

## **UOK – MikroElektronika**

The MikroElektronika firm is one of the leaders on the market in Serbia for development boards for 8, 16 and 32 bits microcontrollers, compilers, peripherals as ADC, DAC, interfaces RS485, CAN et Ethernet, for displays (LCD, GLCD, TFT, IrDA, LIN, Zigbee) as well for MP3, motion sensors, digital potentiometers, radio identification, drivers for stepper motor. The firm's programmers create firmware for microcontrollers in C, Pascal and BASIC as well as in Delphi and C++ for Windows operational system. The company has distributors in over 38 countries over the world – Europe, India, Brazil, Russia, Middle East. Additionally, the firm has published several articles in some of the most popular electronic magazines in several languages, which are available free for download.

One of the recent projects of the company focused on releasing new line of compact, mobile, light and easy to connect multimedia board for PIC microcontrollers with incorporated TFT display with touch screen, audio codec and storage peripherals. The firm's production facilities are equipped with true hole and surface mounting device assembly technology. Around 98% of the parts are exported in more than 25 countries. The firm sells around 300 products annually and has annual income of approximately 2 million Euros.

<http://www.mikroe.com>

### **SWOT ANALYSIS**

#### **Strengths:**

- The company offers a wide range of development tools, compilers and books for a range of microcontroller families (PIC, dsPIC, AVR, 8051, ARM, PSoC). The company is equipped with true hole and SMD assembly technology equipment.
- The company also produces a wide range of peripherals;
- High quality SMD components are used, along on 4-layer PCB which guarantees low noise and low induction from external sources;
- The production is exported in a lot of countries. Export oriented company (98% of monthly production);
- Efficient management structure in the company;
- Partnership with well-known companies such as Microchip, Atmel, Cypress and NXP is very important factor in extension of the existing market and will guarantee long-lasting sustainability and financial stability of MikroElektronika company;
- Financial mechanism applied in transformation of research into innovation is private funding.

### **Weaknesses:**

- The relation between the project coordinator University of Kragujevac and the company;
- MikroElektronika is not clear;
- Development tool market is limited – not a consumer market;
- Only Nebojša Matić invested the private capital in the MikroElektronika company.

### **Opportunities:**

- Future development and production of modern and useful products is awaited;
- Strategic partnership with leading companies in the field such as Microchip, Cypress Semiconductors, Sony;
- Low age of the team makes it possible to stay in touch with recent technological advancements;
- Vast majority of customers are from USA and Europe, followed by India, Brazil, Russia, Middle East and the rest of the world (over 38 countries). Products are low-cost and are therefore meant for users from all economic categories.

### **Threats:**

- The hard competition over the world could be dangerous for the company;
- Market evolution from the PC market to the smart phone market may also influence the market that the company is active;
- Unpredictable evolution on electronically components price after unpredictable disasters.