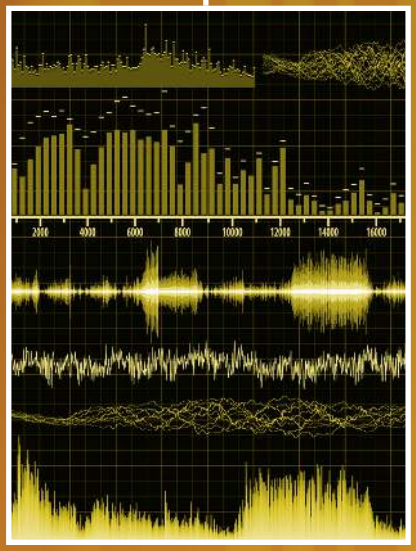
asicNorth

Bringing Analog / Mixed-Signal to Asic Design

Analog Circuit Design



The asicNorth Analog Circuit Design team has over 35 members (includes 19 Masters Degrees and 4 Ph.D's) and an average of over 21 years of Industry experience.

Armed with Industry Standard Electronic Design Automation (EDA) tooling, our staff creates the elements which allow the latest products to do more, operate faster, use less power and at lower cost than ever before.

asicNorth is enabling a future of electronic devices that will bring our world closer with the limitless exchange of data and information.

The World is ANALOG and We Connect Your Device to It

HISTORY

asicNorth started its circuit design service soon after the company was formed in 2000 by developing state of the art data Serializers for the Test Equipment Industry. Using custom CMOS differential current mode logic, these circuits ran at over 3.25 Ghz and provided industry leading performance. Today, our designers enable the world's fastest serial links capable of moving data between chips at over 30 Gigabits per second (Gbps). We accomplish this with the development of state of the art Phase Locked Loops (PLL's), Clock and Data Recovery circuits, equalizers, and the highest performance Analog to Digital converters available.

CAD SOFTWARE

- Mathworks Simulink & MATLAB for System Modeling
- Cadence Virtuoso for Schematic Capture and Circuit Layout
- Cadence SPECTRE, MENTOR AFS, and SYNOPSYS HSPICE for Circuit Analysis
- Cadence Virtuosos AMS supports Mixed Signal Simulation
- Mentor CALIBRE is used for Circuit Extraction and Physical Verification

FOCUS AREAS

Although it is impractical to list every area in which asicNorth has Analog Design expertise, the following lists the main areas of our designers work:

- High Speed Serial Links
- IP Conversion
- Analog to Digital Converters
  - 10 & 12 bit / SAR and Pipeline Architectures
  - Low Power
- Digital to Analog Converters (Multiple Architectures)
- Phase Lock Loops, Bandgaps and Regulators
- RFID Circuits
  - ASK Demodulation, Clock and Data Recovery, Power Harvesting, Charge Pumps
- RFIC Circuits
  - RF Transceiver, Frequency Synthesis, Analog Baseband Conversion, LO Generation, etc.
- Light Detection

For more information on asicNorth's Premier VLSI Design Services, please contact:
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