

Europass Curriculum Vitae

Personal information

First name(s) / Surname(s)

Viorel Bucur



Work experience

Dates

2000 – present

Name and address of employer

Analog Devices International, Raheen Business Park, Limerick, Ireland

Type of business or sector

Semiconductor Industry

Occupation or position held

Senior IC Physical Implementation Design Engineer

Main activities and responsibilities

Layout lead and support block work provided on a multitude of projects and technology nodes, from 28nm, 40nm, 65nm Bi-CMOS, 130nm Bi-CMOS, 180nm CMOS, BI-CMOS, BCD to 10um HV Bipolar processes, Si, SiGe and SOI. Tasks involved include:

- IC layout design in BIPOLAR & CMOS technology
- Mixed signals circuit with full custom layout
- Standard cells layout design
- Automated design verification (DRC and LVS)
- Final chip assembly & verification
- Automotive rules layout implementation and custom verification
- Die finish procedures & implementations, Data processing for Improved Manufacturability. Multi Project Wafers, Split Wafers and Wafer post processing.
- Successful collaboration with multiple FAB. Foundries (TSMC, Vanguard, LK Fab., IMEC, Global Foundries)
- Bonding diagrams and layout optimisation for improved package performance.
- Custom built runsets for data manipulation and proof of concept verification procedure on all the major CAD verification platforms (Dracula, Hercules, Calibre)
- Inter-fab collaboration facilitator, providing from custom proof of concept support to final drafting of specification procedures required
- MEMS wafer design and reticle proof of concept, layout support (More than Moore concept)
- Early "Proof of Concept IC Designs" for a variety of projects and process nodes
- CMOS+MEMS+RDL full stack custom design verification (DRC and LVS)
- Custom die stack builds for full package simulations. (PCB+RDL+MEMS+CMOS)
- Multi-chip modules, SoC ICs and Co-packaged die layout optimisation.

Mentoring Junior Engineers.

Dates

1997 – 1999

Name and address of employer

LDIC – Logic Design & Integration California, Romanian Subsidiary (IC design company San Jose, California, USA)

Type of business or sector

Semiconductor Industry

Occupation or position held

- **IC Design Engineer**

Main activities and responsibilities

- IC layout design in BIPOLAR-CMOS technology
- Mixed signals circuit full custom layout
- Standard cells layout design

- Automated design verification (DRC and LVS)
- IC simulations (both analogue and digital)

Education and training

Dates	2015 – 2022
Title of qualification awarded	PhD in Engineering Sciences Thesis on "Advanced Zener-based Voltage Reference".
Name and type of organisation providing education and training	SD-ETTI-B University Politehnica of Bucharest, Romania
Dates	2004 – 2005
Title of qualification awarded	Master of Engineering in VLSI Systems, 1 st Class Honours. Final project "10Bit Digital to Analog Converter with Offset and Slope correction/Setting Capabilities".
Name and type of organisation providing education and training	University of Limerick, Ireland
Dates	1994 – 1999
Title of qualification awarded	Master of Engineering in Digital Communications and Multimedia Systems Final project "8 Bit Pre-settable Digital to Analog Converter".
Name and type of organisation providing education and training	University Politehnica of Bucharest, Romania
Personal skills and competences	
Mother tongue(s)	Romanian
Other language(s)	English

Research

Author of US patent (Patent Application APD6917US01) " A Circuit for Generating a Temperature Dependent Output" Filled January 2020

Author or co-author of several papers presented to internal ADI technical conferences.

Author of a paper at the MIXDES 2019 technical conference, Rzeszow, Poland.
"Outstanding Paper Award" received for the presented paper

Co-author of a paper at the ISSC 2018 technical conference, Belfast, UK.

Author of a paper at the MIXDES 2018 technical conference, Gdynia, Poland.
"Outstanding Paper Award" received for the presented paper

Co-author of a paper at the ISSCS 2017 technical conference, Iasi, Romania.

Author of a paper at the MIXDES 2017 technical conference, Bydgoszcz, Poland.
"Outstanding Paper Award" received for the presented paper

Co-author of a paper at the ISSC 2015 technical conference, Carlow, Ireland.

Attended and presented at International Semiconductor Conferences

Computer skills and competences

Linux & Windows operation systems , CAD software:
Cadence (Virtuoso & Composer, Allegro PCB Designer, Dracula)
Mentor Graphics (Calibre Verification suit, Tanner L-Edit suit)
Synopsys (Hercules Verification suit)
ADICE (ADI proprietary spice suit)
Avant!Compass(layout design software, BPR),