

- 2-3 days - Talisman Plan for strong HW partner. This will be used to negotiate w/Intel
- ① 12th u/Bill - Paul Me, check w/Christian. meet w/Paul/Bill to decide how to deal w/Intel.
- ② - do write up of agreement for Paul.

PLAINIFF'S
 EXHIBIT
 3188
 Comes v. Microsoft

Talisman
GRAPHICS & MULTIMEDIA SYSTEMS

MULTIMEDIA ISSUE

- ◆ Real issue is that Microsoft and Intel are out of sync on 3D and Multimedia.
 - ▶ We're developing Talisman; they've licensed Lockheed-Martin technology to build Auburn and a series of follow-on chips.
 - ▶ We've disclosed Talisman to them and started on a joint program; they haven't disclosed Auburn to us and are backing out of the joint program.
 - ▶ We're pushing DirectX; they are API neutral at best. May be selecting another API or trying to set a new hardware interface standard to get us "out of the way of their innovation."
 - ▶ They are very aggressive on 3D and Multimedia.
 - Development, content creation, 3D benchmarking, marketing and advertising

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Jay/InLee / Aug / Oct 81

we meet
 Paul/Bill Albert/Paul

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INTEL LICENSING ISSUES

- ◆ Unwilling to license Talisman "for use with Windows only"
 - ▶ Unlikely to move from this position.
 - ▶ Risk is that they can take the technology into the non-PC consumer space (network computers, home appliances, HDTVs, game boxes, etc).
 - ▶ Also rejected "for use only in products capable of running Windows"
- ◆ Unwilling to accept our "Covenant not to sue" clause.
 - ▶ Will accept a modified clause that provides us and other IHVs with a lot less protection.
 - ▶ Agree not to sue if there is no feasible alternative.

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- why does Intel think API story
 - pct my concern in mail - meltem, dng/og/rs D3D
 terminology the D3D API is new content
 Intel had to keep on the strategy.

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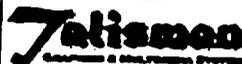
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SITUATION ANALYSIS

- ◆ Intel is taking a hard line. Wants Talisman technology with no restrictions.
- ◆ Probably indicates that they believe that they are on-track to set the PC 3D graphics standard.
 - ▶ Successfully creating market awareness of Intel = Multimedia.
 - MMX press and hype.
 - Commercials (including the Superbowl).
 - Andy Grove at Comdex.
 - ▶ Paying to have titles created for MMX and Auburn.
 - ▶ Very active in generating a 3D industry standard benchmark.
 - ▶ May be able to place Auburn on up to 40% of the motherboards.
- ◆ Have done this before with motherboard chip sets.

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SITUATION ANALYSIS

- ◆ Why do we care if Intel sets the hardware standards?
 - ▶ Multimedia and 3D graphics will be a major focus of innovation for consumer PCs for the next five years or so.
 - ▶ We need to continue to add value in software. 3D and Multimedia is a major opportunity to enhance Windows and our APIs.
 - ▶ Want Talisman and DirectX to win to have the software opportunity. Other 3D architectures have limited or no ability to add value in software. Performance is best achieved with a "thin" API.
 - OpenGL implements the API in hardware.
 - Direct to the hardware programming completely takes us out of the loop.
- ◆ Giving Talisman to Intel puts them in a "no lose" situation.
 - ▶ Great if Auburn wins; otherwise switch to Talisman with no restrictions.

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WHAT DO WE WANT?

- ◆ Get back in sync with Intel on 3D and Multimedia.
- ◆ Intel to push and use DirectX and Windows.
 - ▶ Microsoft is out of the loop on Auburn.
 - ▶ Intel currently appears to be supporting DirectX, OpenGL, GLIDE, and a "direct to the hardware" register interface.
- ◆ Intel to incorporate Talisman technology into their future products.
 - ▶ Talisman is a software intensive multimedia architecture.
 - ▶ Allows us to add value for years to come in software.
 - Chunking, shadows, reflections
 - Image reuse
 - Regulation of resources
 - Higher level constructs (not just triangles)

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STRATEGY

- ◆ Negotiate for what we want: DirectX API and Windows.
 - ▶ LOI indicating that they will incorporate Talisman into future Auburn chips and evangelize DirectX as primary interface.
 - ▶ May need to make Talisman a joint MS/Intel program to make this work.
- ◆ Get more aggressive on making DirectX win.
 - ▶ All Microsoft published titles authored to DirectX.
 - ▶ Aggressively fund content development for DirectX and Talisman.
 - ▶ Push consumer awareness of DirectX. Equate DirectX with compelling title that installs easily and runs well.

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3D PATENT BACKGROUND

- ◆ Did patent search for "3D + Graphics"
 - ▶ Intel = 11 "hits"
 - ▶ Lockheed-Martin = 20 "hits"
 - Includes GE Flight Sim, Loral, Real3D, CalComp
 - Loral, before being acquired, had \$200-300M in annual patent royalties.
- ◆ Lockheed-Martin in suit with SGI over 4 patents
 - ▶ Case history shows that they had discussions prior to filing suit.
 - ▶ Our review not yet complete.

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BACKUP SLIDES

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INDUSTRY WATCH

- ◆ 3D projected to fuel Desktop and Consumer PC growth.
 - ▶ Desktop PCs today are fast enough to run Word and Excel.
 - ▶ 3D is the current industry focal point (40+ companies).
 - ▶ No particular vendor has a dominant position or technology to allow them to achieve a dominant position.
 - ▶ This is fertile ground for Intel to enter and dominate.
- ◆ 3D and multimedia offers unlimited near-term opportunities to innovate and achieve higher performance and quality.
 - ▶ Today 3D games look worse than good 2D games.
 - ▶ Expect consumers to want Toy Story than Jurassic Park.
 - ▶ We have a long way to go. Major quality and performance enhancements required to enable 3D in the corporate environment.

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NEED TO PAY ATTENTION TO INTEL

- ◆ Strong push by Intel to own, drive, and control multimedia hardware on the PC.
- ◆ Intel plans to release a new 3D graphics controller every 6 months starting with Auburn at the end of '97.
- ◆ Very active on generating their own 3D benchmark.
- ◆ Published their own multimedia specifications (like PC '9x)
- ◆ Marketing push to associate Intel with Multimedia.
- ◆ Paid \$ 10M for MMX optimized titles.
- ◆ Paying to have Auburn titles developed now.

Intel appears to be taking 3D and multimedia very seriously

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Talisman
MULTIMEDIA & MULTIMEDIA SYSTEMS

intel

Microsoft

- ◆ Wants to grow their franchise and control their own destiny.
 - ◆ Multimedia is the key.
 - ◆ Multimedia Plan:
 - ▶ Create chips as good or better than everyone else's.
 - ▶ Put them on 40% of the motherboards.
 - ▶ Intel solution becomes pervasive, thereby own the spec, win most of the business, control the evolution of the technology.
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- ◆ Wants to grow our franchise (including beyond the PC.)
 - ◆ Multimedia is one aspect. Content is the key.
 - ◆ Multimedia Plan:
 - ▶ Own the APIs and we're indispensable to the content and we own the platform.
 - ▶ Make PC multimedia pervasive (games, consumer, corporate), converge at ~~EDB-XX~~ *HDPC*
 - ▶ Lead the industry:
 - PC 9X, DirectX, ActiveX, Benchmarking, Talisman, ...

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ADDING VALUE IN LAYERED SOFTWARE

- ◆ First have the opportunity
 - ▶ Eliminate standardized hardware register interfaces. Encourage and support multiple vendors so none becomes the de facto standard.
 - ▶ Have our APIs be the only standard interface. No way for content to write around Windows and DX.
 - ▶ Add value (do more) in DirectX and higher APIs.
 - ▶ Also allows more innovation on the adapter card.
 - ◆ With the content written to our APIs, the industry follows:
 - ▶ Value added technology provided at low cost to all, but only accessible through our APIs.
 - Automatic sprite management, flexible resource management, etc.
 - Much of the opportunity for innovation lies in the higher level APIs.
 - ▶ Microsoft defined industry standards and benchmarks.
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Protect and grow our franchise.