Electromagnetic Compatibility Essentials

Ko Odreitz (Contributor), Bernd Deutschmann (Contributor) & David Johannes Pommerenke (Contributor)
22 Mar 2022

13th International Workshop on the Electromagnetic Compatibility of Integrated Circuits

Dominik Zupan (Participant), Nikolaus Czepl (Participant), Daniel Kircher (Participant) & Bernd Deutschmann (Participant)
9 Mar 2022 → 11 Mar 2022

Improving integrated circuit reliability by combining tests to ionizing radiation and electromagnetic compatibility

Fabian Vargas (Speaker), Bernd Deutschmann (Speaker), Sonia Ben Dhia (Speaker), Nikolaus Czepl (Speaker) & Alicja Malgorzata Michalowska-Forsyth (Speaker)
3 Mar 2022

13th International Workshop on the Electromagnetic Compatibility of Integrated Circuits (Event)

Bernd Deutschmann (Member)
1 Jan 2022 → 31 Dec 2022

2022 International Symposium on Electromagnetic Compatibility (Event)

Bernd Deutschmann (Member)
1 Jan 2022 → 31 Dec 2022

Organisation des VWA/DA Preises der Fakultät für Elektrotechnik und Informationstechnik

Marcel Carsten Baunach (Speaker), Olga Saukh (Speaker), David Johannes Pommerenke (Speaker) & Bernd Deutschmann (Speaker)
2022

SEMICON Europa 2021

Dominik Zupan (Participant), Bernd Deutschmann (Participant), Daniel Kircher (Participant), Nikolaus Czepl (Participant) & Sabrina Koffler (Participant)
16 Nov 2021 → 19 Nov 2021

Elektrostatistische Entladungen und Elektronik

Bernd Deutschmann (Speaker), Gunter Winkler (Speaker) & David Johannes Pommerenke (Speaker)
21 Oct 2021

2021 Asia-Pacific International Symposium on Electromagnetic Compatibility

Dominik Zupan (Participant), Bernd Deutschmann (Participant), Nikolaus Czepl (Participant) & Alicja Malgorzata Michalowska-Forsyth (Participant)
27 Sept 2021 → 30 Sept 2021

2021 Asia-Pacific International Symposium on Electromagnetic Compatibility (Event)

Bernd Deutschmann (Peer reviewer)
27 Sept 2021 → 30 Sept 2021

2021 Asia-Pacific International Symposium on Electromagnetic Compatibility (Event)

Bernd Deutschmann (Member)
27 Sept 2021 → 30 Sept 2021

Improving Integrated Circuit Reliability by Combining Tests to Ionizing Radiation and Electromagnetic Compatibility

Bernd Deutschmann (Speaker), Alicja Malgorzata Michalowska-Forsyth (Speaker), Nikolaus Czepl (Speaker) & Fabian Vargas (Speaker)
27 Sept 2021

2021 Asia-Pacific International Symposium on Electromagnetic Compatibility (Event)

Bernd Deutschmann (Chair)
21 Sept 2021 → 30 Sept 2021

2021 Joint IEEE International Symposium on Electromagnetic Compatibility Signal and Power Integrity, and EMC Europe (Event)

Bernd Deutschmann (Chair)
21 Jul 2021 → 21 Aug 2021

2021 International Conference on Synthesis, Modeling, Analysis and Simulation Methods and Applications to Circuit Design, and 16th Conference on PhD Research in Microelectronics and Electronics (Event)

Bernd Deutschmann (Member)
19 Jul 2021 → 22 Jul 2021

2021 International Conference on Synthesis, Modeling, Analysis and Simulation Methods and Applications to Circuit Design, and 16th Conference on PhD Research in Microelectronics and Electronics (Event)

Bernd Deutschmann (Peer reviewer)
19 Jul 2021 → 22 Jul 2021

2021 International Conference on Synthesis, Modeling, Analysis and Simulation Methods and Applications to Circuit Design, and 16th Conference on PhD Research in Microelectronics and Electronics (Event)

Bernd Deutschmann (Member)
19 Jul 2021 → 22 Jul 2021

13th International Workshop on the Electromagnetic Compatibility of Integrated Circuits (Event)

Bernd Deutschmann (Member)
1 Jan 2021 → 31 Dec 2021

Panel discussion - METIS4Skills

Bernd Deutschmann (Speaker)
18 Nov 2020

System Efficient ESD Design for Robust Electronic Systems

Bernd Deutschmann (Speaker) & David Johannes Pommerenke (Speaker)
27 Oct 2020

2020 Austrochip Workshop on Microelectronics (Event)

Bernd Deutschmann (Peer reviewer)
20 Oct 2020

2020 Austrochip Workshop on Microelectronics (Event)

Bernd Deutschmann (Chair)
7 Oct 2020

Shielding Effectiveness of Soft Ferrite Materials

Bernd Deutschmann (Speaker), Gunter Winkler (Speaker), Junaid Shakeel Khan (Contributor) & Jorge Victoria (Contributor)
30 Sept 2020

Einführung in das EMV-gerechte PCB- und Gerätedesign: Emissions- & Störfestigkeitsprobleme verstehen und beseitigen

Bernd Deutschmann (Speaker) & Gunter Winkler (Speaker)
29 Sept 2020

Microelectronic Systems Symposium 2020 (Event)

Bernd Deutschmann (Member)
27 May 2020 → 28 May 2020

Asia-Pacific Symposium on Electromagnetic Compatibility (APEMC) (Event)

Bernd Deutschmann (Peer reviewer)
19 May 2020 → 22 May 2020

Choosing the Right Decoupling Capacitor

Bernd Deutschmann (Speaker) & Gunter Winkler (Speaker)
13 Mar 2020

PCB-Design Guidelines to Reduce the Electromagnetic Emission

Bernd Deutschmann (Speaker) & Gunter Winkler (Speaker)
13 Mar 2020

27th Austrochip Workshop on Microelectronics (Event)

Bernd Deutschmann (Peer reviewer)
24 Oct 2019

Comparison of Harmonic Suppression Techniques

Bernd Deutschmann (Speaker)
22 Oct 2019

EMV-gerechtes Schaltungs- und Leiterplattendesign

Bernd Deutschmann (Speaker) & Gunter Winkler (Speaker)
16 Oct 2019

Ionizing Radiation and Electromagnetic Interference on Integrated Circuits: from the need of combined tests to current solutions

Bernd Deutschmann (Speaker)
6 Sept 2019

Influence of impedance mismatch of bended or pinched cables on signal integrity

Susanne Maria Bauer (Speaker), Christian Türk (Contributor), Werner Renhart (Contributor), Oszkar Biro (Contributor), Christoph Maier (Contributor), Gunter Winkler (Contributor) & Bernd Deutschmann (Contributor)
24 Jul 2019

Band Specific Suppression of Harmonics and its Effects on Power Efficiency

Bernd Deutschmann (Speaker)

17 Jul 2019

15th Conference on Ph.D. Research in Microelectronics and Electronics (Event)

Bernd Deutschmann (Member)

15 Jul 2019 → 18 Jul 2019

15th Conference on Ph.D. Research in Microelectronics and Electronics (Event)

Bernd Deutschmann (Peer reviewer)

15 Jul 2019 → 18 Jul 2019

15th Conference on Ph.D. Research in Microelectronics and Electronics (Event)

Bernd Deutschmann (Member)

15 Jul 2019 → 18 Jul 2019

15th Conference on Ph.D. Research in Microelectronics and Electronics (Event)

Bernd Deutschmann (Peer reviewer)

15 Jul 2019 → 18 Jul 2019

How smart are smart power products under EMI?

Bernd Deutschmann (Speaker)

23 May 2019

4. Sitzung des Programmbeirats der Silicon Austria Labs (SAL) (Event)

Bernd Deutschmann (Member)

14 May 2019 → 15 May 2019

5. Sitzung des Programmbeirats der Silicon Austria Labs (SAL) (Event)

Bernd Deutschmann (Chair)

14 May 2019 → 15 May 2019

6. Sitzung des Programmbeirats der Silicon Austria Labs (SAL) (Event)

Bernd Deutschmann (Member)

14 May 2019 → 15 May 2019

BCI-Tests - Durchführung und Herausforderung

Bernd Deutschmann (Speaker) & Gunter Winkler (Speaker)

28 Feb 2019

Debugging EMC Problems with Oscilloscopes

Michael Fuchs (Speaker), Bernd Deutschmann (Speaker) & Markus Herdin (Speaker)

27 Feb 2019

15th Conference on Ph.D. Research in Microelectronics and Electronics (Event)

Bernd Deutschmann (Peer reviewer)

1 Jan 2019 → 31 Dec 2019

27th Austrochip Workshop on Microelectronics (Event)

Bernd Deutschmann (Member)

1 Jan 2019

Österreichischer Verband für Elektrotechnik (OVE) (External organisation)

Bernd Deutschmann (Member)

1 Jan 2019 → 31 Dec 2019

The 12th International Workshop on the Electromagnetic Compatibility of Integrated Circuits (Event)

Bernd Deutschmann (Member)

1 Jan 2019 → 31 Dec 2019

The 12th International Workshop on the Electromagnetic Compatibility of Integrated Circuits (Event)

Bernd Deutschmann (Member)

1 Jan 2019 → 31 Dec 2019

Simulation of the Electromagnetic Emission of Electronic Systems

Bernd Deutschmann (Organiser), Gunter Winkler (Organiser) & Michael Fuchs (Organiser)

20 Dec 2018

Olivier Gevin

Alicja Malgorzata Michalowska-Forsyth (Host), Bernd Deutschmann (Host) & Varvara Bezhenova (Host)

10 Dec 2018

Radiation Hardness Day

Alicja Malgorzata Michalowska-Forsyth (Organiser), Bernd Deutschmann (Organiser), Varvara Bezhenova (Organiser), Tommaso Vincenzi (Participant) & Michael Vorderderfler (Participant)

10 Dec 2018

EMV-gerechtes Schaltungs- und Leiterplattendesign

Bernd Deutschmann (Speaker) & Gunter Winkler (Speaker)

16 Oct 2018

26th Austrian Workshop on Microelectronics

Peter Söser (Organiser), Mario Auer (Organiser), Edith Lanz (Organiser), Varvara Bezhenova (Organiser), Alicja Malgorzata Michalowska-Forsyth (Organiser), Eduard Dorner (Organiser), Daniel Eisenkölbl (Organiser), Stephan Fink (Organiser), Tim Reisenhofer (Organiser), Reinhard Lilek (Organiser) & Bernd Deutschmann (Organiser)

27 Sept 2018

3. Sitzung des Programmbeirats Silicon Austria Errichtungs GmbH (Event)

Bernd Deutschmann (Member)

24 Sept 2018 → 25 Sept 2018

44th European Solid-State Circuits Conference

Bernd Deutschmann (Organiser) & Bernhard Wicht (Organiser)

3 Sept 2018

Introduction to Robust Automotive IC Design and Electromagnetic Compatibility of ICs

Bernd Deutschmann (Speaker) & Gunter Winkler (Speaker)

3 Sept 2018

Investigation of Spice Models for Overvoltage Protection Devices with Respect to Fast Transients

Susanne Maria Bauer (Speaker), Werner Renhart (Contributor), Oszkar Biro (Contributor), Christian Türk (Contributor), Christoph Maier (Contributor), Gunter Winkler (Contributor) & Bernd Deutschmann (Contributor)

1 Aug 2018

13th Conference on Ph.D. Research in Microelectronics and Electronics (Event)

Bernd Deutschmann (Peer reviewer)

2 Jul 2018 → 5 Jul 2018

13th Conference on Ph.D. Research in Microelectronics and Electronics (Event)

Bernd Deutschmann (Member)
2 Jul 2018 → 5 Jul 2018

14th Conference on Ph.D. Research in Microelectronics and Electronics, PRIME 2018 (Event)

Bernd Deutschmann (Peer reviewer)
2 Jul 2018 → 5 Jul 2018

Wie „smart“ ist Smart Power Leistungselektronik unter Störbeeinflussung?

Bernd Deutschmann (Speaker), Gunter Winkler (Speaker) & Paul Kastner (Speaker)
12 Jun 2018 → 13 Jun 2018

14th Conference on Ph.D. Research in Microelectronics and Electronics, PRIME 2018 (Event)

Bernd Deutschmann (Member)
2 Jun 2018 → 5 Jun 2018

Time domain FEM computational approach for calibration of surface scan method

Susanne Maria Bauer (Speaker), Oszkar Biro (Contributor), Gergely Koczka (Contributor), Andreas Gleinser (Contributor), Gunter Winkler (Contributor) & Bernd Deutschmann (Contributor)
16 May 2018

2018 JOINT IEEE INTERNATIONAL SYMPOSIUM ON ELECTROMAGNETIC COMPATIBILITY AND ASIA-PACIFIC SYMPOSIUM ON ELECTROMAGNETIC COMPATIBILITY (Event)

Bernd Deutschmann (Chair)
14 May 2018 → 17 May 2018

2. Sitzung des Programmbeirats Silicon Austria Errichtungs GmbH (Event)

Bernd Deutschmann (Member)
25 Apr 2018

Lange Nacht der Forschung 2018

Varvara Bezhnova (Organiser), Alicja Malgorzata Michalowska-Forsyth (Organiser), Bernd Deutschmann (Organiser), Michael Fuchs (Organiser), Gunter Winkler (Organiser), Bernhard Auinger (Organiser), Maximilian Scherzer (Organiser), Eduard Dorner (Organiser), Stephan Fink (Organiser), Daniel Eisenkölbl (Organiser), Tim Reisenhofer (Organiser), Nikolaus Juch (Organiser) & Peter Söser (Organiser)
13 Apr 2018

Locating EMC problems at the surface of ICs and PCBs

Bernd Deutschmann (Speaker)
13 Apr 2018

Electromagnetic Compatibility of Integrated Circuits – An Introduction to EMC Test Methods

Bernd Deutschmann (Speaker)
12 Mar 2018 → 16 Mar 2018

Gridconv - Innovativer HVDC/DC Converter für HVDC-Netze

Bernhard Auinger (Contributor), Bernd Deutschmann (Contributor), Uwe Schichler (Contributor), Klaus Krischan (Contributor), Martin Horn (Contributor), Markus Reichhartinger (Contributor) & Herwig Renner (Speaker)
14 Feb 2018

1. Sitzung des Programmbeirats Silicon Austria Errichtungs GmbH (Event)

Bernd Deutschmann (Member)
8 Feb 2018

Österreichischer Verband für Elektrotechnik (OVE) (External organisation)

Bernd Deutschmann (Member)

1 Jan 2018 → 31 Dec 2018

Fabian Vargas

Varvara Bezhnova (Host) & Bernd Deutschmann (Host)

11 Dec 2017

Introduction into Electromagnetic Compatibility

Bernhard Auinger (Speaker), Bernd Deutschmann (Speaker), Gunter Winkler (Speaker) & Michael Fuchs (Speaker)

21 Nov 2017 → 22 Nov 2017

25th Austrian Workshop on Microelectronics (Event)

Bernd Deutschmann (Peer reviewer)

12 Oct 2017

11th International Workshop on the Electromagnetic Compatibility of Integrated Circuits (Event)

Bernd Deutschmann (Member)

4 Jul 2017 → 8 Jul 2017

11th International Workshop on the Electromagnetic Compatibility of Integrated Circuits (Event)

Bernd Deutschmann (Peer reviewer)

4 Jul 2017 → 8 Jul 2017

11th International Workshop on the Electromagnetic Compatibility of Integrated Circuits (Event)

Bernd Deutschmann (Peer reviewer)

4 Jul 2017 → 8 Jul 2017

8th Workshop on Electromagnetic Compatibility of Integrated Circuits (EMC Compo 2011) (Event)

Bernd Deutschmann (Peer reviewer)

4 Jul 2017 → 8 Jul 2017

8th Workshop on Electromagnetic Compatibility of Integrated Circuits (EMC Compo 2011) (Event)

Bernd Deutschmann (Member)

4 Jul 2017 → 8 Jul 2017

2017 Asia-Pacific International Symposium on Electromagnetic Compatibility, APEMC 2017 (Event)

Bernd Deutschmann (Peer reviewer)

20 Jun 2017 → 23 Jun 2017

13th Conference on Ph.D. Research in Microelectronics and Electronics (Event)

Bernd Deutschmann (Member)

12 Jun 2017 → 15 Jun 2017

GridConv: HVDC-DC Converter for High Voltage Direct Current Transmission Systems – Background and Design

Klaus Krischan (Speaker), Bernhard Auinger (Speaker), Uwe Schichler (Speaker), Bernd Deutschmann (Speaker) & Herwig Renner (Speaker)

26 Apr 2017

GridConv: HVDC-DC Converter for High Voltage Direct Current Transmission Systems – The Electronic System

Bernhard Auinger (Speaker), Franz Vollmaier (Speaker), Bernd Deutschmann (Speaker), Klaus Krischan (Speaker) & Uwe Schichler (Speaker)

26 Apr 2017 → 27 Apr 2017

Störemission von Leistungselektronik

Bernd Deutschmann (Contributor), Gunter Winkler (Contributor) & Bernhard Auinger (Contributor)
26 Apr 2017

Leistungselektronikschau im Rahmen der 15. EMV - Fachtagung

Annette Muetze (Organiser) & Bernd Deutschmann (Organiser)
16 Apr 2017

Österreichischer Verband für Elektrotechnik (OVE) (External organisation)

Bernd Deutschmann (Member)
1 Jan 2017 → 31 Dec 2017

Susceptibility of Precision Operational Amplifiers to EMI

Bernd Deutschmann (Speaker)
30 Nov 2016

Erfolgreich führen und kommunizieren

Bernd Deutschmann (Participant)
24 Nov 2016

Arbeitsrecht für wissenschaftliche Führungskräfte

Bernd Deutschmann (Participant)
15 Nov 2016

LTSpice Seminar with Mike Engelhardt

Bernd Deutschmann (Participant)
28 Oct 2016

24th Austrian Workshop on Microelectronics

Bernd Deutschmann (Participant)
19 Oct 2016

12th Conference on Ph.D. Research in Microelectronics and Electronics

Bernd Deutschmann (Participant)
27 Jun 2016 → 30 Jun 2016

12th Conference on Ph.D. Research in Microelectronics and Electronics (Event)

Bernd Deutschmann (Member)
27 Jun 2016 → 30 Jun 2016

12th Conference on Ph.D. Research in Microelectronics and Electronics (Event)

Bernd Deutschmann (Peer reviewer)
27 Jun 2016 → 30 Jun 2016

12th Conference on Ph.D. Research in Microelectronics and Electronics (Event)

Bernd Deutschmann (Member)
27 Jun 2016 → 30 Jun 2016

Spread Spectrum Clocking for Emission Reduction

Bernd Deutschmann (Speaker)
15 Jun 2016

Inauguration and Radhard Symposium

Bernd Deutschmann (Participant)
7 Jun 2016 → 8 Jun 2016

Asia-Pacific International Symposium on Electromagnetic Compatibility & Signal Integrity (APEMC)

Bernd Deutschmann (Participant)
17 May 2016 → 21 May 2016

14. EMV Fachtagung

Bernd Deutschmann (Speaker)
12 Apr 2016

Power Supply Meets EMC-Know How

Bernd Deutschmann (Participant)
16 Feb 2016

Expertenworkshop "Sensorik / Mikroelektronik" im Rahmen des HTS Strategieentwicklungsprozesses

Bernd Deutschmann (Participant)
10 Feb 2016

Österreichischer Verband für Elektrotechnik (OVE) (External organisation)

Bernd Deutschmann (Member)
1 Jan 2016 → 31 Dec 2016

Digital Control Strategies for EMI reduced switching of Smart Power Switches

Bernd Deutschmann (Agent)
18 Dec 2015

10th International Workshop on the Electromagnetic Compatibility of Integrated Circuits, EMC Compo 2015 (Event)

Bernd Deutschmann (Member)
10 Nov 2015 → 15 Nov 2015

10th International Workshop on the Electromagnetic Compatibility of Integrated Circuits, EMC Compo 2015 (Event)

Bernd Deutschmann (Peer reviewer)
10 Nov 2015 → 13 Nov 2015

International Workshop on the Electromagnetic Compatibility of Integrated Circuits (EMC Compo) (Event)

Bernd Deutschmann (Peer reviewer)
10 Nov 2015 → 13 Nov 2015

International Symposium on Electromagnetic Compatibility

Bernd Deutschmann (Speaker)
16 Aug 2015 → 22 Aug 2015

Asia-Pacific International Symposium on Electromagnetic Compatibility (Event)

Bernd Deutschmann (Peer reviewer)
25 May 2015 → 29 May 2015

Österreichischer Verband für Elektrotechnik (OVE) (External organisation)

Bernd Deutschmann (Member)
1 Jan 2015 → 31 Dec 2015

Austrian Workshop on Microelectronics (Austrochip) (Event)

Bernd Deutschmann (Peer reviewer)
14 Oct 2014

AMP-S Design Symposium

Bernd Deutschmann (Speaker)
14 May 2014

Microelectronics Systems Symposium, MESS

Bernd Deutschmann (Speaker)
9 May 2014 → 10 May 2014

Österreichischer Verband für Elektrotechnik (OVE) (External organisation)

Bernd Deutschmann (Member)
1 Jan 2014 → 31 Dec 2014

9th International Workshop on Electromagnetic Compatibility of Integrated Circuits (Event)

Bernd Deutschmann (Peer reviewer)
15 Dec 2013 → 18 Dec 2013

9th International Workshop on Electromagnetic Compatibility of Integrated Circuits (Event)

Bernd Deutschmann (Member)
15 Dec 2013 → 18 Dec 2013

Austrochip 2013, 21st Austrian Workshop on Microelectronics

Bernd Deutschmann (Speaker)
10 Oct 2013

8th Workshop on Electromagnetic Compatibility of Integrated Circuits (EMC Compo 2011) (Event)

Bernd Deutschmann (Peer reviewer)
6 Nov 2011 → 9 Nov 2011

EMC Compo 2009 (Event)

Bernd Deutschmann (Peer reviewer)
17 Nov 2009 → 19 Nov 2009

EMC Compo 2009 (Event)

Bernd Deutschmann (Peer reviewer)
17 Nov 2009 → 18 Nov 2009

EMC Compo 2009 (Event)

Bernd Deutschmann (Member)
17 Nov 2009 → 18 Nov 2009

EMC Compo 2009 (Event)

Bernd Deutschmann (Member)
17 Nov 2009 → 19 Nov 2009

EMC Compo 2009 (Event)

Bernd Deutschmann (Member)
17 Nov 2009 → 19 Nov 2009

EMC Compo 2009 (Event)

Bernd Deutschmann (Peer reviewer)
17 Nov 2009 → 19 Nov 2009

Projects

Absorbers - Electronics Measurements with Absorbers

Deutschmann, B.
17/04/19 → 22/05/20

ARCADE - New and extended dynamic pulse test concepts for integrated and discrete power semiconductors

Deutschmann, B.
1/05/24 → 30/04/27

Cotomics - Computed Tomography IC with high Radiation immunity

Deutschmann, B.
1/02/15 → 31/01/18

Dissertation Schneider - Evaluation of variables influencing the lifetime of resonant MEMS mirrors by means of current measurements

Deutschmann, B.
1/09/23 → 31/08/26

Electromagnetic Compatibility

Deutschmann, B. & Winkler, G.
1/01/95 → ...

Electronic Circuit Design

Deutschmann, B.
1/01/95 → ...

EM2APS - EM2APS - Enhanced Materials, Methods & Applications for Power Devices & Systems

Deutschmann, B.
1/10/14 → 30/09/17

EMV-Geräte - EMC-compliant device development

Deutschmann, B.
1/08/24 → 31/07/25

EMV Support - Electromagnetic compatibility Support

Deutschmann, B.
26/08/21 → 30/09/22

ESD PROMEMO - ESD-Schutzstrukturentwurf und Prototyping, Messung und Modellierung

Deutschmann, B.
1/08/21 → 30/06/22

FPES2020 - Future of Power Electronic Systems 2020

Deutschmann, B.
1/05/15 → 30/04/18

Inno-EBS - Interdisciplinary knowledge transfer in Electronic Based Systems (EBS) to strengthen value chain actors

Deutschmann, B., Jandl, M. & Kreuzer, E.
1/02/20 → 31/07/23

METIS - MicroElectronics Training, Industry and Skills

Deutschmann, B.
1/01/20 → 31/12/23

PREMI - Pre-estimation of electromagnetic interference of electronic based systems

Deutschmann, B.
1/01/22 → 30/06/24

R-MULTICHARM - Multidisciplinary Characterization & Modeling for Innovative Process & Product Integration

Radl, S., Rosenauer, P. & Deutschmann, B.
1/03/21 → 29/02/24

Robust SiC - Robust Multi-Channel Application Stress Concept for New High Power Semiconductor Technologies

Deutschmann, B.
1/03/19 → 28/02/22