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INTEL REPORTS STRONG Q1 EARNINGS

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Depending on your perspective, Intel either just met or slightly exceeded the consensus of the financial community regarding its expected earnings. Intel earned \$3.1 billion (excluding acquisition-related costs) on revenues of \$8 billion. In its earnings report, Intel

confirmed that the company has continued to be supply constrained and was unable to meet a stronger than expected demand for PC processors. The Intel architecture business group (IABG) provided roughly flat revenue and volume of PC processors compared with the previous quarter. It is the flat revenue from IABG that has some analysts concerned about the health of Intel's core business of processors. Much of Intel's revenue growth was driven by an exploding market for flash memory and better than expected investment returns.

Revenue from the IABG includes chip sets and mother-boards, which apparently were down sharply from a year ago. This may well be a result of the slow acceptance of the 820 and 840 chip sets and the problems with Rambus memory. It appears that the primary beneficiary of Intel's chip-set problems has been VIA in the PC market and ServerWorks (formerly Reliance) in the workstation market. Intel's chip-set problems in PCs may ease with the Q2 introduction of the Solano chip set, which will add an AGP port and PC133 support to the anemic 810e.

During periods of high demand and short supply, processor average selling prices (ASP) would normally tend to rise (as AMD's have), but Intel's ASP did not rise in the quarter. Intel explained that because of contractual agreements, no excess capacity was available to address spot demand. It expects this condition to continue throughout Q2. Intel's capacity appears to be tied to fixed-priced OEM contracts that Intel is compelled to honor. Those agreements provide long-term stability to customers and keep

companies like Dell and eMachines from exploring alternative sources (i.e. AMD).

It is surprising that Intel was unable to increase processor shipments as it converted to the more-compact Coppermine core. The Coppermine die is smaller than the Katmai, Mendocino, and Dixon dies it replaced, which should result in more net die per wafer and therefore more processors from the same fabs. We can only conclude that either the process switchover resulted in a greater dip in wafer production output than was expected, or that Coppermine yields are lower than expected. Intel admitted prioritizing 0.18-micron production for mobile processors, where the smaller geometry is essential for lower power and high performance.

The demand for Xeon products in the workstation and server markets is more predictable, which allowed Intel to allocate sufficient production without a shortfall. Intel revealed that new Xeons will appear in May; we believe these to be the large cache (1- and 2M) versions, code-named Cascades. Intel confirmed that thousands of Itanium evaluation and development systems were shipped during the quarter. Considering the limited availability of 1GHz Pentium III processors in Q1, Intel may have shipped more Itanium processors than gigahertz processors. Intel would only say it shipped some 1GHz PIIIs to a couple of OEMs, with volumes to come later in Q2.

Intel was bullish about the second half of this year, as five of its fabs will be fully converted to 0.18-micron by June, and three additional plants will be added by the end of the year. Intel will increase capital spending from \$5 billion to

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\$6 billion in 2000, with the extra billion going toward extra capacity for PC processors and flash memory. The benefit of this additional spending will be seen in the second half of the year, when Intel will need the additional capacity to meet seasonally higher volumes. Intel assured analysts that the Willamette processor will not experience production limitations when it is introduced in the second half of the year.

The second half of this year will be critical for Intel, which will introduce three new processors—Itanium,

Timna, and Willamette—each of which requires a unique infrastructure of chip sets and motherboards. In addition, Intel must fight a resurgent AMD, which aspires to 30% market share. Despite this challenge to its core processor business, Intel is diverting considerable resources to growing its networking and communications groups with acquisition after acquisition. Managing all these changes while maintaining processor leadership will be a huge challenge. \Diamond

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