



Wireless Advanced System
Innovations and Electronics Art

Winning Through Creativity

www.wasiela.com

Overview

- W IP cores for digital media solutions, and wireless digital communications physical layer design.
- W High performance, power efficient, configurable Microcoded application specific instruction set (ASIP) cores.
- W Efficient highly performing algorithms carefully designed to yield ultra low power, highly configurable designs.
- W Core team started Semiconductor work in 1990. Our experience was acquired at Bell Labs, Texas Instruments, ADI, IBM, AMD and Intel – 8 PhDs.
- W Successful FPGA and ASIC designs market proven.
- W Submitted 20 contributions to the WiMAX 802.16m standards committee.
- W Published numerous papers including 10 papers on OFDM systems and preparing to file ten patents and several others in development.

Expertise

- W Digital IC design (VHDL, Verilog).
- W System level modeling and simulations.
- W Application specific instruction set processor (ASIP) cores.
- W ARM programming.
- W PCB design.
- W Digital design verification and timing closure.
- W Synthesis to FPGA or ASIC.
- W Implementation on programmable DSP.
- W Testing and qualification.

Activities focused
on Broadband
Physical Layer
implementations
and FEC cores

Design Services

Communications transceiver blocks

- W Available:
 - Error Correction
LDPC, BCH, Turbo Decoder, Reed Solomon, Viterbi
 - Modulation / Demodulation
FFI / IFFT, OFDM Channel Estimator
- W Others: Available upon request

Typical Customer Engagements :

- W From specification to silicon.
- W Focus on wireless applications.
- W Work with partners to provide full solution.
- W Support and training at your site.

