UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY LTD.,
Petitioner,

v.

ADVANCED INTEGRATED CIRCUIT PROCESS LLC,
Patent Owner.

IPR2025-00832
U.S. Patent 8,796,779

PETITIONER'S UPDATED EXHIBIT LIST

Mail Stop PATENT BOARD
Patent Trial and Appeal Board
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Pursuant to 37 C.F.R. § 42.63(e), Petitioner Taiwan Semiconductor Manufacturing Company Ltd. hereby submits a current listing of exhibits. Exhibits TSMC-1165 and TSMC-1166 are being filed today.

Exhibit	Description
1001	U.S. Patent 8,796,779 to Ito et al. ("the '779 patent")
1002	File History of U.S. Patent 8,796,779 ("'779 File History")
1003	Declaration of Jakub Kedzierski
1004	CV of Jakub Kedzierski
1005	U.S. Patent 6,881,657 to Torii, et al. ("Torii")
1006	U.S. Patent Publication 2010/0258878 to Mise, et al. ("Mise")
1007	U.S. Patent 8,114,739 to Chowdhury, et al. ("Chowdhury")
1008	U.S. Patent 6,693,333 to Yu ("Yu")
1009	U.S. Patent 6,787,421 to Gilmer, et al. ("Gilmer")
1010	U.S. Patent 7,382,023 to Chen ("Chen")
1011	Van Zant, "Microchip Fabrication" (Fifth Edition, 2004) ("Van Zant")
1012	Weste, "CMOS VLSI Design: A Circuits and Systems Perspective" (Third Edition, 2005) ("Weste")
1013	Houssa, M., "High-k Dielectrics" to Houssa (IOP Publishing Ltd. 2004) ("Houssa")
1014	Wolf, "Silicon Processing for the VLSI Era, Volume 4 – Deep-Submicron Process Technology" (2002) ("Wolf-4")
1015	Plummer, J., et al., "Silicon VLSI Technology: Fundamentals, Practice and Modeling" (Prentice Hall 2000) ("Plummer")

Exhibit	Description
1016	"International Technology Roadmap for Semiconductors: Process Integration, Devices, and Structures" (2007 Edition) ("ITRS")
1017	Campbell, "The Science and Engineering of Microelectronic Fabrication" (Second Edition, 2001) ("Campbell")
1018	Chau, "Advanced Metal Gate/High-K Dielectric Stacks" ("Chau")
1019	Guha, et al. "Examination of flatband and threshold voltage tuning of HfO2/TiN field effect transistors by dielectric cap layers", Applied Physics Letters (March 1, 2007) ("Guha")
1020	H.-J. Li and M. Gardner, "Dual high-k gate dielectric with poly gate electrode: HfSiON on nMOS and Al2O3 capping layer on pMOS," IEEE Electron Device Lett., vol. 26, no. 7, pp. 441-443, 2005. ("Li/Gardner")
1021	U.S. Patent 7,807,990 to Koyama ("Koyama")
1022	U.S. Publication 2006/0244035 to Bojarczuk, JR, et al. ("Bojarczuk")
1023	"Semiconductor Devices: Physics and Technology" by Sze (Second Edition, 2002) ("Sze")
1024	Lee, S. J., et al. "High Quality Ultra Thin CVD HfO_2 Gate Stack with Poly-Si Gate Electrode," Digest of International Electron Devices Meeting, pp. 31-34, Dec. 10-13, 2000 ("Lee")
1025	Lee, B.H., et al., "Ultrathin Hafnium Oxide with Low Leakage and Excellent Reliability for Alternative Gate Dielectric Application," Digest of International Electron Devices Meeting, pp. 133-36, Dec. 5-8, 1999 ("Lee-1999")
1026	U.S. Patent 7,709,331 to Karve, et al. ("Karve")
1027	U.S. Patent 8,017,469 to Luo, et al. ("Luo")
1028	Reserved

Exhibit	Description
1029	Wolf, "Silicon Processing for the VLSI Era, Volume 3 – The Submicron MOSFET" (1995) ("Wolf-3")
1030	Translated Excerpts from File History of JP2010-205599
1031	U.S. Patent 8,384,160 to Onishi, et al. ("Onishi")
1032	"An Adjustable Work Function Technology Using Mo Gate for CMOS Devices", Lin, et al., IEEE Electron Device Letters, Vol. 23, No. 1, January 2002
1033	"Dual Work Function Metal Gate CMOS Transistors by Ni-Ti Interdiffusion", Polishchuk, et al., IEEE Electron Device Letters, Vol. 23, No. 4, April 2002
1034	TSMC's stipulation regarding U.S. Patent Nos. 8,198,686; 8,907,425; 7,579,227; 7,923,764; 8,253,180; 8,587,076; and 8,796,779
1035-1053	Reserved
1054	Reserved
1055	United States District Courts – National Judicial Caseload Profile, 12-Month Period Ending Mar. 31, 2025, U.S. Courts (2025), available at https://www.uscourts.gov/sites/default/files/document/fcms_na_distprofile0331.2025.pdf
1056	Reserved
1057	Summary of cases by year for Judge Gilstrap, Docket Navigator, available at https://search/docketnavigator.com/patent/judge/14373/0?print=true&e=false
1058	Summary of Post-Trial Briefing Timelines for Judge Gilstrap Trials Since 2023, based on LegalMetric data

Exhibit	Description
1059	USPTO U.S. Patent Statistics Chart (1963-2020)
1060	Letter from Sen. Thom Tillis to Acting Director Andrew Hirshfeld (Nov. 2, 2021)
1061	Letter from Sens. Thom Tillis and Patrick Leahy to Hon. Chief Justice John Roberts (Nov. 2, 2021)
1062	2021 Year-End Report on the Federal Judiciary, Supreme Court of the United States (Dec. 31, 2025) (last visited July 15, 2025), available at https://www.supremecourt.gov/publicinfo/yearend/2021year-endreport.pdf
1063	Resonant Sys., Inc. v. Samsung Elecs. Co. Ltd., No. 2:22-cv-00423-JRG, Dkt. 41, Second Amended Docket Control Order (E.D. Tex. Apr. 24, 2023)
1064	Resonant Sys., Inc. v. Samsung Elecs. Co. Ltd., No. 2:22-cv-00423-JRG, Dkt. 58, Third Amended Docket Control Order (E.D. Tex. Nov. 21, 2023)
1065	Resonant Sys., Inc. v. Samsung Elecs. Co. Ltd., No. 2:22-cv-00423-JRG, Docket (E.D. Tex.)
1066	Commc'n Techs. Inc., v. Samsung Elecs. Co., Ltd., No. 2:21-cv-00444-JRG, Dkt. 34, Docket Control Order (E.D. Tex. Apr. 6, 2022)
1067	Commc'n Techs. Inc., v. Samsung Elecs. Co., Ltd., No. 2:21-cv-00444-JRG, Dkt. 83, Second Amended Docket Control Order (E.D. Tex. Oct. 31, 2022)
1068	Commc'n Techs. Inc., v. Samsung Elecs. Co., Ltd., No. 2:21-cv-00444-JRG, Dkt. 133, Third Amended Docket Control Order (E.D. Tex. Feb. 2, 2023)
1069	Commc'n Techs. Inc., v. Samsung Elecs. Co., Ltd., No. 2:21-cv-00444-JRG, Docket (E.D. Tex.)

Exhibit	Description
1070	Pictiva Displays Int'l Ltd. v. Samsung Elecs. Co. Ltd., No. 2:23-cv-00495-JRG, Dkt. 40, Docket Control Order (E.D. Tex. Apr. 17, 2024)
1071	Pictiva Displays Int'l Ltd. v. Samsung Elecs. Co. Ltd., No. 2:23-cv-00495-JRG, Dkt. 224, First Amended Docket Control Order (E.D. Tex. Apr. 21, 2025)
1072	Pictiva Displays Int'l Ltd. v. Samsung Elecs. Co. Ltd., No. 2:23-cv-00495-JRG, Docket (E.D. Tex.)
1073	Cyandia, Inc. v. SAP Am., Inc., No. 2:24-cv-00096-JRG, Dkt. 32, Docket Control Order (E.D. Tex. June 17, 2024)
1074	Cyandia, Inc. v. SAP Am., Inc., No. 2:24-cv-00096-JRG, Dkt. 102, First Amended Docket Control Order (E.D. Tex. May 9, 2025)
1075	Cyandia, Inc. v. SAP Am., Inc., No. 2:24-cv-00096-JRG, Docket (E.D. Tex.)
1076	Emerging Auto. LLC v. Kia Corp., No. 2:23-cv-0437-JRG, Dkt. 40, Docket Control Order (E.D. Tex. February 6, 2024)
1077	Emerging Auto. LLC v. Kia Corp., No. 2:23-cv-0437-JRG, Dkt. 265, First Amended Docket Control Order (E.D. Tex. May 21, 2025)
1078	Emerging Auto. LLC v. Kia Corp., No. 2:23-cv-0437-JRG, Docket (E.D. Tex.)
1079	Reserved
1080	Reserved
1081	Reserved
1082	Declaration of Michael Shen
1083	Reserved

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1084	United Microelectronics Corp. and UMC Group (USA)'s stipulations regarding U.S. Patent Nos. 8,587,076; 8,253,180; 7,579,227; 8,907,425; 8,198,686; 7,923,764; and 8,796,779
1085	Reserved
1086	Institution Decisions for TSMC, based on Lex Machina data
1087	Business Organizations Inquiry for Advanced Integrated Circuit Process LLC, Filing No. 805585855, Texas Secretary of State
1088	Certificate of Formation Limited Liability Company for Advanced Integrated Circuit Process LLC, Filing No. 805585855, Texas Secretary of State (June 12, 2024)
1089	Reserved
1090	Intellectual Ventures I LLC v. T-Mobile USA, Inc., No. 2:17-cv-557-JRG, Dkt. 297, Pre-Trial Hearing Transcript (E.D. Tex. Jan. 3, 2019)
1091	Advanced Integrated Circuit Process LLC v. United Microelectronics Corp., No. 2:24-cv-0730-JRG (Lead Case), AICP's P.R. 3-1 Disclosure of Asserted Claims and Infringement Contentions and P.R. 3-2 Document Production Against TSMC (E.D. Tex. Jan. 7, 2025)
1092	Dockets in Advanced Integrated Circuit Process LLC v. United Microelectronics Corp., No. 2:24-cv-0730-JRG (Lead Case), Docket (E.D. Tex.)
1093	Microchip USA, How Military Tensions Are Driving the Next Semiconductor Chip Race (July 16, 2025) (last visited Aug. 12, 2025), available at https://www.microchipusa.com/industry-news/how-military-tensions-are-driving-the-next-semiconductor-chip-race?srsltid=AfmBOopQdXXTBoOGl_bluj9BHhwBFREsja-0SrRhCUKPHwTlW98FCBKI

Exhibit	Description
1094	United Microelectronics Corp. v. Advanced Integrated Circuit Process LLC, IPR2025-01090, Paper 7, Motion for Joinder Under 35 U.S.C. § 315(c) and 37 C.F.R. § 42.122(b) to Related Inter Partes Review IPR2025-00683 (P.T.A.B. June 30, 2025)
1095	United Microelectronics Corp. v. Advanced Integrated Circuit Process LLC, IPR2025-01093, Paper 7, Motion for Joinder Under 35 U.S.C. § 315(c) and 37 C.F.R. § 42.122(b) to Related Inter Partes Review IPR2025-00831 (P.T.A.B. June 30, 2025)
1096	United Microelectronics Corp. v. Advanced Integrated Circuit Process LLC, IPR2025-01092, Paper 7, Motion for Joinder Under 35 U.S.C. § 315(c) and 37 C.F.R. § 42.122(b) to Related Inter Partes Review IPR2025-00830 (P.T.A.B. June 30, 2025)
1097	United Microelectronics Corp. v. Advanced Integrated Circuit Process LLC, IPR2025-01091, Paper 7, Motion for Joinder Under 35 U.S.C. § 315(c) and 37 C.F.R. § 42.122(b) to Related Inter Partes Review IPR2025-00682 (P.T.A.B. June 30, 2025)
1098	United Microelectronics Corp. v. Advanced Integrated Circuit Process LLC, IPR2025-01079, Paper 7, Motion for Joinder Under 35 U.S.C. § 315(c) and 37 C.F.R. § 42.122(b) to Related Inter Partes Review IPR2025-00829 (P.T.A.B. June 30, 2025)
1099	United Microelectronics Corp. v. Advanced Integrated Circuit Process LLC, IPR2025-01076, Paper 7, Motion for Joinder Under 35 U.S.C. § 315(c) and 37 C.F.R. § 42.122(b) to Related Inter Partes Review IPR2025-00828 (P.T.A.B. June 30, 2025)
1100	United Microelectronics Corp. v. Advanced Integrated Circuit Process LLC, IPR2025-01053, Paper 7, Motion for Consolidation Under 35 U.S.C. § 315(d) and 37 C.F.R. § 42.122(a) with Related Inter Partes Review IPR2025-00832 (P.T.A.B. June 30, 2025)
1101	Listing of district court cases and inter partes review proceedings in which U.S. Patent No. 8,907,425 has been asserted or challenged, Docket Navigator

Exhibit	Description
1102	Continuity data for U.S. Patent No. 8,907,425, Patent Center, United States Patent and Trademark Office
1103	Reserved
1104	Reserved
1105	Delaware Secretary of State Entity Search Status for AMTL LLC
1106	Final Written Decision Outcomes for TSMC, available at https://law.lexmachina.com/party/ptab?filing_date-from=2012-09-16&filing_date-to=&final_decision_date-from=2013-07-17&final_decision_date-to=&new_trial_flowexclude=PreI_AS&party_roleinclude=Petitioner&filters=true&id=26931&id=20676624&id=64431208&tab=ptab_trial_flow&view=analytics&cols=trial%2Cfiled%2Cinstitution_decision_date%2Cpatent%2Cpetitioners%2Cpatent_owners%2Ctrial_resolution%2Cfinal_decision_date
1107	U.S. Publication 2012/0056270 (Application No. 13/294,727)
1108	U.S. Application No. 13/294,727 File History
1109	Reserved
1110	Reserved
1111	Trump on China Putting - America First (Robert C. O'Brien editor)
1112	Reserved
1113	Letter from Billie Chen to Under Secretary Andrei Iancu regarding USPTO Request for Comments on Discretion to Institute Trials Before the Patent Trial and Appeal Board, Docket No. PTO-C-2020-055
1114	Reserved

Exhibit	Description
1115	U.S., Taiwan, and Semiconductors: A Critical Supply Chain Partnership, Final Report, Project 2049 Institute (US-Taiwan Business Counsel June 21, 2023)
1116	TSMC Adds High-K Metal Gate Low Power Process to 20nm Road Map, TSMC (Aug. 24, 2009) (last visited July 16, 2025), available at https://pr.tsmc.com/english/news/1572
1117	TSMC 28nm Technology in Volume Production, PR Newswire (Oct. 24, 2011) (last visited July 16, 2025), available at https://www.prnewswire.com/news-releases/tsmc-28nmtechnology-in-volume-production-132425858.html
1118	Reserved
1119	Another Historic Investment Secured Under President Trump, Articles, The White House (Mar. 3, 2025) (last visited July 14, 2025), available at https://www.whitehouse.gov/articles/2025/03/another-historic-investment-secured-under-president-trump/
1120	Reserved
1121	Reserved
1122	Reserved
1123	CNBC Transcript: United States Commerce Secretary Howard Lutnick Speaks with CNBC's Brian Sullivan on "The Exchange" Today, CNBC (Apr. 29. 2025) (last visited July 14, 2025), available at https://www.cnbc.com/2025/04/29/cnbc-transcript-united-states-commerce-secretary-howard-lutnick-speaks-with-cnbcs-brian-sullivan-on-the-exchange-today.html
1124	Silvia Pellegrino, What is TSMC?, Tech Monitor (Jan. 2, 2023) (last visited July 14, 2025), available at https://www.techmonitor.ai/what-is/what-is-tsmc/?cf-view
1125	Reserved

Exhibit	Description
1126	Silent Giant TSMC Returns to the Peak of its Powers as the AI Boom Continues, Yahoo! finance (June 12, 2025), available at https://finance.yahoo.com/news/silent-giant-tsmc-returns-peak-230300515.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAAGbNeBi6fbz4U1LAPZACoSOpXFKhZ2d8Aeym1OTBUscShGSwm5cDQL_KDbidYk16TkPx7YtIzsB2YbOGeGdO4PchwSBFYrk3fTg3HWr-MVsPIL1q7mWa7ZR5e6BG0tbKASjEzPE-8r-aiT0KakQ2cXTjpdVs4xTGUvCoXUGlVbDT
1127	Reserved
1128	Reserved
1129	Removing Barriers to American Leadership in Artificial Intelligence, Presidential Actions, The White House (Jan. 23, 2025) (last visited July 14, 2025), available at https://www.whitehouse.gov/presidential-actions/2025/01/removing-barriers-to-american-leadership-in-artificial-intelligence/
1130	TSMC Expands Collaboration with Ansys by Integrating AI Technology to Accelerate 3D-IC Design, Ansys (Sept. 25, 2024) (last visited July 14, 2025), available at https://investors.ansys.com/news-releases/news-release-details/tsmc-expands-collaboration-ansys-integrating-ai-technology
1131	Cadence and TSMC Advance AI and 3D-IC Chip Design with Certified Design Solutions for TSMC's A16 and N2P Process Technologies, Cadence (Apr. 23, 2025) (last visited July 14, 2025), available at https://www.cadence.com/en_US/home/company/newsroom/press-releases/pr/2025/cadence-and-tsmc-advance-ai-and-3d-ic-chip-design-with-certified.html
1132	Reserved
1133	Reserved

Exhibit	Description
1134	Reserved
1135	Sujai Shivakumar and Charles Wessner, Semiconductors and National Defense: What Are the Stakes?, Center for Strategic International Studies (June 8, 2022) (last visited July 14, 2025), available at https://www.csis.org/analysis/semiconductors-and-national-defense-what-are-stakes
1136	Eric Lee, How Taiwan Underwrites the US Defense Industrial Complex, The Diplomat (Nov. 9, 2021) (last visited July 14, 2025), available at https://thediplomat.com/2021/11/how-taiwan-underwrites-the-us-defense-industrial-complex/.
1137	Jeffrey D. Bean and Andreas Kuehn, The U.S. Defense Industry Still Faces a Chip Challenge, Observer Research Foundation America (Apr. 1, 2025) (last visited July 14, 2025), available at https://orfamerica.org/orf-america-comments/us-defense-industry-chip-challenge
1138	Reserved
1139	Reserved
1140	Reserved
1141	Reserved
1142	Reserved
1143	Reserved
1144	Allowance Rate for U.S. patent applications for TSMC, from https://app.juristat.com/dashboard/premium-benchmarks
1145	Excerpted data on U.S. utility patent applications from ifi Claims Patent Services December 2024 Monthly Report – U.S. Utility Grants and Applications (Dec. 2024)

Exhibit	Description
1146	ifi Claims Patent Services, Top 50 patent grants from 2022-2024, available at https://www.ificlaims.com/rankings/top-50-2024/, https://www.ificlaims.com/rankings/top-50-2023/, https://www.ificlaims.com/rankings/top-50-2022/.
1147	Jeremy Bowman, Nasdaq, This 1 Number May Ensure TSMC's Market Dominance, The Motley Fool (Aug. 17, 2024) (last visited July 18, 2025), available at https://www.nasdaq.com/articles/1-number-may-ensure-tsmcs-market-dominance
1148	Reserved
1149	Reserved
1150	Report of Judge Rodney Gilstrap, Calendar of Events Set for 6/1/2026/-6/30/2026 (PACER) (last visited June 27, 2025), available at https://ecf.txed.uscourts.gov/cgibin/CalEvents.pl?143870417754058-L_1_0-1
1151	Reserved
1152	Updated Summary of Judge Gilstrap Patent Trials Within One-Year Period of July 12, 2024, to July 11, 2025
1153	Virtex 7 XQ FPGAs (last visited July 31, 2025), https://www.amd.com/en/products/adaptive-socs-andfpgas/fpga/virtex-7-xq.html#advantages
1154	Reserved
1155	Reserved
1156	Reserved
1157	Reserved
1158	Reserved
1159	Reserved

Exhibit	Description
1160	Reserved
1161	Reserved
1162	Reserved
1163	Excerpted 2024 Report to Congress of the U.S.-China Economic and Security Review Commission, One Hundred Eighteenth Congress, Second Session, November 2024
1164	Reserved
1165	Proceedings and Debates of the 117th Congress, Second Session, 168 Cong. Rec. S3619-07 (July 25, 2022)
1166	Excerpted 2024 Report to Congress of the U.S. China Economic and Security Review Commission, One Hundred Eighteenth Congress, Second Session, November 2024, Part II

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that the foregoing **Petitioner's Updated Exhibit List** and **Exhibits TSMC-1165** and **TSMC-1166** were served on August 22, 2025, via e-mail directed to counsel of record for Patent Owner at the following:

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