

TECHCET

Electronics Materials Information



2022 CRITICAL MATERIALS REPORT™ PHOTOLITHOGRAPHY MATERIALS

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RESEARCH METHODOLOGY

TEHCET employs subject matter experts having first-hand experience within the industries which they analyze. Most of TEHCET's analysts have over 25 years of direct and relevant experience in their field. Our analysts survey the commercial and technical staff of IC manufacturers and their suppliers, and conduct extensive research of literature and commerce statistics to ascertain the current and future market environment and global supply risks. Combining this data with TEHCET's proprietary, quantitative wafer forecast results in a viable long-term market forecast for a variety of process materials.

READER'S NOTE

This report represents the interpretation and analysis of information generally available to the public or released by responsible agencies or individuals. Data was obtained from sources considered reliable. However, accuracy or completeness is not guaranteed.

ANALYST BIOGRAPHY

Warren Montgomery, M.B.A – Senior Technology & Market Analyst covers photolithography the associated materials, such as photoresist and ancillary chemicals for TECHCET. Previously, as VP of Technical and Consortia Program Development at CNSE (formally Albany Nanotech).

Warren led process development efforts associated with (365nm, DUV, EUV, X-ray and e-beam) photoresists and ancillaries. Warren worked at SEMATECH, Applied Materials, LSI Logic, ASML, AZ Microelectronic, Irresistible Materials, and IBM in various, business development, sales, technical and senior leadership roles.

Warren has written over 70 technical and marketing publications and been awarded 30 US and European patents: primarily focused on lithography materials and processes.

Warren been BACUS President and Conference Chair. He has a B.S. in Chemistry from Marist College, a B.S. Business Administration from Mount St. Mary College, a graduate Certificate in Project Management from Empire State College and an MBA from City University.



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TABLE OF CONTENTS

1 EXECUTIVE SUMMARY	9		
1.1 MARKET TRENDS IMPACTING LITHOGRAPHY	10	3.2.2.1 ELECTRIC VEHICLE (EV) MARKET TRENDS	37
1.2 TECHNICAL TRENDS IMPACTING LITHOGRAPHY	12	3.2.2.2 INCREASE IN SEMICONDUCTOR CONTENT FOR AUTOS	38
1.3 PHOTORESIST REVENUE 5-YEAR FORECAST	13	3.2.3 SERVERS / IT MARKET	39
1.3.1 ANCILLARY AND EXTENSION REVENUE 5-YEAR FORECAST	14	3.3 SEMICONDUCTOR FABRICATION GROWTH & EXPANSION	40
1.4 YEAR 2021 IN REVIEW	15	3.3.1 FAB EXPANSION ANNOUNCEMENT SUMMARY	41
1.5 MARKET TRENDS IMPACTING LITHOGRAPHY MATERIALS OUTLOOK	16	3.3.2 WW FAB EXPANSION DRIVING GROWTH	42
1.6 COMPETITIVE LANDSCAPE	19	3.3.3 EQUIPMENT SPENDING TRENDS	43
1.7 EHS ISSUES/CONCERNS	21	3.3.4 TECHNOLOGY ROADMAPS	44
1.8 ANALYST ASSESSMENT	22	3.3.5 FAB INVESTMENT ASSESSMENT	45
2 SCOPE, PURPOSE AND METHODOLOGY	24	3.4 POLICY & TRADE TRENDS AND IMPACT	46
2.1 PURPOSE	25	3.4.1 POLICY AND TRADE ISSUES	47
2.2 METHODOLOGY	26	3.5 SEMICONDUCTOR MATERIALS OUTLOOK	48
2.3 OVERVIEW OF OTHER TECHCET CMR™ REPORTS	27	3.5.1 COULD MATERIALS CAPACITY LIMIT CHIP PRODUCTION SCHEDULES?	49
3 SEMICONDUCTOR INDUSTRY MARKET STATUS & OUTLOOK	28	3.5.2 LOGISTICS ISSUES PLAGUE THE WESTERN WORLD, CONTINUED	50
3.1 WORLDWIDE ECONOMY	29	3.5.3 TECHCET WAFER STARTS FORECAST THROUGH 2026	51
3.1.1 SEMICONDUCTOR INDUSTRIES TIES TO THE GLOBAL ECONOMY	31	3.5.4 TECHCET WAFER START FORECAST	52
3.1.2 SEMICONDUCTOR SALES GROWTH	32	3.5.5 TECHCET'S MATERIALS FORECAST	53
3.1.3 TAIWAN MONTHLY SALES TRENDS	33	4 PHOTORESIST SEGMENT	54
3.2 ELECTRONIC GOODS MARKET	34	4.1 MARKET MACRO TRENDS	55
3.2.1 SMARTPHONES	35	4.2 PHOTORESIST REVENUE FORECAST	56
3.2.2 PC UNIT SHIPMENTS	36	4.2.1 EUV PHOTORESIST- MARKET OVERVIEW	57
		4.2.2 ARF & ARFI- MARKET OVERVIEW	58

TABLE OF CONTENTS

4.2.3 (KRF PHOTORESIST)– MARKET OVERVIEW	59	4.4.5 PATTERNING TRENDS	79
4.2.4 (G&I LINE)– MARKET OVERVIEW	60	4.4.5.1 PATTERNING TECHNOLOGY TRENDS	80
4.3 PHOTORESIST MARKET SHARES	61	4.4.5.2	81
4.3.1 PHOTORESIST SUPPLIER REFLECTION	62	4.4.6 KEY MATERIAL (MACRO)TECHNOLOGY TRENDS (PATTERNING MATERIAL TRANSITIONS TO WATCH)	82
4.3.2 SUPPLIERS PHOTORESIST	63	4.5 REGIONAL TRENDS	83
4.3.2.1 DUPONT SUPPLY CAPACITY AND DEMAND, INVESTMENTS	64	4.6 EHS ISSUES	85
4.3.2.2 DONGJIN SUPPLY CAPACITY AND DEMAND, INVESTMENTS	65	4.7 ASSESSMENT OF PHOTORESIST SEGMENT	86
4.3.2.3 FUJIFILM SUPPLY CAPACITY AND DEMAND, INVESTMENTS	66	5 ANCILLARY AND EXTENSIONS MARKET SEGMENT	89
4.3.2.4 JSR SUPPLY CAPACITY AND DEMAND, INVESTMENTS	67	5.1 MARKET LANDSCAPE FOR ANCILLARIES	90
4.3.2.5 MERCK KGAA, EMD ELECTRONICS SUPPLY CAPACITY AND DEMAND, INVESTMENTS	68	5.2 ANCILLARY FORECASTS	91
4.3.2.6 (SHIN-ETSU) SUPPLY CAPACITY AND DEMAND, INVESTMENTS	69	5.2.1 ANCILLARIES (EBR, DEVELOPER, ETC.) VOLUMES FORECAST	92
4.3.2.7 SUMITOMO SUPPLY CAPACITY AND DEMAND, INVESTMENTS	70	5.2.2 ANCILLARIES (EBR AND PREWET) REVENUE FORECAST	93
4.3.2.8 SUB-TIER SUPPLY-CHAIN “NEW” ENTRANTS	71	5.2.3 ANCILLARIES (EBR AND PREWET) VOLUMES FORECAST	94
4.4 PHOTORESIST TECHNOLOGY	72	5.2.4 ANCILLARIES (NTD DEVELOPER AND RINSE) REVENUES FORECAST	95
4.4.1 PATTERNING TECHNOLOGY TRENDS	73	5.2.5 ANCILLARIES (NTD DEVELOPER AND RINSE)VOLUMES FORECAST	96
4.4.2 PRODUCTION LAYERS BY LITHOGRAPHIC EXPOSURE TYPE	74	5.2.6 ANCILLARIES (PTD DEVELOPER) REVENUE FORECAST	97
4.4.3 DEVICE TECHNOLOGY TRENDS (EASING LITHOGRAPHY REQUIREMENTS)	75	5.2.7 ANCILLARIES (PTD DEVELOPER)VOLUMES FORECAST	98
4.4.4 PHOTORESIST TECHNOLOGY TRENDS (PLATFORM TRANSITIONS)	77	5.3 KEY SUPPLIERS OF EXTENSION MATERIALS	99
4.4.4.1 THE EVOLUTION (A LITHO MATERIALS PERSPECTIVE): POLYMER PLATFORM TRANSITION AS WELL AS A DEVELOPER TRANSITION @ EUV	78	5.3.1 SELECT EXTENSION AND ANCILLARY SUPPLIERS	100
		5.4 EXTENSION MATERIALS FORECASTS	101
		5.4.1 EXTENSIONS (BOTTOM COATINGS) REVENUE FORECAST	102
		5.4.2 EXTENSIONS (BOTTOM COATINGS) VOLUMES FORECAST	103

TABLE OF CONTENTS

5.4.3 EXTENSIONS (SI BOTTOM ANTIREFLECTIVE COATINGS) REVENUE FORECAST	104	5.7.1 ANALYST ASSESSMENT (ANCILLARIES)	118
5.4.4 EXTENSIONS (SI BOTTOM ANTIREFLECTIVE COATINGS) VOLUMES FORECAST	105	5.7.2 ANALYST ASSESSMENT (EXTENSIONS)	119
5.4.5 EXTENSIONS (KRF BOTTOM ANTIREFLECTIVE COATINGS) REVENUE FORECAST	106	6 SUPPLY-CHAIN “NEW” ENTRANTS	120
5.4.6 EXTENSIONS (KRF BOTTOM ANTIREFLECTIVE COATINGS) VOLUMES FORECAST	107	6.1 SUPPLY-CHAIN “NEW” ENTRANTS- LAM RESEARCH	121
5.4.7 EXTENSIONS (SOC BOTTOM ANTIREFLECTIVE COATINGS) REVENUE FORECAST	108	6.2 SUPPLY-CHAIN “NEW” ENTRANTS- DONGJIN SEMICHEM	122
5.4.8 EXTENSIONS (SOC BOTTOM ANTIREFLECTIVE COATINGS) VOLUMES FORECAST	109	6.3 SUPPLY-CHAIN: DISRUPTIONS	123
5.4.9 EXTENSIONS (ARF BOTTOM ANTIREFLECTIVE COATINGS) REVENUE FORECAST	110	6.4 SUB-TIER SUPPLY-CHAIN: DISRUPTIONS	124
5.4.10 EXTENSIONS (ARF BOTTOM ANTIREFLECTIVE COATINGS) VOLUMES FORECAST	111	6.5 SUPPLY-CHAIN PRICING TRENDS	125
5.5 ANCILLARY AND EXTENSION MATERIALS TECHNOLOGIES	112	6.6 REFERENCES	126
5.5.1 MATERIAL CHANGES DRIVEN BY NEW PROCESSES (193NM IMMERSION TO EUV)	113	7 SUPPLIER PROFILES	129
5.5.2 THE DEVELOPER TRANSITION	114	AVANTOR	
5.5.3 SOLVENT IMPACT: TRANSITION FROM POSITIVE PHOTORESIST TO NEGATIVE PHOTORESIST	115	BASF	
5.6 ANCILLARY SUPPLY LANDSCAPE (NON-PHOTORESIST MAKERS)	116	BREWER SCIENCE	
5.7 ANCILLARY AND EXTENSION MATERIALS ASSESSMENT	117	CHANG CHUN PETROCHEMICAL	
		DONGJIN CHEMICAL	
		DUPONT	
		...and many more	

FIGURES & TABLES

FIGURE 1: PHOTORESIST REVENUE FORECAST	13	FIGURE 25: EUV PHOTORESIST VOLUME FORECAST	57
FIGURE 2: TOTAL ANCILLARY AND EXTENSION REVENUE FORECAST	14	FIGURE 26: ARF PHOTORESIST REVENUE FORECAST	58
FIGURE 3: BOTTOM ANTI-REFLECTIVE COATINGS (Barcs) EXAMPLE	18	FIGURE 27: ARF PHOTORESIST VOLUME FORECAST	58
FIGURE 4: MARKET SHARES OF TOP 3 PHOTORESIST COMPANIES	19	FIGURE 28: KRF PHOTORESIST REVENUE FORECAST	59
FIGURE 5: ASML EUV SYSTEM BEAM PATH NXE: 3400B	22	FIGURE 29: KRF PHOTORESIST VOLUME FORECAST	59
FIGURE 6: GLOBAL ECONOMY AND THE ELECTRONICS SUPPLY CHAIN (2021)	31	FIGURE 30: G&I PHOTORESIST REVENUE FORECAST	60
FIGURE 7: WORLDWIDE SEMICONDUCTOR SALES	32	FIGURE 31: G&I PHOTORESIST VOLUME FORECAST	60
FIGURE 8: TECHCET'S TAIWAN SEMICONDUCTOR INDUSTRY INDEX*	33	FIGURE 32: 2021 PHOTORESIST MARKET SHARES ESTIMATES (% OF WW REVENUES)	61
FIGURE 9: SEMICONDUCTOR CHIP APPLICATIONS	34	FIGURE 33: GENERAL SCHEMATIC OF LITHO EXPOSURES BY DEVICE TYPE	74
FIGURE 10: MOBILE PHONE SHIPMENTS WW ESTIMATES	35	FIGURE 34: NAND SCALING	75
FIGURE 11: WORLDWIDE PC AND TABLET FORECAST, 2021, Q3	36	FIGURE 35: SCANNER TECHNOLOGY TRENDS ARF TO EUV	76
FIGURE 12: GLOBAL EV TRENDS	37	FIGURE 36: EVOLUTION OF PHOTORESIST CHEMISTRY	78
FIGURE 13: SEMICONDUCTOR SPEND PER VEHICLE TYPE	38	FIGURE 37: NANO IMPRINT LITHOGRAPHY:	80
FIGURE 14: TSMC CONSTRUCTION SITE IN ARIZONA	40	FIGURE 38: CONVENTIONAL AND SELECTIVE DIRECTED SELF-ASSEMBLY	81
FIGURE 15: CHIP EXPANSIONS 2021-2026 > US\$460 B	41	FIGURE 39: ANCILLARY REVENUES FORECAST	91
FIGURE 16: SEMICONDUCTOR CHIP MANUFACTURING REGIONS OF THE WORLD	42	FIGURE 40: ANCILLARY VOLUME FORECAST	92
FIGURE 17: 3-MONTH AVERAGE SEMICONDUCTOR EQUIPMENT BILLINGS	43	FIGURE 41: EBR AND PREWET REVENUE FORECAST	93
FIGURE 18: OVERVIEW OF DEVICE TECHNOLOGY ROADMAP	44	FIGURE 42: EBR AND PREWET VOLUME FORECAST	94
FIGURE 19: EUROPE CHIP EXPANSION UPSIDE	49	FIGURE 43: NTD CHEMICALS REVENUE FORECAST	95
FIGURE 20: TECHCET WAFER START FORECAST BY NODE	51	FIGURE 44: NTD CHEMICALS VOLUME FORECAST	96
FIGURE 21: TECHCET WAFER START FORECAST BY NODE	52	FIGURE 45: PTD REVENUE FORECAST	97
FIGURE 22: GLOBAL SEMICONDUCTOR MATERIALS OUTLOOK	53		
FIGURE 23: PHOTORESIST REVENUE FORECAST	56		
FIGURE 24: EUV PHOTORESIST REVENUE FORECAST	57		

FIGURES & TABLES

FIGURE 46: PTD VOLUME FORECAST	98
FIGURE 47: EXTENSION MATERIALS REVENUE FORECAST	102
FIGURE 48: EXTENSION VOLUME FORECAST	103
FIGURE 49: SI BARC REVENUE FORECAST	104
FIGURE 50: SI BARC VOLUME FORECAST	105
FIGURE 51: KRF BARC REVENUE FORECAST	106
FIGURE 52: KRF BARC VOLUME FORECAST	107
FIGURE 53: SOC REVENUE FORECAST	108
FIGURE 54: SOC VOLUME FORECAST	109
FIGURE 55: ARF BARC REVENUE FORECAST	110
FIGURE 56: ARF BARC VOLUME FORECAST	111
FIGURE 57: DEVELOPER TRANSITION	114
FIGURE 58: SOLVENT IMPACT FOR POSITIVE VS. NEGATIVE PHOTORESIST	115
FIGURE 59: LAM RESEARCH DRY RESIST	121

TABLES

TABLE 1: GLOBAL GDP AND SEMICONDUCTOR REVENUES*	29
TABLE 2: IMF ECONOMIC OUTLOOK*	30
TABLE 3: DATA CENTER SYSTEMS AND COMMUNICATION SERVICES FORECAST 2021	39
TABLE 4: REGIONAL SEMICONDUCTOR TRENDS	83
TABLE 5: REGIONAL LITHOGRAPHY MATERIALS SUPPLIER EXPANSIONS	84
TABLE 6: SOLVENT SUPPLIERS	90
TABLE 7: KEY SUPPLIERS OF EXTENSION MATERIALS	99
TABLE 8: ANCILLARY SUPPLIER LANDSCAPE	116

2

SCOPE, PURPOSE AND METHODOLOGY

2.1 PURPOSE

- This Critical Materials Report™ (CMR) provides focused information for supply-chain managers, process integration and R&D directors, as well as business development managers, and financial analysts. The report covers information about key suppliers, issues/trends in the material supply chain, estimates on supplier market share, and forecast for the material segments.
- This report covers the Photolithography materials market and supply chain for those materials used in semiconductor device fabrication. The report contains data and analysis from TECHCET's database and Sr. Analyst experience, as well as that developed from primary and secondary market research. For more information on TECHCET Critical materials Reports™ please go to <https://TECHCET.com>. This report also highlights technology-driven impacts on photolithography materials.

2.2 METHODOLOGY

- TECHCET employs subject matter experts having first-hand experience within the industries which they analyze. Most of TECHCET's analysts have over 25 years of direct and relevant experience in their field. Our analysts survey the commercial and technical staff of IC manufacturers and their suppliers and conduct extensive research of literature and commerce statistics to ascertain the current and future market environment and global supply risks. Combining this data with TECHCET's proprietary, quantitative wafer forecast results in a viable long-term market forecast for a variety of process materials.

2.3 OVERVIEW OF OTHER TECHCET CMR™ REPORTS

- TEHCET produces electronic material supply chain reports each year as one of its functions for the Critical Materials Council. Reports to be published in 2022 can be found at www.techcet.com and are listed in the table below:

2022	CMR Report Schedule
1	CMP Pads and Slurry
2	Electronic Gases
3	Photoresist
4	Precursors - Dielectric Precursors
5	Precursors - Hi K / ALD CVD Metal Precursors
6	Silicon Wafers
7	Specialty Cleaning Chems / Wet Chems
8	Metal Chemicals
9	Targets
10	Equipment Components – Quartz
11	Equipment Components – Ceramics/SiC
12	Equipment Components- Si parts
13	Impact of Fab Expansion on EU Wet Chemicals
14	2021 Impact of Fab Expansion on US Wet Chemicals