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Andreas Baschnagel, Daniel Prindle, Silvan Geissmann, Fabian Fischer, Samuel Hartmann, Raffael Schnell, Gontran Pâques, Arnost Kopta, ABB Switzerland, CH

A New Generation of 600V Intelligent Power Module for Consumer and Industrial Motor Drive Applications

Bumseung Jin, Kang Yoon Lee, SungDae Shin, Geun-Hyoung Lee, David Jo, Taesung Kwon, Fairchild Korea Semiconductor, ROK

Super Mini DIIPM for Automobile

Naoki Ikeda, Hiroyuki Hata, Hongbo Zhang, Mitsubishi Electric Corporation, J

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Yiyi Chen, Bo Li, Yuying Yan, Wei Gong, University of Nottingham, GB; Fang Qi, Yangang Wang, Steve Jones, Dynex Semiconductor, GB

Silicone-Based Enablers for Thermal Management in Power Electronics

Thomas Seldrum, Marin Demulier, Vincent Delsuc, Dow Corning Europe, BE

Innovative Design in IGBT Cold Plate

Chihwei Wei, Kevin Wu, Larry Lin, Amulair Thermal Technology, TW

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Kazuhiko Minami, Atsushi Otaki, Ichiro Ota, Showa Denko, J

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David Saums, DSA LLC, USA; Timothy Jensen, Indium Corporation, USA

Two-Phase Liquid Cooling for Electric Vehicle IGBT Power Module Thermal Management

Itxaso Aranzabal, Inigo Martinez de Alegria, Inigo Kortabarria, University of the Basque Country (UPV/EHU), ES; Nicola Delmonte, Paolo Cova, University of Parma, I

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Bao Ngoc An, Maurizio Kempf, Michael Meisser, Horst Demattio, Benjamin Leyrer, Thomas Blank, Marc Weber, Karlsruhe Institute of Technology (KIT), D; Johannes Kolb, Schaeffler Technologies, D

Exploring Novel Second Level Cooling Methods for Low Profile IPMs

Khatri Danish, Rajeev Krishna Vytla, Okawa Katsumi, Jin Pei, Infineon Technologies Americas, USA

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Inverter Power Module Lifetime Estimation for HEV and EV

JeHwan Lee, HanGeun Jang, SangChul Shin, KiYoung Jang, JinHwan Jung, Hyundai Motors, ROK

The Enhanced Reliability of the Double Sided Cooled Package with Integrated Internal Isolation

Inpil Yoo, Marina Schmitz, Infineon Technologies, D

Determination of State-of-Health and Remaining Lifetime of Power Modules

Jörg Franke, Christian Herold, Lukas Tinschert, Josef Lutz, Technical University Chemnitz, D

Shoot Through and Avalanche Behavior of High Speed Fet Converter

Florian Kapaun, Rainer Marquardt, University of the Federal Armed Forces Munich, D

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Alexander Otto, Rainer Dudek, Sven Rzepka, Fraunhofer-Institute ENAS, D; Mohamad Abo Ras, Tobias von Essen, Berliner Nanotest & Design, D; Markus Bast, Armin Hindel, Ronald Eisele, FuE-Zentrum FH Kiel, D; Ulf Mütter, Helmut-Schmidt University, D; Arne Lunding, Philips Medical Systems, D

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Frederik Hahn, Markus Andresen, Giampaolo Buticchi, Marco Liserre, Christian-Albrechts-University, D

Thermal Calculation Methodology for Lifetime Estimation of Semiconductor Devices in MMC Application

Yijun Ye, Josef Lutz, Guang Zeng, Technical University of Chemnitz, D; Rodrigo Alvarez, Pablo Correa, Siemens, D

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In-Situ Transient Testing of Run-in and Degradation Effects of Thermal Interface Sheets in Power Switch Assemblies

Gabor Farkas, Zoltan Sarkany, Attila Szel, Mentor Graphics, HU

Material Design and Process Conditions of Pressureless Sintered Silver for 200/-40 °C Thermal Cycling Reliability

Masafumi Takesue, Tomofumi Watanabe, Naoya Nakajima, Bando Chemical Industries, J

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Peter Zacharias, Juliane Hinze, University of Kassel, D

Power Electronic Package for Double Sided Cooling Utilizing Tile-Level Assembly

Maximilian Schmid, Gordon Elger, Johannes Pforr, Technical University of Applied Sciences Ingolstadt, D

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Paula Diaz Reigosa, Francesco Iannuzzo, Frede Blaabjerg, Aalborg University, DK

Thermo-Mechanical Optimisation of Press Pack IGBT Packaging Using Finite Element Method Simulation

Michael Varley, Ashley Plumpton, Robin Simpson, Chas Tonner, Dynex Semiconductor, GB

Thermal Impedance Matrix Characterization of Co-Packed Discrete IGBT and Diode

Alberto Salinaro, ON Semiconductor, D; Hans-Peter Hoenes, ON Semiconductor, D

The Effect of 3 mol% Y₂O₃ doped ZrO₂ on the Flexural Strength of AlN Ceramics

Jong Seol Yoon, Ki Soo Jun, Kyong Hwan Kim, KCC Corporation, ROK

HT Lead-free and Sinter Materials for WBG Power Semiconductors

Minoru Ueshima, Tetsu Takemasa, Jinting Jiu, Senju Metal Industry, J; Soichi Sakamoto, Shijo Nagao, Katsuaki Suganuma, Osaka University, J

Passive and Active Two-Phase Cooling for Power Electronics Applications

Devin Pellicone, Advanced Cooling Technologies, USA

Feasibility Study, Combining High-Power MOSFETs in a Power Module Using Advanced Thermal Management

Martin Schulz, Maximilian Slawinski, Infineon Technologies, D

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Hybrid Power Cell using Si IGBT & SiC MOSFET

Benoit Peron, Joseph Magniez, Centum Adetel, F

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Jochen Staiger, Swen Bosch, Heinrich Steinhart, HTW Aalen, D

High Power Density GaN Interleaved Bidirectional Boost Converter with Extended Cooling Capability

Konstantin Siebke, Thorben Schobre, Niklas Langmaack, Regine Mallwitz, Technical University Braunschweig, D

Single-Ended Boost DC-DC Converter Cascade System for High Boost Rate and High Efficiency in Residential Fuel-Cell System

Ryoga Kiguchi, Yasuyuki, Nishida, Chiba Institute of Technology, J

An Isolated Bidirectional DC-DC Converter for Energy Storage Systems

Mofakkharul Islam, Bebro Electronic, D; Masuma Nasrin, Independent University Bangladesh, BD; Abul Bashar Sarkar, Kempten University of Applied Sciences, D

Modeling of ZVS DC-DC Converter for Charging and Voltage Balancing of Energy Storage Elements

Dimitar Arnaudov, Nikolay Hinov, George Kraev, Gergana Vacheva, Technical University of Sofia, BG

Modeling of Multiphase Converter for Charging of Energy Storage Elements

Stoyan Vuchev, Dimitar Arnaudov, Nikolay Hinov, Ivan Nedyalkov, Technical University of Sofia, BG

Advanced Power Converters for Energy Storage Systems for Light Traction Vehicles

Miroslav Hruška, Skoda Electric, CZ; Martin Schulz, Infineon Technologies, D

Compact Diode-Less Bidirectional GaN Based Buck Converter for Mobile DC-DC Applications

Sebastian Klötzer, Ulf Mütter, Sebastian Fahlbusch, Klaus F. Hoffmann, Helmut Schmidt University-University of the Federal Armed Forces Hamburg, D

Seven Reasons why Power Designers Should Implement 48V to 1V Direct Conversion

Bob Cantrell, Martin Hägerdal, Ericsson Power Modules, SE

Inductor Current Mapping Analog Controllers for Power Inverters and DC/DC Converters

Alexei Nikitin, Avatekh, USA; Ruslan L. Davidchack, University of Leicester, GB

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Analysis of a Novel Buck-Buck Single Stage LED-Ballast

Alexander Pawellek, Thomas Dürbaum, Friedrich-Alexander-University Erlangen, D

Energy Efficient, GHz Excited Plasma Lighting System

Kamil Kompa, Slawomir Niespodziany, KOMPA Sp. z o.o, PL

Constant Current Paralleling Controller for Mid-Power LED

Michael Heidinger, Christoph Simon, Fabian Denk, Wolfgang Heering, Rainer Kling, Karlsruhe Institute of Technology (KIT), D

A Novel Mains Operated LED Driver Using a GaN AC Switch

Dominique Bergogne, Othman Ladhari, Léo Sterna, Pierre Perichon, CEA-Léti, F

Electronic Ballast for Gas Discharge Lamp Based on Input- Series Output- Series Resonant Converter

Kaspars Kroics, Riga Technical University, LV

Control Loop Design for Closed-Loop Class-D Amplifiers with 4th Order Output Filter

Franz Maislinger, Hans Ertl, Technical University of Vienna, AT; Goran Stojcic, Florian Holzner, Bernecker + Rainer Industrie-Elektronik, AT

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Johannes Kemper, Hako, D; Boris Fiedler, Max Planck Institute for the Structure and Dynamics of Matter, D; Klaus F. Hoffmann, Helmut-Schmidt University, D

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David Hammes, Sidney Gierschner, Yves Hein, Hans-Günter Eckel, University of Rostock, D

Implementation of Extended Kalman Filter for PMSG Considering the Dynamics of the Mechanical System

Mohamed Abdelrahem, Christoph Hackl, Ralph Kennel, Technical University of Munich, D

Evolution of Bidirectional Power Architectures

David Bourner, Vicor Corporation, USA

Modular and Compact 1 MW Inverter in One 19 " Rack for Storage and PV

Patrick Hercegf, Stefan Schönberger, Fraunhofer Institute ISE, D

A New Step Towards the Power Electronics Design Automation

Lyubomir Kerachev, CMP, F; Yves Lembeye, André Andreta, Jean-Christophe Crebier, G2Elab, F

Passive Components and New Materials

Comprehensive AC Performance Analysis of Ceramic Capacitors for DC Link usage

Kirill Klein, Eckart Hoene, Klaus-Dieter Lang, Fraunhofer-Institute IZM, D

High Performance DC Link Capacitor/Bus Sourcing Dual Infineon HybridPACK™ Drive Inverters for EV Applications

Michael A. Brubaker, Terry Hosking, Wayne Liu, SBE, USA; Tomas Reiter, Infineon Technologies, D; Carsten Wüst, David Kuschnarew, hofer eds GmbH, D

An Evaluation Circuit for DC-Link Capacitors Used in a Single-Phase PWM Inverter

Kazunori Hasegawa, Ichiro Omura, Shin-ichi Nishizawa, Kyushu Institute of Technology / National Institute of AIST, J

IGBT Switching Behavior with Parallel Surge Arrester for Medium Voltage Application

Fabian Hohmann, Mark-M. Bakran, University of Bayreuth, D

Using Powder Materials to Replace Air-Gaps for Fringing Flux Reduction

Paul Winkler, Wulf Günther, Acal BFi Germany, D

Partial Discharge of Inductives in a High Frequency Application

Michael Schmidhuber, Herbert Jungwirth, SUMIDA Components Modules, D

Design of Inductive Components for Triangular Current Mode (TCM) Inverters up to 500 kW

Tobias Appel, Spezial-Transformatoren-Stockach, D; Jan Fuhrmann, Hans-Günter Eckel, University of Rostock, D

Study of the Influence of an Air Gap on Dimensional Resonance in MnZn-Ferrite Cores

Wolfgang Hauser, Manfred Albach, Friedrich-Alexander-University Erlangen, D

A Novel Approach to Calculate the Reluctance of Air-Gaps in Ferrite Cores

Erika Stenglein, Manfred Albach, Friedrich-Alexander-University Erlangen, D

Inductive Components for Solar Power Conversion in a Harsh Next Decade Environment

Michael Schmidhuber, SUMIDA Components Modules, D; Marco Jung, Fraunhofer Institute IWES, D

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Stefan Scheffler, Stefan Weber, EPCOS, D; Christoph Keller, Konstantin Spanos, Robert Bosch, D

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Current Measurement Device for High and Fast Changing Currents

Felix Himmelstoss, Karl Edlmoser, Technikum Vienna, AT

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Patrick Deck, Jan Hannig, Christian Peter Dick, TH Köln, D

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Christian Schulte-Overbeck, Zhiyu Cao, Faheem Khan, Fahad Hussain, Srujan Grandhi, Denis Weiss, AEG Power Solutions, D

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Fabrice Salvi, David Jobling, Pierre Turpin, LEM Switzerland, CH

Magneto-resistive Sensors for Angle, Position and Speed Measurement in Small-and Micro-sized actuators

Rolf Slatter, Rene Buß, Sensitec, D

Insulation Health State Monitoring of Traction Machines Based on Online Switching Transient Exploitation

Markus A. Vogelsberger, Bombardier Transportation Austria, AT; Clemens Zoeller, Thomas M. Wolbank, Hans Ertl, Technical University of Vienna, AT

Comparison of Fundamental Active and Reactive Power Determination Methods in Single-Phase Systems

Swen Bosch, Heinrich Steinhart, HTW Aalen, D

Practical Experience with EMI of Radio-Communication System Versus Power Electronics Based on the SiC

Jan Leuchter, University of Defence, CZ

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Short Circuit Capability of 650 V Normally Off GaN E-HEMT and MOSFET-HEMT Cascode

Douglas Pappis, Kevin Göbel, Peter Zacharias, University of Kassel, D

Advantages of Using 650V SiC MOSFETs in High-Frequency DC-DC Converters

Antonino Gaito, Giuseppe Sorrentino, STMicroelectronics, I

Cross Conduction of GaN HFETs in Half-Bridge Converters

Jan Böcker, Carsten Kuring, Sibylle Dieckerhoff, Technical University Berlin, D; Oliver Hilt, Joachim Würfl, FBH Ferdinand-Braun-Institute Berlin, D

Design Rules for Paralleling of Silicon Carbide Power MOSFETs

Salvatore La Mantia, STMicroelectronics Application, D; Luigi Abbatelli, Carlo Brusca, Maurizio Melito, Massimo Nania, STMicroelectronics, I

Influence of an Emitter Sense Pin on the Switching Behavior of SiC BJTs in Standard Discrete Housings

Christian Bödeker, Melanie Adelmund, Nando Kaminski, University of Bremen, D; Ranbir Singh, GeneSiC Semiconductor, USA

Designing Manufacturable and Reliable Printed Circuit Boards Employing Chip Scale eGaN® FETs

Michael de Rooij, Alana Nakata, Efficient Power Conversion (EPC) Corporation, USA

Impact of Circuit Carrier Technologies on MHz-switching of GaN Half-Bridge Circuits

Norbert Seliger, Franz Stubenrauch, University of Applied Sciences Rosenheim, D; Christian Brendel, Dr. Johannes Heidenahain, D; Doris Schmitt-Landsiedel, Technical University of Munich, D

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MMC AISiC as Alternative for Molybdenum in Power Press-Pack Semiconductor Design. Investigations of Electric Conductivity Properties of AISiC

Alexey Grishanin, Valentin A. Martynenko, Vyacheslav Eliseev, Anton Samoylov, JSC Electroprivyarnitel, RU; Konstantin Nishchev, Mikhail Novopolitsev, Ogarev Mordovia State University, RU

Sintered Ag Joints on Copper Lead Frame TO220 by Pressure Sintering Process with Improved Reliability and Bonding Strength

Ly May Chew, Wolfgang Schmitt, Jens Nachreiner, Heraeus Deutschland, D

A New Alternative Non-Pressure Silver Sinter Process by Using IR

Wolfgang Schmitt, Ly May Chew, Robert Miller, Anna Wolf, Heraeus Germany, D

High Reliability Large Area Substrate Solder Interconnect by Embedded Mesh Technique

James Booth, Michael Varley, David Slack, Paul Mumby-Croft, Steve Jones, Xiaoping Dai, Dynex Semiconductor, GB; Karthik Vijay, Indium Corporation, GB

Transient Current Distribution with Paralleling Dies and Paralleling Half Bridges in Multichip Power Modules

Helong Li, Wei Zhou, Fang Qi, Daohui Li, Yangang Wang, Steve Jones, Xiaoping Dai, Dynex Semiconductor, GB

Influence of the Power Semiconductor Packaging on the Failure Characteristic for Safety-Critical Applications

Michael Gleißner, Mark-M. Bakran, University of Bayreuth, D; Hussein Khalid, Mitsubishi Electric Europe, D

Double Side Sintered IGBT + FRD, 650V/ 200A, in a STO247 Package for High Performance Automotive Applications

Francois LeHenaff, Alpha Metals Lötssysteme, D; Gustavo Greca, Paul Salerno, Jeffrey Durham, Monnir Bouregghda, Alpha Assembly Solutions, USA; Anna Lifton, Apha, NL; Jean Claude Harel, Satyavrat Laud, Renesas Electronics, USA; Weikun He, Mentor Graphics, GB

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Reactive Power Operation of a Single Phase AC-AC DAB Converter

Martin Jagau, Michael Patt, Technogienetzwerk Allgäu, D

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Ben Jeppesen, Intel FPGA, GB; Ge Gao, Imperial College London, GB; Jason Katcha, Half Moon Ventures, USA

Comparison of Three Model Based Junction Temperature Control Systems to Increase the Lifetime of IGBT-Power- Modules

Maximilian Nitzsche, Julian Wölfle, Nathan Tröster, Martin Stempfle, Jörg Roth-Stielow, University of Stuttgart, D

A New Modulation Technique to Control the Switching Losses for Single Phase Three-Level Active-Neutral-Point-Clamped-Inverters

Johannes Ruthardt, Julian Wölfle, Matthias Zehelein, Jörg Roth-Stielow, University of Stuttgart, D

Comparison of FPGA Based Control Strategies (DDSRF-PI vs. State-Space Control) for Grid Connected Inverters under Grid Disturbances

Emanuel Mittwede, Johannes Kern, Stefan Schönberger, Benjamin Stickan, Fraunhofer Institute ISE, D

STNRGPF01: A New Driver for Interleaved PFC Based on Mixed Signal Control

Sebastiano Messina, Marco Torrisi, Giuseppe Di Caro, STMicroelectronics, I

Quasi-Constant Frequency Secondary Side Controlled Flyback Concept with Variable ON-Time

Arash Pake Talei, Kin Kenneth Leong, Gerald Deboy, Giuseppe Bernacchia, Infineon Technologies Austria AG, AT; Alexander Connaughton, Graz University of Technology, AT

Sensorless Control of a Bridgeless PFC Using a Low Pass Filter Model and a Linear PR Controller

Felipe López, Francisco Azcondo, Alberto Pigazo, Paula Lamo, University of Cantabria, ES

Optimised Modulation of Five-Phase Open-End Winding Drive

Ivan Zoric, Martin Jones, Liverpool John Moores University, GB; Milan Darijevic, Siemens AG, D

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Yu Liu, Infineon Technologies, D; Sergey Kochetov, BMW, D; Thomas Smazinka, Fraunhofer Institute IISB, D; Andreas Lindemann, Otto-von-Guericke-University, D

A New Approach for Digital Controlled Power Supplies Regarding Pulsed Plasma Nitriding Systems

Lisa Franke, Lutz Zacharias, Mirko Bodach, Ringo Lehmann, Westsächsische Hochschule Zwickau, D; Andreas Böhm, Plasmanitriertechnik Dr. Böhm, D

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Combination of Forward-Voltage Measurement and Short-Circuit Detection for High-Voltage RC-IGBTs

Patrick Münster, Daniel Lexow, Dennis Cordt, Hans-Günter Eckel, University of Rostock, D

Gate Driver IC for GaN GIT for High Slew Rate and Cross Conduction Protection

Aaron Qingwei Cai, Arnel Carrera Herreria, Howard Ban How Sin, Panasonic Industrial Devices Semiconductor Asia, SG; Litter Siek, Nanyang Technological University, SG

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Pierre Lefranc, Sokchea Am, David Frey, Rachele Hanna, Benoit Sarrazin, G2Elab, F

Diode Effects Bring Lifetime Risks to Series Resistors

Wolfgang Frank, Infineon Technologies, D

FPGA Based Control of an Three Level Neutral Point Clamped Inverter

Markus Schaefer, Martin Hofmann, Sebastian Raab, Ansgar Ackva, University of Applied Sciences Wuerzburg-Schweinfurt, D

Investigation of Magnetical Coupler Immunity Against External High Frequency and Density Magnetic Field

Bernhard Strzalkowski, Analog Devices, D

Ultra Linear Switching Rectifiers (ULSRs) for High-Quality Regulated 3-Phase AC to DC Conversion

Alexei Nikitin, Avatekh, USA; Arlie Stonestreet II, Kyle D. Tidball, Ultra Electronics ICE, USA; Ruslan L. Davidchack, University of Leicester, UK

Start-Up Operation of Active Three-Phase Third Harmonic Injection Rectifiers

Markus Makoschitz, AIT Austrian Institute of Technology, AT; Michael Hartmann, Schneider Electric, AT; Hans Ertl, Vienna University of Technology, AT

State-of-the-Art GaN Power IC-based 150 W AC-DC Adapter

Tom Ribarich, Stephen Oliver, Navitas Semiconductor, USA

Which Should Be Chosen in Three-Phase Diode Rectifier, Single-Bridge or Double-Bridge?

Ryu Kawakubo, Yasuyuki Nishida, Chiba Institute of Technology, J

Digital Control of Active Resistance Emulation in Three Phase Rectifiers with Current Injection Principle

Radoš Vreljakovic, Predrag Pejovic, School of Electrical Engineering, RS; Milan Darijevic, Siemens, D

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Noise Mitigation in HV Tests Sourced by A Static Frequency Converter by Means Of Changing PWM Signal's Carrier Frequency

Mazen Alzatari, Janusz Szczechowski, ABB, D

Novel Active Ripple Filtering Schemes Used In Little Box Inverter

Rajesh Ghosh, Mudiyula Srikanth, Schneider Electric, IN; Radoslava Mitova, Miao-Xin Wang, Schneider Electric, F; Damir Klikic, Schneider Electric, USA

Experimental Study of Si- and SiC-Based Voltage Source Inverters

Klaus Sobe, Fabio Brucchi, Infineon Technologies Austria, AT

Double-Loop Controlled Grid-Connected Inverter

Yury Skorokhod, Dimitriy Nitkin, Sergey Dyakin, Transconverter, RU; Sergey Volskiy, Moscow State Aviation Institute Technical University, RU

Design and Realization of a 100kHz-100kW Series Resonant Inverter with SiC-MOSFETs Connected in Parallel for a High Frequency Induction Heating Application

Yildiray Baskurt, Haldun Karaca, Dokuz Eylul Universitesi, TK

AC-Sweep Analysis and Verification of an AC Power Source with Virtual Output Impedance for Validation of Grid Connected Components

Peter Jonke, Markus Makoschitz, Biswas Sumanta, Johannes Stöckl, AIT Austrian Institute of Technology, AT; Hans Ertl, Vienna University of Technology, AT

Technological Possibilities of New Silicon-Carbide Mosfets in Power-Inverter for the Inductive Energy Transfer

Martin Warkentin, Faical Turki, Thomas Vossnagen, Paul Vahle, D

Five-Level Cascaded Flying-Capacitor Converter

Sidney Gierschner, David Hammes, Hans-Günter Eckel, University of Rostock, D; Max Beuermann, Siemens, D

A Generalized Approach to the Analysis and Control of Modular Multilevel Converters

Patrick Himmelmann, Marc Hiller, Karlsruhe Institute of Technology (KIT), D

On Energy Balancing for a Full-Bridge MMC with Distributed Energy Storage Devices

Gerrit Henke, Mark-M. Bakran, University of Bayreuth, D

Comparison and Evaluation of Modular Multilevel Converter Topologies for Li-Ion Battery Systems

Matthias Luh, Thomas Blank, Marc Weber, Karlsruhe Institute of Technology (KIT), D

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Progress of High Power Multilevel Converters: Combining Silicon And Silicon Carbide

Christopher Dahmen, Rainer Marquardt, University of the Federal Armed Forces Munich, D

Direct Torque Control with Variable Level Discretization for Automotive Drives

Eduard Specht, Stefan Goetz, Christoph Aschauer, Christian Korte, Porsche Engineering Group, D

Analysis and Modeling of Efficiency Curve Dip in VRM with Low Output Inductance

Ann Starks, Zhiyang Chen, ON Semiconductor, USA

EMI Considerations on MHz Inverters

Christoph Simon, Fabian Denk, Michael Heidinger, Rainer Kling, Wolfgang Heering, Karlsruhe Institute of Technology (KIT), D

Analysis of the Impact of Silicon Carbide Modules in Wind and Traction Applications

Itziar Kortazar, David Ortega, Igor Larrazabal, Ingeteam, ES; Mrinal Das, Wolfspeed, USA

High Efficiency LLC-Based AC-DC Converter for Wide Load Voltage Range Applications

Navid Daniali, Syed Inam UI Murtaza Shah, Euro Engineering, D

A Novel Approach to Reduce Losses in Boost PFC Stage of a 90W-Adapter

Eva Schmidt, Daniel Kübrich, Thomas Dürbaum, Friedrich-Alexander-University Erlangen, D

How the heck do I Measure a Gate Drive Slewing at 70kV/Us?

Bart Schroder, Cleverscope, NZ

Thyristor Rectifier for Permanent Magnet Wind Generators

Philip C. Kjaer, Ionut Trintis, Morten Risskov Knudsen, Stig Lund Pallesgaard, Vestas Wind systems A/S, DK; Peter Mongeau, Vestas Wind Systems, USA; Sébastien Touzard, Nabil Meziti, Semikron SARL, F

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Naoki Koike, Shinichiro Nagai, Pony Electric, J

STMicroelectronics Super-Junction and UltraFAST MOSFET vs IGBT Technologies in Low Power Motor Drives

Carmelo Parisi, Gaetano Belverde, Alessio Corsaro, STMicroelectronics, I

Active Switch Impact on CCM Totem-Pole PFC Efficiency

Matt O'Grady, Ke Zhu, Jonathan Dodge, John Bendel, United Silicon Carbide, USA

Dc Bus In Industry a New Way Towards Energy Efficiency

Fernando Luiz Marcelo Antunes, Andre dos Santos Lima, Antonio Alisson Alencar Freitas, Aderaldo Racarte Guedes, Edilson Meneiro Sá Jr. Federal University of Ceara, BR

Automotive, Traction and Aerospace

The Highest Power Density IGBT Module in the World for xEV Power Train

Akihiro Osawa, Keiichi Higuchi, Akio Kitamura, Daisuke Inoue, Yoshikazu Takamiya, Souichi Yoshida, Hiromichi Gohara, Masahito Otsuki, Fuji Electric, J

J1-Series Modules with Integrated Cooler for Electric and Hybrid Vehicles

Tatsuya Kawase, Mikio Ishihara, Noburu Miyamoto, Kazuaki Hiyama, Shinsuke Godo, Mitsubishi Electric Corporation, J

Power MOSFETs for Low Voltage and High Current Automotive Applications- 48V Bus Systems

Rajagopalan Jagannathan, Marco Atzeri, Hans-Peter Hoenes, ON Semiconductor, D

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Zarina Davletzhanova, Olayiwola Alatise, Jose Ortiz Gonzalez, Sylvia Konaklieva, Roozbeh Bonyadi, University of Warwick, GB

High Efficiency and Ruggedness Intelligent IGBT Technology for EV/HEV

Vittorio Crisafulli, ON Semiconductor, D

Highly Integrated Power Unit Based on Double Sided Cooling IGBT Module

Yun Li, Shiwu Zhu; Yaing Ma, Yangang Wang, Mingliang Jiao, Chundong Wu, Zhenlong Zhao, Jun Yu, Dynex Semiconductor, GB

Efficiency Increasing by a Variable DC Link Voltage in Combination with a Bang-Bang Controlled Inverter for an Automotive Application

Magnus Böh, Andreas Lohner, Noureddine El Amrani, TH Köln, D

Magnetic Leakage Azimuth Pattern of a 7 Kw Wireless Electric Charging System in Different Environments

Leandro Percebon, Daniel Kuerschner, Qualcomm CDMA Technologies, D

Innovations for IGBT Based Power Modules in HEV Drivetrain Applications

Thomas Geinzer, Martin Gleich, Alexander Schwarz, Infineon Technologies, D

Estimation of the Losses in Si and SiC Power Modules for Automotive Applications

Dounia Oustad, Menouar Ameziani, Dominique Lhotellier, VEDECOM, F; Stéphane Lefebvre, Meckael Petit, ENS Cachan, F

DC/DC-Converter with Optimised Power Density for Integration of Multifunctional Fuel Cell Systems in Modern Aircraft Application

Mathias Warncke, Klaus F. Hoffmann, Sebastian Fahlbusch, Helmut Schmidt University- University of the Federal Armed Forces Hamburg, D

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Influence of Different Switching Frequencies and Modulation Techniques on IPMSM and Inverter Losses Optimizing the Overall Drive Train Efficiency

Martin Stempfle, Yuying Han, Julian Wölfle, Nathan Tröster, Jörg Roth-Stielow, University of Stuttgart, D

Finite Control Set Model Predictive Control of a PMSM Fed by a Multilevel Inverter

Cristian Vargas, Simon Feuersänger, Mario Pacas, University of Siegen, D

Current Control Delay Reduction for FPGA-Based Servodrives

Lev Rassudov, Balkovoi Aleksandr, Moscow Power Engineering Institute, RU

Optimal Compensation Capacitors Maximizing Coreless Inductive Power Transfer

Yohan Wanderoild, Romain Grezard, Gael Pillonnet, Dominique Bergogne, Adrien Morel, CEA-Léti, F; Hubert Razik, Laboratoire Ampère, F

Switching Loss Minimization Using Two-Configuration Predictive Control for a Thermo-Hydraulic Linear PMSG

Daniel Bernet, Karlsruhe Institute of Technologie (KIT), D; Robert Seifert, Technical University of Dresden, D

Energy Storage Battery Protection System with External Triggered Melting Fuses

Mitja Koprivsek, ETI, SI

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