



## Capabilities Summary

### Overview

Codified Telenumerics offers complete turnkey solutions and "off-the-shelf" intellectual property components for the design and manufacture of standards compliant hardware appliances in the communications market. The company is located in the Greater Toronto Area and was founded in 2002. Our customers include both start-ups and established companies that design, manufacture, and market communication devices.

### Core Competencies

We are comprised of conscientious seasoned professionals who are committed to producing high quality solutions that exceed our customer's requirements. Our experience spans both the transmission and switching of real-time information across wired, wireless, and optical communication mediums for markets such as Cellular, CLEC, WISP, WLL, ISP, SOHO, and RFID.

Our in-depth understanding of analog, RF, DSP, microprocessor, FPGA, real time software, PCB, SOC, and environmental enclosure technologies affords us the ability to partition functionality across these domains in an optimal manner consistent with product performance criteria.

### Services

Codified Telenumerics offers a variety of communication design services to our clients. These include consultancy, project management, feasibility studies, applied research, analysis, development, implementation, product refinement, early stage production assistance, and procurement of communication related equipment. We are committed to developing and maintaining a close working relationship with our clients. All of our endeavours are preceded by a written proposal that is used as a basis for clearly defining customer expectations and for keeping our clients continuously informed of progress in relation to all identified milestones.

### Products

Codified Telenumerics develops versatile building block entities that can be readily designed into target applications with minimal engineering effort. These blocks assume various forms from standards based hardware subassemblies, to synthesizable VHDL cores targetable to FPGA and ASIC implementation, to "C" coded algorithms targetable to micro-code DSPs and high speed processors.

### Founder Biography

#### *J. Paul Harvey, Chief Technology Officer*

Paul has worked in the telecom industry for over ten years, six of which have been on the management side. He has a keen interest in customer satisfaction and is driven to produce high quality, flexible systems that leverage state of the art technology. Paul's key technical skills include system, analog, RF, and DSP code design. He has managed and technically contributed to the product definition and design of a hybrid packet/circuit switched/wireless end office architecture. He has designed GSM radio transceiver equipment, signal processing DSP code including multi-channel call display, analog POTS subscriber and terminal interfaces (100,000 install base), and high performance multiprocessor circuit packs for multi-channel processing of wireless baseband signals.

Prior to working in telecom, Paul was responsible for the design and development a Synthesis Tool for Analog Integrated Circuits ("STAIC"). The tool was used for the successful tape-out of a 3um CMOS OTA and is presented in IEEE transactions on CAD. He has also developed a parameterized standard cell library for silicon compilers.

Paul holds a Bachelor's (Management Science Option) and Master's Degree in Electrical Engineering from the University of Waterloo, and is a member of the PEO and IEEE.