

ACS - Analog and Mixed Mode Circuits and Systems
ACS100 - Circuit theory
ACS110 - Current mode circuits
ACS120 - Low power/low voltage analog circuits
ACS130 - Amplifiers
ACS140 - Analog filters
ACS150 - Oscillators
ACS160 - Timing circuits and clock generators
ACS170 - HF and RF analog circuits
ACS180 - Low noise circuits
ACS190 - Discrete time analog circuits
ACS190A0 - Switched capacitor circuits
ACS190A5 - Switched current circuits
ACS200 - Continuous-time-digital systems
ACS210 - Signal conditioning and interfacing
ACS210A0 - Conditioning and interfacing for sensors
ACS210A5 - Conditioning and interfacing for actuators
ACS220 - Voltage and current references
ACS230 - Voltage and current regulators
ACS240 - Reconfigurable and field programmable analog circuits
ACS250 - Design techniques for analog and mixed mode circuits with non conventional devices
ACS250A0 - Organic/molecular/self-assembled devices in analog circuits
ACS250A5 - Nano devices in analog circuits
ACS250B0 - Interface circuits for MEMS
ACS250B5 - Interface circuits for NEMS
ACS250C0 - Optical devices and analog circuits
ACS250C5 - 3D integration in analog circuits
ACS260 - Design techniques targeting specific technologies, technology related issues or specific device operation modes
ACS260A0 - Analog circuits in specific processes (including. digital CMOS, bipolar, BiCMOS, GaAs, SiGe, SOI, etc.)
ACS260A5 - Analog circuits exploiting back-gated or floating gate MOS transistors
ACS260B0 - Analog circuits exploiting sub-threshold operation of MOS transistors
ACS260B5 - Circuit design and analysis in presence of substrate noise
ACS270 - Testing of analog and mixed mode circuits
ACS280 - Phase locked loops
ACS290 - Delay locked loops
ACS300 - Frequency synthesizers
ACS310 - Clock/data recovery circuits
ACS320 - Digital to analog converters
ACS330 - Analog to digital converters
ACS330A0 - Pipeline
ACS330A5 - Folding
ACS330B0 - Sigma-Delta and oversampling
ACS340 - V/F and F/V converters
ACS350 - PWM, PDM, PPM modulators

ACS360 - Mixers
ACS370 - Multipliers and other function blocks
ACS380 - Charge pumps
ACS390 - S/H, T/H, analog registers and memories
ACS400 - Circuits and systems for biomedical applications, life science and biology
ACS400A0 - Circuits for Electronics/biology fusion
ACS400A5 - Medical circuits and systems
ACS400B0 - Circuits for wearable/implantable (bio)electronics
ACS400B5 - Neuromorphic circuits and systems
ACS410 - Circuits for energy harvesting
ACS420 - Fractional circuits and systems
CAD - Computer Aided Design and Electronic Design Automation
CAD100 - Computer aided design and synthesis
CAD100A0 - Computer aided system level design
CAD100A5 - Computer aided high level synthesis
CAD100B0 - Computer aided logic synthesis and optimization
CAD110 - Computer aided verification
CAD110A0 - Computer aided physical verification
CAD120 - Computer aided testing and validation
CAD130 - Computer aided placement and routing
CAD140 - Computer aided design of clock and power/ground distribution networks
CAD150 - Computer aided interconnect analysis and optimization
CAD150A0 - Interconnect modeling in digital systems
CAD150A5 - Interconnect optimization in digital systems
CAD150B0 - Signal integrity in digital systems
CAD160 - Circuit simulation
CAD160A0 - Analog circuit simulation
CAD160A5 - Digital circuit simulation
CAD160B0 - Mixed mode circuit simulation
CAD160B5 - Behavioural and multi-domain simulation
CAD170 - Computer aided timing analysis
CAD180 - Computer aided power analysis
CAD190 - Computer aided reliability analysis
CAD200 - Design for manufacturing
CAD210 - Chip-package co-design
CAD220 - Assisted analog modeling, synthesis and optimization
CAD230 - Device modeling
CAD240 - FPGA design tools and applications
CAD250 - New, emerging or specialized design techniques
CAD260 - Network on chip
COMM - Circuits and Systems for Communications
COMM100 - Circuits and systems for coding in communication systems
COMM100A0 - Source coding
COMM100A5 - Channel coding
COMM110 - Modulation
COMM110A0 - Analog modulation schemes

COMM110A5 - Digital modulation schemes
COMM120 - Optimal receiver design
COMM130 - Carrier and symbol synchronization
COMM140 - Circuits and systems for specific channels
COMM140A0 - Band limited channels
COMM140A5 - Fading multipath channels
COMM140B0 - Intersymbol interference channels
COMM140B5 - Signal design for specific channels
COMM150 - Multichannel and multicarrier systems
COMM150A0 - Multichannel digital communications
COMM150A5 - Multicarrier communication
COMM160 - Multi-user communications
COMM160A0 - Multiple access techniques
COMM160A5 - CDMA (Code-Division Multiple Access)
COMM160B0 - Random access methods
COMM180 - Diversity techniques, circuits and systems for communications
COMM190 - MIMO and multiple antenna systems
COMM200 - Wireless communication systems
COMM200A0 - Antenna design
COMM200A5 - MAC (Medium Access Control)
COMM210 - Optical communication systems
COMM220 - Infrared-based Communication Systems
COMM230 - Networks
COMM230A0 - Routing
COMM230A5 - Protocols
COMM240 - Spread-spectrum communications
COMM240A0 - Direct sequence spread spectrum systems
COMM240A5 - Frequency-hopping spread spectrum systems
COMM250 - Ultra-Wideband (UWB) communications
COMM250A0 - Channel modeling and estimation
COMM250A5 - Impulse Radio
COMM250B0 - Waveform design
COMM250B5 - Interference and coexistence
COMM260 - Circuits and systems for software-defined radio
COMM270 - Circuits and Systems for cognitive radio
CTRL - Control Theory topics in Circuits and Systems
CTRL100 - Control theory
CTRL100A0 - Adaptive control
CTRL100A5 - Robust control
CTRL100B0 - Fuzzy and neural control
CTRL100B5 - Intelligent control
CTRL110 - Networked control systems
CTRL120 - Hybrid dynamical systems
CTRL130 - Embedded control systems
CTRL140 - Emerging control technologies
CTRL150 - Applications of control

CTRL150A0 - Control of nonlinear systems
CTRL150A5 - Control of electrical networks
CTRL150B0 - Control of networked systems
CTRL150B5 - Control of biological and biomedical systems
CTRL160 - Control of complex systems
CTRL170 - System identification
Digital Circuits and Systems (and VLSI)
DCS100 - Arithmetic circuits and systems
DCS100A0 - Adders
DCS100A5 - Arithmetic architectures
DCS100B0 - Arithmetic circuits and systems
DCS100B5 - Logarithm and residue arithmetic circuits and systems
DCS100C0 - Multipliers
DCS110 - Digital ASICs
DCS120 - Digital circuits and systems for cryptography
DCS120A0 - Cryptography circuits
DCS120A5 - Cryptography architectures
DCS120B0 - Cryptography hardware and implementation
DCS130 - Digital circuits techniques and building blocks
DCS130A0 - Deep submicron digital circuits
DCS130A5 - Digital circuit modeling
DCS130B0 - Digital circuit design
DCS130B5 - Flip-flops
DCS130C0 - High-speed digital circuits
DCS130C5 - Low voltage and ultra low voltage digital circuits
DCS140 - Embedded digital systems
DCS150 - Digital I/O circuits
DCS160 - Low power digital systems
DCS160A0 - Low power design
DCS160A5 - Low power architectures
DCS170 - Memory circuits and design
DCS180 - Processors
DCS190 - Reconfigurable and field programmable digital circuits
DCS190A0 - FPGAs
DCS200 - Reliability in digital systems
DCS210 - Systems on chip
DCS220 - Testing of digital circuits
DCS220A0 - Fault detection in digital circuits
DCS220A5 - Fault tolerance in digital circuits
DCS220B0 - Design for testability of digital circuits
DCS230 - Digital VLSI
DCS230A0 - Digital hardware implementations for multimedia
DCS230A5 - Scheduling and allocation in digital systems
DCS230B0 - VLSI digital circuits, designs and implementations
DCS230B5 - VLSI digital systems
DCS240 - Digital design and architectures targeting specific technologies

NOLIN - Nonlinear Circuits and Systems
NOLIN100 - Analysis/modeling/simulation of nonlinear networks
NOLIN100A0 - Stability analysis
NOLIN110 - Oscillator analysis
NOLIN120 - Externally linear internally nonlinear networks
NOLIN130 - Translinear circuits
NOLIN140 - Implementation of nonlinear primitives
NOLIN150 - Circuits and systems for nonlinear control
NOLIN160 - Random number generators
NOLIN170 - Chaotic circuits and systems
NOLIN170A0 - Discrete time chaotic systems
NOLIN170A5 - Continuous time chaotic systems
NOLIN170B0 - Statistical approach to the analysis of chaotic circuits and systems
NOLIN170B5 - Bifurcation analysis
NOLIN170C0 - Engineering applications of chaotic circuits
NOLIN170C5 - Synchronization of chaotic systems
NOLIN180 - Neural networks
NOLIN180A0 - Biomorphic neural networks
NOLIN190 - CNNs
NOLIN190A0 - Biomorphic CNNs
NOLIN200 - Circuits and systems for fuzzy computing
POW - Power Systems and Electronic Circuits
POW100 - Power electronic circuits
POW100A0 - Rectifiers (incl. line frequency diode rectifiers)
POW100A5 - Power converters
POW100B0 - Resonant Circuits
POW110 - DC switching mode power supplies
POW120 - AC-DC, DC-AC converters and modeling
POW120A0 - Control circuits
POW120A5 - Averaged models
POW130 - Integrated power converters and charge pumps
POW130A0 - PC-board design technology and circuits
POW130A5 - VLSI technology and circuits
POW130B0 - Heat dissipation
POW130B5 - System configuration and actuation
POW140 - Application circuits
POW150 - Practical design considerations
POW150A0 - Snubber circuits
POW150A5 - Gate and base drive circuits
POW150B0 - Magnetic components
POW160 - Power analysis tools and techniques
POW160A0 - Power flow analysis
POW160A5 - Unbalanced system analysis
POW160B0 - System protection analysis
POW160B5 - State estimation analysis
POW160C0 - Contingency analysis

POW170 - Power systems modeling, dynamics and control
POW170A0 - Single and multi-machine dynamics
POW170A5 - Small signal dynamics
POW170B0 - Voltage and power control
POW170B5 - Energy function methods
POW170C0 - Modeling of transmission lines
POW170C5 - Modeling of transformers
POW170D0 - Modeling of generators and loads
POW170D5 - Steady-state behaviours
POW170E0 - Transient behaviours
POW180 - Distributed generation systems (incl. diesel/wind/microturbine/photovoltaic generation systems)
POW190 - Power system security
POW200 - Interchange of power and energy
SIPRO - Signal Processing
SIPRO100 - Adaptive signal processing
SIPRO100A0 - Adaptive filter design
SIPRO100A5 - Applications of adaptive filters
SIPRO100B0 - Frequency domain adaptive filtering
SIPRO110 - Digital signal processing
SIPRO110A0 - Digital filter design
SIPRO110A5 - Structures for digital signal processing
SIPRO110B0 - Multirate signal processing
SIPRO110B5 - Filter bank theory and design
SIPRO110C0 - Wavelets and applications
SIPRO110C5 - Sampling, extrapolation and interpolation
SIPRO110D0 - Robust filtering
SIPRO110D5 - Algorithms and architectures for digital signal processing
SIPRO110E0 - DSP design and implementation
SIPRO120 - Multidimensional signal processing
SIPRO120A0 - Multidimensional filter design
SIPRO120A5 - Applications of multidimensional signal processing
SIPRO120B0 - Algorithms for multidimensional signal processing
SIPRO130 - Array signal processing
SIPRO130A0 - Beamforming
SIPRO140 - Equalization techniques, circuits and systems
SIPRO140A0 - Adaptive linear equalizer
SIPRO140A5 - Adaptive decision-feedback equalizer
SIPRO140B0 - Kalman algorithms for equalization
SIPRO140B5 - Blind equalization
SIPRO140C0 - Iterative equalization
SIPRO150 - Estimation and detection techniques, circuits and systems
SIPRO150A0 - ML techniques
SIPRO160 - Digital hardware for signal processing