



SAF Tehnika JSC has more than 20 years of experience in the field of microwave data and Low latency, High Band transmission equipment manufacturing. Company also develops series of world's smallest microwave test & measurement devices and lately has expanded its business in the field of wireless IoT solutions under the brand name Aranet.

AREAS OF COOPERATION

- Company has accumulated large experience in classical signal processing, implementation of error correction codes and encryption algorithms, as well as in development and implementation of interfaces, protocols and nodes of network devices;
- SAF Tehnika supports collaboration with Latvian universities, researchers and scientists, within the projects of the company internationally cited publications are prepared and doctoral dissertations are written;
- Engineers of the company have expert level skills in widespread hardware description languages (VHDL, Verilog and SystemVerilog) and extensive experience in the developed algorithm implementation in programmable logic (FPGA);
- Employed specialists have many years of experience in simulation and testing of implemented designs, as well as in usage of universal verification methodology (UVM);
- Engineers of SAF Tehnika obtained comprehensive knowledge in programmable logic timing, power and resource utilization optimization;
- The developers widely use integration techniques of software and FPGA implemented nodes, works in system-on-chip (SoC) paradigm and strictly follow own embedded design methodology;

Circuit board development and manufacturing

- SAF develops analogue and digital electronic CB's, micro controller sensor, power supply, radio and super-high frequency (80GHz) circuits;
- PCB's with up to 16 conductor layers;
- Extensive experience in digital signal processing. SAF has developed ultra-low latency data transmission modems for microwave systems, AES256 encryption algorithm, etc.;
- SAF is experienced with system, node and algorithm modelling and simulation in MATLAB;
- Company uses FPGA programmable logic for realization of developed systems and algorithms;
- SAF Tehnika employs engineers responsible for mechanical part modelling and construction;
- Company develops software for its products – Linux-based micro controllers as well as for PC;
- Industrial temperature testing (-60 C to +80 C)
- SAF has reliable and well-known PCB suppliers and established network of sub-contractors;
- Full cycle of manufacturing: R&D, prototyping, small-batch manufacturing (1-5000 units).

Test & measurement equipment

- SAF has created world's first truly hand-held series of microwave test & measurement devices. Spectrum Compact products range from 30MHz to 87GHz. More on www.spectrumcompact.com
- Company has developed 1 – 10 Gb Ethernet tester for in-house manufacturing needs as well as for ultra-low latency customer segment. Ethernet tester generates data traffic with configurable parameters (Channel occupancy, frame

length, VLAN tags, etc.). Tester's receiver part analyzes data traffic and evaluates throughput, margin of errors and other parameters.

Aranet – Industrial wireless sensor network solutions

- More than 30 types of wireless sensors with battery life of up to 10 years and with exceptionally long receiving range of up to 3km. Data are stored in base station thus enabling autonomous operation without connectivity to cloud. Advanced Cloud functionality also available. (www.aranet.com/cloud)