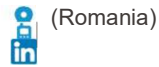


PERSONAL INFORMATION Bogza Amir Oliviu

PERSONAL STATEMENT Passionate Electronics Design Engineer with 7+ years experience in DCDC converter design for Automotive Industry.

WORK EXPERIENCE**08/2014–Present Senior Hardware Design Engineer - Power Electronics**

Delta Energy Systems (Romania) SRL

Main activities:

- Design and simulation of electronic circuits and power converters for Automotive projects (e.g. EV, HEV, PHEV)
- Design and simulation of classic and planar magnetics components
- Design for EMC and Functional Safety compliance
- Schematics design and verification
- PCB layout review
- HW debug and prototype testing
- HW/SW issues solving
- Production support
- RMA analysis

Main simulation/calculation tools used:

- LTSpice, SIMetrix, Spice, PSIM, Ansys Simplorer
- Ansys Maxwell 2D/3D
- Ansys Siwave
- Mathcad

Main schematic/ PCB design tools used:

- Zuken Cadstar
- Altium Designer
- Cadence

11/2008–08/2014 Services Engineer

Schneider Electric Romania SRL, Bucuresti (Romania)

Main activities:

- Spare parts, upgrade and repair quotations support for LV, MV breakers, contactors, switchboards and Automation

UPS Service Engineer

Schneider Electric Romania SRL, Bucuresti (Romania)

Main activities:

- Maintenance and repair of Uninterruptible Power supplies (UPS) with power up to 200kVA
- On-Site interventions

05/2007–11/2008

UPS Service Engineer

Genesys Systems RO SRL

Main activities:

- Maintenance and repair of Uninterruptible Power supplies (UPS) with power up to 250kVA
- On-Site interventions

EDUCATION AND TRAINING

2016–Present **Doctor of Philosophy (PhD) Field Of Study Power Electronics (Ongoing)**

Universitatea „Politehnica” din București, Bucharest (Romania)

Power Electronics Design - DCDC converter for Electrical Vehicle (EV)

2001–2006 **Electrical Engineer**

Universitatea „Politehnica” - Facultatea de Ingineri Electrica, Bucuresti (Romania)

Main areas of study:

- Math
- Physics
- Electronics
- Embedded design
- C programming
- Breakers
- Motors
- Transformers

PERSONAL SKILLS

Mother tongue(s) Romanian

Foreign language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C1	C1	C1
German	A2	A2	A2	A2	A2

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
[Common European Framework of Reference for Languages - Self-assessment grid](#)

Communication skills Excellent communication skills in English obtained due to long work experience with customers and employees from other countries.

Organisational / managerial skills Good organisational skills gained as HW design project leader at Delta Energy Systems

Digital skills

Information processing	Communication	Content creation	Problem -solving
Proficient user	Proficient user	Proficient user	Proficient user

- Microsoft Office tools (Word, Excel, PowerPoint, Visio)
- PC software and HW repair
- Email

ADDITIONAL INFORMATION

Courses

- [Introduction to Power Electronics - University of Colorado Boulder](#)
- [Converter Circuits - University of Colorado Boulder](#)
- [Magnetics for Power Electronic Converters - University of Colorado Boulder](#)
- Texas Instruments Power Supply Design Seminar 2015
- Altium Designer - Online Courses
- Electrical Risk Prevention Course – Schneider Electric

Projects

2kW Isolated DC-DC converter for Electric Vehicle (EV)

HW/SW and EMC improvements of existing Half-Bridge Phase Shifted converter including schematics design, simulations, magnetics design and prototype testing.

3kW DC-DC 3phase buck converter for Hybrid Vehicle (HEV)

HW/SW improvements of existing 3 Phase Interleaved Buck Converter including schematic design, simulations and prototype testing.

3.2kW Isolated DC-DC converter for Electric Vehicle (EV)

Design of a Full-Bridge Phase Shifted interleaved converter including schematic design, simulation, magnetics design, and prototype testing.

1kW AC-DC Isolated converter for Power Audio Amplifier

Design of a Full Bridge AC-DC converter including schematic design, simulation, PCB design, magnetics design, and prototype testing.

1.5kW AC-DC Isolated converter for Power Audio Amplifier

Design of an Half Bridge 1.5kW converter including schematic design, PCB design, magnetics design and prototype testing.

65W Dell Laptop DC-DC power adapter from 12V car battery

Schematic and PCB design of a DC-DC converter for a Dell laptop

1kW HI-FI Power Audio Amplifier

Schematic design, analog simulation, protections, PCB design and prototype testing.

1kW HI-FI Power Audio Amplifier

Schematic design, analog simulation, protections, PCB design and prototype testing.

Embedded Web Server for Home Automation

Design of an Embedded Web server based on microcontroller including circuit design, C programming, schematic design, layout design and prototype testing.

IPTV streaming based on Raspberry PI 3

Design of auxiliary switching supply and Set Top Box IR remote control. SW Linux compilation.

Voluntaries Bucharest International Half Marathon

Participation to this contest helped the children from Hospice Organization

Publications

1. *A. Bogza, D. Floricău, L. Parvulescu*, "Selection of the Power Components for a Phase-Shifted Full-Bridge Converter with Current Doubler", pp.1-6, ICATE, Craiova, 2018, WOS:000487278600086.
2. *A. Bogza, D. Floricău*, "Analysis and Optimization of a High Frequency Planar Transformer for DC-DC Converter using Finite Element Method", Rev. Roum. Sci. Techn. – Électrotechn. et Énerg, Vol. 65, pp.47-52, Bucharest, 2020, WOS:000552052900008.
3. *A. Bogza, D. Floricău*, "The Parallel Connection of Phase-Shifted Full-Bridge DC-DC Converters", Rev. Roum. Sci. Techn. – Électrotechn. et Énerg, Vol. 65, pp. 229-234, Bucharest, 2020, WOS:000608261900013.
4. *A. Bogza, D. Floricău*, "Leakage inductance optimization for FBPS DC-DC Converter", U.P.B. Sci. Bull., Series C, 2021, (în curs de publicare).
5. *L. Parvulescu, P. C. Mihalache, D. Floricău, A. Bogza and M. A. Mihai*, "A Multidisciplinary Student Platform Design," 2019 11th International Symposium on Advanced Topics in Electrical Engineering (ATEE), 2019, pp. 14, doi: 10.1109/ATEE.2019.8724947, WOS:000475904500104.

27.08.2021