

IDC HPC USER FORUM

APRIL 7, 2014



Eric Hayes
Vice President Platform Marketing
Infrastructure Networking Group

ABOUT BROADCOM



2013 Net Revenue of **\$8.31 Billion**

Founded in **1991**

Initial Public Offering in **April 1998**
(NASDAQ-BRCM)

A **Global Leader** in Semiconductors for
Wired and Wireless Communications

Broad IP Portfolio with More than **19,850**
U.S. and Foreign Patents and Applications

One of the **Largest Volume** Fabless
Semiconductor Suppliers

~12,050 Employees Worldwide



BROADCOM IS INVESTING IN PROCESSORS FOR EVERY BUSINESS



Home



BCM7445 Ultra HD STB SoC



28nm, 1.8 Billion Transistors

**BCM7445:
World's Best Gateway**



Quad Core 1.5GHz

Hand



4G LTE SoCs

Application Processors



**ARM 64 bit V8
Lead Licensee**

Infrastructure



Technology Leadership

**Highest performance SoC
20 Quad Threaded CPUs
300Gbps Multi-Chip Coherency
180Gbps I/O**

**StrataGX
Multi-Core ARM SoC**

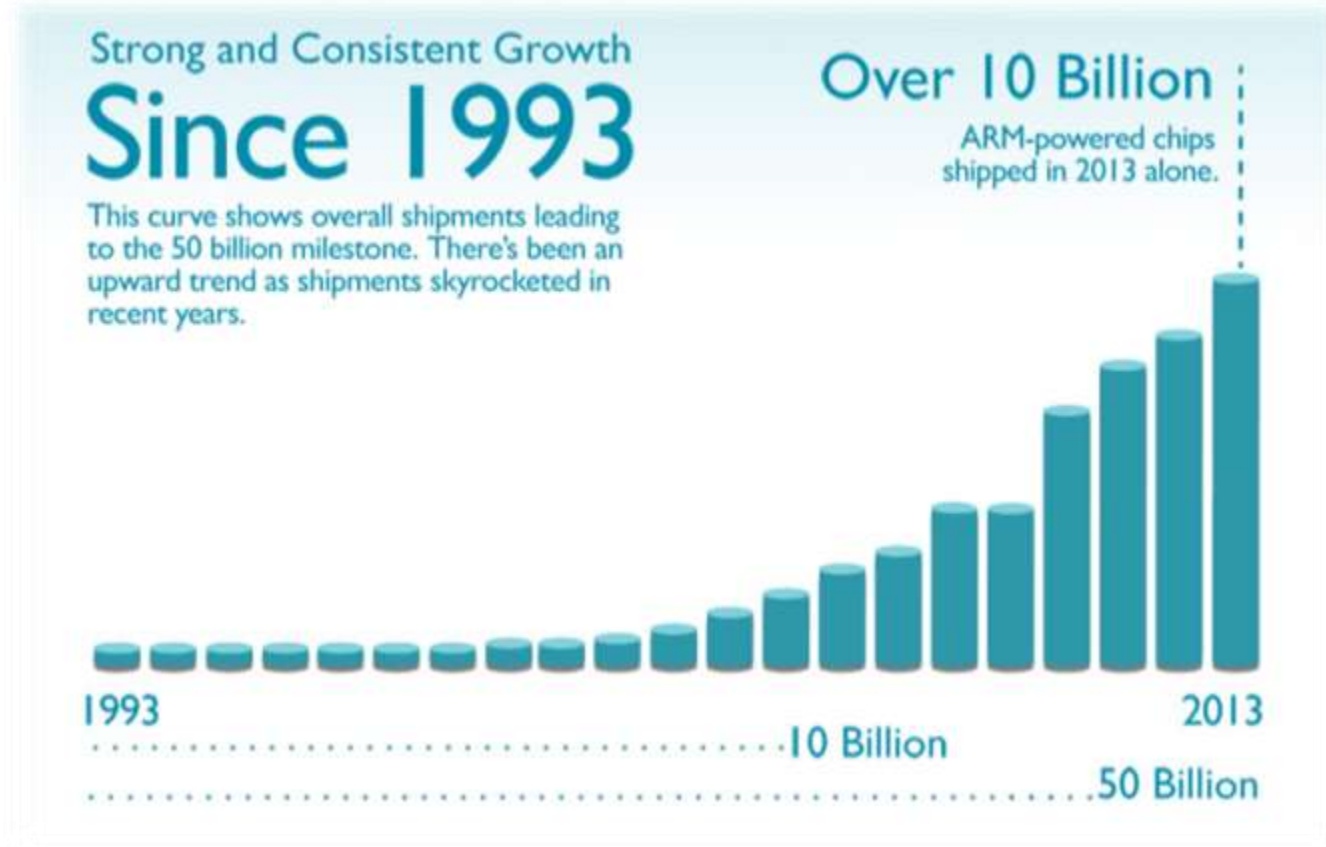


**XLP II
80 nxCPUs**





- 1,060 Processor licenses
- 350 Semiconductor partners
- 5+ Foundry partners
- 1100+ Connected community members

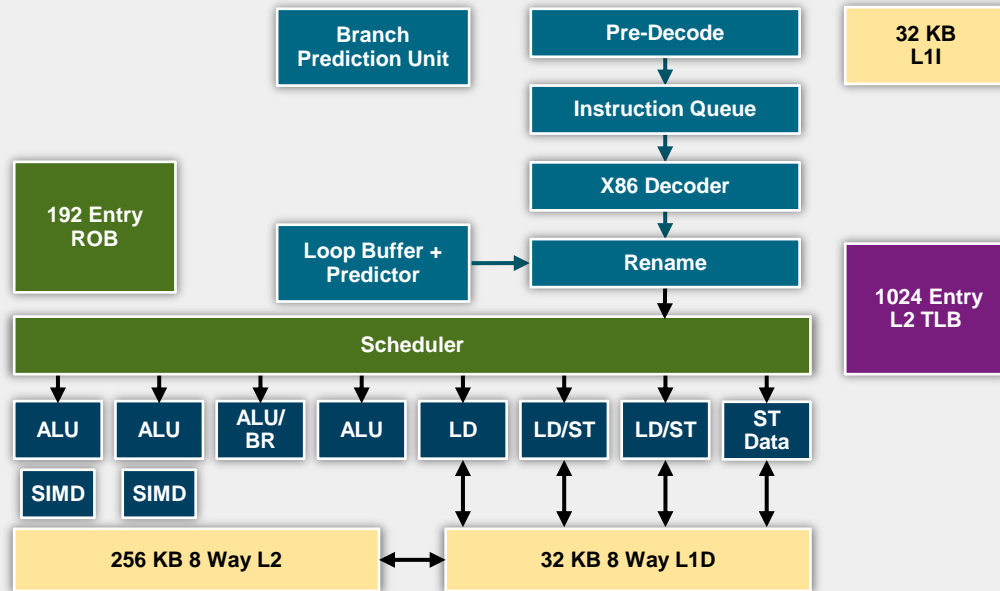


<http://www.50billionchips.com>

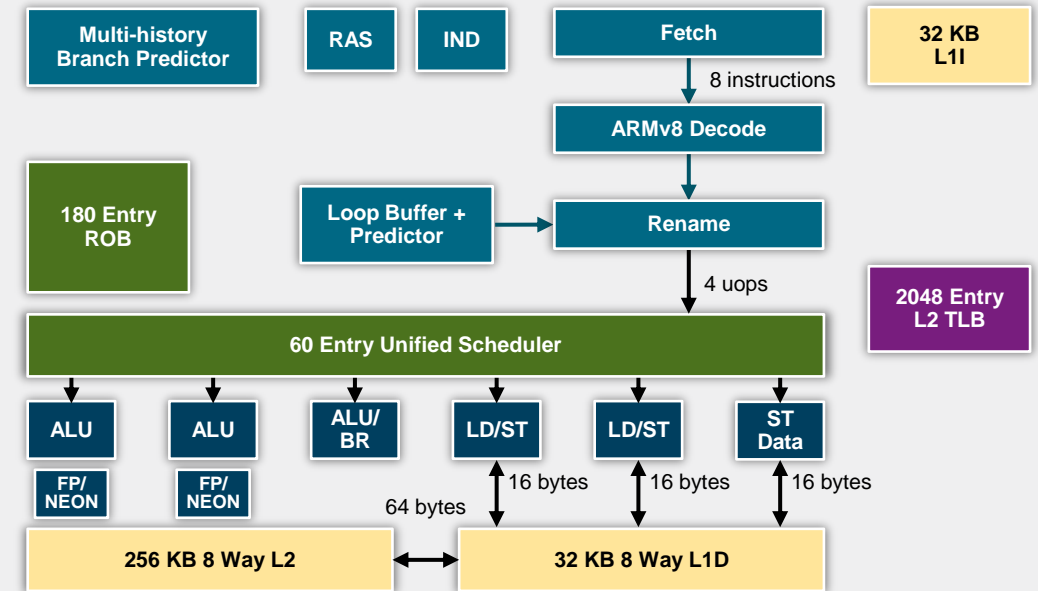
VULCAN – 1ST 16 NANOMETER ARMV8 SERVER CLASS CORE



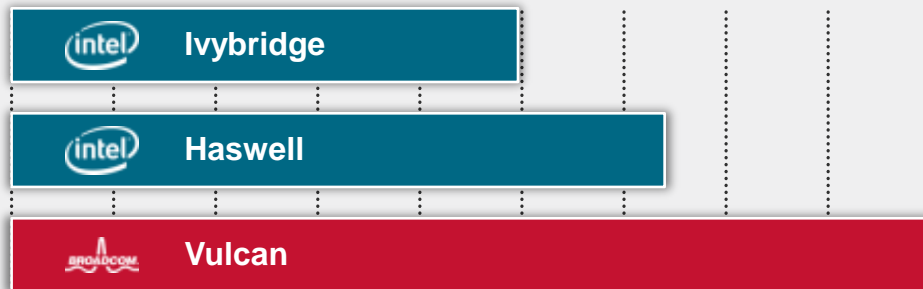
Intel Xeon Haswell x86 – Microarchitecture



Broadcom Vulcan ARM v8 - Microarchitecture



Projected Socket Level Throughput



- ✓ Vulcan is highest performance ARMv8 CPU
- ✓ 90% of Haswell per thread performance
- ✓ Will exceed competitive server platforms on a socket level

WHAT IS THE RIGHT BALANCE FOR YOUR APPLICATION?

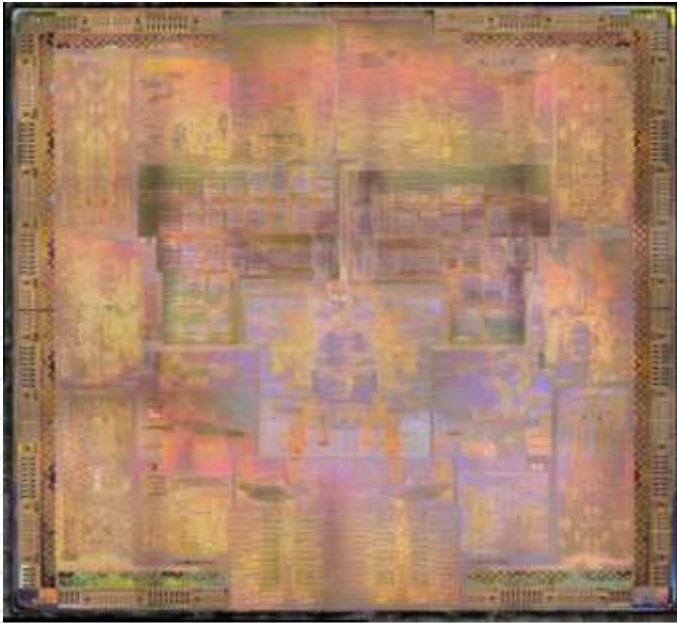
Memory Bandwidth



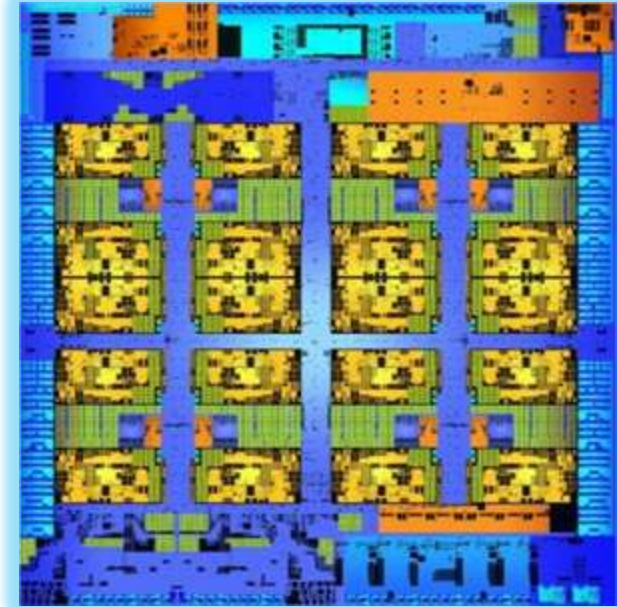
Core Performance

I/O Throughput

- **Chuck Tato – Vulcan Product Management**
- **Kumaran Siva – HPC Product Marketing**
- **Mark Litvack – Ecosystem Partnerships**
- **Nick Ilyadis – CTO Infrastructure Networking Group**



Ethernet Networking Leadership



ARM Processor Leadership



THANK YOU