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YANGTZE MEMORY TECHNOLOGIES COMPANY, LTD.,

**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION**

YANGTZE MEMORY TECHNOLOGIES
COMPANY, LTD.,

Plaintiff,

v.

MICRON TECHNOLOGY, INC., and
MICRON CONSUMER PRODUCTS
GROUP, LLC,

Defendants.

Case No. 3:23-cv-05792-RFL

**PLAINTIFF YANGTZE MEMORY
TECHNOLOGIES COMPANY'S
PROPOSED CLAIM
CONSTRUCTIONS**

DEMAND FOR JURY TRIAL

1 Pursuant to the Court’s Scheduling Order (Dkt. 85), J. Lin’s Standing Order Governing
2 Patent Cases, and Local Patent Rule 4-2, Plaintiff Yangtze Memory Technologies Company, Ltd.
3 (“YMTC”) hereby identifies the following proposed claim constructions to Defendants Micron
4 Technology, Inc., and Micron Consumer Products Group, LLC (collectively, “Micron”).

5 YMTC proposes claim constructions from the following patents: United States Patent Nos.
6 10,950,623 (the “’623 Patent”), 11,501,822 (the “’822 Patent”), 10,658,378 (the “’378 Patent”),
7 10,937,806 (the “’806 Patent”), 10,861,872 (the “’872 Patent”), 11,468,957 (the “’957 Patent”),
8 11,600,342 (the “’342 Patent”), and 10,868,031 (the “’031 Patent”) (collectively, the
9 “Asserted Patents”), which YMTC has asserted against Micron. YMTC’s proposed constructions are
10 based on information that is currently available to YMTC based on investigation, Micron’s
11 productions and discovery responses to date (which are deficient), and the parties’ exchange of
12 proposed terms for construction.
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14 YMTC reserves the right, consistent with the Federal Rules of Civil Procedure and the
15 Local Rules of this Court, as well as any other applicable rule, to revise its proposed constructions,
16 as well as its list of proposed claim terms, in view of Micron’s proposed constructions or position
17 Micron takes in this proceeding or elsewhere, including the right to adopt any claim terms or
18 constructions proposed by Micron, and the right to add additional terms if, in view of YMTC’s
19 infringement allegations or Micron’s invalidity contentions, the parties have further disputes
20 regarding claim scope. *See O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351,
21 1360 (Fed. Cir. 2008). YMTC also reserves the right to modify this disclosure should other terms
22 become relevant. YMTC also reserves the right to modify this disclosure should additional
23 information become available through investigation or discovery. Further, YMTC reserves the right
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1 to modify this disclosure once it has reviewed Micron’s proposed claim constructions, and in light
2 of arguments made, or positions taken by, Micron as this case proceeds.¹
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26 _____
27 ¹ The ordering of the patents and terms does not reflect any priority or rank of the identified terms
28 for construction.

Term #	Party	Term	Patent (claims)	YMTC's Preliminary Construction	Intrinsic and Extrinsic Evidence ¹
1.	YMTC	“group of the plurality of word lines”	'822 (1-2, 11-12)	“at least one of the plurality of word lines”	'822, 4:66-5:34, 5:35-5:64, 6:30-60, 7:19-36, Figs. 3-5, Claims 1-3, 11-13, 18. Plaintiff may rely on testimony from Dr. Paul Min to explain what a person of ordinary skill in the art would understand as to the P&OM of this term as it is used by the '822 patent in light of the specification, the prosecution history, and extrinsic evidence.
2.	YMTC	“word line pre-pulse signal”	'822 (1, 11)	“pulse signal to prepare word lines for a programming step”	'822, Abstract, 1:15-48, 1:52-55, 1:56-2:27, 3:43-65, 3:66-4:38, 4:39-59, 4:60-65, 5:35-64, 5:65-6:29, 6:30-60, 6:61-7:18, 7:19-36, 7:37-47, Figs. 4-5, Claims 1, 4, 7-11, 14, 16-20. Plaintiff may rely on testimony from Dr. Paul Min to explain what a person of ordinary skill in the art would understand as to the P&OM of this term as it is used by the '822 patent in light of the specification, the prosecution history, and extrinsic evidence.
3.	Micron	“in [a/the] pre-verify stage”	'957 (1, 4-5)	P&OM	'957, Abstract, 1:24-40, 1:50-2:8, 2:11-29, 2:29-39, 2:41-55, 2:56-63, 2:64-3:23, 3:26-43, 3:44-53, 3:56-4:3, 4:4-11, 4:12-36, 4:47-67, 5:1-13, 5:14-25, 6:37-49, 9:57-10:7, 10:57-11:15, 11:16-34, 11:58-12:9, 12:10-27, 12:28-38, 12:39-62, 12:63-13:4, 13:5-25, 13:26-42, 13:43-58, 13:59-14:12, 14:13-18,

¹ The '378 and '806 patents share the same specification. Where the identified term applies to both the '378 and '806 patents, YMTC's identification of support from the '378 specification and figures also includes corresponding support from the '806 patent.

Term #	Party	Term	Patent (claims)	YMTC's Preliminary Construction	Intrinsic and Extrinsic Evidence ¹
					14:19-30, 14:31-42, 14:43-62, 14:63-15:17, 15:18-30, 15:31-44, 15:45-47, 15:48-50, 15:51-55, 15:66-16:16, Figs. 4-10, Claims 1, 4-6. Plaintiff may rely on testimony from Dr. Paul Min to explain what a person of ordinary skill in the art would understand as to the P&OM of this term as it is used by the '957 patent in light of the specification, the prosecution history, and extrinsic evidence.
4.	Micron	"in [a/the] verify stage"	'957 (1, 4-5)	P&OM	'957, Abstract, 1:24-40, 1:50-2:8, 2:11-29, 2:29-39, 2:41-55, 2:56-63, 2:64-3:23, 3:26-43, 3:44-53, 3:56-4:3, 4:4-11, 4:12-36, 4:47-67, 5:1-13, 5:14-25, 6:37-49, 9:57-10:7, 10:57-11:15, 11:16-34, 11:58-12:9, 12:10-27, 12:28-38, 12:39-62, 12:63-13:4, 13:5-25, 13:26-42, 13:43-58, 13:59-14:12, 14:13-18, 14:19-30, 14:31-42, 14:43-62, 14:63-15:17, 15:18-30, 15:31-44, 15:45-47, 15:48-50, 15:51-55, 15:66-16:16, Figs. 4-10, Claims 1, 4-6. Plaintiff may rely on testimony from Dr. Paul Min to explain what a person of ordinary skill in the art would understand as to the P&OM of this term as it is used by the '957 patent in light of the specification, the prosecution history, and extrinsic evidence.
5.	Micron	"dielectric	'623 (1-4, 8-9)	P&OM	'623, Abstract, 1:61-2:45, 3:30-65, 4:35-37,

Term #	Party	Term	Patent (claims)	YMTC's Preliminary Construction	Intrinsic and Extrinsic Evidence ¹
		trenches”			7:17-58, 7:67-8:3, 8:65-9:57, 11:37-12:12, 12:62-13:38, 14:62-66, 15:58-16:30, 17:31-18:9, 19:1-5, 20:9-27, 21:10-33, 12:45-54, , 22:6-18, 22:40-43, 23:12-15, 23:26-33, Figs. 1A-B, 2, 3A, 5A, 5C, 6, 7A, 8A, 8C, 9A-B, 10A-B, 11A-C, 12, Claims 1-4, 8-11. Plaintiff may rely on testimony from Dr. Kelin Kuhn and/or Dr. Woodward Yang to explain what a person of ordinary skill in the art would understand as to the P&OM of this term as it is used by the '623 patent in light of the specification, the prosecution history, and extrinsic evidence.
6.	Micron	“local contact[s]”	'378 (15, 18) '806 (8, 10)	P&OM	'378, 4:20-29, 11:16-30, 11:31-47, 11:48-59, 11:60-64, 12:4-19, 17:7-22, 17:23-43, 17:44-57, 17:58-18:7, 18:8-26, 18:27-41, 18:42-58, 18:59-19:3, 19:4-24, 19:25-34, 19:55-67, 20:1-8; Figs. 2, 7-13; Claims 9, 15, 18. '806, Claims 8, 10. '378FH, 12/23/2019 Reply to Office Action, p. 8. '378FH, 01/13/2020 Notice of Allowance, pp. 2-3. Plaintiff may rely on testimony from Dr. Kelin Kuhn and/or Dr. Woodward Yang to explain what a person of ordinary skill in the art would understand as to the P&OM of this term as it is used by the '378 and '806

Term #	Party	Term	Patent (claims)	YMTC's Preliminary Construction	Intrinsic and Extrinsic Evidence ¹
					patents in light of the specification, the prosecution history, and extrinsic evidence.
7.	YMTC	“dielectric structure”	'378 (1-2, 6-7, 15-17) '806 (8-9)	P&OM	'378, Abstract, 1:38-55, 2:22-32, 2:33-51, 2:52-58, 3:7-13, 5:46-59, 6:11-29, 6:30-50, 6:51-7:4, 10:18-43, 10:44-56, 10:57-11:2, 11:3-15, 11:31-47, 14:46-15:32, 15:42-56, 16:31-42, 18:27-41, 20:24-37, 20:38-48, 20:56-57, 21:1-2, 21:3-4, 21:5-6, 21:7-25, 21:56-22:3, 22:23-24, 22:25-26, 22:27-38, 22:46-47, 22:48-49; Figs. 1A-C, 2-13; Claims 1-9, 15:17. '806, Claims 1-9, 13. '378FH, 01/13/2020 Notice of Allowance, pp. 2-3. '806FH, 12/16/2020 Notice of Allowance, pp. 2-3. Plaintiff may rely on testimony from Dr. Keln Kuhn and/or Dr. Woodward Yang to explain what a person of ordinary skill in the art would understand as to the P&OM of this term as it is used by the '378 and '806 patents in light of the specification, the prosecution history, and extrinsic evidence.
8.	YMTC	“through array contact[s]”; “[through array contact[s]] (TAC[s])”; TACs	'378 (1, 2, 7, 15-17, 20) '806 (8-9, 12)	P&OM which means a contact that goes through an array	'378, Abstract, 1:38-55, 2:52-58, 5:46-59, 5:60-6:10, 6:11-29, 6:30-50, 6:51-7:4, 10:18-43, 10:44-56, 10:57-11:2, 11:3-15, 11:16-30, 11:31-59, 15:42-56, 17:7-22, 18:8-26, 18:27-41, 18:42-58, 18:59-19:3, 19:25-34, 20:24-37, 20:38-48, 20:49-55, 20:57-58, 21:3-4,

Term #	Party	Term	Patent (claims)	YMTC's Preliminary Construction	Intrinsic and Extrinsic Evidence ¹
					21:7-25, 21:26-35, 21:56-22:3, 22:4-19, 22:25-26, 22:27-38, 22:46-47, 22:48-49; Figs. 1A-C, 2-13; Claims 1-2, 7, 9, 15-17, 20. '806, Claims 1-2, 6, 8-9, 12-13, 18-20. '378FH, 01/13/2020 Notice of Allowance, pp. 2-3. '806FH, 10/21/2020 Reply to Office Action, pp. 7-8. '806FH, 12/16/2020 Notice of Allowance, pp. 2-3. Xiao, "3D IC Devices, Technologies, and Manufacturing" (2016), Ch. 2. Plaintiff may rely on testimony from Dr. Keln Kuhn and/or Dr. Woodward Yang to explain what a person of ordinary skill in the art would understand as to the P&OM of this term as it is used by the '378 and '806 patents in light of the specification, the prosecution history, and extrinsic evidence.
9.	Micron	epitaxial layer	'378 (1, 18) '806 (10)	P&OM	'378, 9:31-48, 20:38-48, Figs. 2, 6-13; Claims 1, 18. Plaintiff may rely on testimony from Dr. Woodward Yang to explain what a person of ordinary skill in the art would understand as to the P&OM of this term as it is used by the '378 and '806 patents in light of the

Term #	Party	Term	Patent (claims)	YMTC's Preliminary Construction	Intrinsic and Extrinsic Evidence ¹
					specification, the prosecution history, and extrinsic evidence.
10.	Micron	one or more contact layers on the one or more TACs, the one or more channel structures, and the slit structures	'378 (1)	P&OM, where “on” not only means “directly on” something but also includes the meaning of “on” something with an intermediate feature or a layer therebetween	'378, 1:56-63, 2:9-21, 2:33-51, 2:52-58, 2:59-62, 2:63-3:3, 4:20-29, 4:51-5:10, 11:48-59, 19:4-24, 19:25-34, 19:35-54, 19:55-67, 20:49-55, 22:4-19; Figs. 2, 7-13; Claim 1. '806, Claim 1. Plaintiff may rely on testimony from Dr. Keln Kuhn and/or Dr. Woodward Yang to explain what a person of ordinary skill in the art would understand as to the P&OM of this term as it is used by the '378 patent in light of the specification, the prosecution history, and extrinsic evidence.
11.	Micron	local contacts disposed on the channel structures and the slit structures	'378 (15)	P&OM, where “on” not only means “directly on” something but also includes the meaning of “on” something with an intermediate feature or a layer therebetween	'378, 4:20-29, 11:16-30, 11:31-47, 11:48-59, 11:60-64, 12:4-19, 17:7-22, 17:23-43, 17:44-57, 17:58-18:7, 18:8-26, 18:27-41, 18:42-58, 18:59-19:3, 19:4-24, 19:25-34, 19:55-67, 20:1-8; Figs. 2, 7-13; Claims 9, 15, 18. '806, Claims 8, 10. '378FH, 12/23/2019 Reply to Office Action, p. 8. '378FH, 01/13/2020 Notice of Allowance, pp. 2-3. Plaintiff may rely on testimony from Dr. Keln Kuhn and/or Dr. Woodward Yang to explain what a person of ordinary skill in the art would understand as to the P&OM of this

Term #	Party	Term	Patent (claims)	YMTC's Preliminary Construction	Intrinsic and Extrinsic Evidence ¹
					term as it is used by the '378 patent in light of the specification, the prosecution history, and extrinsic evidence.
12.	Micron	local contacts disposed on the first and second channel structures and the slit structures	'806 (8)	P&OM, where “on” not only means “directly on” something but also includes the meaning of “on” something with an intermediate feature or a layer therebetween	'378, Claims 9, 15, 18. '806, 4:26-35, 11:20-34, 11:35-50, 11:51-62, 11:63-67, 12:8-23, 17:11-27, 17:28-48, 17:49-62, 17:63-18:12, 18:13-31, 18:32-46, 18:47-63, 18:66-19:8, 19:9-28, 19:29-38, 19:59-20:4, 20:5-12; Figs. 2, 7-13; Claims 8, 10, 13. '378FH, 12/23/2019 Reply to Office Action, p. 8. '378FH, 01/13/2020 Notice of Allowance, pp. 2-3. Plaintiff may rely on testimony from Dr. Keln Kuhn and/or Dr. Woodward Yang to explain what a person of ordinary skill in the art would understand as to the P&OM of this term as it is used by the '806 patent in light of the specification, the prosecution history, and extrinsic evidence.
13.	YMTC & Micron	“dummy source structure[s]”	'872 (1-6, 9, 11-13)	P&OM	'872, Abstract, 1:39-54, 5:31-58, 6:31-59, 7:9-8:53, 11:34-60, 16:14-18:23, Figs. 1A-D, 2A-L, 3-5, Claims 1-20. '872FH, 05/21/2020 Office Action Summary, pp. 2-4. '872FH, 05/22/2020 Response To Restriction Requirement, pp. 1-2.

Term #	Party	Term	Patent (claims)	YMTC's Preliminary Construction	Intrinsic and Extrinsic Evidence ¹
					'872FH, 06/03/2020 Office Action Summary, pp. 3, 9-10. '872FH, 08/18/2020 Amendments to the Claims, pp. 2-3, 5-8 '872FH, 10/17/2020 Notice of Allowability, pp. 2-4. Plaintiff may rely on testimony from Dr. Kelin Kuhn and/or Dr. Woodward Yang to explain what a person of ordinary skill in the art would understand as to the P&OM of this term as it is used by the '872 patent in light of the specification, the prosecution history, and extrinsic evidence.
14.	YMTC & Micron	"dummy channel structure[s]"	'872 (7-10)	P&OM	'872, 1:44-2:28, 4:30-5:16, 5:31-48, 5:59-6:4, 6:31-50, 6:60-7:15, 7:29-8:53, 10:13-27, 10:48-56, 11:10-33, 13:44-64, 14:58-15:5, 16:14-49, 17:27-40, 17:52-18:13, 18:24-67, Figs. 1A-D, 2A-L, 3-5, Claims 7-10, 14-20. '872FH, 05/21/2020 Office Action Summary, pp. 2-4. '872FH, 05/22/2020 Response To Restriction Requirement, pp. 1-2. '872FH, 06/03/2020 Office Action Summary, pp. 3, 9-10. '872FH, 08/18/2020 Amendments to the Claims, pp. 2-3, 5-8 '872FH, 10/17/2020 Notice of Allowability, pp. 2-4.

Term #	Party	Term	Patent (claims)	YMTC's Preliminary Construction	Intrinsic and Extrinsic Evidence ¹
					Plaintiff may rely on testimony from Dr. Keln Kuhn and/or Dr. Woodward Yang to explain what a person of ordinary skill in the art would understand as to the P&OM of this term as it is used by the '872 patent in light of the specification, the prosecution history, and extrinsic evidence.
15.	Micron	"conductive contact"	'872 (1, 13)	P&OM	'872, 5:37-47, Claims 1, 13-14. '872FH, 08/18/2020 Amendments to the Claims, pp. 2-3, 5-8 '872FH, 10/17/2020 Notice of Allowability, pp. 2-4. Shur, "Introduction to Electronic Devices" (1996); Streetman, "Solid State Electronic Devices" (1995); US Patent No. 8,766,336. Plaintiff may rely on testimony from Dr. Keln Kuhn and/or Dr. Woodward Yang to explain what a person of ordinary skill in the art would understand as to the P&OM of this term as it is used by the '872 patent in light of the specification, the prosecution history, and extrinsic evidence.
16.	YMTC	"filling structure surrounding the multiple staircase"	'031 (1)	P&OM which means filling structure is all the way around the multiple staircase	'031, Abstract, 1:5-64, 2:12-17, 2:40-45, 3:31-35, 4:13-17, 8:48-53, 9:1-28, 10:25-27, 13:27-64, 15:49-57, 18:25-26, 19:45-49, 22:27-32, 22:61-23:9, Figs. 3-6, 11-12.

Term #	Party	Term	Patent (claims)	YMTC's Preliminary Construction	Intrinsic and Extrinsic Evidence ¹
		structure”		structure	Plaintiff may rely on testimony from Dr. Kelin Kuhn and/or Dr. Woodward Yang to explain what a person of ordinary skill in the art would understand as to the P&OM of this term as it is used by the '872 patent in light of the specification, the prosecution history, and extrinsic evidence. New Oxford American Dictionary, 3rd Ed., 2010; The American Heritage® College Dictionary, 3rd Ed., 2000; Webster's II New College Dictionary, 3rd Ed., 2005; Merriam-Webster's Dictionary and Thesaurus, 5th Printing, 2014

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3 Date: August 5, 2024

Respectfully submitted,

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