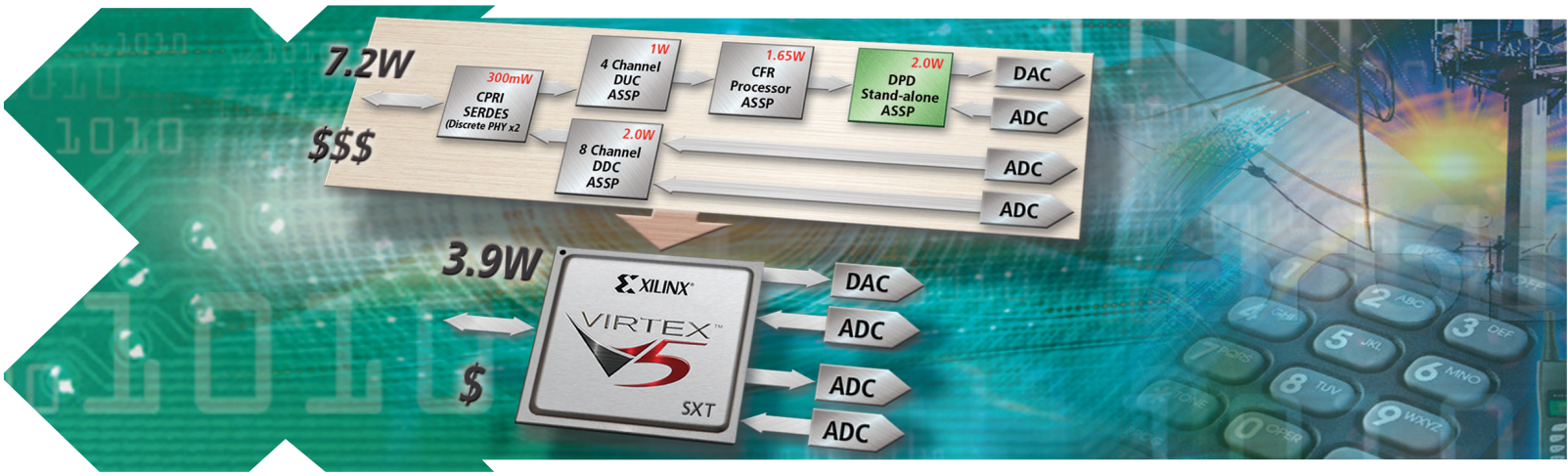
Reducing Costs For Infrastructure Vendors



XILINX®

The wireless industry is experiencing a period of extraordinary challenge and opportunity. Digital convergence continues to drive new consumer technologies that enable the sharing of more types of data, by more people, via a multiplicity of applications. The ability to develop wireless base stations with the flexibility and scalability to support high-reliability voice, video and data services has become critical.

Success in this marketplace dictates the need for a common platform that can support the latest technologies, be deployed across all geographies, and scale to meet the demands of network operators. Equally significant is the need to simultaneously drive down capital outlay and operational costs. As the world's leading programmable solutions company and one of the largest semiconductor suppliers to the wireless market, Xilinx has gained an intimate understanding of the challenges facing wireless base station designers. This has enabled us to develop a comprehensive range of low-cost, customizable building blocks targeted at wireless standards such as 3GPP-LTE, WiMAX, W-CDMA/HSPA, CDMA2000 and TD-SCDMA.

Xilinx has made a significant investment in resources focused on wireless applications within the company—as well as nurturing partnerships with external providers—to deliver the semiconductor logic industry's most comprehensive solutions for wireless applications.

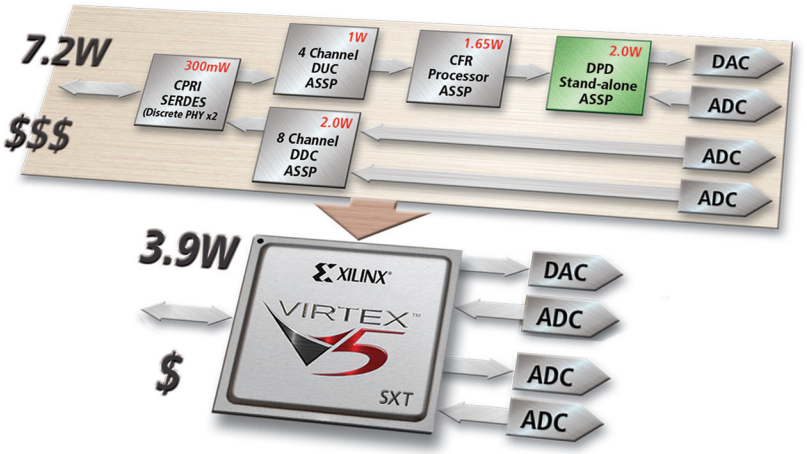
Thank you for taking the time to find out more about our wireless solutions, and how Xilinx can help bring your company significant savings in capital and development costs.

Moshe Gavrielov
CEO
Xilinx, Inc.

Xilinx Platform FPGAs are:

- Bringing unprecedented levels of flexibility, reliability and performance to wireless infrastructure equipment deployed in the field today
- Decreasing CapEx & OpEx in radio card and remote radio head applications, reducing power consumption and enabling multi-modal radios
- Delivering the performance and scalability needed in demanding baseband applications, such as LTE Turbo decoding
- Reducing network latency through MAC Acceleration and packet-processing capabilities beyond the scope of network processors
- Supported by the industry's most comprehensive set of cores, IP, software development tools and technical support

ADDING VALUE AND REDUCING COSTS IN RADIO EQUIPMENT



Integrates all digital radio functions at lower cost, lower power and higher reliability, with room to spare.

	Calculated benefit of using Xilinx FPGAs in your Radio Digital Front-End equipment*
Reduced BOM Costs Integrating multiple ASSPs saves the cost of functional ICs and power regulators.	**$405K**
Increased Flexibility The flexibility you need to respond quickly to the rigorous demands of an ever-changing market significantly reduces the risk of delayed market entry.	**$280K**
Improved Scalability Highly scalable solutions within a common footprint enable fast design migration, saving R&D costs and enabling faster access to new markets.	**$450K**
Reduced OpEx Increased reliability resulting from a reduction in the number of devices required, a decrease in power dissipation, alongside the ability to manage field upgrades without visiting each cell site, delivers considerable OpEx savings.	**$3,198K**
Reduced development and inventory costs with multi-modal radios Putting Platform FPGAs at the heart of the radio system enables infrastructure vendors to design and manufacture a common platform to support multiple air interfaces, providing the potential to save millions of dollars in development and inventory costs.	
Optimized networks which require fewer cells The algorithms in Xilinx FPGAs can be individually programmed and reprogrammed at any time, enabling network architects to maximize the cellular footprint & minimize the number of cell sites required for a given network coverage.	

* Assumes: Virtex-5 SXT vs. ASSP chipset (6off); Market life of 3 years / service life of 10 years; 15 Ku lifetime forecast

WIRELESS S

Advanced Software and Development Environment

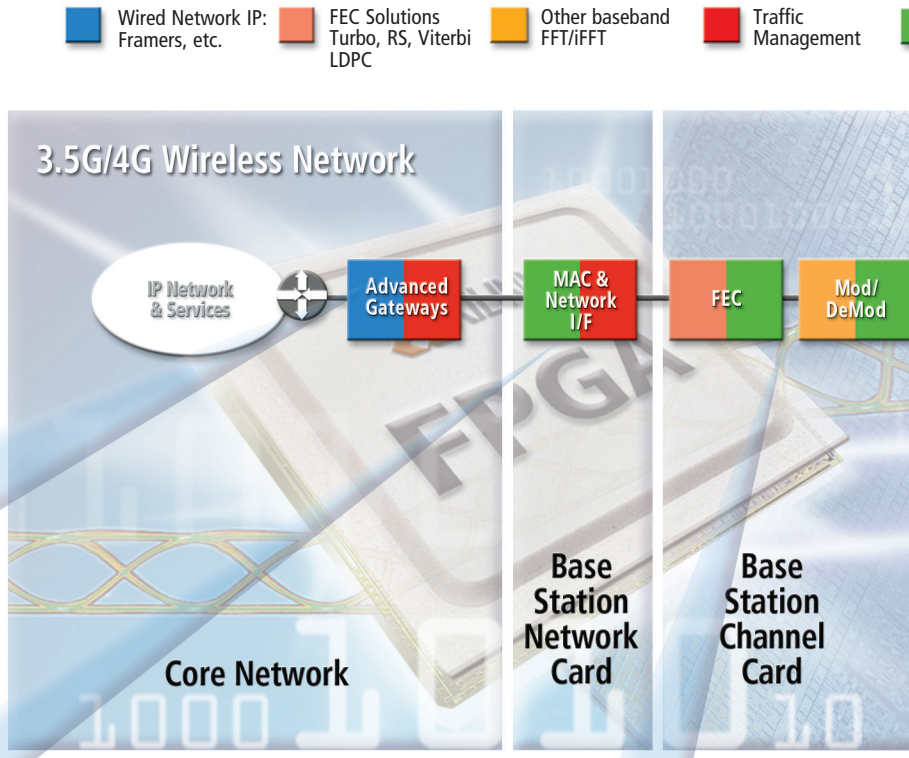
- Advanced software tools allow designers to go from Algorithm to Silicon at the push of a button
- AccelDSP™ Synthesis Tool is a high-level MATLAB® language-based tool for designing DSP blocks for Xilinx FPGAs
- System Generator for DSP enables MATLAB Simulink™ designs to target FPGAs
- Multiple development board options allow bread-boarding & advanced simulation acceleration via "Hardware-In-The-Loop"

More information at:
http://www.xilinx.com/ise/dsp_design_prod

Radio Core Network

- Solutions to support future packet-based RAN core network requirements
- High-performance, low-latency, packet-management solutions, such as Traffic Management
- Pseudowire (PWE3) solutions to assist migration from a circuit-switched to packet-based core network
- Systems to control network timing, using IEEE1588

More information at:
http://www.xilinx.com/esp/wired



MAC & Network I/F

- Reduce system latency and tackle network timing issues with FPGA performance benefits
- Framing, mapping & traffic management solutions
- Ciphering and header compression co-processor to reduce system load for upper layer processing
- MAC Acceleration to offload DSP processor and reduce system latency
- IEEE1588 client side IP

More information at:
http://www.xilinx.com/esp/wireless

Baseband Processing

- Break through DSP architecture bottlenecks, with higher-performance and lower-power FPGA solutions
- Industry-leading FEC solutions, optimized for each wireless standard
- LTE and HSPA baseband sub modules analysis
- Comprehensive range of high-performance FFT/iFFT and DFT solutions
- Advanced research into MIMO processing blocks

More information at:
http://www.xilinx.com/esp/wireless

SOLUTIONS

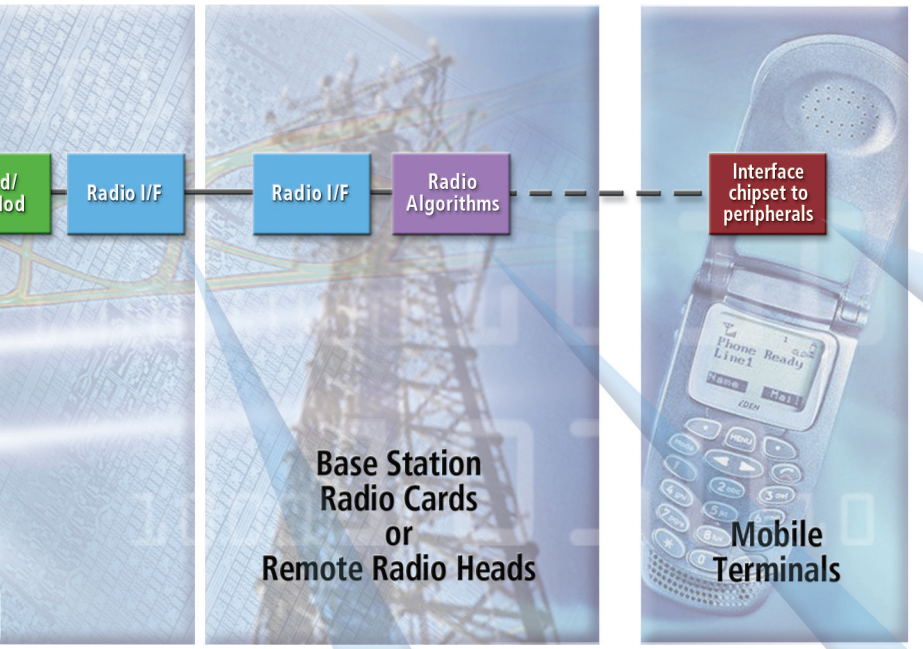
XtremeDSP™

General Connectivity:
SRIO
CPRI
OBSAI

Radio Connectivity:
CPRI
OBSAI

Radio Algorithms:
DUC/DDC
CFR
DPD

CPLD IP:
Flash I/F
Hard Drive IF



Femtocells

- Xilinx supplies the widest selection of proven high-volume, low-power, programmable logic devices
- Capability to perform all of Femtocell baseband and radio processing
- Easily integrated into existing designs to offload complex functions from DSP processors or dedicated ASSPs
- IEEE1588 support to improve network timing and enable support of new low-latency, high-speed services
- Comprehensive Femtocell white paper, together with systems level design support from experienced system architects

More information at:
http://www.xilinx.com/ise/dsp_design_prod

Mobile Terminal

- Add new functionality and features to current chipsets, through use of Xilinx CoolRunner™-II CPLDs
- Proven high-volume production delivery & support
- Simple method to add new interfaces and provide important features such as level shifting and retiming

More information at:
http://www.xilinx.com/coolrunner2

Radio Digital Front End

- Lowering BOM cost & power while offering increased flexibility, have made FPGAs the technology of choice in radio cards & remote radio heads
- Highly reliable devices and in–field reprogramming help reduce maintenance costs
- Wide selection of optimized IP for DUC/DDC, CFR & DPD; with complete reference designs for LTE, WiMAX, TD-SCDMA & WCDMA
- CDRSX development platform

More information at:
http://www.xilinx.com/esp/wireless

Connectivity

- Solutions to increase engineering productivity and essential to Common Platform design
- Rapidly updated to meet evolving standards
- Most efficient and comprehensive OBSAI and CPRI cores
- SRIO LogiCORE™ available
- Embedded GigE and PCI Express® capability
- Other solutions include: SDRAM, EMIF

More information at:
http://www.xilinx.com/esp/wireless

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