



ATI TECHNOLOGIES INC.

R400 August Program Review

May 2, 2017

AMD1044_0051162

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❖ Application Analysis

- Extract application data using existing tools on existing HW (R200/R300)
- Analyze application data against R400 models

❖ Performance Verification (PrimLib)

- Fill rate tests, etc
- Complex images/shaders
- Application-based tests/algorithms

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❖ Application Analysis (R400)

- Scissored application tests on simulator and IKOS using R400 pkt capture and playback tools
- Applications on simulator and IKOS using driver stack
- Leverage as much of the existing infrastructure as possible including tools, tests, methodologies, etc

❖ R400 Bringup

- Performance related support for hardware and driver groups
- Continued application analysis on hardware

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❖ Application Analysis

- Extensive Doom3 analysis resulting in HW optimization
- Beginning analysis of 3DMark2003 (alpha)

❖ Performance Verification (PrimLib)

- R400 Performance Verification Test Plan spec started
- Initial support for geometry creation in PrimLib
- Several tests for color and depth reads and writes are written and being debugged
- Directed tests (no random tests), simulator/IKOS only
- Performance counters compared against theoretical

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❖ Performance Verification (PrimLib)

- Read/regression support for pv tests in simulator and IKOS
- Performance counters defined
- Support for complex shaders

❖ Application Analysis (R400)

- R400 binary packet dump specification and capture implementation (Toronto HW performance and QS groups)
- R400 Packet reconstruction and playback tools unstaffed
- Not sure if driver can be run on IKOS or sim
- Availability of IKOS, drivers, etc

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❖ Resources

- Not all tasks sufficiently staffed
- Planned trip to SiV to discuss resources as well as performance verification methodology, R300 tests, etc

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Performance Verification – Schedule



Milestone	Plan	Actual	Forecast
Start Application Analysis	06-03-02	06-03-02	
Performance Verification Test Plan Complete	08-23-02		09-13-02
Start R400 Tool Support	09-01-02		
Performance Verification Tests Complete	09-27-02		
Debug/Analyze PV tests on Simulator	09-30-02		
R400 Capture and Playback of Packets	11-15-02		
Start Applications on IKOS (IKOS ready)	11-15-02		
Start R400 Bringup Support (HW eng samples)	05-09-03		

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