Mohamed Abbas, Ph.D.

Professor, Electrical Engineering Department, Faculty of
Engineering, Assiut University, Assiut, EGYPT

e-mail: m-abbas@aun.edu.eg; mohamedabbas2001@gmail.com

Home Page: http://www.aun.edu.eg/membercv.php?M_ID=787

Education:

- **Ph.D.-Electronic Engineering.** September-2006
  Department of Electronic Engineering, Graduate School of Engineering,
  The University of Tokyo, Japan

- **M.Sc.-Electronic Engineering**. August-1996
  Department of Electrical Engineering, Faculty of Engineering,
  Assiut University, Egypt..

- **B.Sc."*Distinction with Honor*" - Electronics & Communications Engineering**,
  July-1992, Department of Electrical Engineering, Faculty of Engineering,
  Assiut University, Egypt.

Working History:

- *March/2015 - Present:-* Associate professor, Electrical Engineering Department.,
  College of Engineering, King Saud University, Riyadh , Kingdom of Saudi Arabia.

- *March/2014 - Feb./2015:* Associate professor, Electronics and Communications
  Engineering Department, School of Electronics , Communications and Computers,
  Egypt-Japan University of Science and Technology, Alexandria, Egypt.

- *March/2013 - Feb./2014:* Associate professor, Electrical Engineering Department,
  Faculty of Engineering, Assiut University, Egypt

- *Oct./2010 -Feb./2013:* Assistant professor, Electrical Engineering Department,
  Faculty of Engineering, Assiut University, Egypt.

- *Aug./2008-Sept./2010:* Project Researcher at Advantest Design to Test (D2T)
  research division, VLSI Design and Education Center (VDEC), The University of
  Tokyo, Japan.

- *Nov./2006 - Jul./2008:* Assistant professor, Electrical Engineering Department,
  Faculty of Engineering, Assiut University, Egypt.

- *Mar./2003-Sept./2006:* PhD Student, Graduate School of Engineering, The University of Tokyo, Tokyo, Japan (Through scholarship supported by Egyptian government).

- *Oct./2002-Feb./2003:* Visiting researcher, VLSI Design and Education Center (VDEC), The University of Tokyo, Tokyo Japan.

- *Mar./1993-Sept./2002:* Assistant Lecturer and lecturer Associate, Department of Electrical Engineering, Faculty of Engineering, Assiut University.

Teaching Experiences:

- **March./2015 to present**
  - **Associate professor,** Electrical Engineering Department, College of Engineering, King Saud University.

    (i) Undergraduate Courses

    Taught the following courses to undergraduate students:-
    - EE310:Microelectronic Devices and Circuits, 2017/Semester I~2018/Semester II,
    - EE405 Introduction to VLSI Circuits: 2017/Semester I~2018/Semester II,,
    - EE406: VLSI Circuits Laboratory: 2017/Semester I~2018/Semester II,,

    (ii) Supervised the following graduation projects:-
    - Design of PV system for KSU Solar house for SDME2018 2017/2018
    - Design of Heart rate monitoring and Tracking system for Elderly using Android and GSM 2017/2018
    - Gas and Water Leakage Detection and Control Using Hardware and Software CoDesign 2017/2018
    - Design and Implementation of a PV-Powered LED Lighting Set (2016/2)
    - Design of photovoltaic panel cooling system for solar house for SDME 2017
    - Design and Implementation of Smart Home Automation and Monitoring System Using Android and GSM 2017
    - Design and Implementation of Home Monitoring and Control System Using Android and Internet 2017
    - Design and Implementation of PV-Powered LED lighting Set 2016.

(v) Graduate Courses

Taught the following courses to postgraduate students:-
- EE507: VLSI Circuit Design and Layout
- EE617: Analog CMOS Integrated Circuits.

- **Nov./2006 –Jul./2008, Oct./ 2010 to Feb./2015**
  - **Assistant/Associate professor,** Electrical Engineering Department, Faculty of Engineering, Assiut University, Egypt and Egypt-Japan University of Science and Technology (EJUST), Alexandria, Egypt
  , . I have been responsible about

  (i) Developed and taught the following courses to undergraduate students:-
  - Digital Systems Design using VHDL, (2011/2012, 2013/2014, 2014/2015).
  - Introduction to VLSI Design, (2007/2008, 2010/2011, 2011/2012,).

  (ii) Taught the following courses to undergraduate students:-
  - Electronics (1), 2012/2013
  - Electronics (2), 2012/2013, 2013/2014
  - Electric Circuit Analysis, 2012/2013
  - Electric and Electronic Circuits Analysis to Computers and Information College students, (2010/2011).
  - Electrical Properties of Materials, (2011/2012).
  - Electronic Circuits to Mechatronics Division Students, (2007/2008).
  - Electric Circuit Analysis to Mechatronics Division Students, (2007/2008).
  - *Supervising* Electrical Testing labs of 1st and 2nd grade Electrical Engineering Student, (2007/2008, 2010/2011, 2011/2012, 2012/2013, 2013/2014).
  - *Supervising* Electrical Testing labs of 3nd and 4rd grade Electronics and Communications Section Students, (2007/2008, 2010/2011, 2011/2012).

  (iii) Supervised and co-supervised the following graduation projects:-
  - Photovoltaic -Based Street Lighting System (2014/2015)
  - RFID-Based Security System Design and Implementation (2013/2014).

- Design of Low-Power ALU (2013/2014).
- Design and Implementation of Optical Fiber Communication systems (2010/2011,2011/2012)
- FPGA and ASIC Implementation of a Local Positioning System (LPS) (2007/2008).
- Secured Home Automation (2007/2008).

(v) Developed and taught the following courses to postgraduate students:-
- VLSI testing (2010/2011)
- Digital Systems Design Using VHDL (2010/2011).
- CMOS Integrated Circuit Design (2014/2015)
- Data Converters (2013/2014).

(v) Taught the following courses to postgraduate students:-
- CMOS Analog Integrated Circuits (2015/2016)
- Advanced Topics in Electronic Circuits Design. (2007/2008)
- Applied Electronics –for Mechanical Eng. Dept. Students (2007/2008).

o **Adjunct Assistant Professor,** Electrical Engineering Department, Faculty of Engineering, Sohag University, Egypt. I had been responsible about teaching the following courses:-
  - Logic Design, 1stSemester 2010/2011
  - Electronics (2), 2ndSemester 2013/2014

o **Adjunct Assistant Professor,** Electrical Engineering Department, Faculty of Engineering, South Valley University, Egypt. I had been responsible about teaching the following courses:-
  - Electronics (3) , 1st Semester 2007/2008
  - Electronic Circuits (2), 2ndSemester 2007/2008

- **Mar./1993 –Sept./2002:**
  o **Assistant Lecturer**, Department of Electrical Engineering, Faculty of Engineering, Assiut University, Egypt. I was the teaching assistant of the following courses and graduation projects:
    - Electronics (1)
    - Electronics (2)

- Electronics (3)
- Engineering Analysis
- Electrical Properties of Materials
- Communications Theory
- Electronic Measurements and Instrumentation
- Electrical Testing.
- Photovoltaic Power Generation (Graduation Project)
- PC to TV Interfacing (Graduation Project)
- Telecommunications Electronic Switch (Graduation Project)
- PC LAN.(Graduation Project)

Management, Quality Accreditation-Related Work Experience

- Chair of Graduate Studies Unit, College of Engineering, King Saud University. May/2016 till present.
- Chair of Master Students Research projects ' committee, Electrical Engineering Department, College of Engineering, King Saud University. Sept./2016 till present.
- Member of Lab preparation committee , Electronic and Communications Department, School of Electronics, Communications and Computers, Egypt -Japan University of Science and Technology (E-Just) March/2015-Jan/2016
- Representative of Quality and Accreditation committee of EE Dept. Program, faculty of Engineering, Assiut University (2007/2008).
- Member of Committee of Developing of Post-Graduate and Research program of EE Dept, faculty of Engineering, Assiut University. (2013/2015)

Membership of Professional Bodies:

- January-2008 to present   : Member of IEEE Solid State Circuit Society
- Technical Program Committee member of IEEE International Design and Test Symposium (IDT)
- Technical Program Committee member of IEEE International Symposium on Electronic System Design (ISED)
- Technical Program Committee member of IEEE JEC-ECC 2013
- April-2004 to Dec.-2006   : Student member of IEICE, Japan.

- April ~Oct-2006 : Student member of IEEE.
- July-1992 to present : Member of Engineers Syndicate, Egypt.

Awards and Patents:

- **Best paper award** of IEEE JEC-ECC 2012 conference, Alexandria, Egypt 2012.
- **Patent**: "Low Delay Dispersion Comparator – The university of Tokyo"
- **Scholarship from Egyptian Government** to Study for Ph.D.
- **Award of highest grade graduate of faculty of engineering of Assiut University 1992**, Egyptian Engineers Syndicate

Computer Languages and CAD Skills:

- **CADs (EDA):** VLSI Design CADs of Cadence, Synopsis, Mentor Graphics and Tanner.

- **Circuit and Systems Simulators:** HSPICE, VHDL and MATLAB.

- **Computer languages:** C++, PASCAL, FORTRAN, BASIC, Visual Basic , and Assembly.

- **Operating Systems:** Microsoft Windows, Linux.

- **Office tools:** MS Office.

Languages:

- **Arabic:** Native

- **English:** Fluent

- **Japanese :** Manage

Professional Training:

- "Preparation of Lecturer", Assiut University, Egypt.
- "Training of Trainee" , Assiut University, Egypt.
- "Ethics of Academic Careers" Assiut University, Egypt.
- "Course Preparation" , Assiut University, Egypt.
- "Scientific Publishing", Assiut University, Egypt.

- "Preparation of Scientific Conferences", Assiut University, Egypt.
- "Management of Research Team" Assiut University, Egypt

Training Experiences:

- Aug.-2007 to Jan.-2008: Trainer of "Developing of analytical and creative thinking skills" for the graduate students in Assiut University.
- Oct.-1995 to Nov.-2001: Trainer of "MS-Windows, MS-Office and Computer Programming" Part-time job in International Computer Center (ICC), Specialized Computer Center (SCC), IBI, Assiut, Egypt.

Research and Supervision Experience:

- **Research Interests:**
  - Design of low-cost ADCs.

  - Designing of high-reliability low-power VLSI circuits and systems.

  - Testing and design for testability of high-speed mixed signal systems.

  - Digitally-Assisted analog design.

  - Bio-Medical Electronics

  - Design, modeling and characterization of MEMS resonators for biomedical applications.

- **M.Sc. Thesis Supervision:**
  - Mohamed Zanaty, "Design and modeling of Nano / Micro electromechanical resonators for biosensing applications", Electrical Engineering Department, Faculty of Engineering, Assiut University, Egypt, 2013.

  - Ahmed Khaled, "Characterization of bio-coated MEM resonators for molecular sensing applications", Electrical Engineering Department, Faculty of Engineering, Assiut University, Egypt, 2013.

  - Kasem Khalil, "Design of comparators and high performance TDCs for level-crossing ADCs", Electrical Engineering Department, Faculty of Engineering, Assiut University, Egypt, 2014.

- o Nahla Tarek, " Adaptive Power-Efficient Background Calibration Technique for Digitally Assisted Pipelined ADCs ", Arab ACADEMY for Science, Technology and Maritime TRANSPORT, Alexandria, Egypt, (2014)

- o Diaa Mahmoud, " High Speed Optical Receivers in Nanometer CMOS Technology ", Electrical Engineering Department, Faculty of Engineering, Assiut University, Egypt (2016)

- o Ahmed Atef, " Wide Dynamic Range High Sensitivity Optoelectronics Integrated Circuits for Sensing Biomedical Signals " Electrical Engineering Department, Faculty of Engineering, Assiut University, Egypt (2017)

- o Ashraf Ramadan, "Cost-effective test methodologies for pipelined ASCs", Electrical Engineering Department, Faculty of Engineering, Assiut University, Egypt (2018)

- o Ehab Hamad, " EMG Signal Sensing and Regeneration for Skeletal Muscles Rehabilitation " Electrical Engineering Department, Faculty of Engineering, Assiut University, Egypt . (2018)

- o Abdulrahman El-Kelby, "Economical Study of Load Shifting & Load Shaving of PV Implementation Using Dynamic Tariff in Riyadh.", King Saud University, EE Dept., **Running**

- o Nawaf Al-Jehany, " Design Techniques of Low Power Successive Approximation Register Analog to Digital Converter for Portable and Implantable Biomedical Devices", King Saud University, EE Dept., **Running**

Professional Presentations and Invited Talks

[1] "Recent Trends in Electronic Solutions for Amputees and Paralyzed (ESAP): Challenges and Opportunities", Meeting of Professors Nomination Committee, Supreme Council of Universities, Nov. 2019, Cairo Egypt .

[2] "A Low Power Programmable Gain Integrated Front-End for Electromyogram Signal Sensing", Oral presentation in IEEE MIXDES2018, 21-23 June 2018, Gdynia, Poland.

[3] "Analog/Mixed Signal Design: Challenges, Techniques and Opportunities" Half-Day tutorials, IEEE JEC-ECC, Alexandria. Egypt Dec. 2013.

[4] "A Low-Power Low-Delay Dispersion Comparator for High-Speed Level-Crossing ADCs", IEEE 2nd Saudi International Electronics, Communications and Photonics Conference SIECPC2013, April, 2013, Riyadh, KSA

[5] "Novel Technique for Reducing the Comparator Delay Dispersion in 45nm CMOS Technology for Level-Crossing ADCs", IEEE ISCDG2012, Sept. 2012, Grenoble- France

[6] "Low Delay Dispersion Comparator for Level-Crossing ADCs", IEEE JECECC2011, March-2011, Alexandria, Egypt.

[7] "Fault Detection and Diagnoses Methodology for Adaptive Digitally-Calibrated Pipelined ADCs", IEEE IDT2011, Beirut, Lebanon, Dec. 2011

[8] **Poster**" Novel Technique for Minimizing the Comparator Delay Dispersion in 65nm CMOS Technology", IEEE ICECS2011, Beirut, Lebanon, Dec. 2011

[9] **Invited Talk**, "High-speed clocked comparator for on-chip signal monitoring applications", Advantest D2T Symposium, VLSI Design and Education Center (VDEC), The University of Tokyo, Japan, Match 2011.

[10] **Invited Talk** "An Automatic Test Generation Framework for Adaptive Mixed-Signal Systems" Advantest Research and Development Laboratory, Gunma, Japan January 2010.

[11] **Invited Talk**, "Cost-Effective Test Methodology for Analog and Mixed-Signals in SoCs", D2T Symposium, VDEC. The university of Tokyo, Japan, June 2010.

[12] "Clocked Comparator for High-Speed Applications in 65nm Technology", A-SSCC2010, China, Beijing, November 2010.

[13] "An Automatic Test Generation Framework for Digitally-Assisted Adaptive Equalizers in High-Speed Serial Links ", DATE2010, Germany, Dresden, March-2009.

[14] "Signature-Based Testing for Adaptive Digitally-Calibrated Pipelined Analog-to-Digital Converters", IEEE ASICON09, Changsha, China October-2009.

[15] "GA-Based Test Generation for Digitally-Assisted Adaptive Equalizers in High-Speed Serial Links", IEEE EWDTS, Moscow, Russia, September-2009.

[16] "Signature-Based Testing for Digitally-Assisted Adaptive Equalizers in High-Speed Serial Links", IEEE European Test Symposium, ETS09, Seville, Apian, May-2009.

[17] "On-chip 8GHz Non-Periodic High-Swing Noise Detector" Proceedings of DATE 2006 , Germany, Munich, March-2006

[18] "Statistical Model for Logic Errors in CMOS Digital Circuits for Reliability-Driven Design Flow" DDECS06, Czech Republic, Prague, April-2006.

[19] "On-chip Detector for Non-Periodic High-Swing Noise Detection" IEEE Int. SoC Design Conf. pp: 231-234, S. Korea, Seoul, October-2005.

[20] "On-chip Non-Periodic High-Swing Noise Detector" 12th IEEE Int. Conf. on Electronics, Circuits and System, Tunisia , Tunis, December 2005.

[21] "Noise Effects on Performance of Low Power Design Schemes in Deep Submicron Regime" 19th IEEE Int. Symp. On Defect and Fault Tolerance in VLSI, France, Cannes, October-2004.

[22] "On High Noise Immunity CMOS Design Scheme with Low Leakage Power Consumption", 7th Int. Conf. on Solid-State and Integrated Circuit Technology, China, Beijing, October-2004.

[23] "Statistical Evaluation of Logic Errors in Low Power Design Schemes", IEICE national Conf. 2004, Japan 2004

[24] "On-chip Detector for Non-Periodic High-Swing Noise Sensing", IEICE national Conf. 2005, Japan 20~23-Sept. 2005.

Publications:

[1] Nawaf ALjehani and **Mohamed Abbas**, "Rail to Rail Comparator for SAR ADC in Biomedical Applications" 2021 28th IEEE International Conference on Mixed Design of Integrated Circuits and System (MIXDES)

[2] Abdulrahman M. Alkelbi; **Mohamed Abbas**; Ali M. Eltamaly, "Economical Study on Load Shaving by PV Implementation for Bulk Customers in Riyadh", 2021 6th International Conference on Renewable Energy: Generation and Applications (ICREGA)

[3] Nawaf ALjehani and **Mohamed Abbas**, "Low Power Preamplifier for Biomedical Signal Digitization 2020 27th IEEE International Conference on Mixed Design of Integrated Circuits and System (MIXDES)

[4] Ahmed Atef, Mohamed Atef, Elsayed Esam M. Khaled, and **Mohamed Abbas**, "CMOS Transimpedance Amplifiers for BiomedicalvApplications: A Comparative Study", IEEE Circuits and Systems Magazine 2019

[5] Ahmed Atef, Mohamed Atef, **Mohamed Abbas**, Elsayed Esam M. Khaled, Guoxing Wang, " Fully integrated wide dynamic range optical receiver for near

infrared spectroscopy", Microelectronics Journal , Volume 85, March 2019, Pages 92-97

[6] **Mohamed Abbas** and Kasem Khalil, "Low-Delay Dispersion Comparator for Level Crossing Analog to Digital Converters" International Journal of Microelectronics and Computer Science , Vol. 9 No. 2 2018 .

[7] **Mohamed Abbas** and Ashraf Ramadan, "Low-cost methodology for fault diagnosis and localization in pipelined ADCs", The Journal of VLSI Integration, Volume 63, September 2018, Pages 64-73

[8] Ehab A. Hamed, Mohamed Atef and **Mohamed Abbas** " A Low Power Programmable Gain Integrated Front-End for Electromyogram Signal Sensing", Accepted for oral presentation in IEEE MIXDES2018, 21-23 June 2018, Gdynia, Poland..

[9] Ehab A. Hamed, Mohamed Atef and **Mohamed Abbas** " An Ultralow-Power High-Gain Biopotential Amplifier for Electromyogram Signal Recording", Proceedings of IEEE JAC-ECC 2018, Alexandria, Egypt.

[10]   Ashraf Ramadan and **Mohamed Abbas**, "Defect diagnoses and localization methodology for pipelined ADCs", 2016 IEEE 21st International Mixed-Signal Testing Workshop (IMSTW), Barcelona, Spain 4-6 July 2016

[11]   Ehab A. Hamed, Mohamed Atef, **Mohamed Abbas** and R. R. Gharieb, " "Transferring Electromyogram (EMG) Signal between Limb", IEEE JEC-ECC 2016,June 2016, Cairo, Egypt.

[12]   Ahmed Atef , Mohamed Atef , **Mohamed Abbas**, and Sayed Esam, " High-Sensitivity Regulated Inverter Cascode Transimpedance Amplifier for Near Infrared Spectroscopy" IEEE JEC-ECC 2016,June 2016, Cairo, Egypt.

[13]   Mohamed Atef, Ahmed Atef and **Mohamed Abbas, "** Low-Power Transimpedance Amplifier for Near Infrared Spectroscopy", IEEE ISCAS 2016, May 2016, Montreal Canada .

[14]   **Mohamed Abbas** and Kasem Khalil, "A 23ps Resolution Time-to-Digital Converter Implemented on Low-Cost FPGA Platform ", IEEE ISSCS2015, July 2015, Lasi, Romania.

[15]   Diaa Abd-elrahman ، Mohamed Atef , **Mohamed Abbas** and Mohamed Abdelgawad, " Current-Reuse Transimpedance Amplifier with Active Inductor", IEEE ISSCS2015, July 2015, Lasi, Romania

[16]   Nahla T. Abou-El-Kheir, **Mohamed Abbas** and Mohammed EssamKhedr,"An Adaptive Digital Background Calibration Technique using

Variable Step Size LMS for Pipelined ADC", Accepted and to be appear in proceedings of IEEE CSNDSP2014, July 2014, Manchester, UK.

[17]   Nahla T. Abou-El-Kheir, **Mohamed Abbas** and Mohammed EssamKhedr, "A Fast Power Efficient Equalization-Based Digital Background Calibration Technique for Pipelined ADC, Accepted and to be appear in proceedings of IEEE MIXDES June 2014, Lublin, Poland.

[18]   S. Komatsu, T. J. Yamaguchi, M. Abbas, N. Khanh, J. Tandon and K. Asada, "A Flash TDC with 2.6-4.2ps Resolution Using a Group of Unbalanced CMOS Arbiters", IEICE TRANSACTIONS on Fundamentals of Electronics, Communications and Computer Sciences   Vol.E97-A   No.3   pp.777-780, March – 2014

[19]   X.   Rottenberg · R.   Jansen · V.   Cherman · A.   Witvrouw · H.A.C. Tilmans · M. Zanaty · A. Khaled · M. Abbas, " Meta-materials approach to sensitivity enhancement of MEMS BAW resonant sensors", Sensors, 2013 IEEE; 11/2013

[20]   K. Khalil, **M. Abbas** and M. Abdel-Gawad, "A Low-Power Low-Delay Dispersion Comparator for High-Speed Level-Crossing ADCs", IEEE 2nd Saudi International   Electronics,   Communications   and   Photonics   Conference SIECPC2013, April, 2013, Riyadh, KSA

[21]   K. Khalil, **M. Abbas** and M. Abdel-Gawad, "A Low Propagation Delay Dispersion Comparator Low Cost Level-Crossing ADCs", Proceedings ofIEEE IDT2012, Dec. 2012, Doha , Qatar

[22]   M. Zanaty, R. Jansen, **M. Abbas**, A. Witvrouw, H. A. C. Tilmans, X. Rottenberg, "Influence of the nonlinearity introduced by the Casmir Force on the Harmonic behavior of MEM resonators   ",The 2nd Saudi International Nanotechnology Conference (2SINC)2012, Riyadh, Saudi Arabia, November 2012

[23]   A. Khaled, M. Raoof, V. Cherman , **M. Abbas**, A. Witvrouw and De Wolf, "SiGeDouble Clamped Beam MEM resonators for DNA Sensing ",The 2nd Saudi International Nanotechnology Conference (2SINC)2012, Riyadh, Saudi Arabia, November 2012

[24]   Takahiro J. Yamaguchi, Kunihiro Asada, KiichiNiitsu, **Mohamed Abbas**, Satoshi Komatsu1, Haruo Kobayashi, Jose A. Moreira, "A New Procedure for Measuring High-Accuracy Probability Density Functions", Accepted for Presentaion in IEEE ATS 2012, Nov. 2012, Niigata, Japan

[25]   A. Khaled, M. Raoof, V. Cherman , K. Jans , **M. Abbas**, Sh. Ebrahim, G. Bryce, P. Verheyen , A. Witvrouw and De Wolf, "Effect of the functionalization

process on the performance of SiGe MEM resonators used for bio-molecular sensing", *Microelectronics Reliability* , vol. 52 issue 9-10 September - October, 2012. p. 2272-2277

[26]   K. Khalil, **M. Abbas** and M. Abdel-Gawad, "Novel Technique for Reducing the Comparator Delay Dispersion in 45nm CMOS Technology for Level-Crossing ADCs", IEEE ISCDG2012, Sept. 2012, Grenoble- France

[27]   M. Zanaty, R. Jansen, V. Rochus, **M. Abbas**, A. Witvrouw, H. A. C. Tilmans, X. Rottenberg, "Influence of the nonlinearity introduced by the van der Waals forceon the behaviour of NEM resonators ",The 23rd Micromechanics and Microsystems Europe Workshop (MME 2012), September, 2012 Ilmenau, Germany.

[28]   T. J. Yamaguchi, S. Komatsu1, **M Abbas**, K. Asada1, N. Khanh and J. Tandon, "CMOS Flash TDC with 0.84 – 1.3 ps Resolution Using Standard Cells", RFIC 2012, June 2012, Montreal- Canada.

[29]   **M. Abbas** "Feedforward Compensation Technique for comparator delay dispersion for level-crossing ADCs", Journal of Electrical Science (JES) Faculty of Engineering, May 2012.,Assiut University, Egypt

[30]   **M. Abbas**, T. J. Yamaguchi, Y Furukawa, S. Komatsu and K. Asada," Low Delay Dispersion Comparator for Level-Crossing ADCs", Procedddings of IEEE JECECC2012, March-2012, Alexanderia, Egypt. (Best paper of the conference)

[31]   **M. Abbas** "Toward High-Speed Level-Crossing ADCs", 8th International Conference on Electrical Engineering, Cairo, Egypt, May 2012.

[32]   **M. Abbas**, "Fault Detection and Diagnoses Methodology for Adaptive Digitally-Calibrated Pipelined ADCs", Proceedings of IEEE IDT2011, Beirut, Lebanon, Dec. 2011

[33]   **M. Abbas**, T. J. Yamaguchi, Y Furukawa, S. Komatsu and K. Asada," Novel Technique for Minimizing the Comparator Delay Dispersion in 65nm CMOS Technology", Proceedings of IEEE ICECS2011, Beirut, Lebanon, Dec. 2011

[34]   T.J. Yamaguchi, M. Soma, T. Aoki, Y. Furukawa, K. Degawa, K. Asada, **M. Abbas**, S. Komatsu," Application of a Continuous-Time Level Crossing Quantization Method for Timing Noise Measurements", ITC2011.

[35]   T. J. Yamaguchi, **M. Abbas** et al , "An Equivalent-Time and Clocked Approach for Continuous-Time Quantization", ISCAS2011, Rio de Janeiro, RJ – BRAZIL, May 2011.

[36]   **M. Abbas**, Y. Furukawa, S. Komatsu , T. J. Yamaguchi and K. Asada, "Clocked Comparator for High-Speed Applications in 65nm Technology", A-SSCC2010, China, Beijing, November 2010.

[37]   **M. Abbas**, K-T. Cheng, Y. Furukawa, S. Komatsu and K. Asada, "An Automatic Test Generation Framework for Digitally-Assisted Adaptive Equalizers in High-Speed Serial Links ", DATE2010, Germany, Dresden, March-2009.

[38]   **M. Abbas**, Y. Furukawa, S. Komatsu and K. Asada, "Signature-Based Testing for Adaptive Digitally-Calibrated Pipelined Analog-to-Digital Converters", IEEE ASICON09, Changsha, China October-2009.

[39]   **M. Abbas**, K-T. Cheng, Y. Furukawa, S. Komatsu and K. Asada," GA-Based Test Generation for Digitally-Assisted Adaptive Equalizers in High-Speed Serial Links", IEEE EWDTS, Moscow, Russia, September-2009.

[40]   **M. Abbas**, K-T. Cheng, Y. Furukawa, S. Komatsu and K. Asada, "Signature-Based Testing for Digitally-Assisted Adaptive Equalizers in High-Speed Serial Links", IEEE Europian Test Symposium, ETS09, Sivilla, Apain, May-2009.

[41]   **M. Abbas**, M. Ikeda and K. Asada," On-chip detector for single-event noise sensing with voltage scaling function" IEICE TRANS. VOL. E89-C NO.3 March 2006, pp. 370-376.

[42]   **M. Abbas,** M. Ikeda and K. Asada," Noise Immunity Investigation of Low power Design schemes" IEICE TRANS., VOL. E89-C. NO.8 August 2006.

[43]   **M. Abbas**, M. Ikeda and K. Asada," On-chip 8GHz Non-Periodic High-Swing Noise Detector" Proceedings of DATE 2006 , Germany, Munich, March-2006

[44]   **M. Abbas**, M. Ikeda and K. Asada,"Statistical Model for Logic Errors in CMOS Digital Circuits for Reliability-Driven Design Flow" Proceedings of DDECS06, Czech Republic, Prague, April-2006.

[45]   **M. Abbas**, M. Ikeda and K. Asada," On-chip Detector for Non-Periodic High-Swing Noise Detection" Proc. of Int. SoC Design Conf. pp: 231-234, S. Korea, Seoul, October-2005.

[46]   **M. Abbas**, M. Ikeda and K. Asada," On-chip Non-Periodic High-Swing Noise Detector" Proc. of 12th IEEE Int. Conf. on Electronics, Circuits and System, Tunisia , Tunis, December 2005.

[47]   **M. Abbas**, M. Ikeda and K. Asada, "Noise Effects on Performance of Low Power Design Schemes in Deep Submicron Regime" the 19th IEEE Int. Symp. On Defect and Fault Tolerance in VLSI, France, Cannes, October-2004.

[48]   **M. Abbas**, M. Ikeda and K. Asada, "On High Noise Immunity CMOS Design Scheme with Low Leakage Power Consumption", 7th Int. Conf. on Solid-State and Integrated Circuit Technology, China, Beijing, October-2004.

[49]   **M. Abbas**, M. Ikeda and K. Asada ," Statistical Evaluation of Logic Errors in Low Power Design Schemes", IEICE national Conf. 2004, Japan 2004

[50]   **M. Abbas**, M. Ikeda and K. Asada, "On-chip Detector for Non-Periodic High-Swing Noise Sensing", IEICE national Conf. 2005, Japan 20~23-Sept. 2005.

[51]   M. El-Sayed and **M. Abbas**, "Optimization of Arbitrarily Doped MINP+ as Solar Cell" Journal of Renewable Energy Vol. 14 No. 1-4-1998, pp. 141-147.

[52]   M. A. El-Sayed and **M. Abbas**, "Effect of Temperature on the Performance of MINP   Solar Cell" Sharjah   Solar Energy conference, United Arab Emarat,Sharjah, February- 2000.

[53]   M. A. El-Sayed and **M. Abbas**, "A Numerical Model for Arbitrarily Doped MINP Semiconductor Device as Solar Cell", Middel East Power Conference, EGYPT, Luxor, January-1996.