

Asynchronous fault detection in IEEE P1687 instrument network

Shibin, Konstantin; Devadze, Sergei; Jutman, Artur IEEE 23rd North Atlantic Test Workshop : 14-16 May 2014, Binghampton, New York : proceedings 2014 / p. 73-78 : ill

At-speed testing of inter-die connections of 3D-SICs in the presence of shore logic

Shibin, Konstantin; Chickermane, Vivek; Keller, Brion; Papamaleitis, Christos; Marinissen, Erik Jan 2015 Asian Test Symposium : ATS 2015 : 22-25 November 2015, Mumbai, Maharashtra, India : proceedings 2015 / p. 79-84 : ill <https://doi.org/10.1109/ATS.2015.21>
[Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

CMS drift tubes sector collector relocation phase 1 upgrade [Electronic resource]

Bedoya, C. F.; **Jutman, Artur; Shibin, Konstantin; Devadze, Sergei** 2015 http://cms.cern.ch/iCMS/jsp/openfile.jsp?type=DN&year=2015&files=DN2015_011.pdf

The CMS fast beam condition monitor for HL-LHC

Auzinger, G.; Bakhshiansohi, H.; Dabrowski, A.; Delannoy, A.G.; Dierlamm, A.; Dragicevic, M.; Gholami, A.; Gomez, G.; Jenihhin, Maksim; **Shibin, Konstantin** Journal of instrumentation 2024 / art. C03048, 10 p. : ill <https://doi.org/10.1088/1748-0221/19/03/C03048>
[Conference proceedings at Scopus](#) [Article at Scopus](#) [Conference proceedings at WOS](#) [Article at WOS](#)

Designing reliable cyber-physical systems

Aleksandrowicz, Gadi; Arbel, Eli; Bloem, Roderick; **Devadze, Sergei; Jenihhin, Maksim; Jutman, Artur; Raik, Jaan; Shibin, Konstantin** Languages, design methods, and tools for electronic system design : selected contributions from FDL 2016 2018 / p. 15-38 : ill https://doi.org/10.1007/978-3-319-62920-9_2 [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Designing reliable cyber-physical systems : overview associated to the special session at FDL'16

Aleksandrowicz, Gadi; Arbel, Eli; Bloem, Roderick; **Devadze, Sergei; Jenihhin, Maksim; Jutman, Artur; Raik, Jaan; Shibin, Konstantin** The 2016 Forum on Specification & Design Languages : proceedings : Bremen, Germany, September 14-16, 2016 2016 / [8] p. : ill <https://doi.org/10.1109/FDL.2016.7880382>

Effective scalable IEEE 1687 instrumentation network for fault management

Jutman, Artur; Shibin, Konstantin; Devadze, Sergei IEEE design & test 2013 / p. 26-35 : ill
<https://doi.org/10.1109/MDAT.2013.2278535> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Electronics design and testing of the CMS Fast Beam Condition Monitor for HL-LHC

Shibin, Konstantin; Auzinger, Georg; Bakhshiansohi, Hamed; Dabrowski, Anne; Dierlamm, Alexander; Dragicevic, Marko; Gholami, Asghar; Gomez, Gervasio; Guthoff, Moritz; Haranko, Mykyta; Honma, Alan; Jenihhin, Maksim Journal of physics : conference series 2023 / p. 50-51 <https://doi.org/10.48550/arXiv.2410.14867>

Fault management instrumentation network based on IEEE P1687 IJTAG

Shibin, Konstantin; Jutman, Artur; Devadze, Sergei European Test Symposium (ETS), 2013, Avignon, France 2013

Health management for self-aware SoCs based on IEEE 1687 infrastructure

Shibin, Konstantin; Devadze, Sergei; Jutman, Artur; Grabmann, Martin; Pricken, Robin IEEE Design & Test 2017 / p. 27-35 : ill
<https://doi.org/10.1109/MDAT.2017.2750902> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

IEEE 1687 compliant ecosystem for embedded instrumentation access and in-field health monitoring

Tsertov, Anton; Jutman, Artur; Shibin, Konstantin; Devadze, Sergei IEEE AUTOTESTCON 2018 : National Harbor, September 17-20, 2018 : proceedings 2018 / 9 p.: ill <https://doi.org/10.1109/AUTEST.2018.8532559>

IEEE P1687 IJTAG demonstrator on FPGA

Shibin, Konstantin; Alekseev, Igor; Jutman, Artur; Devadze, Sergei DATE 2012 University Booth : Design Automation and Test in Europe : Dresden, Germany, March 12-16, 2012 2012 / 1 p. : ill
https://www.academia.edu/22101517/IEEE_P1687_IJTAG_demonstrator_on_FPGA

Integrated modelling, fault management, verification and reliable design environment for cyber-physical systems

Raik, Jaan; Rauwerda, Gerard; Zhao, Yong; Shibin, Konstantin MEDIAN Finale : Workshop on Manufacturable and Dependable Multicore Architectures at Nanoscale : November 10-11, 2015, Tallinn, Estonia 2015 / p. 74

Keynote: cost-efficient reliability for Edge-AI chips

Jenihhin, Maksim; Taheri, Mahdi; Cherezova, Natalia; Ahmadilivani, Mohammad Hasan; Selg, Hardi; Jutman, Artur; Shibin, Konstantin; Tsertov, Anton; Devadze, Sergei; Kodamanchili, Rama Mounika; Rafiq, Ahsan; Raik, Jaan; Daneshtalab, Masoud 2024 IEEE 25th Latin American Test Symposium (LATS) 2024 / 2 p <https://doi.org/10.1109/LATS62223.2024.10534610> [Article at Scopus](#)

On-chip sensors data collection and analysis for SoC health management

Shibin, Konstantin; Jenihhin, Maksim; Jutman, Artur; Devadze, Sergei; Tsertov, Anton 2023 IEEE International Symposium on Defect and Fault Tolerance in VLSI and Nanotechnology Systems (DFT) 2023 / 6 p <https://doi.org/10.1109/DFT59622.2023.10313562>

On-line fault classification and handling in IEEE1687 based fault management system for complex SoCs

Shibin, Konstantin; Devadze, Sergei; Jutman, Artur LATS 2016 : 17th IEEE Latin-American Test Symposium, Foz do Iguacu, Brazil, 6th-9th April 2016 / p. 69-74 : ill <https://doi.org/10.1109/LATW.2016.7483342>

Open-source JTAG simulator bundle for labs

Shibin, Konstantin; Devadze, Sergei; Rosin, Vjatseslav; Jutman, Artur; Ubar, Raimund-Johannes International journal of electronics and telecommunications 2012 / p. 233-239 : ill <https://journals.pan.pl/Content/87192/PDF/32.pdf>

Optimization of boundary scan tests using FPGA-based efficient scan architectures

Aleksejev, Igor; Devadze, Sergei; Jutman, Artur; Shibin, Konstantin Journal of electronic testing : theory and applications (JETTA) 2016 / p. 245-255 : ill <https://doi.org/10.1007/s10836-016-5588-y> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Reliable health monitoring and fault management infrastructure based on embedded instrumentation and IEEE 1687

Jutman, Artur; Shibin, Konstantin; Devadze, Sergei IEEE AUTOTESTCON 2016 : Anaheim, California, USA, September 12-15, 2016 : proceedings 2016 / p. 240-249 : ill <https://doi.org/10.1109/AUTEST.2016.7589605>

Special session: in-field ML-assisted intermittent fault localization and management in RISC-V SoCs

Selg, Hardi; Shibin, Konstantin; Tsertov, Anton; Jenihhin, Maksim; Ellervee, Peeter; Raik, Jaan 2024 IEEE International Symposium on Defect and Fault Tolerance in VLSI and Nanotechnology Systems (DFT) 2024 <https://doi.org/10.1109/DFT63277.2024.10753541> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Synchronization, calibration and triggering of IEEE 1687 embedded instruments

Jutman, Artur; Devadze, Sergei; Shibin, Konstantin The Seventeenth Workshop on RTL and High Level Testing (WRTL'16) : November 24-25, 2016, Aki Grand Hotel, Hiroshima, Japan 2016 / [6] p

System-wide fault management based on IEEE P1687 IJTAG

Shibin, Konstantin; Jutman, Artur; Devadze, Sergei Info- ja kommunikatsioonitehnoloogia doktorikooli IKTDK kuuenda aastakonverentsi artiklite kogumik : 3.-5. oktoobril 2012, Laulasmaa 2012 / p. 81-84 : ill

The optimization, design and performance of the FBCM23 ASIC for the upgraded CMS beam monitoring system

Kaplon, Jan; Wegrzyn, Grzegorz; Shibin, Konstantin; Barendregt, Marnix Journal of instrumentation 2024 / art. C02026, 6 p. : ill <https://doi.org/10.1088/1748-0221/19/02/C02026> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Conference proceedings at WOS](#) [Article at WOS](#)

Trainer 1149 : a boundary scan simulation bundle with hardware support for labs

Shibin, Konstantin; Jutman, Artur Info- ja kommunikatsioonitehnoloogia doktorikooli IKTDK viienda aastakonverentsi artiklite kogumik : 25.-26. novembril 2011, Nelijärve 2011 / p. 135-138 : ill

Trainer 1149: a boundary scan simulation bundle for labs

Jutman, Artur; Ubar, Raimund-Johannes; Devadze, Sergei; Shibin, Konstantin; Rosin, Vjatseslav MIXDES 2011 : 18th International Conference "Mixed Design of Integrated Circuits and Systems" : June 16-18, 2011, Gliwice, Poland 2011 / p. 520-525

Understanding boundary scan test with Trainer 1149

Jutman, Artur; Devadze, Sergei; Shibin, Konstantin; Rosin, Vjatseslav; Ubar, Raimund-Johannes 22nd EAAEIE annual conference : June, 13-15, 2011, Maribor, Slovenia : conference book 2011 / p. 21-22 <https://ieeexplore.ieee.org/document/6165727>

Understanding fault-tolerance vulnerabilities in advanced SoC FPGAs for critical applications

Cherezova, Natalia; Shibin, Konstantin; Jenihhin, Maksim; Jutman, Artur Microelectronics reliability 2023 / art. 115010, 10 p. : ill <https://doi.org/10.1016/j.microrel.2023.115010> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Virtual reconfigurable scan-chains on FPGAs for optimized board test

Aleksejev, Igor; Jutman, Artur; Devadze, Sergei; Shibin, Konstantin 2015 16th Latin American Test Symposium (LATS 2015) : Puerto Vallarta, Mexico, 25-27 March 2015 / [6] p. : ill <http://dx.doi.org/10.1109/LATW.2015.7102411>