

TABLE OF CONTENTS

1.0 SEMICONDUCTOR INDUSTRY MARKET STATUS & OUTLOOK	6		
1.1 WORLDWIDE ECONOMY	7		
2.0 SEMICONDUCTOR MARKET 9			
2.1. SEMICONDUCTOR INDUSTRIES TIES TO THE GLOBAL ECONOMY	10		
2.2 SEMICONDUCTOR SALES GROWTH	11		
2.3 TAIWAN MONTHLY SALES TRENDS	12		
2.4 SEMICONDUCTOR INDUSTRY OUTLOOK	13		
2.5 SEMICONDUCTOR UNITS AND WAFER SHIPMENT GROWTH FORECAST	14		
3.0 ELECTRONIC GOODS MARKET	15		
3.1 SMART PHONES	16		
3.2 PC UNIT SHIPMENTS	17		
3.3 AUTOMOTIVE SALES	18		
3.3.1 AUTOMOTIVE SALES AND IMPACT ON SEMICONDUCTOR SALES	19		
3.3.2 ELECTRIC VEHICLE (EV) MARKET TRENDS	20		
3.3.3 INCREASE IN SEMICONDUCTOR CONTENT FOR AUTOS	21		
		3.3.4 SEMICONDUCTOR CONTENT BY AUTOMOTIVE ELECTRONIC SYSTEM	22
		3.4 SERVERS / IT	23
		3.4.1 SERVERS / IT, CONTINUED – FORECASTS	24
		4.0 SEMICONDUCTOR FABRICATION GROWTH & EXPANSION	25
		4.1 EQUIPMENT SPENDING TRENDS	26
		4.2 RECENT INVESTMENT AND FAB/PLANT EXPANSION ACTIVITY	29
		4.3 OVERALL CHINA MARKET TRENDS	31
		5.0 POLICY & TRADE TRENDS AND IMPACT	33
		5.1 POLICY AND TRADE ISSUES	34
		5.2 U.S. CHIPS ACT	36
		5.3 OTHER SEMICONDUCTOR FUNDING ACTIVITY	37
		6.0 SEMICONDUCTOR MATERIALS OUTLOOK	38
		6.1 TECHCET WAFER START FORECAST	39
		6.2 SEMICONDUCTOR – LEADING EDGE NODE WAFER START GROWTH	40
		6.3 WAFER STARTS OTHER DEVICES	41
		6.4 SEMICONDUCTOR MATERIALS FORECAST	42
		6.5 2020 SEMICONDUCTOR MATERIALS MARKET	43

TABLE OF CONTENTS

TABLE OF FIGURES

FIGURE 1: GLOBAL ECONOMY AND THE ELECTRONICS SUPPLY CHAIN (2020)	10
FIGURE 2: WORLDWIDE SEMICONDUCTOR SALES	11
FIGURE 3: WORLDWIDE SEMICONDUCTOR SALES (TSMC, UMC, VIS, ASE, CHIPMOS, KYEC)	12
FIGURE 4: SEMICONDUCTOR REVENUES 2021	13
FIGURE 5: SEMICONDUCTOR WAFER AREA SHIPMENTS	14
FIGURE 6: SEMICONDUCTOR CHIP APPLICATIONS	15
FIGURE 7: MOBILE PHONE SHIPMENTS WW ESTIMATES	16
FIGURE 8: PC NOTEBOOK SHIPMENTS	17
FIGURE 9 : U.S. AUTOMOTIVE SALES	18
FIGURE 10: MONTHLY AUTOMOTIVE SALES TRENDS	19
FIGURE 11: GLOBAL EV TRENDS	20
FIGURE 12: SEMICONDUCTOR SPEND PER VEHICLE TYPE	21
FIGURE 13: SEMICONDUCTOR CONTENT BY AUTOMOTIVE APPLICATION	22

FIGURE 14: AMAZON SERVER FARM	23
FIGURE 15: 3-MONTH AVERAGE SEMICONDUCTOR EQUIPMENT BILLINGS	26
FIGURE 16: CAPITAL SPENDING TRENDS BY TECHNOLOGY NODE	27
FIGURE 17: OVERVIEW OF LOGIC ROADMAP TRENDS	28
FIGURE 18: CHINA IC MARKET AND PRODUCTION TRENDS	31
FIGURE 19: 300 WAFER STARTS	40
FIGURE 20: OTHER DEVICE AND WAFER STARTS	41
FIGURE 21: GLOBAL SEMICONDUCTOR MATERIALS OUTLOOK	42
FIGURE 22: 2020 SEMICONDUCTOR MATERIALS US\$50B MARKET	43

LIST OF TABLES

TABLE 1: GLOBAL GDP AND SEMICONDUCTOR REVENUES*	7
TABLE 2: IMF WORLD ECONOMIC OUTLOOK*	8
TABLE 3: DATA CENTER SYSTEMS AND COMMUNICATION SERVICES FORECAST 2021	24
TABLE 4: DEVICE MAKER INVESTMENT ACTIVITY	29
TABLE 5: US CHIPS ACT PROVISIONS	36