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17	Attorneys for Plaintiff YANGTZE MEMORY TECHNOLOGIES COMPANY, LTD.	
18 19	UNITED STATES I	DISTRICT COURT
	NORTHERN DISTRIC	CT OF CALIFORNIA
20   21	SAN JOSE	DIVISION
21	YANGTZE MEMORY TECHNOLOGIES COMPANY, LTD.,	
23	, ,	Case No. 5:24-cv-04223
24	Plaintiff,	COMPLAINT FOR PATENT
	V.	INFRINGEMENT
25	MICRON TECHNOLOGY, INC., and MICRON CONSUMER PRODUCTS	DEMAND FOR JURY TRIAL
26	GROUP, LLC.,	
27	Defendants.	
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Plaintiff Yangtze Memory Technologies Company, Ltd. ("YMTC" or "Plaintiff"), by its attorneys Latham & Watkins LLP, as and for its complaint against Defendants Micron Technology, Inc. and Micron Consumer Products Group, LLC (collectively, "Micron" or "Defendants"), on personal knowledge as to its own actions, and upon information and belief as to all others, alleges as follows:

#### NATURE OF THE ACTION

- 1. YMTC is one of the world's most innovative developers and manufacturers of 3D NAND flash memory chips. Although a relative newcomer, YMTC has developed and patented technologies that enable the production of better flash memory chips, having more capacity and a lower per-bit cost. YMTC's innovations have not gone unnoticed. In 2018, for example, YMTC received the award for the Most Innovative Flash Memory Start-up Company from the Flash Memory Summit in Santa Clara, California, which "recognizes the most creative and ambitious startup companies and applauds their entrepreneurial journey to becoming a market disruptor and champion of the storage industry." YMTC has continued to innovate and has continued to receive important patents as a result. In 2022, YMTC received the award for Most Innovative Memory Technology for YMTC's Xtacking® 3.0 3D NAND Architecture from the Flash Memory Summit in Santa Clara, CA.<sup>2</sup>
- 2. No longer an upstart, YMTC has become a key player in the global semiconductor market. In November 2023, TechInsights Inc., which analyzes and tracks the flash memory market, concluded that "[w]hat YMTC has accomplished has been nothing short of amazing" and that YMTC "is now the leader in 3D NAND flash," having "leap-frogged Micron," another major player in the 3D NAND space.<sup>3</sup>
- 3. Micron's response has been unauthorized, blatant, and widespread use of YMTC's patented innovations. In particular, this is an action brought by YMTC against Micron for infringement of United States Patent Nos. 10,879,254 (the "'254 Patent"), 11,581,322 (the "'322

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<sup>&</sup>lt;sup>1</sup> See Ex. 12 ("Flash Memory Summit 2018 Award Winners").

<sup>&</sup>lt;sup>2</sup> See Ex. 13 ("Flash Memory Summit Announces 2022 Best of Show Award Winners").

<sup>&</sup>lt;sup>3</sup> See Ex. 14 (https://www.techinsights.com/disruptive-event/ymtc-2321-tlc-3d-nand).

Patent"), 10,886,291 (the "'291 Patent"), 11,482,532 (the "'532 Patent"), 11,145,666 (the "'666

2	Patent"), 11,450,604 (the "'604 Patent"), 10,672,711 (the "'711 Patent"), 11,101,276 (the "'276
3	Patent"), 11,568,941 (the "'941 Patent"), 10,879,164 (the "'164 Patent"), and 12,010,838 (the
4	"'838 Patent") (collectively, the "Asserted Patents").
5	THE PARTIES
6	4. YMTC is headquartered in China and maintains a principal place of business in
7	Wuhan, China. YMTC maintains a wholly-owned subsidiary, Yangtze Memory Technologies,
8	Inc. ("YMTI"), which has its principal place of business in Santa Clara, CA, in this judicial
9	District.
10	5. Micron Technology, Inc. is a publicly traded corporation organized under the laws
11	of the State of Delaware, with its principal place of business at 8000 S. Federal Way, Boise,
12	Idaho, 83716. Micron Technology, Inc. may be served with process through its registered agent,
13	CSC – Lawyers Incorporating Service, at 2710 Gateway Oaks Dr., Ste. 150N, Sacramento,
14	CA 95833.
15	6. Micron Consumer Products Group, LLC, is a wholly-owned subsidiary of Micron
16	Technology, Inc., is directed and controlled by Micron Technology, Inc., and is organized under
17	the laws of the State of Delaware, with its principal place of business at 110 Holger Way, San
18	Jose, California, 95134. Micron Consumer Products Group, LLC may be served with process
19	through its registered agent, CSC - Lawyers Incorporating Service, at 2710 Gateway Oaks Dr.,
20	Ste. 150N, Sacramento, CA 95833.
21	7. Defendants have been and are acting in concert, and are otherwise liable
22	jointly, severally, or otherwise for relief related to or arising out of the same transaction, occurrence,
23	or series of transactions or occurrences related to the making, using, selling, offering for sale,
24	or otherwise importing and distributing the Accused Memory Products (as defined below) in this
25	District and elsewhere in the United States.
26	8. In addition, this action involves questions of law and fact that are common to
27	both Defendants. For example, Defendants are making, using, offering for sale, selling, or
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otherwise important and distributing at least some of the same Accused Memory Products (as 1 2 defined below) in this District and elsewhere. 3 JURISDICTION AND VENUE 9. This action arises under the patent laws of the United States, Title 35 of the United 4 5 States Code. This Court has original subject matter jurisdiction under 28 U.S.C. §§ 1331 (federal 6 question), and 1338(a) (action arising under an Act of Congress relating to patents). 7 10. This Court has personal jurisdiction over Micron because Micron, directly or 8 through its agents, has regularly conducted business activities in this judicial District and 9 throughout California, and this action arises out of and relates to activities that Micron has 10 purposefully directed at this judicial District and California. Micron Technology, Inc., maintains an office at 110 Holder Way, San Jose, California, 95134, within this judicial District.<sup>4</sup> Micron 11 12 Consumer Products Group, Inc. is a resident of this State and maintains a headquarters office at 110 Holger Way, San Jose, California, 95134.<sup>5</sup> 13 14 11. Micron has committed acts of infringement within this judicial District and California by, inter alia, directly and/or indirectly making, selling, offering for sale, importing, and/or 15 16 using products that practice (or are made in a manner that practices) one or more claims of the Asserted 17 Patents. Micron, directly and/or through intermediaries, uses, sells, ships, distributes, imports, offers for sale, and/or advertises or otherwise promotes its products throughout the United States, including 18 19 in this judicial District and California.<sup>6</sup> 20 Micron maintains highly interactive and commercial websites, accessible to 12. 21 residents of this judicial District, through which Micron promotes and facilitates sales and use of 22 its products and services, including products that infringe the Asserted Patents.<sup>7</sup> 23 <sup>4</sup> Ex. 15 (https://www.micron.com/about/locations?country=USA&city=San%20Jose) ("Micron San Jose"). <sup>5</sup> See Ex. 16 (Micron Consumer Products Group, Inc., Statement of Information filed with the

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California Secretary of State); see also Ex. 17 (San Jose Mercury news article titled, "Micron opens modern new north San Jose campus amid growth spurt"); Ex. 18 (Yangtzee Memory Technologies Co. v. Micron Technology, Inc., No. 3:23-cv-05792, ECF No. 35 (N.D. Cal Feb. 16, 2024) at 2-3.

<sup>&</sup>lt;sup>6</sup> See, e.g., Ex. 19 (https://www.micron.com).

<sup>&</sup>lt;sup>7</sup> See, e.g., Ex. 19 (https://www.micron.com).

1	13. Venue is proper in this judicial District pursuant to 28 U.S.C. §§ 1391 and 1400(b),
2	because Micron has a regular and established place of business in this judicial District, and has
3	committed and continues to commit acts of patent infringement in this judicial District by, among
4	other things, directly and indirectly making, using, selling, offering to sell, or importing products
5	that infringe (or are made in a manner that infringes) one or more claims of the Asserted Patents.
6	14. This is an action concerning infringement by Micron with respect to its 3D NAND
7	and DRAM technologies and products incorporating the same. According to Micron, "Micron's
8	3D NAND related design and product engineering occurs in Micron's San Jose and Folsom,
9	California facilities."8
10	<u>DIVISIONAL ASSIGNMENT</u>
11	15. This case is an Intellectual Property Action under Civil Local Rule 3-2(c) and,
12	pursuant to Civil Local Rule 3-5(b), shall be assigned on a district-wide basis.
13	YMTC'S INNOVATIONS AND PATENTS
14	16. YMTC is an integrated device manufacturer (IDM) dedicated to the development
15	of memory products for the global market. With a focus on the design of superior 3D NAND
16	flash memory, YMTC's innovations have gained significant recognition in a short amount of time.
17	YMTC has succeeded in designing and manufacturing 3D NAND flash memory chips with bit
18	densities, I/O speeds, and capacities that are highly praised in the industry. YMTC maintains ties
19	to Silicon Valley through a wholly-owned subsidiary, Yangtze Memory Technologies, Inc.,
20	incorporated in California. <sup>9</sup>
21	17. YMTC's 3D NAND Chips have been recognized as the "Best of Show" for "Most
22	Innovative Flash Memory Start-up Company." In 2018, the Flash Memory Summit held in Santa
23	Clara, CA, recognized YMTC as among "the most creative and ambitious startup companies and
24	applaud[ed] their entrepreneurial journey to becoming a market disruptor and champion of the
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26	<sup>8</sup> Ex. 20 at 2.
27	<sup>9</sup> See Ex. 21 (Yangtze Memory Technologies, Inc. Statement of Information filed with the California Secretary of State); see also, Ex. 22 (https://www.ymtc.com/en/contact.html).
28	<sup>10</sup> Ex. 12; <i>see also</i> , Ex. 23 ( <u>https://apnews.com/press-release/globe-newswire/technology-business-472edca95b4b227a486f5f8c4750cbb3)</u> .
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1	storage industry." <sup>11</sup> In 2022, the Flash Memory Summit recognized YMTC's Xtacking® 3.0 3D
2	NAND Architecture as the "Most Innovative Memory Technology." The Flash Memory Summit
3	hosts up to 6,000 individuals and companies, including on average 100 global sponsors, and is the
4	largest collection of flash memory experts. <sup>13</sup> YMTC innovations have resulted in "the world's
5	most advanced 3D NAND memory chip in a consumer device," having "the highest bit density
6	seen in a commercially available NAND product."14
7	18. To promote the progress of science and useful arts, protect its investments in
8	research and development, and to facilitate further research and development efforts, YMTC has

applied for and received numerous patents for its innovations, including many U.S. patents.

19. YMTC's patented innovations yield numerous benefits including, for example, increasing the speed, performance, density, reliability, and yield of semiconductor memory chips, which in turn facilitate technological improvements in a wide variety of products including, for example, mobile phones, data centers, and personal computers, as well as many types of products requiring memory, such as portable electronic devices and automotive infotainment systems. YMTC's innovations make possible, or improve, many of the electronic devices that consumers depend upon and enjoy.

#### MICRON'S ACCUSED PRODUCTS AND INFRINGING ACTIVITIES

- 20. Micron is a global manufacturer and supplier of memory components and devices for use in consumer and enterprise products, systems, and services.
- 21. Micron designs, makes, uses, sells, offers for sale, imports, supplies, or otherwise distributes into the United States, and provides support for, 96-Layer NAND memory chips and Micron products containing the same (collectively, "96L Accused Products"), including products with the part or die name or number B27A, and other memory chips (and memory products

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<sup>&</sup>lt;sup>11</sup> See Ex. 12 ("Flash Memory Summit 2018 Award Winners").

<sup>&</sup>lt;sup>12</sup> Ex. 13.

<sup>&</sup>lt;sup>13</sup> See Ex. 24 (Flash Memory Summit Sponsor Prospectus); see also Ex. 13 (The Flash Memory Summit is "the world's largest event featuring the trends, innovations, and influencers driving the adoption of flash memory in demanding enterprise storage applications, as well as in smartphones, tablets, and mobile and embedded systems.").

<sup>&</sup>lt;sup>14</sup> Ex. 25 (https://www.techinsights.com/blog/china-does-it-again-nand-memory-market-first).

containing the same) that have the same or similar structures, features, or functionalities, and/or are made by the same or similar manufacturing processes, as the aforementioned exemplary product. An exemplary technical analysis of the B27A is available for purchase at https://www.techinsights.com/products/car-1906-202 4 and https://www.techinsights.com/products/war-1912-801.

- 22. Micron designs, makes, uses, sells, offers for sale, imports, supplies, or otherwise distributes into the United States, and provides support for, 128-Layer NAND memory chips and Micron products containing the same (collectively, "128L Accused Products"), including products with the part or die name or number B37R and other memory chips (and memory products containing the same) that have the same or similar structures, features, or functionalities, and/or are made by the same or similar manufacturing processes, as the aforementioned exemplary product. An exemplary technical analysis of the B37R is available for purchase at https://www.techinsights.com/products/tcr-2104-805.
- 23. Micron designs, makes, uses, sells, offers for sale, imports, supplies, or otherwise distributes into the United States, and provides support for, 176-Layer NAND memory chips and Micron products containing the same, (collectively, "176L Accused Products"), including products with the part or die name or number B47R, and other memory chips (and memory products containing the same) that have the same or similar structures, features, or functionalities, and/or are made by the same or similar manufacturing processes, as the aforementioned exemplary An exemplary technical analysis of the B47R is available for purchase at https://www.techinsights.com/blog/memory/micron-176l-3d-nand.
- 24. Micron designs, makes, uses, sells, offers for sale, imports, supplies, or otherwise distributes into the United States, and provides support for, 232-Layer NAND memory chips and Micron products containing the same (collectively, "232L Accused Products"), including products with the part or die name or number B58R and other memory chips (and memory products containing the same) that have the same or similar structures, features, or functionalities, and/or are made by the same or similar manufacturing processes, as the aforementioned exemplary

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product. An exemplary technical analysis of the B58R is available for purchase at <a href="https://www.techinsights.com/products/tcr-2303-802">https://www.techinsights.com/products/tcr-2303-802</a>.

- 25. Micron designs, makes, uses, sells, offers for sale, imports, supplies, or otherwise distributes into the United States, and provides support for, DDR5 DRAM memory chips and Micron products containing the same (collectively, "DRAM Accused Products"), including products with the part or die name or number Y2BM and other memory chips (and memory products containing the same) that have the same or similar structures, features, or functionalities, and/or are made by the same or similar manufacturing processes, as the aforementioned exemplary product.
- 26. The 96L Accused Products, 128L Accused Products, 176L Accused Products, 232L Accused Products, and DRAM Accused Products are collectively referred to as the "Accused Memory Products."
- 27. The Accused Memory Products are, or are integrated into, devices made, used, sold, offered for sale, imported, supplied, or otherwise distributed in the United States by among others, Micron, Micron's customers, original equipment manufacturers ("OEMs"), original design manufacturers ("ODMs"), distributors, resellers, and other third parties, including under Micron's own brand name and under the Crucial brand name.<sup>15</sup>
- 28. Micron actively encourages others, such as its customers and distributors, to make, use, offer to sell, import, supply, or otherwise distribute into the United States the Accused Memory Products, and products containing the Accused Memory Products. For example, Micron maintains a website that advertises the Accused Memory Products, including identifying the applications for which they can be used, along with specifications for the Accused Memory Products. Micron takes affirmative acts specifically intending for its customers and end-users

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<sup>15</sup> See, e.g., Exs. 26-30

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<sup>27 | 16</sup> See e.g., Ex. 31 ("We are dedicated to collaborating with you, our customers and partners..."); see also, Ex. 32.

<sup>&</sup>lt;sup>17</sup> See, e.g., Ex. 33.

1	to use the Accused Memory Products in such applications and provides instructions and
2	encouragement for its customers and end-users to do so. <sup>18</sup>
3	29. Micron sells and offers to sell in the United States, and imports into the United
4	States, the Accused Memory Products, which are essential, non-trivial components of the products
5	into which they are integrated, constituting a material part of the claimed inventions of the Asserted
6	Patents, and are not a staple article or commodity of commerce suitable for substantial non-
7	infringing use.
8	30. Micron knows that the Accused Memory Products and products incorporating the
9	same are used, marketed, sold, offered for sale in, and imported into, the United States. For
10	example, Micron's website identifies distributors of the Accused Memory Products. 19 The website
11	includes a list of United States "authorized distributors" for purchasing the Accused Memory
12	Products, including Arrow Electronics, Inc., ASI, Avnet, D&H, Digi-Key, Edge Electronics, Inc.,
13	MA Labs, Mouser Electronics, Phoenics Electronics, TD Synnex, and WPG Americas, Inc. <sup>20</sup>
14	31. Micron also has imported into the United States, and offered to sell, sold, and used
15	within the United States, the Accused Memory Products, which are made by a process patented in
16	the United States during the term of the Asserted Patents. Micron practices the patented processes,
17	or owns or controls, or is owned or controlled by, the person who practices the patented processes.
18	Micron sells its products to customers, including customers in this District, in the computer,
19	networking, storage, consumer electronics, solid-state drive, and mobile telecommunications
20	markets. Micron encourages its customers to import, sell, resell, and/or offer to sell the Accused
21	Memory Products in the United States. <sup>21</sup>
22	32. Micron knew and knows that YMTC has patents in the semiconductor memory
23	space. For example, there are a limited number of companies competing to make advanced
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<sup>&</sup>lt;sup>18</sup> See, e.g., Ex. 34 (Micron Form 10-K (FY 2023) at 10, available at <a href="https://investors.micron.com/static-files/25afc2b7-1b51-4f33-9d3b-9d1620fafa30">https://investors.micron.com/static-files/25afc2b7-1b51-4f33-9d3b-9d1620fafa30</a>.)

<sup>26 || &</sup>lt;sup>19</sup> See, e.g., Ex. 35.

<sup>&</sup>lt;sup>20</sup> See, e.g., Ex. 35; see also, e,g., Ex. 36.

<sup>&</sup>lt;sup>21</sup> See e.g., Ex. 37 at 18-19 (Micron listed as a supplier for Dell Technologies, 2022); Ex. 38 at 5 (Micron listed as a supplier for HP, 2021); Ex. 39 at 16 (Micron listed as a "Top 100 Production and Service Suppliers" of Intel, 2020-2021).

1	generation 3D NAND products; Micron knows that YMTC is one of them; and Micron knows that
2	YMTC actively patents in that area. Many YMTC-owned patents are cited on the face of Micron's
3	own patents (including patent publications of one or more of the Asserted Patents), demonstrating
4	Micron's knowledge of YMTC's patent portfolio that is highly relevant to Micron's own memory
5	products. Micron has actual knowledge of YMTC's patents in the semiconductor memory space
6	and yet Micron has not sought or received authorization to use those patents.

On information and belief, Micron's development, sales, marketing, and 33. manufacturing activities in the United States, including within this judicial District, directly contributed to over \$8 billion of Micron's net revenue in the United States for the year of 2022 as of September 1, 2022.<sup>22</sup>

#### COUNT I: INFRINGEMENT OF U.S. PATENT NO. 10,879,254

- 34. YMTC incorporates by reference and re-alleges all the foregoing paragraphs of this Complaint as if fully set forth herein.
- 35. YMTC owns by assignment all rights, title, and interest, including the right to recover damages for past, present, and future infringement, in and to U.S. Patent No. 10,879,254, entitled "Three-Dimensional Memory Devices Having Through Array Contacts And Methods For Forming The Same." A true and correct copy of the '254 Patent is attached as Exhibit 1.
- 36. The '254 Patent was duly and legally issued by the United States Patent and Trademark Office on December 29, 2020.
- 37. Micron directly infringes under 35 U.S.C. § 271(a) at least claim 1 of the '254 Patent, literally and/or under the doctrine of equivalents, by making, using, offering for sale, selling, and/or importing into the United States, without YMTC's authorization, at least Micron's 128L Accused Products (for example, the BX500 2.5 480GB SSD), Micron's 176L Accused Products (for example, the Micron SSDs model 3400), and Micron's 232L Accused Products (for example, the Micron SSD model 2250) ("the '254 Accused Products"). Further identification of the '254 Accused Products will be provided in YMTC's infringement contentions disclosed pursuant to the Court's scheduling order, the local rules, and/or as discovery progresses.

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<sup>&</sup>lt;sup>22</sup> Ex. 34 at 43 (Micron's 10-K filing, 2022).

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- 38. The '254 Accused Products embody and/or are made using each and every limitation of at least claim 1 of the '254 Patent, literally and/or under the doctrine of equivalents. Exemplary claim charts providing examples of how the '254 Accused Products practice each limitation of claim 1 of the '254 Patent are attached as Exhibits 40-41 hereto, and incorporated by reference herein.
- 39. Micron has infringed and continues to infringe under 35 U.S.C. § 271(g) by importing into the United States or offering to sell, selling, or using within the United States a product which is made by a process patented in the United States during the term of the '254 Patent. Micron has practiced the patented process; or owns or controls, or is owned or controlled by the person who has practiced the patented process. Micron sells its products to customers, including customers in this District, in the computer, networking, storage, consumer electronics, solid-state drive, and mobile telecommunications markets. Micron encourages its customers to import, sell, resell, offer to sell, and/or resell the '254 Accused Products.
- 40. As a result of Micron's infringement of the '254 Patent, YMTC is entitled to monetary damages in an amount adequate to compensate for Micron's infringement, but in no event less than a reasonable royalty for the use made of the invention by Micron, together with interest and costs as fixed by the Court.
- 41. The harm to YMTC from Micron's ongoing infringing activity is irreparable, continuing, and not fully compensable by money damages, and will continue unless Micron's infringing activities are enjoined.

#### COUNT II: INFRINGEMENT OF U.S. PATENT NO. 11,581,322

- 42. YMTC incorporates by reference and re-alleges all the foregoing paragraphs of this Complaint as if fully set forth herein.
- 43. YMTC owns by assignment all rights, title, and interest, including the right to recover damages for past, present, and future infringement, in and to U.S. Patent No. 11,501,822, entitled "Three-Dimensional Memory Devices Having Through Array Contacts And Methods For Forming The Same." A true and correct copy of the '322 Patent is attached as Exhibit 2.

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The '322 Patent was duly and legally issued by the United States Patent and 44. Trademark Office on February 14, 2023.

- 45. Micron directly infringes under 35 U.S.C. § 271(a) at least claim 1 of the '322 Patent, literally and/or under the doctrine of equivalents, by making, using, offering for sale, selling, and/or importing into the United States, without YMTC's authorization, at least Micron's 128L Accused Products (for example, the Micron BX500 model SSD), 176L Accused Products (for example, the Micron SSD model 3400), and 232L Accused Products (for example, the Micron SSD model 2250) collectively, "the '322 Accused Products"). Further identification of the '322 Accused Products will be provided in YMTC's infringement contentions disclosed pursuant to the Court's scheduling order, the local rules, and/or as discovery progresses.
- 46. The '322 Accused Products embody and/or are made using each and every limitation of at least claim 1 of the '322 Patent, literally and/or under the doctrine of equivalents. Exemplary claim charts providing examples of how the '322 Accused Products practice each limitation of claim 1 of the '322 patent are attached as Exhibits 42-44 hereto, and incorporated by reference herein.
- 47. As a result of Micron's infringement of the '322 Patent, YMTC is entitled to monetary damages in an amount adequate to compensate for Micron's infringement, but in no event less than a reasonable royalty for the use made of the invention by Micron, together with interest and costs as fixed by the Court.
- 48. The harm to YMTC from Micron's ongoing infringing activity is irreparable, continuing, and not fully compensable by money damages, and will continue unless Micron's infringing activities are enjoined.

## COUNT III: INFRINGEMENT OF U.S. PATENT NO. 10,886,291

- 49. YMTC incorporates by reference and re-alleges all the foregoing paragraphs of this Complaint as if fully set forth herein.
- 50. YMTC owns by assignment all rights, title, and interest, including the right to recover damages for past, present, and future infringement, in and to U.S. Patent No. 10,886,291, entitled "Joint Opening Structures Of Three-Dimensional Memory Devices And

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27 28 Methods For Forming The Same." A true and correct copy of the '291 Patent is attached as Exhibit 3.

- 51. The '291 Patent was duly and legally issued by the United States Patent and Trademark Office on January 5, 2021.
- 52. Micron directly infringes under 35 U.S.C. § 271(a) at least claim 1 of the '291 Patent, literally and/or under the doctrine of equivalents, by making, using, offering for sale, selling, and/or importing into the United States, without YMTC's authorization, at least Micron's 96L Accused Products (for example, Micron's Crucial BX500 and SSD model 1300 SATA) ("the '291 Accused Products"). Further identification of the '291 Accused Products will be provided in YMTC's infringement contentions disclosed pursuant to the Court's scheduling order, the local rules, and/or as discovery progresses.
- 53. The '291 Accused Products meet each and every limitation of at least claim 1 of the '291 Patent, literally and/or under the doctrine of equivalents. An exemplary claim chart providing an example of how the '291 Accused Products practice each limitation of claim 1 of the '291 Patent is attached as Ex. 45 hereto, and incorporated by reference herein.
- 54. Micron has infringed and continues to infringe under 35 U.S.C. § 271(g) by importing into the United States or offering to sell, selling, or using within the United States a product which is made by a process patented in the United States during the term of the '291 Patent. Micron has practiced the patented process; or owns or controls, or is owned or controlled by the person who has practiced the patented process. Micron sells its products to customers, including customers in this District, in the computer, networking, storage, consumer electronics, solid-state drive, and mobile telecommunications markets. Micron encourages its customers to import, sell, resell, offer to sell, and/or resell the '291 Accused Products.
- 55. As a result of Micron's infringement of the '291 Patent, YMTC is entitled to monetary damages in an amount adequate to compensate for Micron's infringement, but in no event less than a reasonable royalty for the use made of the invention by Micron, together with interest and costs as fixed by the Court.

continuing, and not fully compensable by money damages, and will continue unless Micron's

infringing activities are enjoined.

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**COUNT IV: INFRINGEMENT OF U.S. PATENT NO. 11,482,532** 

The harm to YMTC from Micron's ongoing infringing activity is irreparable,

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57. YMTC incorporates by reference and re-alleges all the foregoing paragraphs of this Complaint as if fully set forth herein.

- 58. YMTC owns by assignment all rights, title, and interest, including the right to recover damages for past, present, and future infringement, in and to U.S. Patent No. 11,482,532, entitled "Joint Opening Structures of Three-Dimensional Memory Devices and Methods For Forming the Same." A true and correct copy of the '532 Patent is attached as Exhibit 4.
- 59. The '532 Patent was duly and legally issued by the United States Patent and Trademark Office on October 25, 2022.
- 60. Micron directly infringes under 35 U.S.C. § 271(a) at least claim 1 of the '532 Patent, literally and/or under the doctrine of equivalents, by making, using, offering for sale, selling, and/or importing into the United States, without YMTC's authorization, at least Micron's 96L Accused Products (for example, Micron SSD model 1300 SATA) ("the '532 Accused Products"). Further identification of the '532 Accused Products will be provided in YMTC's infringement contentions disclosed pursuant to the Court's scheduling order, the local rules, and/or as discovery progresses.
- 61. The '532 Accused Products meet each and every limitation of at least claim 1 of the '532 Patent, literally and/or under the doctrine of equivalents. An exemplary claim chart providing examples of how the '532 Accused Products practice each limitation of claim 1 of the '532 Patent is attached as Exhibit 46, and incorporated by reference herein.
- 62. Micron has infringed and continues to infringe under 35 U.S.C. § 271(g) by importing into the United States or offering to sell, selling, or using within the United States a product which is made by a process patented in the United States during the term of the '532 Patent. Micron has practiced the patented process; or owns or controls, or is owned or controlled by the person who has practiced the patented process. Micron sells its products to customers,

including customers in this District, in the computer, networking, storage, consumer electronics, solid-state drive, and mobile telecommunications markets. Micron encourages its customers to import, sell, resell, offer to sell, and/or resell the '532 Accused Products.

- 63. As a result of Micron's infringement of the '532 Patent, YMTC is entitled to monetary damages in an amount adequate to compensate for Micron's infringement, but in no event less than a reasonable royalty for the use made of the invention by Micron, together with interest and costs as fixed by the Court.
- 64. The harm to YMTC from Micron's ongoing infringing activity is irreparable, continuing, and not fully compensable by money damages, and will continue unless Micron's infringing activities are enjoined.

#### **COUNT V: INFRINGEMENT OF U.S. PATENT NO. 11,145,666**

- 65. YMTC incorporates by reference and re-alleges all the foregoing paragraphs of this Complaint as if fully set forth herein.
- 66. YMTC owns by assignment all rights, title, and interest, including the right to recover damages for past, present, and future infringement, in and to U.S. Patent No. 11,145,666, entitled "Staircase Structure For Memory Device." A true and correct copy of the '666 Patent is attached as Exhibit 5.
- 67. The '666 Patent was duly and legally issued by the United States Patent and Trademark Office on October 12, 2021.
- 68. Micron directly infringes under 35 U.S.C. § 271(a) at least claim 17 of the '666 Patent, literally and/or under the doctrine of equivalents, by making, using, offering for sale, selling, and/or importing into the United States, without YMTC's authorization, at least Micron's 128L Accused Products (for example, the Micron BX500 model SSD) and 176L Accused Products (for example, the Micron SSD model 2400 PCIe) (collectively, "the '666 Accused Products"). Further identification of the '666 Accused Products will be provided in YMTC's infringement contentions disclosed pursuant to the Court's scheduling order, the local rules, and/or as discovery progresses.

- 69. The '666 Accused Products meet each and every limitation of at least claim 17 of the '666 Patent, literally and/or under the doctrine of equivalents. Exemplary claim charts providing examples of how the '666 Accused Products practice each limitation of claim 17 of the '666 Patent are attached as Exhibits 47-48 hereto, and incorporated by reference herein.
- 70. As a result of Micron's infringement of the '666 Patent, YMTC is entitled to monetary damages in an amount adequate to compensate for Micron's infringement, but in no event less than a reasonable royalty for the use made of the invention by Micron, together with interest and costs as fixed by the Court.
- 71. The harm to YMTC from Micron's ongoing infringing activity is irreparable, continuing, and not fully compensable by money damages, and will continue unless Micron's infringing activities are enjoined.

#### COUNT VI: INFRINGEMENT OF U.S. PATENT NO. 11,450,604

- 72. YMTC incorporates by reference and re-alleges all the foregoing paragraphs of this Complaint as if fully set forth herein.
- 73. YMTC owns by assignment all rights, title, and interest, including the right to recover damages for past, present, and future infringement, in and to U.S. Patent No. 11,450,604, entitled "Staircase Structure In Three-Dimensional Memory Device And Method For Forming The Same." A true and correct copy of the '604 Patent is attached as Exhibit 6.
- 74. The '604 Patent was duly and legally issued by the United States Patent and Trademark Office on September 20, 2022.
- 75. Micron directly infringes under 35 U.S.C. § 271(a) at least claim 1 of the '604 Patent, literally and/or under the doctrine of equivalents, by making, using, offering for sale, selling, and/or importing into the United States, without YMTC's authorization, at least Micron's 232L Accused Products (for example, the Micron SSD model 2250) ("the '604 Accused Products"). Further identification of the '604 Accused Products will be provided in YMTC's infringement contentions disclosed pursuant to the Court's scheduling order, the local rules, and/or as discovery progresses.

- 76. The '604 Accused Products embody and/or are made using each and every limitation of at least claim 1 of the '604 Patent, literally and/or under the doctrine of equivalents. An exemplary claim chart providing examples of how the '604 Accused Products practice each limitation of claim 1 of the '604 Patent is attached as Exhibit 49 hereto, and incorporated by reference herein.
- 77. Micron has infringed and continues to infringe under 35 U.S.C. § 271(g) by importing into the United States or offering to sell, selling, or using within the United States a product which is made by a process patented in the United States during the term of the '604 Patent. Micron has practiced the patented process; or owns or controls, or is owned or controlled by the person who has practiced the patented process. Micron sells its products to customers, including customers in this District, in the computer, networking, storage, consumer electronics, solid-state drive, and mobile telecommunications markets. Micron encourages its customers to import, sell, resell, offer to sell, and/or resell the '604 Accused Products.
- 78. As a result of Micron's infringement of the '604 Patent, YMTC is entitled to monetary damages in an amount adequate to compensate for Micron's infringement, but in no event less than a reasonable royalty for the use made of the invention by Micron, together with interest and costs as fixed by the Court.
- 79. The harm to YMTC from Micron's ongoing infringing activity is irreparable, continuing, and not fully compensable by money damages, and will continue unless Micron's infringing activities are enjoined.

### COUNT VII: INFRINGEMENT OF U.S. PATENT NO. 10,672,711

- 80. YMTC incorporates by reference and re-alleges all the foregoing paragraphs of this Complaint as if fully set forth herein.
- 81. YMTC owns by assignment all rights, title, and interest, including the right to recover damages for past, present, and future infringement, in and to U.S. Patent No. 10,672,711, entitled "Word Line Contact Structure For Three-Dimensional Memory Devices And Fabrication Methods Thereof." A true and correct copy of the '711 Patent is attached as Exhibit 7.

82.	The '711	Patent	was	duly	and	legally	issued	by	the	United	States	Patent	and
Trademark Of	fice on Jun	e 2. 202	20.										

- 83. Micron directly, infringes under 35 U.S.C. § 271(a) at least claim 1 of the '711 Patent, literally and/or under the doctrine of equivalents, by making, using, offering for sale, selling, and/or importing into the United States, without YMTC's authorization, at least Micron's 232L Accused Products (for example, Micron SSD model 2550) (collectively, "the '711 Accused Products"). Further identification of the '711 Accused Products will be provided in YMTC's infringement contentions disclosed pursuant to the Court's scheduling order, the local rules, and/or as discovery progresses.
- 84. The '711 Accused Products are used to perform and/or practice each and every limitation of at least claim 1 of the '711 Patent, literally and/or under the doctrine of equivalents. An exemplary claim chart providing examples of how the '711 Accused Products practice each limitation of claim 1 of the '711 Patent is attached as Exhibit 50 hereto, and incorporated by reference herein.
- 85. As a result of Micron's infringement of the '711 Patent, YMTC is entitled to monetary damages in an amount adequate to compensate for Micron's infringement, but in no event less than a reasonable royalty for the use made of the invention by Micron, together with interest and costs as fixed by the Court.
- 86. The harm to YMTC from Micron's ongoing infringing activity is irreparable, continuing, and not fully compensable by money damages, and will continue unless Micron's infringing activities are enjoined.

### **COUNT VIII: INFRINGEMENT OF U.S. PATENT NO. 11,101,276**

- 87. YMTC incorporates by reference and re-alleges all the foregoing paragraphs of this Complaint as if fully set forth herein.
- 88. YMTC owns by assignment all rights, title, and interest, including the right to recover damages for past, present, and future infringement, in and to U.S. Patent No. 11,101,276, entitled "Word Line Contact Structure For Three-Dimensional Memory Devices And

- 91. The '276 Accused Products meet each and every limitation of at least claim 1 of the '276 Patent, literally and/or under the doctrine of equivalents. An exemplary claim chart providing examples of how the '276 Accused Products practice each limitation of claim 1 of the '276 Patent is attached as Exhibit 51 hereto, and incorporated by reference herein.
- 92. Micron has infringed and continues to infringe under 35 U.S.C. § 271(g) by importing into the United States or offering to sell, selling, or using within the United States a product which is made by a process patented in the United States during the term of the '276 Patent. Micron has practiced the patented process; or owns or controls, or is owned or controlled by the person who has practiced the patented process. Micron sells its products to customers, including customers in this District, in the computer, networking, storage, consumer electronics, solid-state drive, and mobile telecommunications markets. Micron encourages its customers to import, sell, resell, offer to sell, and/or resell the '276 Accused Products.
- 93. As a result of Micron's infringement of the '276 Patent, YMTC is entitled to monetary damages in an amount adequate to compensate for Micron's infringement, but in no event less than a reasonable royalty for the use made of the invention by Micron, together with interest and costs as fixed by the Court.

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rules, and/or as discovery progresses.

94. The harm to YMTC from Micron's ongoing infringing activity is irreparable, continuing, and not fully compensable by money damages, and will continue unless Micron's infringing activities are enjoined.

#### **COUNT IX: INFRINGEMENT OF U.S. PATENT NO. 11,568,941**

- 95. YMTC incorporates by reference and re-alleges all the foregoing paragraphs of this Complaint as if fully set forth herein.
- 96. YMTC owns by assignment all rights, title, and interest, including the right to recover damages for past, present, and future infringement, in and to U.S. Patent No. 11,568,941, entitled "Memory Including a Plurality of Portions and Used For Reducing Program Disturbance And Program Method Thereof." A true and correct copy of the '941 Patent is attached as Exhibit 9.
- 97. The '941 Patent was duly and legally issued by the United States Patent and Trademark Office on January 31, 2023.
- 98. Micron directly infringes under 35 U.S.C. § 271(a) at least claim 1 of the '941 Patent, literally and/or under the doctrine of equivalents, by making, using, offering for sale, selling, and/or importing into the United States, without YMTC's authorization, at least Micron's 176L Accused Products (for example, Micron SSD model 2400 PCIe Gen 4) (collectively, "the '941 Accused Products"). Further identification of the '941 Accused Products will be provided in YMTC's infringement contentions disclosed pursuant to the Court's scheduling order, the local rules, and/or as discovery progresses.
- 99. The '941 Accused Products meet each and every limitation of at least claim 1 of the '941 Patent, directly and/or under the doctrine of equivalents. An exemplary claim chart providing examples of how the '941 Accused Products practice each limitation of claim 1 of the '941 Patent is attached as Exhibit 52 hereto, and incorporated by reference herein.
- 100. Micron has infringed and continues to infringe under 35 U.S.C. § 271(g) by importing into the United States or offering to sell, selling, or using within the United States a product which is made by a process patented in the United States during the term of the '941 Patent. Micron has practiced the patented process; or owns or controls, or is owned or controlled

by the person who has practiced the patented process. Micron sells its products to customers, including customers in this District, in the computer, networking, storage, consumer electronics, solid-state drive, and mobile telecommunications markets. Micron encourages its customers to import, sell, resell, offer to sell, and/or resell the '941 Accused Products.

- 101. As a result of Micron's infringement of the '941 Patent, YMTC is entitled to monetary damages in an amount adequate to compensate for Micron's infringement, but in no event less than a reasonable royalty for the use made of the invention by Micron, together with interest and costs as fixed by the Court.
- 102. The harm to YMTC from Micron's ongoing infringing activity is irreparable, continuing, and not fully compensable by money damages, and will continue unless Micron's infringing activities are enjoined.

#### COUNT X: INFRINGEMENT OF U.S. PATENT NO. 10,879,164

- 103. YMTC incorporates by reference and re-alleges all the foregoing paragraphs of this Complaint as if fully set forth herein.
- 104. YMTC owns by assignment all rights, title, and interest, including the right to recover damages for past, present, and future infringement, in and to U.S. Patent No. 10,879,164, entitled "Integrated Circuit Electrostatic Discharge Bus Structure And Related Methods." A true and correct copy of the '164 Patent is attached as Exhibit 10.
- 105. The '164 Patent was duly and legally issued by the United States Patent and Trademark Office on December 29, 2020.
- 106. Micron directly infringes under 35 U.S.C. § 271(a) at least claim 8 of the '164 Patent, literally and/or under the doctrine of equivalents, by making, using, offering for sale, selling, and/or importing into the United States, without YMTC'S authorization, at least Micron's DRAM Accused Products (for example, the DDR5 DRAM) ("the '164 Accused Products"). Further identification of the '164 Accused Products will be provided in YMTC's infringement contentions disclosed pursuant to the Court's scheduling order, the local rules, and/or as discovery progresses.

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107. The '164 Accused Products embody and/or are made using each and every limitation of at least claim 8 of the '164 Patent, literally and/or under the doctrine of equivalents. An exemplary claim chart providing examples of how the '164 Accused Products practice each limitation of claim 8 of the '164 Patent is attached as Exhibit 53 hereto, and incorporated by reference herein.

- 108. Micron has infringed and continues to infringe under 35 U.S.C. § 271(g) by importing into the United States or offering to sell, selling, or using within the United States a product which is made by a process patented in the United States during the term of the '164 Patent. Micron has practiced the patented process; or owns or controls, or is owned or controlled by the person who has practiced the patented process. Micron sells its products to customers, including customers in this District, in the computer, networking, storage, consumer electronics, solid-state drive, and mobile telecommunications markets. Micron encourages its customers to import, sell, resell, offer to sell, and/or resell the '164 Accused Products.
- 109. As a result of Micron's infringement of the '164 Patent, YMTC is entitled to monetary damages in an amount adequate to compensate for Micron's infringement, but in no event less than a reasonable royalty for the use made of the invention by Micron, together with interest and costs as fixed by the Court.
- 110. The harm to YMTC from Micron's ongoing infringing activity is irreparable, continuing, and not fully compensable by money damages, and will continue unless Micron's infringing activities are enjoined.

### COUNT XI: INFRINGEMENT OF U.S. PATENT NO. 12,010,838

- YMTC incorporates by reference and re-alleges all the foregoing paragraphs of this Complaint as if fully set forth herein.
- 112. YMTC owns by assignment all rights, title, and interest, including the right to recover damages for past, present, and future infringement, in and to U.S. Patent No. 12,010,838, entitled "Staircase Structure For Memory Device." A true and correct copy of the '838 Patent is attached as Exhibit 11.

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divisions, affiliates, successors, assigns, transferees, officers, directors, attorneys, agents, servants,

An order pursuant to 35 U.S.C. § 283 enjoining Micron and its subsidiaries, parents,

1	employees, parties in privity with, and all other persons in active concert or participation with any
2	of the foregoing, from continued acts of infringement of any claim of the Asserted Patents;
3	3. A judgment and order requiring Micron to pay YMTC its damages, costs, expenses,
4	and pre-judgment and post-judgment interest for Micron's infringement;
5	4. If a permanent injunction is not granted, then a determination of the conditions for
6	Micron's future infringement, such as an ongoing or post-verdict royalty;
7	5. A judgment and order finding that this is an exceptional case within the meaning of
8	35 U.S.C. § 285 and awarding to YMTC its reasonable attorneys' fees against Micron; and
9	6. All other relief that the Court deems just and proper.
10	JURY TRIAL DEMAND
11	YMTC respectfully demands a jury trial pursuant to Rule 38(b) of the Federal Rules of
12	Civil Procedure on all claims and issues so triable.
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1	Dated: July 12, 2024	Respectfully submitted,
2		/a/Varin C. Whooley
3 4		/s/ Kevin C. Wheeler LATHAM & WATKINS LLP Kevin C. Wheeler (SBN 261177) kevin.wheeler@lw.com
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18 19		Attorneys for Plaintiff  YANGTZE MEMORY TECHNOLOGIES
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