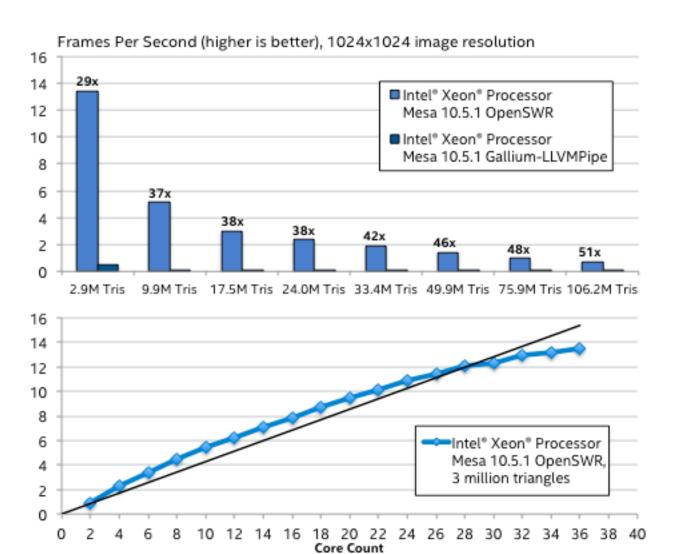
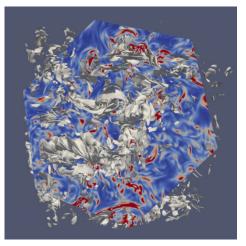
## **Performance: OpenSWR vs MESA\* LLVMpipe**



(intel)



- Intel<sup>®</sup> Xeon<sup>®</sup> E5-2699 v3 Processor 2 x 18 cores, 2.3 GHz
- ParaView<sup>\*</sup> 4.3.1
- OpenSWR "alpha 2"

Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance tests, such as SYSmark\* and MobileMark\*, are measured using specific computer systems, components, software, operations and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products. For more information go to http://www.intel.com/performance.

## **Performance Test Configuration**

Node count	1
Platform	Cottonwood Pass Platform (Intel)
СРՍ	Intel® Xeon® processor E5-2699 v3 LGA2011 2.3GHz 45MB 145W (DP) Dual socket 18 core
RAM	128 GB total 8*16GB 2133MHz Reg ECC DDR4
BIOS	Vendor: Intel Corporation Version: SE5C610.86B.01.01.0005.101720141054 Release Date: 10/17/2014 BIOS Configuration: default
Hard drive	Intel® SSD_SA2M160G2GC 1x160 GB SATA* SSD
NVIDIA Co- Processor	NVIDIA* GeForce* GTX* Titan X 3072 CUDA Cores 12GB memory Software Details: CUDA Version 7.0.28 OptiX Version 3.8.0 NVIDIA Driver Version 346.46
OS / Kernel	CentOS release 6.6 / 2.6.32-504.23.4.el6.x86_64

## **Legal Notices and Disclaimers**

Intel technologies' features and benefits depend on system configuration and may require enabled hardware, software or service activation. Learn more at intel.com, or from the OEM or retailer.

No computer system can be absolutely secure.

Tests document performance of components on a particular test, in specific systems. Differences in hardware, software, or configuration will affect actual performance. Consult other sources of information to evaluate performance as you consider your purchase. For more complete information about performance and benchmark results, visit <a href="http://www.intel.com/performance">http://www.intel.com/performance</a>.

Cost reduction scenarios described are intended as examples of how a given Intel-based product, in the specified circumstances and configurations, may affect future costs and provide cost savings. Circumstances will vary. Intel does not guarantee any costs or cost reduction.

This document contains information on products, services and/or processes in development. All information provided here is subject to change without notice. Contact your Intel representative to obtain the latest forecast, schedule, specifications and roadmaps.

Statements in this document that refer to Intel's plans and expectations for the quarter, the year, and the future, are forward-looking statements that involve a number of risks and uncertainties. A detailed discussion of the factors that could affect Intel's results and plans is included in Intel's SEC filings, including the annual report on Form 10-K.

The products described may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request.

No license (express or implied, by estoppel or otherwise) to any intellectual property rights is granted by this document.

Intel does not control or audit third-party benchmark data or the web sites referenced in this document. You should visit the referenced web site and confirm whether referenced data are accurate.

Intel, Xeon, Xeon Phi, and the Intel logo are trademarks of Intel Corporation in the United States and other countries.

\*Other names and brands may be claimed as the property of others.

© 2015 Intel Corporation.



Intel's compilers may or may not optimize to the same degree for non-Intel microprocessors for optimizations that are not unique to Intel microprocessors. These optimizations include SSE2, SSE3, and SSE3 instruction sets and other optimizations. Intel does not guarantee the availability, functionality, or effectiveness of any optimization on microprocessors not manufactured by Intel.

Microprocessor-dependent optimizations in this product are intended for use with Intel microprocessors. Certain optimizations not specific to Intel microarchitecture are reserved for Intel microprocessors. Please refer to the applicable product User and Reference Guides for more information regarding the specific instruction sets covered by this notice.

Notice revision #20110804

