Idan Ben Ezra

+972-52-6565524 | idantk@gmail.com

Residence:	*Pethah Tiqva, Israel*
Date of birth:	*26.2.1991*
Family status:	*Married*

Education

2012-2016 **B.Sc. Electrical, Electronics and Computers Engineering** from HIT, graduated with honors, **GPA: 93.**

Major: Embedded Computer Systems & Digital Image Processing.

Final Project: license plate recognition algorithm using image processing & machine learning techniques, grade 99.

2009-2011 **Practical Electrical Engineering** from Ort Singalovski College, graduated with honors, **GPA: 97**.

Final Project: Developed a Universal controller antenna project at Unit 108, IAF, grade 100.

2005-2009 **Ort Givatayim High School -** full matriculation, majored in Electronics and Physics.

Professional experience

2017-Today **Valens, Board design engineer at the R&D department**

- Development of multi-layer (16+ layers) boards for testing the functionalities of Valens's chips.
- Development of multi-interface circuits: HDBT (Valens's interface), QSFP+, SFP+, HDMI, Ethernet, USB, I2S, SPDIF, I2C, UART etc.
- Design and implementation:
  - FPGA based boards (Xilinx- Spartan, Kintex, and UltraScale) for new interfaces & test-bus.
  - EMC ECU boards (including SI & PI simulations) to Valens's new chips, including all the relevant aspects to succeed in automotive EMC emission & immunity tests.
  - Smart power management board (DC-DC, LDOs, sensors, etc.) to greatly increase characterization tests performance.
  - Boards that are mounted on a chassis (backplanes).
- Vast experience in high-speed digital and analog PCB design, layout, production, bring up and debug.
- Investigation of unique and undocumented phenomena of Valens's chips.
- Advisor to all the relevant departments in the company (both domestic and abroad).

2016-2017 **Valens, Validation and Integration engineer at the R&D department**

- Working in collaboration with the development departments.
- Checking feasibility (hardware and software) from the initial stage (FPGA) to the chip's tape out.
- Testing and integration between the hardware and software.
- Design and implementation of new testing methods in multi-chip systems.
- Design and implementation of optimization proposals for products that are related to testing (from the optimization proposal stage to development and implementation of the project).

2016-2018 **Spydro, Board design engineer for a smart fishing camera (Start-up)**

- Participating in the HW development cycle of Spydro’s main board.
- Hands-on experience designing and accompanying full product design process: such as choosing components, Schematics and PCB design mechanics, manufacturers, etc.
- Development of multi-interface circuit: CPUs, MIPI camera, all the peripheral of the battery (charger, gauges, etc.), sensors (light, accelerometer, drivers and discrete components).
- Dealing with challenges to develop a reliable product at the highest quality for mass production that can successfully compete in the global market.

2014-2016 **PAL electronics systems, R&D Engineer for access control systems for parking lots**

- Design and development multi-disciplinary projects from concept to mass production products (Choosing components, Schematics, and PCB designing, C coding etc.).
- Communication with vendors to manufacture and supply parts and materials for the products.
- Worked closely with the clients and managed customer support to ensure client satisfaction.
- Production, repair (Down to component level), upgrade versions of existing company products.

2011-2014 **Military service, laboratory system engineer, 108 Base, Israeli Air Force**

- Participation in the development team and developing for communications products (Transmission, Telephony, Switching, Encryption).
- Maintenance of transmission assemblies: Testing equipment, Megaplex cards, voltages converter and power suppliers.
- Development and validation testing, conducting final tests, including fault detection and repair down to component level.
- Training and preparing practical engineer students for their final project.

Courses

- **Electromagnetic compatibility** (2019) – Introduction to EMC/EMI including design to EMC compliance, measurements, simulation, high speed PCB design, standards and regulations.
- **Project Leaders course** (IAF) – Management and commanding approaches and skills, load balancing, task management, building strategy, goals and vision, feedback and mentoring processes.
- **Soldering components** (IAF) – Solderability with high quality (SMT 0402, QFN, LPCC, etc.).

Skills

- ✓ Design Schematics and layout using OrCAD (Allegro) & Eagle frameworks.
- ✓ Schematics and Layout simulations using LTspice, PSpice, SI&PI with Allegro Sigrity framework.
- ✓ Working with schemes, reverse engineering, writing technical documents.
- ✓ Deep knowledge of lab equipment instruments such as: Scopes, DVM, Logic, Spectrum Analyzer, Network Analyzer, VNA (for S-Parameters), BCI & DPI (for EMC tests), etc.
- ✓ Knowledge of PCB manufacturing.
- ✓ Coding for microcontrollers such as: Microchip, TI, ST, Silicon Lab, Arduino, etc.
- ✓ Hands-on, Responsible, Thorough, Creative, Thinking outside the box, Highly motivated, Self-learning, Multitasking, Team player, Realistic and has analytical thinking.

Languages

Hebrew (Native) | English (Fluent)

Personal Reference

Given upon request.