From: Bill Gates

Sent: Wednesday, October 18, 1995 11 19 AM

To: Brad Silverberg, Carl Stork (carls), Jim Allchin (jimall), Paul Maritz (paulma)

Cc: Bernard Vergnes (bernardv), Craig Mundie (craigmu), David Cole (davidcol), Jeff Raikes (jeffr), Joachim Kempin (joachimk), John Ludwig (johnlu), Jonathan Lazarus (jonl), Nathar

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Richard Tait (richta), Steve Ballmer (steveb)

Subject: Intel Grove - some opportunities to work together!

1 MMXI (bradsi, craigmu, carls)

intel has instruction set extensions to allow for higher speed multimedia operations called MMX. All Pentiums coming out after summer 96 (P55C) and all Pentium Pros coming out after Fall 96 will include these instructions. Intel thinks they will have 200mhz Pentium Pros in 96. Intel has a plan to fix the 16bit performance of Pentium Pro but not until sometime in 1997. Intel has decided to make the MMX instructions available to the people who do x86 clones. Intel is expecting support from Microsoft as it goes public with these instructions in February 96. I am asking Brad to prioritize more discussions with intel about MMX – where can we use these improvements? For example we should study Intels MPEG2 software using MMX and understand if software only video conferencing becomes realistic. Even though MMX isn't perfect is its first release we need to support Intel on this one and help them evolve it. If we really don't like it we need to be very articulate NOW. Our multimedia group in PSD and Craig's video group under Jay Torborg need to take a hard look. It is past the point of major change for Intel. With Intel's share I believe the best thing for us is to push everyone to adopt MMX even if its mainly a marketing thing. If MMX really enables video we should consider how our content and applications should use it.

2 NT/Pentium Pro (steveb, jimali, paulma, craigmu, jon l)

Intel wants to work with us on marketing the NT/Pentium Pro combination. Intel has an architectural sales force that calls on large accounts. They are willing as part of a cooperative arrangement to have this group focus on promoting NTS on Pentium Pro servers and NTW on Pentium Pro desktops. Grove thinks we could really help each other on this. We would both still have modest activities where we are processor independent and they are OS independent but they are willing to have almost all of their message focus on the combination of our products. I think this is the first time where we can really leverage Intel's marketing investment to help a Microsoft product. We might even be able to get Intel to help us focus on Publishing and Higher Education.

Under the new organization Intel has 2 relevant groups - Dave House for servers and Carl Everrett for Desktop. Grove wants to increase the bandwidth between BSD and these groups. Grove wants to know personally things that hold us back for working closely with these groups to deliver a strong message. If we want help on tuning, benchmarking, working with particular ISVs or customers Grove thinks Intel can be supportive. Intel is actually doing 2 launches for the Pentium Pro - one by each of these groups.

Intel as a customer has decided to skip Windows 95! They have a roll out plan to go straight for Windows NT. Grove says they put a lot of time into thinking about this. They don't want to go public on it yet. I am actually surprised personally at the number of corporations looking at going straight to NT.

3 Real time Communications (paulma, craigmu, bradsi, johnlu)

Paul - Intel feels we have all the OEMs on hold with our NSP chill. For example they feel HP is unwilling to do anything relative to MMX exploitation or the new audio software Intel is doing using Windows 95 unless we say its ok. This is good news because it means OEMs are listening to us. Andy believes Intel is living up to its part of the NSP bargain and that we should let OEMs know that some of the new software work Intel is doing is Ok. If Intel is not sticking totally to its part of the deal let me know. Andy knows you are down seeing Albert Yu on October 26. He will grab a short meeting with you. He think Intel still has a lot of strength in "real time communication" and that combining this with the great strength he fears we have developed in graphics/video is the key to getting interactive applications on the Internet to require more than a simple terminal. He wants us to recognize that despite problems in the past combining our strengths here makes sense. He says the key groups involved here now work for Gill. He is willing to lay out everything they are doing. He understands telling us at the last minute does not work.



