Intel company analysis

Intel is one of the most foremost American global technology companies and the world’s largest semiconductor chip producer, in term of revenue. It is the inventor of the x86 series of microprocessors where its processors nowadays can be seen in a various computing devices used. The company was founded in 1968, as Integrated Electronics Corporation with home-based in Santa Clara, California, USA. Intel also manufactures motherboard chipsets, integrated circuits, graphic chips, network interface controllers, and other communications and computing utility devices. Robert Noyce and Gordon Moore and widely cooperated with the executive leadership Andrew Grove initially founded the company. The company grew and later started integrating an advanced chip design with a leading capability support manufacturing. The company started its prominent advertising campaign with Intel’s “ Intel Inside” in the 1990s and made its Pentium brand names as the home-used processor.

Intel was well-known as an early pioneer in developing memory chips: SRAM and DRAM which represented its core business until 1981. During the 1990s, Intel took huge money for its investment in new microprocessor designs whose evolving the significantly rapid growth of the computer industry. During this period Intel became the dominant supplier of PCs microprocessors, and later was known for revealing aggressively controversial marketing strategies in defense of its product market position, particularly against its biggest competitors: AMD and Microsoft for controlling across the directions of the PC industry (Lea, 1998 and Millwardbrown, 2010).

Intel was a prominent company based on its founding by its ability to produce semiconductors, and its main products were static random access memory (SRAM) chips. Intel’s business activities continuously expanded and eventually produced a wider range of products which still prevailed today’s technology market by various memory devices.

In the end of the 1980s, after altering fundamental aspects of that business model and repositioning the company’s market focus to microprocessors, the company had successfully become a dominant player in semiconductors. Supported by its advantageous position as microprocessor supplier to IBM and its competitors within the growingly potential PC market, Intel started on a 10-year period of unprecedented growth as the primary hardware supplier to the PC industry which deriving enormous profit to the company.

Demand growth for high-end microprocessors decreased slowly in 2000. Intel competitors, such as AMD (the largest competitor in its primary x86 architecture market), earned significant growth in microprocessors market share, initially in low-end and mid-range processors but ultimately across the product range, and finally reduced Intel’s dominancy. Intel attempted to enhance such efforts and strategies to diversify the company’s business beyond semiconductors, but only few of these activities were eventually profitable.

In June 2006, by giving up the XScale processor business to Marvell Technology Group, Intel focused its resources on its core x86 technology and server businesses, and the acquisition was completed a couple months later. Then, Intel announced two major acquisitions in August 2010 and

respectively purchased McAfee in January 2011, a manufacturer of computer security technology and proceeds its plans to use the company’s technology in laptops, netbooks, smart phones, tablets and embedded computers in retail products.

Corporate Vision, Mission, Values and Objectives

THE VISION

Intel has a vision of inspiring ongoing innovation boundaries so that people can make life more enthusiastic, more fulfilled and easier to manage. Intel’s commitment to a strong drive to the front of the technology have made the transformation of the world with the leap and bound. Intel is a company which is always in motion, actively rendered, creating an industry that never breaks. Conference partner Intel to develop innovative products and services, rally to encourage the industry can provide a solution to the settlement of better collectively to provide greater benefits.

Intel, as the world leader in silicon innovation, develops technologies, products, and initiatives to continually advance how people work and live. Moreover, Intel always tries to build big efforts to capable in evolving advanced technology utilization. Besides, Intel really wishes to become the most preferred supplier of total computer technology and business solutions such as software, hardware and technical services that effectively enables and optimizes the living standards of world communities and businesses and connects enormous computers worldwide in the future.

Through processor family, Intel continues to expand its business to deliver the highest possible performance. Moreover, Intel networking products help

eliminates roadblocks on the way to the Web. Intel is also a leading supplier of Fast Ethernet connections and a range of easy-to-use hub and switch products that can get a small business connected and on the Internet the same day.

THE MISSION

Delight our customers, employees, and shareholders by relentlessly delivering the platform and technology advancements that become essential to the way we work and live (www. intel. com).

THE VALUES

Customer orientation

Results orientation

Risk taking

Great place to work

Quality

Discipline

THE OBJECTIVES

Extend our silicon technology and manufacturing leadership

Deliver unrivaled microprocessors and platforms

Grow profitability worldwide

Excel in customer orientation

Regarding with corporate vision and mission, Intel Company also involves the linkages with external parties including customers as the most valuable targets such as (www. intel. com)

Original equipment manufacturers (OEMs) and original design manufacturers (ODMs) who make computer systems, cellular handsets and handheld computing devices, and telecommunications and networking communications equipment;

PC and network communications products users (including individuals, large and small businesses, and service providers) who buy PC components and board-level products, as well as our networking and communications products, through distributor, reseller, retail and OEM channels throughout the world; and

Other manufacturers, including makers of a wide range of industrial and communications equipment.

Leadership and Organizational Structure

Intel had nearly 100, 000 employees and 200 facilities worldwide by September 2006. Its 2005 revenues were $38. 8 billion and listed as 49th in Fortune 500 ranking. Its stock symbol is INTC, listed on the NASDAQ. As of February 2009 the biggest customers of Intel are Hewlett-Packard and Dell.

Robert Noyce was Intel’s CEO at its founding in 1968, followed by co-founder Gordon Moore in 1975. Andy Grove became the company’s President in 1979 and added the CEO title in 1987 when Moore became Chairman. In 1998 Grove succeeded Moore as Chairman, and Craig Barrett, already company

president, took over. On May 18, 2005, Barrett handed the reins of the company over to Paul Otellini, who previously was the company president and was responsible for Intel’s design win in the original IBM PC. The board of directors elected Otellini CEO, and Barrett replaced Grove as Chairman of the Board. Grove stepped down as Chairman, but is retained as a special adviser. In May 2009, Barrett stepped down as chairman and Jane Shaw was elected as the new Chairman of the Board. Current members of the board of directors of Intel are Craig Barrett, Charlene Barshefsky, Susan Decker, James Guzy, Reed Hundt, Paul Otellini, James Plummer, David Pottruck, Jane Shaw, John Thornton, and David Yoffie (www. intel. com).

The firm promotes very heavily from within, particularly in its executive level. The company has defied the trend toward outsider CEOs. All of Intel executives have risen through the ranks after many years with the company. In many cases, Intel’s top executives are so loyal to the firm and most have spent their entire working careers with Intel, a very rare occurrence in Silicon Valley environment.

The company is headquartered in Silicon Valley in Santa Clara, California and employs 79, 800 people. and has operations around the world. Outside of California, the company has facilities in China, Costa Rica, Malaysia, Israel, Ireland, India, Russia and Vietnam, 63 countries and regions internationally. In the U. S. Intel employs significant numbers of people in California, Colorado, Massachusetts, Arizona, New Mexico, Oregon, Texas, Washington, and Utah. In Oregon, Intel is the state’s largest private company with more than 15, 000 employees and with over 10, 000 employees in Arizona. Intel’s

workforce totals approximately 90, 000, including (roughly) 12, 000 software engineers in these days (www. wikipedia. org).

Intel has a Diversity Initiative, including employee diversity groups as well as supplier diversity programs. Like many companies with employee diversity groups, they include groups based on race and nationality as well as sexual identity and religion. In 1994, Intel sanctioned one of the earliest corporate Gay, Lesbian, Bisexual, and Transgender employee groups, and supports a Muslim employees group, a Jewish employees group, and a Bible-based Christian group (www. intel. com).

Intel received a 100% rating on the first Corporate Equality Index released by the Human Rights Campaign in 2002. It has maintained this rating in 2003 and 2004. In addition, the company was named one of the 100 Best Companies for Working Mothers in 2005 by Working Mother magazine.

The detail of Intel organizational chart is displayed below based on the current change on November 2010.

Brands and Product Characteristics

Brands

Intel has become one of the world’s most recognizable computer brands following its long-running Intel Inside campaign which started in 1991 including the five-note jingle was introduced the following year and by its tenth anniversary over 130 countries around the world.

The Intel Inside advertising campaign highly considered public brand loyalty and awareness of Intel processors in consumer computers. Intel paid some of

the advertiser’s costs for an advertisement that used the Intel Inside logo and jingle as shortly described through following table (www. wikipedia. org):

The famous jingle, sonic logo, tag, audio mnemonic (MP3 file of sonic logo) was written by Walter Werzowa from the Austrian sampling band Edelweiss and then produced by Musikvergnuegen. The Sonic logo has taken some crucial changes in tone since the introduction of the Pentium III, Pentium 4, and Core processors, though it still maintains the same jingle.

Intel lately widened its promotion of open specification platforms beyond Centrino. After all, it encompassed the Viiv media center PC and the business desktop Intel vPro to strengthen company brand image campaign. However, Intel gradually terminated the Pentium brand names from mobile processors first, when the new Yonah chips, branded Core Solo and Core Duo, were released. PC processors changed when the Core 2 line of processors were released.

To maximize the company brand image campaign, Intel is promoting a concept of good-better-best with Celeron being good, Pentium better, and the Intel Core family personifying the best the company has to provide (www. pcworld. com).

Intel then planned to change the focus of its Intel Inside campaign from traditional media such as television and print-oriented to a newer media such as the Internet by optimizing online marketing through its co-op partnership program with other companies.

Since 2009, Intel has maintained only the Celeron brand, the Atom brand for netbooks and the vPro lineup for businesses. Current processors will carry the Intel Core brand, but will be known as the Intel Core i7, Intel Core i5 or Core i3 depending on their segment of the market.

Beginning in 2010 “ Centrino” was figured to Intel’s WiMAX and Wi-Fi technologies; it will not be considered as a PC brand name again. This will point out a critical evolution phases that occurs from respective period; Intel recognizes that several brands will persist in the market which implying the older ones throughout the changeover phases.

Product Characteristics

Intel is U. S. manufacturer of semiconductor computer circuits such as microprocessors, mainboards, flash memory and one of the major semiconductor chip manufacturer in the world. Intel was founded as NM Electronics to manufacture large-scale integrated (LSI) circuits. IBM chose to use Intel’s 8088 microprocessor in its first personal computer (the IBM PC), and Intel microprocessors became standard for all PC-type machines. Although other manufacturers developed Intel-compatible microprocessors, Intel continued to power more than 80% of PCs.

A couple years after the company was founded, Intel had started a scheduled project journey to develop and produce a highly advanced 32-bit microprocessor from failed Intel iAPX 432 project, the x86 architecture to 32 bits extension, and when the dawn of the personal computer era came in 1983. Intel’s profits came under increased pressure from Japanese memory-chip manufacturers, and then-the company drove into a focus on

microprocessors which finally becoming the single source for successors to the popular 8086 microprocessor. Furthermore, Intel began producing processors in three distinct factories based on geographical location, and gave up licensing the chip designs to competitors such as Zilog and AMD.

Despite the critical significance of the microprocessor market, the 4004 and its successors the 8008 and the 8080 never became major revenue contributors for Intel. Then, Intel started launching a major marketing and sales campaign for the next processor the 8086 (and its variant the 8088), and intended to win as many customers for the processor as possible.

Though IBM just initially introduced its personal computer within the last three decades and it was quickly successful, Intel was enabled to create the 80286 microprocessor in which finally used in the IBM PC/AT with the first 80386-based system, driving Intel as a key component supplier crushing IBM and making a tough competition for PC-compatible systems market. With long development span from period of microprocessors (386, 486, Pentium, and Itanium, x86 architecture) until period “ Intel Inside” campaign, Intel could dramatically redirect the company, closing much of its DRAM business and leading resources to the microprocessor business area.

Market Analysis

Market Share

Intel as a foremost semiconductor chip manufacturing company develops advanced and integrated digital technology products, integrated circuits (ICs), for computing and communications industries. Intel primarily operates

in the Taiwan, China (including Hong Kong), and the US. The company recorded decreased revenues from 2008 to 2009.

In the fourth quarter 2010 the world volumes of processors deliveries decreased by 0. 04% compared with the third quarter of the same year, and by 0. 21% with the fourth quarter of the previous year. As a whole over the years was observed the displacement of consumer preferences to the side of productive mobile processors, which was reflected in the realization of processors increased by 8% (price). Furthermore, the portion of mobile processors for PC in the overall mass in the year increased from 50. 2% to 54. 1%.

The sales volumes of mobile processors in 2010 increased by 26. 2% , server processors with x86- compatible architecture – by 28. 1%, desktop processors – by 6. 2%. In 2011, processor market as a whole will grow by 10. 1% with the locomotive of increase will be the corporate purchases including server solutions (International Data Corporation, 2010).

In the fourth quarter Intel increased its portion on the market for microprocessors from 80. 4% to 80. 8%. In the portion of AMD there is 18. 9% world market for microprocessors, in VIA portion – not more than 0. 3%. In the desktop segment Intel increased market share from 71. 8% to 72. 5%, AMD Company decreased from 27. 8% to 27. 3%, VIA portion was reduced to 0. 2%.

Mobile segment in the fourth quarter was characterized by the redistribution of market between Intel and AMD. The first increased its portion from 85. 9% to 86. 1%, the second – decreased its from 13. 7% to 13. 5%. AMD inevitably

loses positions in the server segment. Intel increased its portion from 93. 7% to 94. 2%, whereas AMD decreased its portion from 6. 3% to 5. 8%.

The year 2011 will be the biggest period yet for graphics-enabled microprocessors (GEM), as the penetration of GEMs reaches approximately 50 percent in notebooks and almost half of desktop shipments. The enhanced shipments will include both of the notebook PC segment and the desktop PC with detail description as follows (www. isuppli. com):

By 2012, nearly 70 percent of all notebook PCs and close to 60 percent of desktop PCs worldwide will ship with GEMs. Nevertheless, for tough competition between Intel and AMD (a third player, VIA serves different markets with GEM solutions for embedded and industrial applications) still continuously occurs till these days, the following figure describe ‘ battle’ between them as the long time competition to be market leader in microprocessors and chips producer in the world (www. cpubenchmark. net). The graph figures out the baselines during these time period based on global yearly statistics and therefore it is representative of CPUs in use rather than CPUs purchased. It only includes x86 processors and does not include other chip architectures these manufacturers may sell.

SWOT Analysis

SWOT Analysis, is one strategic planning tool commonly used to evaluate the Strengths, Weaknesses, Opportunities, and Threats which is involved either in a project or in a business venture. SWOT is also the tool aims to see where is the real position of an organization within the market and existing

competition and to identify the key of internal and external factors that are significantly crucial to achieving the objective.

Intel Corporation is a US company and the largest semiconductor manufacturer in the world. The company's product line includes motherboard chipsets and integrated circuits, graphic chips, network interface controllers, flash memory, embedded processors and other devices related to communications and computing fields. The SWOT Analysis of Intel Corporation is given below:

Strengths

Intel is the largest microprocessor manufacturer company in the world where most of the computer manufacturers and consumers prefer using devices with Intel microprocessor. It has the largest market share of around 80% all over the world. Moreover, Intel has been successfully created a good branding strategy through brand image. Most of users will associate PCs with Intel as good microprocessor architecture. People believe in Intel products as it is most reputable name.

Intel creates specialized products as it has captured only one specific area. Its employees are well-skilled in that area so Intel produces the best products because of its specialization in products. Besides, Intel simultaneously keeps on improving its products as Intel introduced many versions of " core-called" processors and every version are sustainably improved than the previous ones. These product improvement not only helps in stronger the customer base but also complying with the customers' satisfaction.

In other side, one of the most important things for a company to make sustainable innovations and improvement is strong finances support in order to lead the market continuously. Besides, taking risks capability regarding new products is a considerably important instance. Furthermore, Intel involves well-skilled and experienced employees with qualified knowledge about such area they are taking part and working in.

Weaknesses

There is still a lack of directive strategic plans in company where employees make their own strategies to work which do not always bear successful results. Besides, technical problems occasionally have found within the products launched which needs careful consideration because it can weakly derive the customers' acceptance.

There is lot of work load and burdens on the employees so they could not poise work life simultaneously with social life. Moreover, the management also prefers those who do a lot of work rather than those who are creative and competent. After all, there are some issues which can be stated as Intel weaknesses as follows:

Intel sometime used divisive strategies in defense of its market position against its competitors.

After year 2000, Intel's leading position in its core business was greatly lessened.

By the end of the 2006, Intel proclaimed a reform that resulted in the dismissal of 10, 500 employees or near 10 percent of its labor force by July 2006.

The company faced decreasing revenue in financial year 2008.

Intel has not achieved economies of scale and economies of scope throughout the long history.

Retail prices are higher as compared to the prices of competitors.

Opportunities

As the time surpassing the demand for computer products increasing rapidly which is opening step point for the company’s success. Increased demand of technology products is a big opportunity for Intel, particularly computer products. Then, when the new technologies are emerging, the company can create innovative ways to make the new products and to improve related products as well. Through distinguishing the product, Intel can expectedly seize more market share.

The company should be customer-oriented because customer preference changes after few months and customers always look for new and updated products. Furthermore, product development and markets penetration in the existing markets might be also a good opportunity.

Advancement in technology also provides the opportunity to offer new products. Intel can keep on playing significant roles in the rapid changing industry with innovation as the crucial way to remain in the industry as market leader. Furthermore, backward and forward integration may reduce

the needed expenses, improve the quality and service. Changing circumstances after economic slowdown or financial crises is also helpful for the company.

Threats

Product specialization may derive a big menace. If any competitor beats the market by manufacturing fabulous microprocessor then the market demand for Intel’s processor would be low and there is no back up products through which company can survive. Besides, the following issues are also considered as threats for Intel Corporation such as:

AMD as a tough competitor, always trying to amend its products which can bring the hard efforts to Intel’s microprocessors to recover.

Advancement in technology can make the manufacturing facilities and products getting obsoleted.

The strong price war is going on between PC producers.

Many competent PC makers are using inferior performance IC’S.

Changing customer taste and preferences along with the reduction in brand loyalty is a major threat.

Currency changeability in different countries create problem for the company business activities.

Intel has strong competitors in the industry such as Dell, IBM, etc.

The company is facing strong competition to maintain its market share sustainability.

Intel Corporation is facing strong political instability, regulation and tariffs in different countries.

Porter's Five Forces Analysis

Using Five Forces analysis brings the purpose to analyze the industry in order to determine the level of intensity regarding the competition and attractiveness of the industry (Porter, 1979). The attractiveness of an industry is measured in terms of profit; more profitability means a more attractive industry and otherwise.

Porter five forces model of competitive analysis is a widely applied approach for developing strategies in many industries. The intensity of competition varies across the industries. The intensity of competition is higher in low return industry as compared to high return industry due to less capital requirements and minimum R & D (Research & Development) requirements for common products.

According to Porter (1979), the nature of competitiveness in a given industry can be figured as a composite of the following five forces: rivalry among competitive firms, potential entry of new competitors, advantageous development of substitute products, bargaining power of suppliers, and bargaining power of consumers.

Porter’s framework is used to ascertain the impact of current competitors, potential entrants, buyers, suppliers, and potential substitutes to the company reviewed. The further explanation is described as follows:

Current Competitors: From the Microprocessor SBU perspective (Microprocessor and Chipset only), only one significant competitor will persist: Advanced Micro Devices (AMD). Having beaten all other microprocessor developers such as Cyrix and NexGen, Intel’s only real competition will come from the developers of the Athlon, Thunderbird, and Sledgehammer CPUs.

Potential Entrants: It is not easy to be capably supposed to find the potential ones immediately. Developing and manufacturing microprocessors and chipsets will require the immense capital expenditures-the insuperable entry barrier for almost any company that wish to join the battle. Companies willing to penetrate this industry need to consider Intel capitalized power before affordably finding other industries to successfully occupy.

Buyers: Buyers involving household computer manufacturers and small imitator’s shops those develop custom-made machines in most areas. But big computer makers such as Dell and Hewlett-Packard will calculate for the immense chipset and microprocessor leverages. Power of buyer in this industry has turned sequentially from period to period, but the Intel logo has been respectably considered by most manufacturers to be significantly important to dispense with for the most part. In other words, buyers will simply have nowhere else to turn for microprocessors but Intel.

Suppliers: It might be assumed that the company’s suppliers will have the same shortages of power to sell as other commodity traders in the technology equipment industry. Intel’s most needed component can be respectively purchased from a series of manufacturers, thus affording the firm a deal of buying power whose will be chose to do business with.

Potential Substitutes: When respective companies produce a competitive server, these companies only contend in a short figure of circumstances. It is possible to debate that matching up Intel/Windows machines to Sun/UNIX machines is simply inappropriate. Though the competition between Intel and its products buyer companies, Intel is just worried to substitution comes from AMD.

Innovation and Strategies

In the beginning, Intel’s Architecture Lab (IAL) was responsible for many of the hardware innovations of the personal computer, including the PCI Bus, the PCI Express (PCIe) bus, the Universal Serial Bus (USB), Bluetooth wireless interconnect, and the now-dominant architecture for multiprocessor servers. IAL’s software efforts met with a more mixed fate; its video and graphics software was important in the development of software digital video, but later its efforts were largely overshadowed by competition from Microsoft

In 2006, Intel produced P6 and NetBurst products with reduced die size (65 nm). A year later it unveiled its Core microarchitecture to widespread critical acclaim; the product span was perceived as an exceptional leap in processor performance that at a stroke regained much of its leadership of the field. Then, Intel introduced the Penryn microarchitecture, undergoing a

shrink from 65 nm to 45 nm, and the year after saw the release of its positively reviewed successor processor, Nehalem, followed by the other silicon shrink to the 32nm process.

The company’s first products were shift register memory and RAM integrated circuits, and Intel grew to be a leader in the fiercely competitive DRAM, SRAM, and ROM markets throughout the 1970s. Concurrently, Intel engineers invented Intel’s first microprocessor. Originally developed for the Japanese company Busicom to replace a number of ASICs in a calculator already produced by Busicom, the Intel 4004 was introduced to the mass market in 1971, though the microprocessor did not become the core of Intel’s business until the mid-1980s.

In March 2011, Intel has announced their SSDs 510 1with 20GB and 250GB capacities and read speeds more than 500MBps. One drawback is that the SSD 510 requires a SATA 6 GBps port in conjunction with the second generation of Intel Core Series processor. Furthermore it still sells only in packs of 1000s which are difficult to acquire for the average consumer.

After all, the Intel Scientific Computers division was founded in order to design and produce parallel computers based on Intel microprocessors connected in hypercube topologies. Later, the name was changed to the Intel Supercomputing Systems Division, and development of the iWarp architecture was also subsumed. The division designed several supercomputer systems, including the Intel iPSC/1, iPSC/2, iPSC/860, Paragon and ASCI Red.

In addition to Intel competitive strategies, Intel’s position as the “ gold standard” for PC architectures must be counted among the company’s competitive advantages. By serving basically as “ the R&D for the entire computing industry,” Intel is able to steer trends and technologies in ways that best benefit, itself.

Intel’s leadership position in the PC architecture theatre is very much a de facto competitive advantage-the result of its long-term market dominance and market position, but not necessarily a result of superior strategy. One competitive advantage that has come about due to corporate strategy would be Intel’s superior marketing and public relations machine, which is surely to be counted among its core competencies.

By manipulating the public perspectives into believing it has a monopoly on CPUs (as discussed in the text), and simultaneously protecting itself from antitrust litigation by claiming that it is indeed not a monopoly at all, Intel has secured for itself the best of both worlds. Customers and investors alike trust Intel because of its product’s stature and importance, yet trustbusters are kept at bay by the existence of tiny firms like VIA and AMD.

Intel’s marketing clout is also impressive when it comes to merchandising. By initiating price wars with its poorer competitor, it successfully drives AMD out of certain markets. By charging a premium for Pentiums, it encourages a premium image, while still outselling and outpacing the Athlon. Meanwhile, Intel’s marketers are hard at work behind the scenes, concocting exclusive deals with computer manufacturers, effectively cutting AMD out of the majority of the market.

But not all of Intel’s power comes as a result of sinister marketing tactics. Intel has been, and continues to be, an incredible innovator in microprocessor and chipset technology. Leveraging its deep pockets, huge research staff, and decades of experience, Intel’s manufacturing superiority is clearly both a distinct core competency and a competitive advantage few could ever hope to match. Intel is by far the largest microprocessor manufactu