Model F17 - Memoriul științific al studentului doctorand

MEMORIU ȘTIINȚIFIC
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Studii de doctorat

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Domeniu: Inginerie Electronică, Telecomunicații și Tehnologii Informaționale
Titlul tezei de doctorat: DIRECT-TO-DIGITAL INTERFACES FOR CMOS HALL SENSORS

Activitate științifică

A. Lista de lucrări științifice (articole în reviste sau volume)

1. **D. -I. -D. Stoica**, A. Ciobanaşu, A. Gheorghe, M. Motz and G. Brezeanu, "A Direct-to-Digital Readout Architecture for CMOS Hall Sensors," in IEEE Transactions on Circuits and Systems II: Express Briefs, vol. 72, no. 11, pp. 1655-1659, Nov. 2025, doi: 10.1109/TCSII.2025.3605969, ISI, WOS:001610854500035 (Q1, 2025)
2. **D. -I. -D. Stoica**, M. Motz, A. Gheorghe, I. -I. Cristea and L. Turic˘a, "A 75 dB DR, 0.13 uT/Hz Hall Sensor with CT-SD-ADC, Digital Chopper Ripple Rejection Loops and Custom Nano-Timing Techniques," 2024 IEEE European Solid-State Electronics Research Conference (ESSERC), Bruges, Belgium, 2024, pp. 524-527, doi: 10.1109/ESSERC62670.2024.10719446, ISI, WOS:001349548800132
3. **D. -I. -D. Stoica**, I. -A. Nica, A. Ciobana¸su and G. Brezeanu, "A Continuous-Time Sigma-Delta ADC for Chopped Sensors with Digital Only Demodulation," 2024 International Semiconductor Conference (CAS), Sinaia, Romania, 2024, pp. 1-4, doi: 10.1109/CAS62834.2024.10736855, ISI, WOS:001361909500036
4. A. Obuhov, **D. -I. -D. Stoica**, I. -A. Nica and A. Cracan, "A Low Offset Ping-Pong Hysteresis Comparator for Magnetic Sensors," 2024 International Semiconductor Conference (CAS), Sinaia, Romania, 2024, pp. 241-244, doi: 10.1109/CAS62834.2024.10736722, ISI, WOS:001361909500051
5. A. Ciobanașu, **D. -I. -D. Stoica**, I. -I. Cristea, A. Cracan and R. -G. Bozomitu, "A Digital Demodulation-Based Architecture for Offset-Free Chopped Sensor Signal Paths Using Oscillator-Based ADCs," 2025 International Semiconductor Conference (CAS), Sinaia, Romania, 2025, pp. 239-242, doi: 10.1109/CAS66707.2025.11222247

A. Participări la conferințe/workshop-uri

1. **Dan Stoica**, "Direct-to-Digital Interfaces for CMOS Hall-Effect Sensors," presented in The Fourth Sensor Interfaces Meeting (IEEE SIM’25), Veldhoven, The Netherlands;

B. Brevete

1. **Dan Ioan Dumitru Stoica** and Ioan-Alexandru Nica, "Sensor circuit," US 2025/0062774 A1, Feb. 20, 2025.....
2. Andrei-Sorin Gheorghe, **Dan Ioan Dumitru Stoica**, Ilie-Ionut Cristea, "Sigmadelta analog to digital converter and method for converting an analog input signal to a digital output signal at a sampling frequency," US 2024/0250693 A1, Jul. 25, 2024