THE BENCHMARK WAR

INTEL CORP. VS AMD INC.

(2019)

(SPECIALIZED JCC)

Chairs : Ryan Neubauer and Gabrielle Santallis

Head Crisis : David Alade

Committee Information

Zoom

Central debate will take place over Zoom. While speaking, it is expected that you keep your camera on, unless your internet connection does not allow it. While not speaking, it is expected that you remain muted. Chairs will make use of the "React" features of Zoom to come to a vote. Moderated caucuses will take place much in the same way as in person caucus would: the chair picks each speaker, who will be allowed to speak for a set duration. Unmoderated caucuses will be facilitated using the breakout room feature. The chair will open breakout rooms for all attendees. They will be allowed to enter and leave the rooms as they choose, before the unmoderated caucus elapses. Points and motions should be brought to the floor using the "Raise hand" feature. In place of passing notes, the Zoom private messaging system will be used. Please keep all messages respectful and committee focused. Zoom links to each committee will be shared on the day of the conference.

Discord

Crisis notes and directive submissions will be handled via Discord. Each committee will have a server on Discord they will have access to. Within the server, the delegate is expected to keep their name as their position, for ease of communication. There will be a committee wide chat, where committee wide information such as crisis updates and new directives can be shared. Crisis Notes will be sent via DM to your crisis team (an individual contact will be assigned to you). Links to each server will be shared on the day of the conference.

Directives and Resolutions

Directives and resolutions will be written on Google Docs. Delegates may share the link to these documents, for the purposes of sponsoring, signing, and writing them. Once a document receives the required number of signatures and is linked in the Discord chat, a motion to present the directive may be passed, at which time the chair will share their screen and open the document.

Note from Crisis:

Executive and Board members,

Intel and AMD (Advanced Micro Devices) hold the leading positions in the manufacturing industry. The rising question for the past couple years is one that has resulted in an exponential uprising of arguments on forums and social media platforms: Which company is superior? While Intel's processors generally perform better, AMD has been staging a comeback for the past couple of years especially with their release of the new "Ryzen" line. Their "Ryzen" processors marked the first time in almost two decades that AMD processors were able to be *compared* to Intel's higher-end products. In the past, AMD's highest-end processors were barely comparable to Intel's "budget" options. Your role as an executive member is to drive your company into a more successful future than the other. Your goal is to refute all arguments that even slightly suggest the inferiority of your company. Prove you are ***superior***.

My name is David Alade and I will be your crisis director for this committee.

General Parliamentary Procedure

Point of Order - A Point of Order may interrupt a speech and be used when a delegate feels that the Chair or another delegate is not correctly following the rules of procedure.

Point of Inquiry - A Point of Inquiry may not interrupt a speaker and may be used to direct a question to the chair to clarify parliamentary procedure or to ask a question. Substantive analyses or speeches may not be made using a point of inquiry.

Point of Information - A Point of Information may not interrupt a speech and may be used either to clarify a point or motion, or to bring substantive information to the notice of the Dais. No analyses or speeches may be made using a point of information.

Point of Personal Privilege - A Point of Personal Privilege may be raised when a delegate's ability to participate in debate is immediately impaired for any physical or logistical reason (for instance, if the speaker is not audible). In addition, this point may be used to bring up any issues with the conditions of the room, such as lighting or temperature. This point may interrupt a speech, and the Dais will immediately try to resolve the difficulty.

Right of Reply - The Right of Reply may be invoked in the rare case that a delegate feels his or her personal dignity or integrity has been deliberately offended. The delegate may raise his placard and ask the Chair for a Right of Reply which will be judged at the Chair's discretion.

Motion for a Moderated Caucus - A motion to enter into a moderated caucus must specify the topic of debate, the length of the caucus, and the speaker's time. Much of committee debate is expected to take place in moderated caucus.

Motion for an Unmoderated Caucus - A motion for an unmoderated caucus is up to the Chair's discretion and must specify a topic of debate for the caucus. If this motion passes, the rules of debate will be suspended for the given amount of time, and delegates will be permitted to leave their seats to discuss and write documents for submission.

Motion to Introduce Documents - A motion to introduce documents must be recognized by the chair for any of the documents to be presented or discussed. The document will be read out loud by the Chair or by the presenting delegate and be submitted for committee discussion if it has at least four signatures from delegates. If the document is a directive it will abide by the rules set forth below.

Motion for a Q&A Session - At the Chair's discretion, after a document has been submitted for debate, a delegate may motion for a question and answer session to ask questions of the document's author(s). If the Chair approves this motion, the rules of debate will be suspended for a session whose length is subject to the Chair's discretion.

Motion to Enter Voting Procedure - If a delegate deems that a document has been sufficiently discussed, he or she may motion to enter voting procedure. If this motion passes, debate will be suspended on that document, and the committee will enter voting procedure.

Motion to Suspend Debate - At the end of a committee session, a delegate may motion to suspend debate. If this motion passes, debate will be suspended and resume at the next committee session. This motion may be ruled out of order at the Chair's discretion.

Motion to Adjourn Debate - At the end of the final committee session of BREWMUNC, a delegate may motion to adjourn debate. If this motion passes, debate at this committee for this conference will be adjourned, and committee business will be concluded. This motion may be ruled out of order at the Chair's discretion.

Between Delegates - Delegates are encouraged to exchange ideas amongst one another during unmoderated caucus and through the passing of notes during normal flow of debate. Out of respect for other members of the Ministry, however, talking during another member's speech will not be tolerated. The chair may take disciplinary action against delegates who do not adhere to this policy.

Position Papers

Position papers should detail what a position's stance on the various topics of debate are. A quality position paper also describes what the delegate intends on accomplishing during the course of the conference, which may include who they plan on allying with and what policies they plan on suggesting to the committee. Although an ample amount of information is provided in the prep packet, it is highly recommended that delegates conduct outside research on their own time prior to the conference in order to better gauge their position's opinions and possible course of action.In order to be considered for awards in this committee, position papers are required.

Please type position papers using standard MLA format, double-spaced, size 12 Times New Roman font. A position paper of decent length typically ranges from one to one-and-one-half pages. Email a PDF file of your position paper to ayodele.alade@brewsterschools.org by March 5, 2021, in order to be eligible for awards. Please include your position name in the subject line of the email.

Note:

This committee will operate as a simulation of an executive board meeting for both companies. In order to do this smoothly, there will be some predetermined dynamics built into the committee. Here is a list of all the functions of the committee:

- Recognizing that the vast majority of high school students aren't able to design products on the same scale as the real-life companies, the premade function to release new lines of products will be dependent on the percentage of your company's budget that you decide to allocate to research sectors.
- Each company will be given a starting budget of (TBD). The starting budgets are the same in order to provide balance into the committee.

Background Guide

When discussing the history between Intel and AMD, one can generally split it into three phases: the beginning, the comeback, and the war.

The Beginning

In the beginning, there were two companies. For the most part, both were not competing in the same industries as they are today. One was pointed more towards custom builds and DIY builds. The other cooperated with larger companies such as Dell and Microsoft to develop pre built systems. However, as time went on, one began to fall behind the other in many performance aspects. These two companies were AMD and Intel. Buyers began to prefer intel processors for superior raw performance scores over AMD's overclocking potential. As the worldwide culture shifted towards a more digital approach to things, more and more people were looking for powerful computers to use for productive purposes such as running games or graphic design. These require stable, fast chips which could only be provided by intel or AMD. Traditionally, AMD cpus would run faster when overclocked however, this would yield a higher risk for crashing or failure and a lower life expectancy. Intel marketed their processors as fast, cool and reliable chips which were great products out of the box.

The main two differences between their processors are their two flagship features on their processors. Intel has hyperthreading whereas AMD processors focus on overclocking. Hyperthreading is a feature that is intel exclusive that is intel's efficient way of processing packets by enabling multiple threads on each core. AMD on the other hand more focuses on the overclocking aspect. They're processors generally run at cooler temperatures which means that they can handle more overclocking without burning up. However, if a product is overclocked too much, it can fry the processor and it won't work after that. While overclocking is a commonly used tactic by buyers, it voids the warranty for the products because it counts as a dangerous modification to the product.

Before recent history, the two main lines have been the AMD FX series and the Intel core i3/i5/i7. The FX series was AMD's flagship line. Their processors were generally cheaper and could be overclocked to perform approximately 50% faster than their base clock. That statistic was appealing to customers and set the attitude that people had towards AMD: the budget option.

The Comeback

As AMD realized that their company was quickly losing steam and allowing Intel to steal their consumers, they did nothing. They continued to do nothing but let Intel steamroll over them for a good decade or so until AMD realized that increasing performance at 1/10th the speed of Intel would cause their company to eventually go bankrupt and no longer pose any sort of competition. Towards the beginning of 2017, AMD released their new cpu line called AMD "Ryzen". The previous "fx" processors were no longer comparable to RYZEN and was a ginormous step forward for AMD. The release stirred up the competition quite a bit and caused Intel to start cutting prices in order to keep up with AMD's lower prices. Intel then began working on their own rebuttal and came out with the core i9 line up in which AMD responded with threadripper, a worthy opponent which caught Intel off guard. This caused a temporary reduction in price on both sides, but AMD which up until this point was making a fraction of what Intel was raking in per year(through processors) and therefore could not cut prices like intel was and was forced to raise/maintain high prices that made Intel's lineup more valuable than AMD's. This did not go unnoticed by pc enthusiasts. Many long time AMD fans decided to go back to AMD with this release, hoping that their investments now would yield greater performance in the future.

The War

After CES 2019 Intel and AMD were relatively well balanced with AMD still maintain their budget persona but with a significantly more powerful lineup. Intel still maintained their quality persona which was for buyers who had no budget and didn't care about a performance to dollar ratio. When it comes to straight up comparison both companies are about equally

matched but with Intel's advertising, they present themselves as the superior company because they have much wider media coverage than AMD.

Topics of Debate

- Marketing
  - Like any executive board, delegates will be responsible for some of the marketing elements of the company. The marketing strategies that delegates choose to utilize is completely at the discretion of the executive members of each company. There is no limit as to what you can do so long as your means of presenting them to the public are logistically viable. These marketing strategies can be in the form of television commercial advertisements, slogans, social media etc.. The marketing director for the respective companies will have the final say on whether a marketing move gets rolled out to the public or not. It should be noted that these marketing moves should be a frequent occurrence throughout the conference as it has major implications for the end result of the committee.
- Releasing new products (broad)
  - The release of products is each company is dependent on the amount of your company's budget that you allocate into research. As you release new products, marketing strategies should be released along with them. While this committee focuses on the processors side of things, delegates are permitted to utilize any industry that their company is involved in. The part that you have to solve includes both companies' problems.
- Upcoming CES 2020
  - Each company will be responsible for an extraordinary debut at CES 2020 convention. This conference will take place directly after CES 2019 and end at the aftermath of CES 2020. The winner of the committee will be decided by each company's debut at CES 2020 which will incorporate the releasing of products

done throughout the year and the marketing done for these products throughout the year.

Positions

AMD

President and CEO Dr Lisa SU -

Lisa Su is a Taiwanese American business executive and electrical engineer, and the CEO and president of Advanced Micro Devices. Early in her career, Su worked at Texas Instruments, IBM, and Freescale Semiconductor in engineering and management positions.

Executive VP Sandeep Chennakeshu -

Sandeep Chennakeshu leads AMD's Computing and Graphics Business Group and is responsible for managing all aspects of strategy, business management and engineering for AMD's PC, graphics, and semi-custom business lines.

Senior VP / Worldwide Marketing Ruth Cotter -

Human Resources and Investor Relations at AMD, Ruth Cotter's unique role positively differentiates the company's People, Strategy and Voice. In addition to overseeing all aspects of these critical corporate functions, she builds distinctive customer experiences, deeper stakeholder relationships and ensures AMD's inclusive, learning and innovative workplace culture sets it apart from its competition.

Senior VP / Chief Human Resources Officer Robert Gama -

Human Resource executive with domestic and international Generalist, Talent, Learning & Organizational Development, HR Operations, HR Technology, Labor Relations, Talent Acquisition and Change Management experience in consumer, high tech, industrial, manufacturing, services and semiconductor industries.

Senior VP / Chief Sales Officer Darren Grasby -

Grasby is responsible for leading AMD's global sales organization for all AMD product lines, including computing, graphics, datacenter and embedded products.

Senior VP / Global Operations Keivan Keshvari -

Keshvari leads teams responsible for executing AMD's end-to-end manufacturing and supply chain strategy. Keshvari brings to AMD 30 years of industry experience in global technology

business operations, capacity planning, supply chain operations, procurement, and new product introduction engineering.

Senior VP / Chief Financial Officer and Treasurer Devinder Kumar -

Kumar is responsible for the company's global finance organization as well as global corporate services and facilities.

Since he joined AMD in 1984, Kumar has progressed through several leadership positions in corporate accounting and corporate finance. His past roles include serving as interim CFO, corporate controller and assistant treasurer. Kumar also spent 10 years in Asia as financial controller for AMD Penang and group finance director for AMD's Manufacturing Services Group across Singapore, Thailand, China and Malaysia.

Senior VP / General Manager Saeid Moshkelani -

Saeid Moshkelani serves as senior vice president and general manager of AMD Client Compute responsible for all aspects of product strategy, management and engineering for client computing products and solutions. Moshkelani joined AMD in 2012 as general manager of the AMD Semi-Custom Business Unit, which he grew from infancy to a multi-billion-dollar business. He then spent two years leading product and platform engineering operations.

Moshkelani is an experienced executive with more than 30 years of engineering and operations leadership experience and a strong track record of driving product development and business growth for semiconductor companies, including Trident Microsystems Inc., LSI Logic, C-Cube Microsystems and VLSI.

Senior VP / Datacenter and Embedded Solutions Business Group Forrest Norrod -

Forrest Norrod is senior vice president and general manager of the Datacenter and Embedded Solutions Business Group at AMD. In this role, he is responsible for managing all aspects of strategy, business management, engineering and sales for AMD datacenter and embedded products. Norrod has more than 25 years of technology industry experience across a number of engineering and business management roles at both the chip and system level.

Norrod most recently was vice president and general manager of the Server Business at Dell from December 2009 to October 2014, driving the business to market share leadership in several key geographies and markets while delivering consistent revenue and profitability

growth. In his role as vice president and general manager of Dell Data Center Solutions, Norrod successfully led the creation of the company's first internal startup, which established Dell's leadership presence in the hyper-scale datacenter market. He joined Dell as CTO of Client Products in August 2000, then led the company's Enterprise Engineering before ultimately having responsibility for all of Dell's global engineering teams.

Chief Technology Officer / Executive VP Technology and Engineering Mark Papermaster -

Mark Papermaster is chief technology officer and executive vice president of Technology and Engineering at AMD and is responsible for corporate technical direction, product development including system-on-chip (SOC) methodology, microprocessor design, I/O and memory and advanced research. He led the re-design of engineering processes at AMD and the development of the award-winning "Zen" high-performance x86 CPU family, high-performance GPUs and the company's modular design approach, Infinity Fabric. He also oversees Information Technology that delivers AMD's compute infrastructure and services.

His more than 35 years of engineering experience includes significant leadership roles managing the development of a wide range of products, from microprocessors to mobile devices and high-performance servers. Before joining AMD in October 2011 as chief technology officer and senior vice president, Papermaster was the leader of Cisco's Silicon Engineering Group, the organization responsible for silicon strategy, architecture, and development for the company's switching and routing businesses. He served as Apple senior vice president of Devices Hardware Engineering, where he was responsible for iPod and iPhone hardware development. He also held a number of senior leadership positions at IBM overseeing development of the company's key microprocessor and server technologies.

Senior VP / Engineering Radeon Technologies group David Wang -

David Wang is senior vice president of engineering for the Radeon Technologies Group (RTG) at AMD. In this role, Wang is responsible for all aspects of graphics engineering, including the technical strategy, architecture, hardware and software for AMD's graphics products and technologies. With more than 25 years of graphics and silicon engineering experience, Wang brings deep technical expertise and an excellent track record in managing complex silicon development to AMD.

Wang rejoined AMD from Synaptics, where he was senior vice president of Systems Silicon Engineering from 2012 to January 2018, responsible for silicon systems development of Synaptics products. Prior to joining Synaptics, Wang was corporate vice president at AMD responsible for graphics IP and SOC development of AMD processor products, including GPUs, CPUs and APUs. Previously, Wang held various technical and management positions at ATI, ArtX, Silicon Graphics, Axil Workstations and LSI Logic.

Senior VP / General Counsel and Corporate Secretary Harry Wolin -

Harry Wolin is senior vice president, general counsel and corporate secretary at AMD. In this role, Wolin has responsibility for the company's worldwide legal matters, corporate strategy, global trade compliance, corporate investigations and public affairs, including government relations, community affairs and corporate responsibility. Prior to becoming general counsel in 2003, Wolin was vice president of intellectual property.

Before joining AMD in 2000, Wolin spent 12 years at Motorola, Inc. (now known as Motorola Solutions, Inc., a provider of technologies, products and services that enable a broad range of mobile, wireline, digital communication, information and entertainment experiences), where his last role was vice president and director of legal affairs for the Semiconductor Products Sector.

Intel

Chief Executive Officer Robert (Bob) H. Swan -

Robert (Bob) H. Swan is chief executive officer of Intel and serves on its board of directors. Before being named CEO on Jan. 31, 2019, Swan was interim CEO for seven months and was chief financial officer, where he oversaw Intel's global finance organization, mergers and acquisitions, investor relations, information technology, and the company's Corporate Strategy Office.

Senior VP / President of Intel Capital / Strategic Transactions Wendell M. Brooks

Wendell Brooks is senior vice president of Intel Corporation and president of Intel Capital. He is responsible for all areas of strategic growth, including equity investing, M&A, and new business incubation.

Senior VP / General Manager / Client Computing Group Gregory M. Bryant -

Gregory M. Bryant is senior vice president and general manager of the Client Computing Group at Intel Corporation. He leads the Intel organization dedicated to client computing solutions, a business that spans notebooks, desktops, tablets, 2 in 1 devices and home gateways. Bryant's responsibilities include profit and loss, business strategy, and product development for the full portfolio of Intel technologies, processors, chipsets and connectivity solutions designed to enable exceptional personal computing experiences.

Corporate VP / General Manager / Communications and Devices Dr.Corm

Dr. Cormac S. G. Conroy is corporate vice president and general manager of the Communication and Devices Group at Intel Corporation. He leads Intel's efforts to deliver world-class intellectual property, technology and solutions for wireless communications. Conroy oversees business strategy, technology and product development, and profit and loss for multiple communications products and platforms, including 4G and 5G cellular modems, radio frequency (RF) solutions, Wi-Fi, 60 GHz, Bluetooth, and GPS and global navigation satellite systems (GNSS).

Robert (Rob) B. Crooke

Robert (Rob) B. Crooke is senior vice president and general manager of the Non-Volatile Memory (NVM) Solutions Group at Intel Corporation. He leads a worldwide organization responsible for NVM technology design and development, complete solid-state drive (SSD) system hardware and firmware development, and wafer and SSD manufacturing, as well as marketing for Intel's component, module and SSD NVM businesses.

Leslie S. Culbertson

Leslie S. Culbertson is an executive vice president and general manager of Product Assurance and Security at Intel Corporation. She leads the IPAS organization and is responsible for cross company efforts to continuously improve the security of Intel's products.

George S. Davis

George S. Davis is executive vice president and the chief financial officer at Intel Corporation. He leads Intel's global finance organization, including finance, accounting and reporting, tax, treasury, internal audit, and investor relations. He also oversees Intel's information technology (IT) organization.

Michelle Johnston Holthaus

Michelle Johnston Holthaus is senior vice president, general manager of the Sales and Marketing Group and interim chief marketing officer at Intel Corporation. She is responsible for global sales and revenue at Intel and leads the company's efforts to foster innovative sales and marketing approaches that broaden Intel's business opportunities and enhance customer relationships worldwide.

Dr. Ann B. Kelleher

Dr. Ann B. Kelleher is senior vice president and general manager of Manufacturing and Operations at Intel Corporation. She is responsible for the company's worldwide manufacturing operations, including Fab Sort Manufacturing, Assembly Test Manufacturing and strategic planning, as well as corporate quality assurance and corporate services.

Jim Keller

Jim Keller is a senior vice president in the Technology, Systems Architecture and Client Group (TSCG) and general manager of the Silicon Engineering Group (SEG) at Intel Corporation. He is responsible for architecting the silicon engineering organization within TSCG using his impressive depth of experience and expertise.

Raja M. Koduri

Raja M. Koduri is senior vice president of the Core and Visual Computing Group, general manager of edge computing solutions and chief architect at Intel Corporation. Koduri leads the expansion of Intel's leading position in integrated graphics for the PC market with discrete graphics solutions for a broad range of computing segments. He also leads differentiated IP across computing, graphics, media, imaging and machine intelligence capabilities for the client and data center segments, artificial intelligence, and emerging opportunities like edge computing.

Sources

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