Media Release
13 June 2024

National Honours Conferred on Three Business Leaders for Significant Contributions to Singapore

1 Mr Tharman Shanmugaratnam, President of the Republic of Singapore, conferred national honours on three business leaders this week. The President presented the Public Service Star (Distinguished Friends of Singapore) award to Mr Gary E. Dickerson, President and CEO of Applied Materials and Mr Marc Casper, Chairman, President and Chief Executive Officer (CEO) of Thermo Fisher Scientific, and the Public Service Medal (Friends of Singapore) award to Mr Manish Bhatia, Executive Vice President of Global Operations of Micron Technology.

2 Mr Png Cheong Boon, Chairman of the Singapore Economic Development Board, said: "Mr Gary E. Dickerson, Mr Marc Casper and Mr Manish Bhatia have significantly expanded the presence of their respective firms in Singapore, benefiting our local ecosystem through the creation of good jobs and business opportunities. Applied Materials, Thermo Fisher Scientific and Micron are stalwarts in Singapore's manufacturing sector, and their activities have deepened and strengthened Singapore's semiconductor and healthcare industries, contributing to our continued attractiveness as an investment destination. I sincerely congratulate each of you on your award and thank you for the strong partnership over the years."

Mr Gary E. Dickerson

3 Mr Gary E. Dickerson is the President and CEO of Applied Materials, a global leader in materials engineering. Mr Dickerson has more than 35 years of experience in the semiconductor industry and has been recognised by Forbes and Harvard Business Review as an innovative leader and top-performing CEO. At Applied Materials, Mr Dickerson has served as President for 12 years and CEO for 11 years.

4 Mr Dickerson has been pivotal in the company's continued investments in manufacturing and R&D in Singapore. Notably, Singapore has become the company's key development hub for advanced packaging technologies serving its global customers. Applied Material's Operations Centre in Singapore is its largest manufacturing facility outside of the US.

5 Mr Dickerson's belief in Singapore's prime position as a regional hub and collaboration centre is reinforced by the company's "Singapore 2030" plan. Launched in 2022, the plan outlines Applied Material's commitment to strengthen its manufacturing and R&D capabilities in Singapore, nurture tech ecosystem collaborations and develop the local workforce. In line with this strategy, the company announced a S$600 million investment in a new equipment manufacturing facility in 2022, which will more than double its production capacity and close to double its headcount in Singapore over the coming years. This represents the largest investment by the company and by any equipment manufacturer in recent years.

6 A strong advocate for education and investing in future generations, Mr Dickerson has shaped collaborations between Applied Materials and local Institutes of Higher Learning to provide training and upskilling opportunities for both students and employees. These include continuing education and training programmes that contribute to building a future-ready talent pipeline in Singapore, and support Singapore's Manufacturing 2030 vision to become a global business hub for advanced manufacturing.

7 Applied Materials has been a close and trusted partner of Singapore's since its establishment here in 1991. In 2019, Applied Materials received the Distinguished Partner in Progress Award from the Government of Singapore in recognition of the company's outstanding contributions and commitment to the country.

8 In addition, Mr Dickerson is a member of EDB's International Advisory Council. His deep insights on issues such as the development of artificial intelligence and big data and innovating for sustainable growth are invaluable to the Council's discussions.

9 On being conferred the Award, Mr Dickerson said: "It is a tremendous honour to receive this award, and I would like to thank the Singapore Government, our academic and industry partners, and our talented team for supporting Applied Materials' success here over the past three decades. Singapore plays a unique and important role in the global semiconductor industry. Through our 'Singapore 2030' plan, we look forward to expanding our manufacturing and innovation capabilities and broadening technology ecosystem partnerships in Singapore for mutual growth that will benefit the global semiconductor industry."

Mr Marc Casper

10 Since 2009, Mr Marc Casper has served as the President and CEO of Thermo Fisher Scientific, the largest scientific and lab equipment company by revenue globally. Under his leadership, the Singapore team has grown from 360 employees to more than 2,000 since 2011. Its R&D team has also tripled from 80 Researchers and Engineers to 240 today, becoming the largest employer for life science tools in Singapore.

11 Mr Casper has been instrumental in building up the company's presence in Singapore, which serves as a key business hub and regional commercial headquarters for Thermo Fisher Scientific's business in Asia-Pacific. Singapore is also one of the company's global Centres of Excellence for instrument manufacturing and a key production site for microarrays. The development of these tools, used for genetic testing, aligns with Singapore's interests in precision medicine.

12 During the COVID-19 pandemic, Thermo Fisher Scientific was one of the major producers of PCR instruments that enabled large-scale COVID-19 testing in Singapore. PCR test kits were used extensively for testing and tracking of COVID-19 patients, which supported our national efforts to manage the outbreak.

13 Mr Casper has also been instrumental in Thermo Fisher Scientific's recent investment in Singapore's first fill-finish manufacturing facility, which enables end-to-end manufacturing of therapies and vaccines to be carried out here. The expanded capabilities strengthen the competitiveness of Singapore's healthcare industry, while boosting pandemic preparedness and resilience in the region.

14 Thermo Fisher Scientific has also invested in a Single-Use Technology (SUT) production facility, which supplies critical SUT consumables used to produce life-saving biologic medicines and facilitates local sourcing of bioreactors for drug substance manufacturing, strengthening the local healthcare ecosystem.

15 On being conferred the Award, Mr Casper said: "On behalf of our team in Singapore and all of our colleagues around the world, I am deeply honoured to receive this Public Service Star Award and be recognised as a Distinguished Friend of Singapore. Thermo Fisher has a profound Mission – to enable our customers to make the world healthier, cleaner and safer – and our presence in Singapore is integral to fulfilling our Mission. We've been here for more than 50 years, and we are very proud of the impact we've had as we help the country and our customers diagnose and treat disease, ensure clean air and water and help keep people safe. I look forward to what we will accomplish together as we continue to invest in our capabilities and enable our customers to address the world's greatest challenges."

Mr Manish Bhatia

16 Mr Bhatia is the Executive Vice President of Global Operations of Micron Technology, one of the world's largest semiconductor companies. Micron has over 44,000 employees globally, including nearly 9,000 employees in Singapore. Appointed Executive Vice President in 2017, Mr Bhatia oversees the company's global operations and manufacturing. He has more than 25 years of engineering and operations experience.

17 Under Mr Bhatia's leadership, Micron has made multi-billion-dollar investments in Singapore, which have cemented the country's role as a critical node in the global semiconductor supply chain. Over the past 20 years, Micron has invested more than S$40 billion in Singapore and currently operates four memory wafer fabrication plants and a test and assembly centre here. Singapore also serves as the company's global Centre of Excellence for NAND flash memory, which is used in applications such as data centres, mobile phones and automobiles.

18 In 2019, Micron expanded its wafer fabrication plant in Singapore to support the company's long-term growth. Notably, Micron Singapore is the first front-end semiconductor fab in the world to have received recognition as an Advanced Fourth Industrial Revolution Lighthouse and a Sustainability Lighthouse from World Economic Forum's Global Lighthouse Network in 2020 and 2022 respectively. This is testament to Micron's leadership in deploying advanced Industry 4.0 and sustainability technologies in its operations in Singapore.

19 During the COVID-19 pandemic, Micron's operations in Singapore continued to deliver record output, maintaining supply flows and ensuring the company remained a reliable partner in the global semiconductor supply chain. These efforts supported supply chain resiliency and helped mitigate the global semiconductor chip shortage.

20 Mr Bhatia has also played a crucial role in shaping Micron's commitment to building a strong pipeline of semiconductor talent in Singapore. Micron continues to deepen its partnerships with local universities, educational institutions and training partners. For example, Micron launched a comprehensive partnership with the five polytechnics in Singapore in 2023. This partnership includes providing 20 scholarships annually to polytechnic students with a passion for engineering and an interest in the semiconductor industry. Micron also offers internships to polytechnic students from science, technology, engineering and mathematics courses, providing hands-on experience at Micron's facilities in Singapore.

21 On being conferred the Award, Mr Bhatia said: “I am honoured to receive the Public Service Award on behalf of Micron and our strong team of nearly 9,000 members in Singapore. As semiconductors become an increasingly integral part of our lives, we look forward to continuing our partnerships with the Singapore government and ecosystem partners to drive technology innovation in the years ahead.”

About the Awards

Initiated by the Singapore Economic Development Board in 1998, the Public Service Star (Distinguished Friends of Singapore) award recognises senior business executives for their outstanding contributions to the economic growth of Singapore, and the Public Service Medal (Friends of Singapore) award recognises individuals who have rendered commendable public service in Singapore.

Between 1998 and 2023, 49 senior business executives have been conferred the Public Service Star (Distinguished Friends of Singapore) award. Another 49 have been accorded the Public Service Medal (Friends of Singapore) award.

End

Annex A: Citation of Award Recipients

Annex B: Biographies of Award Recipients

About the Singapore Economic Development Board

The Singapore Economic Development Board (EDB), a government agency under the Ministry of Trade and Industry, is responsible for strategies that enhance Singapore's position as a global centre for business, innovation, and talent. We undertake investment promotion and industry development, and work with international businesses, both foreign and local, by providing information, connection to partners and access to government incentives for their investments. Our mission is to create sustainable economic growth, with vibrant business and good job opportunities for Singapore and Singaporeans.

For more information on EDB, please visit www.edb.gov.sg.

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ANNEX A

CITATION FOR MR GARY E. DICKERSON – PUBLIC SERVICE STAR (DISTINGUISHED FRIENDS OF SINGAPORE) AWARD

Mr Gary E. Dickerson, as the President and Chief Executive Officer of Applied Materials, has made significant contributions to Singapore's economic development. Under his leadership, the Applied Materials-Singapore partnership has grown from strength to strength.

Mr Dickerson's vision for Applied Materials to "make possible a better future" has been instrumental in strengthening its presence in Singapore and charting its future growth plans. In January 2024, Applied Materials celebrated a significant milestone of shipping out its 10,000th system from Singapore. This represented a remarkable growth for Applied Materials from a small sales and services site in 1991. Today, Singapore has become a key hub for Applied Materials with a workforce of more than 2,500. The Singapore team produces nearly half of the company's products, innovates advanced technologies for core business and new markets, serves regional customers, and is a crucial hub for corporate functions across Asia.

Applied Materials continues to invest in Singapore, creating exciting job opportunities and serving the growing demand for semiconductors globally. In 2022, Mr Dickerson launched Applied Materials "Singapore 2030" plan to holistically grow its operations here by expanding the company's manufacturing capacity and R&D capabilities, broadening technology ecosystem partnerships, and promoting local workforce development. This includes building Applied Materials' largest factory outside of the United States and the sole Centre of Excellence for Advanced Packaging in collaboration with A*STAR's Institute of Microelectronics.

With strong support from the government and industry ecosystem, Applied Materials has built a broad Research & Development footprint in collaboration with research institutes and academia in Singapore. Multiple joint labs have been established including the Applied Materials-NUS Advanced Materials Corporate Lab.

In 2022, Applied Materials announced plans to help enable a future-ready workforce through enhanced training and advanced education programmes. This included an initiative with the Singapore Institute of Technology to give Applied Materials' employees access to tailored learning modules in areas such as artificial intelligence and machine learning. This has contributed to Applied Materials being named one of the best places to work in Singapore by The Straits Times for five years in a row.

In recognition of his outstanding contributions to Singapore, the President of the Republic of Singapore is pleased to confer the Public Service Star (Distinguished Friends of Singapore Award) 2023 to Mr Gary E. Dickerson.

CITATION FOR MR MARC CASPER – PUBLIC SERVICE STAR (DISTINGUISHED FRIENDS OF SINGAPORE) AWARD

Mr Marc Casper, as the Chief Executive Officer of Thermo Fisher Scientific, has made significant contributions to Singapore's economy, particularly to the growth of our healthcare industry.

The Thermo Fisher Scientific-Singapore partnership is longstanding, with the company commemorating its 50th anniversary in Singapore in 2023. During Mr Capser's time as Chief Executive Officer for more than a decade, he has been instrumental in accelerating the advancement of this partnership.

Today, Singapore serves as a key business hub for Thermo Fisher Scientific with over 2,000 staff, hosting its regional commercial headquarters for Asia-Pacific. Notably, Singapore is home to one of Thermo Fisher Scientific's global Centres of Excellence for instrument manufacturing, and a key production site for microarrays.

During Singapore's fight against the COVID-19 pandemic, Thermo Fisher Scientific played a critical role in our national efforts to subdue the pandemic by developing effective PCR testing solutions that enabled large-scale COVID-19 testing of our population.

More importantly, under the leadership of Mr Casper, Thermo Fisher Scientific invested significantly in Singapore, which helped to bolster our country's pandemic preparedness and supply chain resilience, thus enhancing the overall competitiveness of our healthcare industry.

This was demonstrated by the establishment of a Fill-Finish facility to enable end-to-end manufacturing of therapies and vaccines here, which will support Singapore and the Asia-Pacific region's ability to respond to future health emergencies.

In addition, during that period of severe supply chain shortages faced by the pharmaceutical industry, Thermo Fisher Scientific also established its Single-Use Technology (SUT) facility in Singapore to boost the supply of SUT consumables, which are critical for the smooth production of life-saving biologic medicines by its biopharmaceutical customers in the region.

In recognition of his outstanding contributions to Singapore, the President of the Republic of Singapore is pleased to confer the Public Service Star (Distinguished Friends of Singapore Award) 2023 on Mr Marc Casper.

CITATION FOR MR MANISH BHATIA – PUBLIC SERVICE MEDAL (FRIENDS OF SINGAPORE) AWARD

Mr Manish Bhatia, Executive Vice President of Global Operations of Micron Technology, has made significant contributions to Singapore's economic development.

The partnership between Micron and Singapore has strengthened continuously over the years, with Micron's presence in Singapore growing significantly over time. Today, Micron employs over 9,000 staff across headquarters, technology development, product development, and advanced manufacturing operations. Singapore is home to Micron's NAND Centre of Excellence, where 98% of Micron's NAND flash memory is manufactured.

Mr Bhatia is a key driver of the Micron Singapore team's continued pursuit for excellence and technology leadership. This helped propel Singapore to be the technology leader in NAND flash memory. In addition, Micron's front-end semiconductor fab in Singapore deploys advanced Industry 4.0 and sustainability technologies. In recognition of this, the plant has been recognised as an Advanced Fourth Industrial Revolution Lighthouse and a Sustainability Lighthouse by the World Economic Forum. Micron Singapore is one of the first few companies that have been accorded this recognition in Singapore.

Under Mr Bhatia's leadership, Micron has also invested heavily to refresh and transform its Bendemeer assembly and test operations site in Singapore. The Bendemeer facility, previously operated by Texas Instruments, was one of the first semiconductor plants to be set up in Singapore. Through the investments, Micron expanded the usable space for production, upgraded the facilities, implemented new product lines, and trained the Singapore manufacturing team to be able to manufacture and test new products. The investment was critical to enable Micron to undertake more advanced manufacturing and test operations in Singapore.

Beyond investments, Mr Bhatia is passionate about talent development. Micron has continued to closely partner Singapore's educational institutes in training the future generation of semiconductor talent. This year, Micron is one of three companies that signed a Memorandum of Understanding (MOU) with the Institute of Technical Education (ITE) and Singapore Semiconductor Industry Association (SSIA) for an ITE student training partnership. Last year, Micron signed a MOU with all five Polytechnics, with Micron agreeing to partner with the Polytechnics in a wide range of areas, from

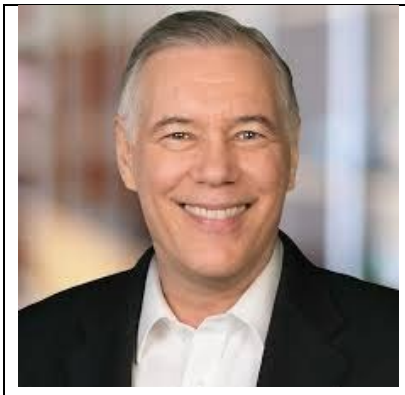
the provision of more internship positions and scholarships to Polytechnic students, to equipping lecturers with relevant industry skills.

These initiatives have been instrumental in enhancing the overall competitiveness of Singapore's semiconductor industry and have helped position Singapore as a critical node in the global supply chain.

In recognition of his outstanding contributions, the President of the Republic of Singapore is pleased to confer the Public Service Medal (Friends of Singapore) 2023 on Mr Manish Bhatia.

ANNEX B

BIOGRAPHIES OF AWARD RECIPIENTS

 **Mr Gary E. Dickerson, President and CEO, Applied Materials**	Mr Gary E. Dickerson was named president of Applied Materials, Inc. in June 2012 and appointed chief executive officer and a member of the board of directors in September 2013. Applied Materials is the leader in materials engineering solutions used to produce virtually every new chip and advanced display in the world. Named as one of the top-performing CEOs by Barron's, Forbes and the Harvard Business Review, Mr Dickerson is a long-time industry leader with more than 35 years of semiconductor experience and a strong track record of delivering profitable growth and gaining market share while achieving recognition for outstanding customer satisfaction. Prior to Applied Materials, he was CEO of Varian Semiconductor Equipment Associates, Inc. for seven years, until its acquisition by Applied Materials in 2011, and spent 18 years at KLA-Tencor Corporation where he held a variety of operations and product development roles before serving as president and chief operating officer. He began his semiconductor career in manufacturing and engineering management at General Motors' Delco Electronics Division and AT&T Technologies. Mr Dickerson holds a Bachelor of Science degree in engineering management from the University of Missouri, Rolla, and an MBA degree from the University of Missouri, Kansas City.

 **Mr Marc Casper** **Chairman, President and CEO,** **Thermo Fisher Scientific**	Mr Marc Casper has been President and Chief Executive Officer of Thermo Fisher Scientific since October 2009. He was also elected Chairman of the Board in February 2020. Mr Casper joined Thermo Electron Corporation in 2001 as Vice President of the Life Sciences sector. He was named Senior Vice President in 2003, and in 2005 assumed responsibility for all of the company's operating divisions. After the merger that created Thermo Fisher Scientific in 2006, Mr Casper was named Executive Vice President and President of its Analytical Technologies business, and in 2008 he became the company's Chief Operating Officer. Prior to joining Thermo Fisher, Mr Casper served as President, Chief Executive Officer and Director of Kendro Laboratory Products. Previously, he worked for clinical diagnostics provider Dade Behring Inc., serving as President–Americas. Mr Casper began his career as a strategy consultant at Bain & Company and later joined Bain Capital. Mr Casper serves on the boards of Wesleyan University, Mass General Brigham, Synopsys Inc., the U.S.-China Business Council and the Board of Dean's Advisors at Harvard Business School. He was previously a director of the Advisory Board Company, Zimmer Holdings, U.S. Bancorp and Brigham & Women's Hospital. He earned an MBA with high distinction from Harvard Business School and is a graduate of Wesleyan University, where he received a bachelor's degree in economics.

 **Mr Manish Bhatia** **Executive Vice President of Global Operations, Micron Technology**	Mr Manish Bhatia is the executive vice president at Micron since 2017. Mr Bhatia has over 25 years of engineering and operations experience. He held several executive roles at Western Digital Corporation, SanDisk Corporation, Matrix Semiconductor and in consulting at McKinsey & Company. Mr Bhatia currently serves on the board of the U.S.-Japan Business Council whose mission is to advance U.S. business interests in Japan and promote stronger economic ties between the United States and Japan. Mr Bhatia earned bachelor's and master's degrees in mechanical engineering from the Massachusetts Institute of Technology and a master's degree in business administration from MIT's Sloan School of Management, which he attended as a Leaders for Manufacturing fellow.