Tempus Project University of Kragujevac
WBCVMnet
WBC Virtual Manufacturing Network
Fostering an Integration of the Knowledge Triangle

Centar za integrisane mikrosisteme i komponente

www.cimc.rs

Fakultet tehničkih nauka, Univerzitet u Novom Sadu

Dr Goran Stojanović

European Commission
TEMPUS

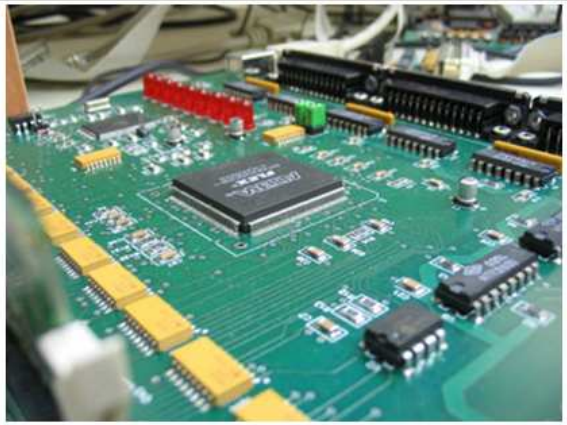
O Centru:

- Osnovan 2004. godine sa idejom da poveže istraživače na FTNu, srodnih oblasti interesovanja, ali pre svega fokusiran na istraživanja u elektronici i povezanim oblastima
- Najveći uspeh dobijanje FP6 projekta (2007. godine) u vrednosti od 310.000,00 EUR
- Razvijena saradnja s kompanijama
- Prosečno godišnje oko 16 naučnih radova publikovanih u časopisima sa SCI liste
- Tim čine 12 doktora nauka, 15 mladih istraživača (doktoranata) i 4 laboranta
- Planovi – prerastanje u inovacioni centar koji će biti lider u ovoj oblasti u regionu

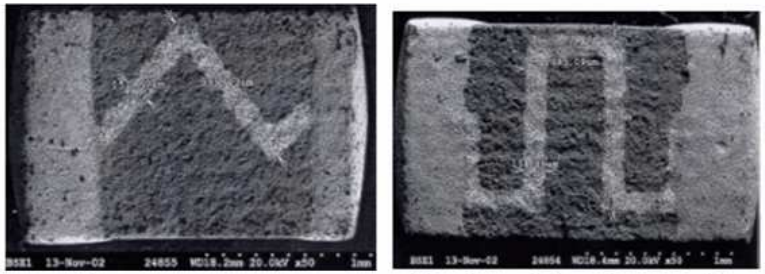
Saradnja sa kompanijama iz zemlje i inostranstva:

- *Littelfuse Ireland Limited, Ireland*
- *Test Laboratories International Inc., USA*
- *ELSYS Design, Paris, France*
- *STMicroelectronics, Pavia, Italy*
- *Hotwell, Klingenbach, Austria*
- *Fotec, Wiener Neustadt, Austria*
- *HDL Design House, Belgrade, Serbia*
- *ICM Electronics, Novi Sad, Serbia*
- *IRITEL, Belgrade, Serbia*
- *NIS – Naftagas, Novi Sad, Serbia*
- *Panakva, Novi Sad, Serbia*

Razvijeni proizvodi:

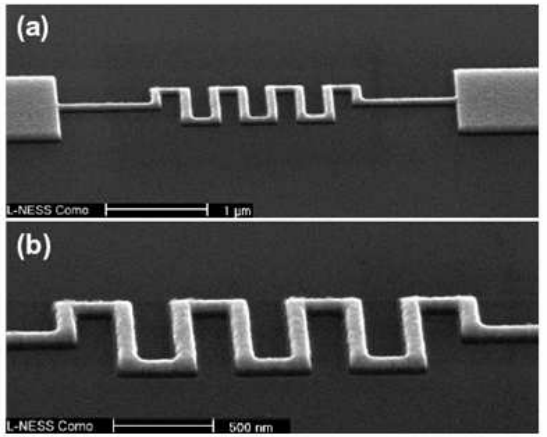


USB Serial Communication Board, developed for Test Laboratories International Inc., USA



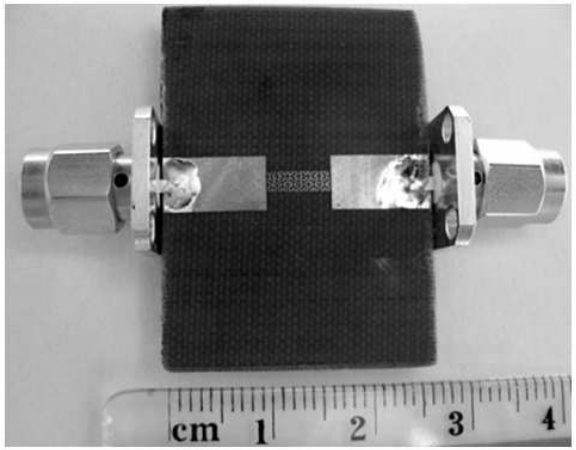
SMD ferrite EMI suppressors, developed for the Littelfuse Ireland Limitted, Ireland

Pressure sensor developed in cooperation with Institute for sensors and actuators systems, Vienna, Austria



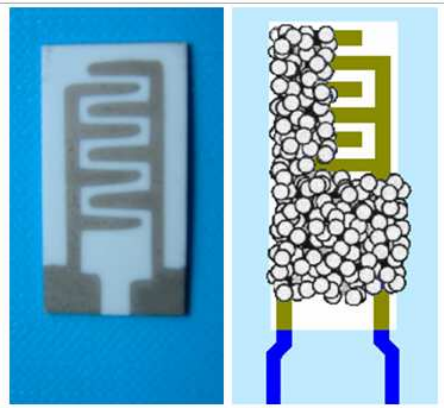
An meander inductor developed in cooperation with LNESS, Como, Milan Polytechnic, Como, Italy

Razvijeni proizvodi:

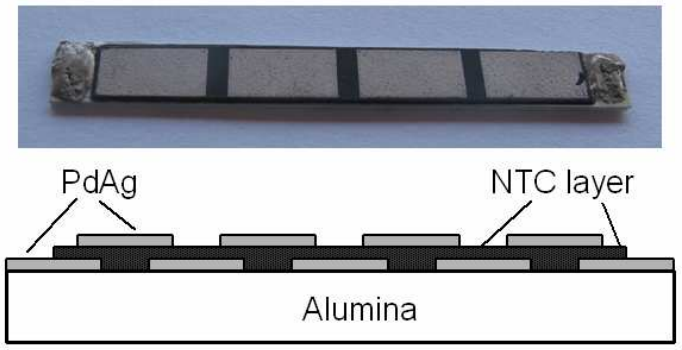


2D Hilbert resonator, developed in cooperation with Iritel

Indoor embedded system for monitoring of critical parameters in borehole measurement (NIS - Naftagas)



Interdigitated capacitor with nanostructured titania coatings for sensors applications, completely in-house developed



Segmented thick-film NTC thermistor, completely in-house developed and patented

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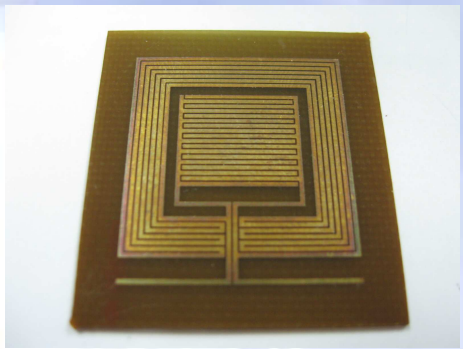
Razvijeni proizvodi:



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Međunarodni projekti – u toku:

1. FP7, REGPOT project: "*Reinforcement of Research Potentials of the Faculty of Technical Sciences in the Field of Post Silicon Electronics*" (APOSTILLE - no. 256615, coordinator: prof. Goran Stojanović), 2010-2013.

2. FP6 project: "*Reinforcement of the Center for Integrated Microsystems and Components*" (*Re*CIMiCo - no. 043669, coordinator: prof. Ljiljana Živanov), 2007-2010.

3. EUREKA project: "*New Generation of 3D Integrated Passive Components and Microsystems in LTCC Technology* " (IPCTECH – no. E!4570, coordinator: prof. Goran Stojanović), 2009 – 2011.

4. Bilateral project: "*Design, modeling and optimization of novel integrated passive components for power electronic application*", (coordinator: prof. Goran Stojanović), 2007-2010.

Nacionalni projekti – u toku:

"Nove konfiguracije feritnih transformatora i EMI potiskivača za *DC/DC konvertore i telekomunikacione module*", broj projekta: 11023, 2008 – 2011, (rukovodilac: prof. Ljiljana Živanov)

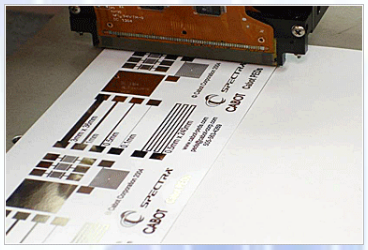
"Realizacija mikro-senzora visokih performansi za rad u ekstremnim uslovima okruženja", broj projekta: 114-451-01009/2008-01, 2008-2011, (rukovodilac: prof. Goran Stojanović)

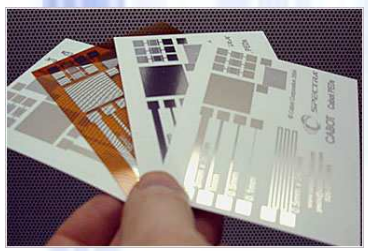
"Sinteza nano prahova i keramika za primene u novim tehnologijama", (broj projekta: 142059), 2005-2011, (rukovodilac: prof. Mirjana Damnjanović).

"Razvoj sistema i instrumenata za ispitivanje vode, nafte i gasa", broj projekta: 11006, 2008 – 2011, (rukovodilac: prof. Miloš Živanov).

Oprema – fabrikacioni kapaciteti – fleksibilna osnova:

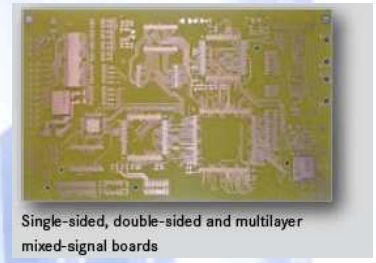
Primene



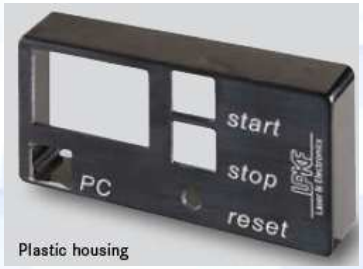


Oprema – fabrikacioni kapaciteti – čvrsta osnova (PCB):

Primene


Single-sided, double-sided and multilayer mixed-signal boards


Aluminum housing



Plastic housing

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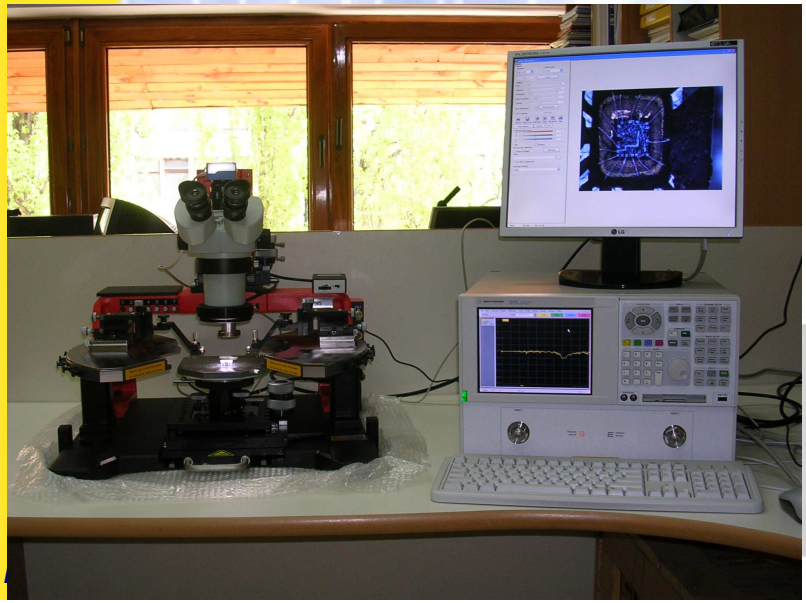
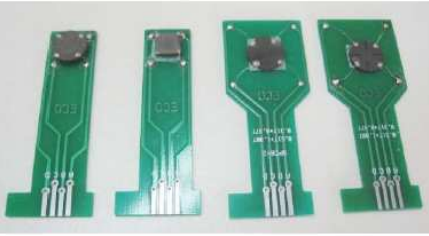
Drugi specifični delovi opreme – karakterizacija:

- N5230A Agilent PNA-L Network Analyzer, 10MHz-50GHz
- E5071B Agilent Vector Network Analyzer, 300 kHz-8.5 GHz
- 4191A RF Impedance Analyzer, 1 MHz-1GHz
- 4194A Impedance/Gain Phase Analyzer, 100Hz-40MHz
- RF/Microwave Wafer Probe Station, SUSS PM5
- Hall Effect Measurement System HMS-3000
- HP 4277 A LCZ Meter to 1 MHz





Neki od naših publikovanih naučnih radova:

1. H. Liu, Veljko Malbaša, Ivan Mezei, A. Nayak, Ivan Stojmenović: "Coordination in Sensor, Actuator and Robot Networks", In: Wireless Sensor and Actuator Networks: Algorithms and Protocols for Scalable Coordination and Data Communication (Ed.: A. Nayak and I. Stojmenovic), Wiley Blackwell, Jan. 2010, pp. 233-262, ISBN 978-0-470-17082-3.
2. Goran Stojanović, Milan Radovanović, Mirjana Malešev, Vlastimir Radonjanin, "Monitoring of Water Content in Building Materials Using a Wireless Passive Sensor", *Sensors* (IF: 1.821), vol. 10, no. 5, 2010, pp. 4270-4280, ISSN 1424-8220.
3. Mirjana Damnjanović, Ljiljana Živanov, Goran Stojanović, Aleksandar Menićanin, "Influence of Conductive Layer Geometry on Maximal Impedance Frequency Shift of Zig-Zag Ferrite EMI Suppressor", *IEEE Transactions on Magnetics* (IF: 1.061), vol. 46, no. 6, 2010, pp. 1303-1306, ISSN: 0018-9464.
4. Goran Radosavljević, Ljiljana Živanov, Walter Smetana, Andrea Marić, Michael Unger, Laslo Nađ: A Wireless Embedded Resonant Pressure Sensor Fabricated in the Standard LTCC Technology, *IEEE Sensor Journal (IF: 1.61)*, vol. 9, no. 12, 2009, pp. 1956-1962, ISSN: 1530-437X.
5. Rastislav Struharik, Ladislav Novak, "IP Core Implementation of Decision Trees", *IET Computers and Digital Techniques (IF: 0.629)*, vol. 3, no. 3, 2009, pp. 259-269, ISSN: 1751-8601.

Neki od naših publikovanih naučnih radova:

6. Aleksandra Sešić, Staniša Dautović, Veljko Malbaša, "Dynamic Power Management of a System with a Two-Priority Request Queue Using Probabilistic Model Checking", *IEEE Transactions on Computer Aided Design of Integrated Circuits & Systems (IF: 1.466)*, vol. 27, no. 2, 2008, pp. 403- 407, ISSN: 0278-0070.
7. Mirjana Videnović-Mišić, Milan Jeftić, "Impact of bias condition on 1/f noise of dual-gate depletion type MOSFET in linear region and consequences for noise diagnostic application and modeling", *Microelectronics Reliability (IF: 1.29)*, vol. 48, no. 7, 2008, pp. 1008- 1014, ISSN: 0026-2714.
8. Obrad Aleksić, Viktor Marić, Ljiljana Živanov, Aleksandar Menićanin, "A Novel Approach to Modeling and Simulation of NTC Thick-Film Segmented Thermistors for Sensor Applications, *IEEE Sensors Journal (IF: 1.34)*, vol. 7, no. 10, 2007, pp. 1420-1428, ISSN: 1530-437X.
9. Mirjana Damnjanović, Goran Stojanović, Vladan Desnica, Ljiljana Živanov, Ramesh Raghavendra, Pat Bellew, Neil Mcloughlin, "Analysis, design and characterization of ferrite EMI suppressors," *IEEE Transactions on Magnetics* (IF: 0.938), vol. 42, no. 2, 2006, pp. 270-277, ISSN: 0018-9464.
10. Ramesh Raghavendra, Pat Bellew, Neil Mcloughlin, Goran Stojanovic, Mirjana Damnjanovic, Vladan Desnica, Ljiljana Zivanov, "Characterization of Novel Varistor+Inductor Integrated Passive Devices," *IEEE Electron Devices Letters* (IF: 2.538), vol. 25, no. 12, pp. 778-780, 2004.

HVALA NA PAŽNJI

sgoran@uns.ac.rs

021/4852552