

Curriculum Vitae

Personal information

First name(s) / Surname(s) **Mircea-Alexandru Călin**

Address [REDACTED]

Mobile [REDACTED]

E-mail(s) [REDACTED]

Nationality [REDACTED]

Date of birth [REDACTED]

Gender [REDACTED]

Desired employment / Occupational field

Electronics Research and Design

Work experience

July 2023 – present

Occupation or position held **Power Management Senior Application Engineer**

Name and address of employer **Microchip Technology**

Main activities and responsibilities

- New product development and proposal
- Specifications and application definition
- Road test and key parameters verification
- Product integration in other business units Apps
- Troubleshooting and solution proposal
- Schematic design and PCB layout for reference applications
- Datasheet, App Notes and client support

August 2020 – June 2023:

Occupation or position held **Project manager**
Romanian Ministry of National Defence

Name and address of employer

Main activities and responsibilities

- Project initiation and idea proposal;
- Team assembly and role assignation;
- Legal and financial management;
- Leading the team through project changes;
- Monitoring progress and controlling processes;
- Performance evaluation;
- Talent scouting and recruiting;
- Managing documentation and reports;

Occupation or position held	<p><i>December 2014 – 2020:</i> Embedded Electronics Research and Design Engineer Romanian Ministry of National Defence</p>
Name and address of employer	
Main activities and responsibilities	<ul style="list-style-type: none"> -Embedded electronic systems architecture design; -Design and simulation for electronic schematics; -PCB design and production in SMD and THD technology; -Manual and automated PCB assembly and testing; -Electronic circuit troubleshooting; -Proof-of-concept validation; -Developing technical documentation; - Radio-frequency systems design and testing;
	<p><i>August 2012 – December 2014:</i></p>
Occupation or position held	Radio Planning and Network Access Engineer
Name and address of employer	TELEKOM Romanian Mobile Telecommunications S.A
Main activities and responsibilities	<ul style="list-style-type: none"> - Designing the GSM/UMTS/LTE radio system and optimizing the radio coverage of the network; - Radio network coverage and propagation simulation; - Monitoring network performance through KPIs; - Solving customer problems; - Making work orders for equipment install and custom solutions;
	<p><i>December 2011 - July 2012</i></p>
Occupation or position held	Internship
Name and address of employer	Microchip Technology Inc, Bucharest
Main activities and responsibilities	<ul style="list-style-type: none"> - development and research for a switching power supply application; - designing and manufacturing a prototype for a synchronous Buck converter;
	<p><i>15/06/2011 - 10/09/2011</i></p>
Occupation or position held	Internship
Name and address of employer	SC EXACT SERVICE SRL, Bacau (Romania)
Main activities and responsibilities	<ul style="list-style-type: none"> -service and maintenance for industrial applications -specialized internship program for students

Education and training Title of qualification awarded	<i>October 2021 - present</i> Doctoral student at the Faculty of Electronics, Telecommunications and Information Technology , Politehnica University of Bucharest - 4 published papers at IEEE conferences; - 2nd place at the TIEplus contest for signal integrity analysis and design.
	<i>September 2021 – Management training course and communication workshops organized by TREND consult</i>
	<i>October 2020 - present</i> Doctoral student at the Faculty of Electronics, Telecommunications and Information Technology , POLITEHNICA University of Bucharest - 4 published papers at IEEE conferences; - 2nd place at the TIEplus contest for signal integrity analysis and design.
	<i>September 2021 – Management training course and communication workshops organized by TREND consult</i>
Dates	<i>October 2012 – 2014</i> Master studies in „Applied Electronics” ; ETI, Politehnica University of Bucharest 2012-2014 Followed several courses in the field of telecom networks „Award Solutions” course – LTE radio interface ; Workshop Ericsson – Dimensioning of LTE radio networks ; Ericsson course - RANW12 protocol for WCDMA ;
Title of qualification awarded Principal subjects / occupational skills covered Name and type of organisation providing education and training	<i>October 2008 - July 2012</i> Bachelor of Science in Electronics Engineering Main studies include: Electronic Measurements, Data Acquisition, Television, Telecommunication, Digital Circuits, Microprocessors, Microcontrollers, Integrated Circuits, Power Electronics, Electronic Circuit Simulation, Microwaves, FPGA. ETI - Politehnica University of Bucharest Iuliu Maniu 1-3, Bucharest
Title of qualification awarded Principal subjects / occupational skills covered Name and type of organisation providing education and training	<i>June 2004 - July 2008</i> Romanian Baccalaureate Advanced Mathematics, Physics, English Language Oral, Romanian Language Oral, Romanian Language, Sports. "Gheorghe Vranceanu" National College Bacau (Romania)
Title of qualification awarded Principal subjects / occupational skills covered	<i>2006 - 2007</i> Cambridge Advanced English Certificate Achieved an "A" grade at the CAE tests

Name and type of organisation providing education and training	University of Cambridge									
Self-assessment										
European level (*)	Understanding				Speaking				Writing	
	Listening		Reading		Spoken interaction		Spoken production			
English	C2	Proficient user	C2	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user
German	A1	Basic User	A2	Basic User	A2	Basic User	A1	Basic User	A2	Basic User

Social skills and competences

- Chair of IEEE Electronics Packaging Society - Student Chapter UPB Bucharest
- CETTI (Center of Technological Electronics and Interconnection Techniques) member
-IEEE member for the Electronics Packaging Society (EPS)
- over 10 years activity as a moderator on a public electronics forum (www.elforum.ro);

Technical skills and competences

Electronics Research and Design:

-vast experience in schematic design for analog, power, microcontroller, RF and IoT systems;
- good experience in PCB design and manufacturing of PCB's in THT and SMD technology using CAD software);
- very good experience with the design and simulation of electronic circuits using CAD software;
- good knowledge about digital electronics and CMOS type ICs;
- good experience using ANSYS HFSS and SIWAVE simulation;
- proficient experience with manual electronics soldering and rework of THT and SMD (solder pen, hot air station, infra-red station);
-very good experience in using electronic measurement equipment (oscilloscope, spectrum analyzer, signal generator, vector network analyzer);
- good experience using Pick and Place machines for semi-automated board assemblies;
-good experience using CNC machines;
-very good knowledge regarding power electronics and most of the SMPS topologies (Buck, Boost, Flyback, Forward, Half-bridge, etc);
-proficient experience in fault finding and repairing audio-video equipment and switch-mode power supplies;

Mobile Telecommunication Systems:

- basic knowledge on GSM/UMTS/LTE network architecture;
- knowledge about RF equipment (Ericsson, ZTE, Raycap, Kathrein) used for mobile telecommunication networks;
- good knowledge about base station equipment (SDR and non SDR series);
-good knowledge about RF antennas used for GSM/ CDMA /UMTS/LTE/ networks;
-good knowledge regarding radio cell planning tools (Astrix by Teleplan Globe);
-experience using measurement tools and network optimization software;

Computer skills and competences	<ul style="list-style-type: none"> -very good experience using CAD programs: Eagle, Orcad, PSIM, TINA, ANSYS - experience using C/C++, MySQL languages; - operating Microsoft Windows and Microsoft Office; - experience in diagnosing and repairing personal computers;
Other skills and competences	<ul style="list-style-type: none"> -Hobbies: collecting vintage audio equipment, electronic projects, reading; - Sports: swimming, football, fishing; - Took a utility climbing and height safety course; - Offroad driving course –with former rally champion Titi Aur;