

Chiplet Market by Processor (Field-Programmable Gate Array (FPGA), Central Processing Unit (CPU), Graphics Processing Unit (GPU), APU, AI ASIC Co-Processor), Packaging Technology (SiP, FCCSP, FCBGA, 2.5D/3D, WLCSP, Fan-Out) – Global Forecast to 2028

https://marketpublishers.com/r/C4093B65D53EEN.html

Date: October 2023 Pages: 242 Price: US\$ 4,950.00 (Single User License) ID: C4093B65D53EEN

Abstracts

The chiplet market is projected to grow from USD 6.5 billion in 2023 and is projected to reach USD 148.0 billion by 2028; it is expected to grow at a CAGR of 86.7% from 2023 to 2028.

Adoption of chiplets in AI and edge computing applications, proliferation of data centers worldwide, and adoption of advanced packaging technologies are the factors expected to fuel the growth of the chiplet market.

"AI ASIC coprocessor segment of the chiplet market to witness high growth during the forecast period."

The artificial intelligence application-specific integrated circuit (AI ASIC) coprocessor segment of the chiplet market to grow at high CAGR during the forecast period. The growth is attributed to the growing demand for user-specific customized solutions tailored for artificial intelligence (AI) applications. The shift toward AI-driven decision-making processes across industries is a driving force behind this trend. In addition, the pursuit of energy efficiency and optimized performance is steering companies toward AI ASIC coprocessors to bolster their AI capabilities. This convergence of technological advancements, strategic alliances, and a burgeoning demand for AI-driven solutions underscores the tremendous growth potential of the AI ASIC coprocessor segment



within the chiplet market, cementing its role in the evolving landscape of Alfocused computing.

"Enterprise electronics segment to witness significant growth for chiplet market during the forecast period."

Enterprise electronics segment to grow at high CAGR during the forecast period. Data centers are crucial for enterprise operations as it rapidly adopts chiplets to enhance processing power while reducing energy consumption. The appeal of chiplets lies in their modular design, providing scalability aligned with evolving enterprise needs. They are revolutionizing server architectures by reducing latency and optimizing power consumption, offering a promising solution for data-centric enterprises. Its key applications include AI accelerators, memory chiplets, and network processors, providing efficient and flexible solutions for data center infrastructures.

"Asia Pacific to hold a major market share of the chiplet market during the forecast period" Asia Pacific is expected to hold a major market share for chiplet market during the forecast period. The emergence of advanced technologies, such as AI, IoT, and Big Data has paved the way for the implementation of large-scale data centers in the region. Global giants such as Alibaba (China), Facebook (US), Amazon (US), Microsoft (US), Google (US), and Baidu (China) have already established their data centers in the Asian territory and are planning to expand their dominance in other regions. In Asia Pacific, the market is currently driven by Chinese and Indian consumers because of their increasing adoption rate of high-speed broadband services and mobile devices. The increasing telecommunication and data center networking infrastructure expansion is expected to drive the Asia Pacific chiplet market over the forecast period.

Extensive primary interviews were conducted with key industry experts in the chiplet market space to determine and verify the market size for various segments and subsegments gathered through secondary research. The break-up of primary participants for the report has been shown below:

The break-up of the profile of primary participants in the chiplet market:

By Company Type: Tier 1 - 50%, Tier 2 - 30%, and Tier 3 - 20%

By Designation: C Level – 20%, Director Level – 50%, Others-30%

By Region: North America - 30%, Europe - 20%, Asia Pacific - 40%, ROW-



10%

The report profiles key players in the chiplet market with their respective market ranking analysis. Prominent players profiled in this report are Intel Corporation (US), Advanced Micro Devices, Inc. (US), Apple Inc. (US), IBM (US), Marvell (US), MediaTek Inc. (Taiwan), NVIDIA Corporation (us), Achronix Semiconductor Corporation (US), Ranovus (Canada), and ASE Technology Holding Co., Ltd. (Taiwan).

Apart from this, Netronome (US), Cadence Design Systems, Inc. (US), and Synopsys, Inc. (US), SiFive, Inc. (US), ALPHAWAVE SEMI (UK), Eliyan (US), Ayar Labs, Inc. (US), Tachyum (US), X-Celeprint (Ireland), Kandou Bus SA (Switzerland), NHanced Semiconductors (US), Tenstorrent (Canada), Chipuller (China) and Rain Neuromorphics (US) are among a few emerging companies in the chiplet market.

Research Coverage: This research report categorizes the chiplet market on the basis of processor, packaging technology, end-use application, and region. The report describes the major drivers, restraints, challenges, and opportunities pertaining to the chiplet market and forecasts the same till 2028. Apart from these, the report also consists of leadership mapping and analysis of all the companies included in the chiplet ecosystem.

Key Benefits of Buying the Report The report will help the market leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall chiplet market and the subsegments. This report will help stakeholders understand the competitive landscape and gain more insights to position their businesses better and to plan suitable go-to-market strategies. The report also helps stakeholders understand the pulse of the market and provides them with information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:

Analysis of key drivers (adoption of high-performance computing (HPC) servers in various sectors, proliferation of data centers worldwide, adoption of advanced packaging technologies), restraints (heat management issues, lack of industrywide interoperability standards), opportunities (development of quantum chiplets, rapid expansion of 5G infrastructure, rising incorporation of highperformance and power-efficient chiplets in medical devices, adoption of chiplets in AI and edge computing applications, increasing investments in autonomous vehicles) and challenges (challenges related to intellectual property (IP)



protection and licensing, cybersecurity and vulnerability issues associated with chiplet-based systems) influencing the growth of the chiplet market.

Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product & service launches in the chiplet market.

Market Development: Comprehensive information about lucrative markets – the report analysis the chiplet market across varied regions

Market Diversification: Exhaustive information about new products & services, untapped geographies, recent developments, and investments in the chiplet market

Competitive Assessment: In-depth assessment of market shares, growth strategies and service offerings of leading players like Intel Corporation (US), Advanced Micro Devices, Inc. (US), Apple Inc. (US), IBM (US), Marvell (US), among others in the chiplet market.



Contents

1 INTRODUCTION

1.1 STUDY OBJECTIVES
1.2 MARKET DEFINITION
1.3 STUDY SCOPE

1.3.1 MARKETS COVERED

FIGURE 1 CHIPLET MARKET SEGMENTATION

1.3.2 REGIONAL SCOPE
1.3.3 INCLUSIONS AND EXCLUSIONS
1.3.4 YEARS CONSIDERED
1.3.5 CURRENCY CONSIDERED

1.4 LIMITATIONS

- 1.5 STAKEHOLDERS
- 1.6 RECESSION IMPACT

FIGURE 2 GDP GROWTH PROJECTION UNTIL 2023 FOR MAJOR ECONOMIES

2 RESEARCH METHODOLOGY

2.1 RESEARCH DATA

FIGURE 3 CHIPLET MARKET: RESEARCH DESIGN

- 2.1.1 SECONDARY DATA
 - 2.1.1.1 Major secondary sources
 - 2.1.1.2 Key data from secondary sources
- 2.1.2 PRIMARY DATA
- 2.1.2.1 Participants and key opinion leaders for primary interviews
- 2.1.2.2 Breakdown of primaries
- 2.1.2.3 Key data from primary sources
- 2.1.3 SECONDARY AND PRIMARY RESEARCH
- 2.1.3.1 Key industry insights

2.2 MARKET SIZE ESTIMATION

FIGURE 4 RESEARCH FLOW FOR MARKET SIZE ESTIMATION

2.2.1 BOTTOM-UP APPROACH

2.2.1.1 Approach to derive market size using bottom-up analysis (demand side) FIGURE 5 MARKET SIZE ESTIMATION METHODOLOGY: BOTTOM-UP APPROACH 2.2.2 TOP-DOWN APPROACH

2.2.2.1 Approach to derive market size using top-down analysis (supply side) FIGURE 6 MARKET SIZE ESTIMATION METHODOLOGY: TOP-DOWN APPROACH.



2.2.2.2 Supply-side analysis FIGURE 7 MARKET SIZE ESTIMATION METHODOLOGY: SUPPLY-SIDE ANALYSIS 2.3 MARKET BREAKDOWN AND DATA TRIANGULATION FIGURE 8 DATA TRIANGULATION 2.4 RESEARCH ASSUMPTIONS FIGURE 9 ASSUMPTIONS 2.5 APPROACH TO ANALYZE IMPACT OF RECESSION ON CHIPLET MARKET 2.6 RISK ASSESSMENT TABLE 1 RISK ASSESSMENT 2.7 RESEARCH LIMITATIONS

3 EXECUTIVE SUMMARY

3.1 GROWTH RATE ASSUMPTIONS/FORECAST FIGURE 10 CPU SEGMENT TO HOLD LARGEST MARKET SHARE IN 2028 FIGURE 11 2.5D/3D SEGMENT TO HOLD LARGEST MARKET SHARE IN 2028 FIGURE 12 ENTERPRISE ELECTRONICS SEGMENT TO HOLD LARGEST MARKET SHARE IN 2028

FIGURE 13 ASIA PACIFIC HELD LARGEST SHARE OF CHIPLET MARKET IN 2022

4 PREMIUM INSIGHTS

4.1 ATTRACTIVE OPPORTUNITIES FOR PLAYERS IN CHIPLET MARKET
FIGURE 14 RISING NUMBER OF DATA CENTERS WORLDWIDE
4.2 CHIPLET MARKET, BY PROCESSOR
FIGURE 15 CPU SEGMENT TO DOMINATE CHIPLET MARKET DURING FORECAST
PERIOD
4.3 CHIPLET MARKET, BY PACKAGING TECHNOLOGY AND END-USE
APPLICATION
FIGURE 16 2.5D/3D AND ENTERPRISE ELECTRONICS SEGMENTS TO HOLD
LARGEST MARKET SHARES IN 2023
4.4 CHIPLET MARKET, BY REGION
FIGURE 17 ASIA PACIFIC TO HOLD LARGEST MARKET SHARE IN 2023
4.5 CHIPLET MARKET, BY COUNTRY
FIGURE 18 CHINA TO REGISTER HIGHEST CAGR IN CHIPLET MARKET FROM
2023 TO 2028

5 MARKET OVERVIEW



5.1 INTRODUCTION

5.2 MARKET DYNAMICS

FIGURE 19 CHIPLET MARKET: DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES

5.2.1 DRIVERS

5.2.1.1 Adoption of high-performance computing (HPC) servers in various sectors

5.2.1.2 Proliferation of data centers worldwide

FIGURE 20 NUMBER OF DATA CENTERS WORLDWIDE

5.2.1.3 Adoption of advanced packaging technologies

FIGURE 21 ANALYSIS OF IMPACT OF DRIVERS ON CHIPLET MARKET

5.2.2 RESTRAINTS

5.2.2.1 Heat management issues

5.2.2.2 Lack of industry-wide interoperability standards

FIGURE 22 ANALYSIS OF IMPACT OF RESTRAINTS ON CHIPLET MARKET 5.2.3 OPPORTUNITIES

5.2.3.1 Development of quantum chiplets

5.2.3.2 Rapid expansion of 5G infrastructure

5.2.3.3 Rising incorporation of high-performance and power-efficient chiplets into medical devices

5.2.3.4 Adoption of chiplets in AI and edge computing applications

5.2.3.5 Increasing investments in autonomous vehicles

FIGURE 23 ANALYSIS OF IMPACT OF OPPORTUNITIES ON CHIPLET MARKET 5.2.4 CHALLENGES

5.2.4.1 Challenges related to intellectual property (IP) protection and licensing

5.2.4.2 Cybersecurity and vulnerability issues associated with chiplet-based systems FIGURE 24 ANALYSIS OF IMPACT OF OPPORTUNITIES ON CHIPLET MARKET 5.3 TECHNOLOGY ANALYSIS

5.4 VALUE CHAIN ANALYSIS

FIGURE 25 CHIPLET MARKET: VALUE CHAIN ANALYSIS

5.5 ECOSYSTEM MAPPING

TABLE 2 CHIPLET MARKET: ROLE OF KEY PLAYERS IN ECOSYSTEM

FIGURE 26 KEY PLAYERS IN CHIPLET ECOSYSTEM

5.6 TRENDS AND DISRUPTIONS IMPACTING CUSTOMERS' BUSINESSES

FIGURE 27 REVENUE SHIFTS AND NEW REVENUE POCKETS FOR PLAYERS IN CHIPLET MARKET

5.7 PORTER'S FIVE FORCES ANALYSIS

TABLE 3 CHIPLET MARKET: PORTER'S FIVE FORCES ANALYSIS

FIGURE 28 PORTER'S FIVE FORCES ANALYSIS

5.7.1 THREAT OF NEW ENTRANTS

Chiplet Market by Processor (Field-Programmable Gate Array (FPGA), Central Processing Unit (CPU), Graphics Pro...



5.7.2 THREAT OF SUBSTITUTES

5.7.3 BARGAINING POWER OF SUPPLIERS

5.7.4 BARGAINING POWER OF BUYERS

5.7.5 INTENSITY OF COMPETITIVE RIVALRY

5.8 PRICING ANALYSIS

5.8.1 INDICATIVE PRICING ANALYSIS FOR CHIPLET SOLUTIONS TABLE 4 INDICATIVE PRICING ANALYSIS, BY KEY PLAYER (USD) TABLE 5 INDICATIVE PRICING ANALYSIS, BY PROCESSOR (USD) TABLE 6 INDICATIVE PRICING ANALYSIS, BY APPLICATION (USD) 5.9 CASE STUDY ANALYSIS

5.9.1 INTEL AND SIEMENS HEALTHINEERS DEVELOPED STATE-OF-THE-ART AI-POWERED IMAGING SOLUTIONS USING CHIPLETS

5.9.2 ACHRONIX'S EMBEDDED FPGAS (EFPGAS) EMPOWERED HETEROGENEOUS CHIPLET INTEGRATION

5.9.3 ELIYAN PARTNERED WITH TMSC TO ADVANCE CHIPLET INTEGRATION 5.10 TRADE ANALYSIS

FIGURE 29 IMPORT DATA FOR PRODUCTS COVERED UNDER HS CODE 854231, BY COUNTRY, 2018–2022 (USD MILLION)

FIGURE 30 EXPORT DATA FOR PRODUCTS COVERED UNDER HS CODE 854231, BY COUNTRY, 2018–2022 (USD MILLION)

5.11 TARIFF ANALYSIS

TABLE 7 MFN TARIFF FOR HS CODE 854231-COMPLIANT PRODUCTS EXPORTED BY CHINA

TABLE 8 MFN TARIFF FOR HS CODE 854231-COMPLIANT PRODUCTS EXPORTED BY US

TABLE 9 MFN TARIFF FOR HS CODE 854231-COMPLIANT PRODUCTS EXPORTED BY GERMANY

5.12 PATENT ANALYSIS

FIGURE 31 NUMBER OF PATENTS GRANTED RELATED TO CHIPLETS

PUBLISHED FROM 2012 TO 2023

FIGURE 32 TOP 10 PATENT APPLICANTS, 2012–2023

TABLE 10 TOP 20 PATENT OWNERS, 2012-2023

TABLE 11 PATENT REGISTRATIONS, 2019–2023

5.13 KEY CONFERENCES AND EVENTS, 2023-2024

TABLE 12 CHIPLET MARKET: KEY CONFERENCES AND EVENTS, 2023–2024

5.14 STANDARDS AND REGULATORY LANDSCAPE

5.14.1 REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 13 NORTH AMERICA: REGULATORY BODIES, GOVERNMENT AGENCIES,



AND OTHER ORGANIZATIONS

TABLE 14 EUROPE: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 15 ASIA PACIFIC: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 16 ROW: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

5.14.2 STANDARDS

5.14.3 GOVERNMENT REGULATIONS

5.15 KEY STAKEHOLDERS AND BUYING CRITERIA

5.15.1 KEY STAKEHOLDERS IN BUYING PROCESS

FIGURE 33 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP 3 END-USE APPLICATIONS

TABLE 17 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP 3 END-USE APPLICATIONS (%)

5.15.2 BUYING CRITERIA

FIGURE 34 KEY BUYING CRITERIA FOR TOP 3 END-USE APPLICATIONS TABLE 18 KEY BUYING CRITERIA FOR TOP 3 END-USE APPLICATIONS

6 CHIPLET MARKET, BY PROCESSOR

6.1 INTRODUCTION

FIGURE 35 CPU SEGMENT TO HOLD LARGEST SHARE OF CHIPLET MARKET IN 2028

TABLE 19 CHIPLET MARKET, BY PROCESSOR, 2019–2022 (USD MILLION) TABLE 20 CHIPLET MARKET, BY PROCESSOR, 2023–2028 (USD MILLION) 6.2 FIELD PROGRAMMABLE GATE ARRAY (FPGA)

6.2.1 RE-PROGRAMMABILITY, FLEXIBILITY, SCALABILITY, IMPROVED PERFORMANCE, AND POWER EFFICIENCY FEATURES TO FUEL DEMAND TABLE 21 FPGA: CHIPLET MARKET, BY END-USE APPLICATION, 2019–2022 (USD MILLION)

TABLE 22 FPGA: CHIPLET MARKET, BY END-USE APPLICATION, 2023–2028 (USD MILLION)

TABLE 23 FPGA: CHIPLET MARKET, BY REGION, 2019–2022 (USD MILLION)TABLE 24 FPGA: CHIPLET MARKET, BY REGION, 2023–2028 (USD MILLION)6.3 GRAPHICS PROCESSING UNIT (GPU)

6.3.1 HIGHER BANDWIDTH THAN CPUS AND EXPANDING AI, MACHINE LEARNING, AND DATA CENTER MARKETS TO DRIVE DEMAND TABLE 25 GPU: CHIPLET MARKET, BY END-USE APPLICATION, 2019–2022 (USD



MILLION)

TABLE 26 GPU: CHIPLET MARKET, BY END-USE APPLICATION, 2023–2028 (USD MILLION)

TABLE 27 GPU: CHIPLET MARKET, BY REGION, 2019–2022 (USD MILLION)TABLE 28 GPU: CHIPLET MARKET, BY REGION, 2023–2028 (USD MILLION)6.4 CENTRAL PROCESSING UNIT (CPU)

6.4.1 COST-EFFECTIVENESS AND ABILITY TO HANDLE CERTAIN AI ALGORITHMS TO FUEL DEMAND

TABLE 29 CPU: CHIPLET MARKET, BY END-USE APPLICATION, 2019–2022 (USD MILLION)

TABLE 30 CPU: CHIPLET MARKET, BY END-USE APPLICATION, 2023–2028 (USD MILLION)

TABLE 31 CPU: CHIPLET MARKET, BY REGION, 2019–2022 (USD MILLION) TABLE 32 CPU: CHIPLET MARKET, BY REGION, 2023–2028 (USD MILLION) 6.5 APPLICATION PROCESSING UNIT (APU)

6.5.1 EXCELLENT PERFORMANCE AND EFFICIENT THERMAL MANAGEMENT FEATURES TO DRIVE DEMAND

TABLE 33 APU: CHIPLET MARKET, BY END-USE APPLICATION, 2019–2022 (USD MILLION)

TABLE 34 APU: CHIPLET MARKET, BY END-USE APPLICATION, 2023–2028 (USD MILLION)

TABLE 35 APU: CHIPLET MARKET, BY REGION, 2019–2022 (USD MILLION) TABLE 36 APU: CHIPLET MARKET, BY REGION, 2023–2028 (USD MILLION) 6.6 ARTIFICIAL INTELLIGENCE APPLICATION-SPECIFIC INTEGRATED CIRCUIT (AI ASIC) COPROCESSOR

6.6.1 GROWING NEED FOR USER-SPECIFIC CUSTOMIZED SOLUTIONS TO DRIVE MARKET

TABLE 37 AI ASIC COPROCESSOR: CHIPLET MARKET, BY END-USE APPLICATION, 2019–2022 (USD MILLION)

TABLE 38 AI ASIC COPROCESSOR: CHIPLET MARKET, BY END-USE APPLICATION, 2023–2028 (USD MILLION)

TABLE 39 AI ASIC COPROCESSOR: CHIPLET MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 40 AI ASIC COPROCESSOR: CHIPLET MARKET, BY REGION, 2023–2028 (USD MILLION)

7 CHIPLET MARKET, BY PACKAGING TECHNOLOGY

7.1 INTRODUCTION

Chiplet Market by Processor (Field-Programmable Gate Array (FPGA), Central Processing Unit (CPU), Graphics Pro...



FIGURE 36 2.5D/3D PACKAGING SEGMENT TO DOMINATE CHIPLET MARKET DURING FORECAST PERIOD

TABLE 41 CHIPLET MARKET, BY PACKAGING TECHNOLOGY, 2019–2022 (USD MILLION)

TABLE 42 CHIPLET MARKET, BY PACKAGING TECHNOLOGY, 2023–2028 (USD MILLION)

7.2 SYSTEM-IN-PACKAGE (SIP)

7.2.1 ABILITY OF SYSTEM-IN-PACKAGE (SIP) TECHNOLOGY TO SEAMLESSLY INTEGRATE MULTIPLE HETEROGENEOUS CHIPLETS INTO SINGLE, COMPACT MODULE TO FUEL DEMAND

7.3 FLIP CHIP CHIP SCALE PACKAGE (FCCSP)

7.3.1 EXCEPTIONAL ELECTRICAL PERFORMANCE OF FLIP CHIP CHIP SCALE PACKAGE (FCCSP) TECHNOLOGY TO FUEL DEMAND

7.4 FLIP CHIP BALL GRID ARRAY (FCBGA)

7.4.1 STRONG ELECTRICAL CONNECTION AND EFFICIENT HEAT DISSIPATION FEATURES OF FLIP CHIP BALL GRID ARRAY (FCBGA) TECHNOLOGY TO DRIVE MARKET

7.5 2.5D/3D

7.5.1 ABILITY OF 2.5D/3D PACKAGING TECHNOLOGY TO DELIVER SUPERIOR PERFORMANCE AND HIGH BANDWIDTH THROUGH VERTICAL STACKING TO PROPEL DEMAND

7.6 WAFER-LEVEL CHIP SCALE PACKAGE (WLCSP)

7.6.1 CAPABILITY OF WAFER-LEVEL CHIP SCALE PACKAGING (WLCSP) TECHNOLOGY TO ELIMINATE NEED FOR TRADITIONAL PACKAGING SUBSTRATES AND COMPATIBILITY WITH HIGH-VOLUME MANUFACTURING PROCESSES TO SUPPORT MARKET GROWTH

7.7 FAN-OUT (FO)

7.7.1 POTENTIALITY OF FAN-OUT (FO) PACKAGING TECHNOLOGY TO SUPPORT DIFFERENT CHIPLET CONFIGURATIONS TO FUEL ADOPTION

8 CHIPLET MARKET, BY END-USE APPLICATION

8.1 INTRODUCTION

FIGURE 37 ENTERPRISE ELECTRONICS SEGMENT TO DOMINATE CHIPLET MARKET DURING FORECAST PERIOD

TABLE 43 CHIPLET MARKET, BY END-USE APPLICATION, 2019–2022 (USD MILLION)

TABLE 44 CHIPLET MARKET, BY END-USE APPLICATION, 2023–2028 (USD MILLION)



8.2 ENTERPRISE ELECTRONICS

8.2.1 INCREASING DEMAND FOR ENERGY EFFICIENCY IN ORGANIZATIONAL OPERATIONS TO DRIVE SEGMENTAL GROWTH

TABLE 45 ENTERPRISE ELECTRONICS: CHIPLET MARKET, BY PROCESSOR, 2019–2022 (USD MILLION)

TABLE 46 ENTERPRISE ELECTRONICS: CHIPLET MARKET, BY PROCESSOR, 2023–2028 (USD MILLION)

8.3 CONSUMER ELECTRONICS

8.3.1 TECHNOLOGICAL ADVANCEMENTS IN CONSUMER ELECTRONICS TO FUEL ADOPTION OF MICROPROCESSORS FOR FAST DATA PROCESSING TABLE 47 CONSUMER ELECTRONICS: CHIPLET MARKET, BY PROCESSOR, 2019–2022 (USD MILLION)

TABLE 48 CONSUMER ELECTRONICS: CHIPLET MARKET, BY PROCESSOR, 2023–2028 (USD MILLION)

8.4 AUTOMOTIVE

8.4.1 ADVANCEMENTS IN ADAS AND AUTONOMOUS DRIVING TECHNOLOGIES TO SUPPORT SEGMENTAL GROWTH

TABLE 49 AUTOMOTIVE: CHIPLET MARKET, BY PROCESSOR, 2019–2022 (USD MILLION)

TABLE 50 AUTOMOTIVE: CHIPLET MARKET, BY PROCESSOR, 2023–2028 (USD MILLION)

8.5 INDUSTRIAL AUTOMATION

8.5.1 INCREASING DEPLOYMENT OF ROBOTICS AND AUTOMATION ACROSS INDUSTRIAL PLANTS AND FACILITIES TO DRIVE DEMAND

TABLE 51 INDUSTRIAL AUTOMATION: CHIPLET MARKET, BY PROCESSOR, 2019–2022 (USD MILLION)

TABLE 52 INDUSTRIAL AUTOMATION: CHIPLET MARKET, BY PROCESSOR,2023–2028 (USD MILLION)

8.6 HEALTHCARE

8.6.1 RISING NEED FOR WEARABLES AND IMPLANTABLE DEVICES TO FUEL MARKET GROWTH

TABLE 53 HEALTHCARE: CHIPLET MARKET, BY PROCESSOR, 2019–2022 (USD MILLION)

TABLE 54 HEALTHCARE: CHIPLET MARKET, BY PROCESSOR, 2023–2028 (USD MILLION)

8.7 MILITARY & AEROSPACE

8.7.1 GROWING NEED FOR RELIABILITY AND EXCEPTIONAL PERFORMANCE IN MILITARY & AEROSPACE SECTOR TO BOOST ADOPTION

TABLE 55 MILITARY & AEROSPACE: CHIPLET MARKET, BY PROCESSOR,



2019–2022 (USD MILLION)

TABLE 56 MILITARY & AEROSPACE: CHIPLET MARKET, BY PROCESSOR, 2023–2028 (USD MILLION) 8.8 OTHERS TABLE 57 OTHERS: CHIPLET MARKET, BY PROCESSOR, 2019–2022 (USD MILLION) TABLE 58 OTHERS: CHIPLET MARKET, BY PROCESSOR, 2023–2028 (USD

MILLION)

9 CHIPLET MARKET, BY REGION

9.1 INTRODUCTION

FIGURE 38 ASIA PACIFIC TO DOMINATE CHIPLET MARKET DURING FORECAST PERIOD

TABLE 59 CHIPLET MARKET, BY REGION, 2019–2022 (USD MILLION) TABLE 60 CHIPLET MARKET, BY REGION, 2023–2028 (USD MILLION) 9.2 NORTH AMERICA

9.2.1 NORTH AMERICA: RECESSION IMPACT

FIGURE 39 NORTH AMERICA: CHIPLET MARKET SNAPSHOT

FIGURE 40 US TO DOMINATE NORTH AMERICAN CHIPLET MARKET DURING FORECAST PERIOD

TABLE 61 NORTH AMERICA: CHIPLET MARKET, BY COUNTRY, 2019–2022 (USD MILLION)

TABLE 62 NORTH AMERICA: CHIPLET MARKET, BY COUNTRY, 2023–2028 (USD MILLION)

TABLE 63 NORTH AMERICA: CHIPLET MARKET, BY PROCESSOR, 2019–2022 (USD MILLION)

TABLE 64 NORTH AMERICA: CHIPLET MARKET, BY PROCESSOR, 2023–2028 (USD MILLION)

9.2.2 US

9.2.2.1 Rising demand for chiplets in data centers and presence of stringent environmental policies to fuel market growth

9.2.3 CANADA

9.2.3.1 Government-led initiatives for boosting domestic semiconductor industry to drive demand

9.2.4 MEXICO

9.2.4.1 Growing automotive industry to fuel market growth

9.3 EUROPE

9.3.1 EUROPE: RECESSION IMPACT



FIGURE 41 EUROPE: CHIPLET MARKET SNAPSHOT

FIGURE 42 GERMANY TO DOMINATE EUROPEAN CHIPLET MARKET DURING FORECAST PERIOD

TABLE 65 EUROPE: CHIPLET MARKET, BY COUNTRY, 2019–2022 (USD MILLION) TABLE 66 EUROPE: CHIPLET MARKET, BY COUNTRY, 2023–2028 (USD MILLION) TABLE 67 EUROPE: CHIPLET MARKET, BY PROCESSOR, 2019–2022 (USD MILLION)

TABLE 68 EUROPE: CHIPLET MARKET, BY PROCESSOR, 2023–2028 (USD MILLION)

9.3.2 GERMANY

9.3.2.1 Government-led investments in semiconductor industry to fuel market growth 9.3.3 UK

9.3.3.1 Government-led focus on developing telecommunications industry to drive demand

9.3.4 FRANCE

9.3.4.1 Strategic investments in semiconductor manufacturing to support market growth

9.3.5 REST OF EUROPE

9.4 ASIA PACIFIC

9.4.1 ASIA PACIFIC: RECESSION IMPACT

FIGURE 43 ASIA PACIFIC: CHIPLET MARKET SNAPSHOT

FIGURE 44 CHINA TO DOMINATE ASIA PACIFIC CHIPLET MARKET DURING FORECAST PERIOD

TABLE 69 ASIA PACIFIC: CHIPLET MARKET, BY COUNTRY, 2019–2022 (USD MILLION)

TABLE 70 ASIA PACIFIC: CHIPLET MARKET, BY COUNTRY, 2023–2028 (USD MILLION)

TABLE 71 ASIA PACIFIC: CHIPLET MARKET, BY PROCESSOR, 2019–2022 (USD MILLION)

TABLE 72 ASIA PACIFIC: CHIPLET MARKET, BY PROCESSOR, 2023–2028 (USD MILLION)

9.4.2 CHINA

9.4.2.1 Government-led efforts for enhancing semiconductor capabilities to drive demand

9.4.3 JAPAN

9.4.3.1 Technological advancements in automotive sector to accelerate market growth

9.4.4 SOUTH KOREA

9.4.4.1 Booming consumer electronics industry to drive demand



9.4.5 REST OF ASIA PACIFIC

9.5 ROW

9.5.1 ROW: RECESSION IMPACT

TABLE 73 ROW: CHIPLET MARKET, BY REGION, 2019–2022 (USD MILLION) TABLE 74 ROW: CHIPLET MARKET, BY REGION, 2023–2028 (USD MILLION) TABLE 75 ROW: CHIPLET MARKET, BY PROCESSOR, 2019–2022 (USD MILLION) TABLE 76 ROW: CHIPLET MARKET, BY PROCESSOR, 2023–2028 (USD MILLION) 9.5.2 SOUTH AMERICA

9.5.2.1 Increased need for data centers to drive market growth

9.5.3 MIDDLE EAST & AFRICA

9.5.3.1 Government funding for development of healthcare infrastructure to boost market growth

10 COMPETITIVE LANDSCAPE

10.1 OVERVIEW

10.2 KEY STRATEGIES ADOPTED BY MAJOR PLAYERS

TABLE 77 CHIPLET MARKET: OVERVIEW OF STRATEGIES ADOPTED BY KEY PLAYERS

10.3 REVENUE ANALYSIS, 2020–2022

FIGURE 45 REVENUE ANALYSIS OF TOP FIVE MARKET PLAYERS, 2020–2022 10.4 MARKET SHARE ANALYSIS, 2022

FIGURE 46 CHIPLET MARKET SHARE ANALYSIS, 2022

TABLE 78 CHIPLET MARKET SHARE ANALYSIS, 2022

10.5 EVALUATION MATRIX OF KEY COMPANIES, 2022

10.5.1 STARS

10.5.2 EMERGING LEADERS

10.5.3 PERVASIVE PLAYERS

10.5.4 PARTICIPANTS

FIGURE 47 CHIPLET MARKET: EVALUATION MATRIX OF KEY COMPANIES, 2022 10.6 EVALUATION MATRIX OF STARTUPS/SMALL AND MEDIUM-SIZED ENTERPRISES (SMES), 2022

10.6.1 PROGRESSIVE COMPANIES

10.6.2 RESPONSIVE COMPANIES

10.6.3 DYNAMIC COMPANIES

10.6.4 STARTING BLOCKS

FIGURE 48 CHIPLET MARKET: EVALUATION MATRIX OF STARTUPS/SMES, 2022 10.7 LIST OF STARTUPS/SMES

TABLE 79 CHIPLET MARKET: LIST OF KEY STARTUPS/SMES



10.8 COMPETITIVE BENCHMARKING TABLE 80 STARTUP/SME: COMPANY FOOTPRINT TABLE 81 OVERALL COMPANY FOOTPRINT TABLE 82 PROCESSOR: COMPANY FOOTPRINT TABLE 83 END-USE APPLICATION: COMPANY FOOTPRINT TABLE 84 REGION: COMPANY FOOTPRINT 10.9 COMPETITIVE SCENARIOS AND TRENDS 10.9.1 PRODUCT LAUNCHES TABLE 85 CHIPLET MARKET: PRODUCT LAUNCHES, 2019–2023 10.9.2 DEALS TABLE 86 CHIPLET MARKET: DEALS, 2019–2023

11 COMPANY PROFILES

(Business overview, Products/Solutions/Services offered, Recent Developments, MNM view)*

11.1 KEY PLAYERS

11.1.1 INTEL CORPORATION

TABLE 87 INTEL CORPORATION: COMPANY OVERVIEW FIGURE 49 INTEL CORPORATION: COMPANY SNAPSHOT TABLE 88 INTEL CORPORATION: PRODUCTS/SOLUTIONS/SERVICES OFFERED TABLE 89 INTEL CORPORATION: PRODUCT LAUNCHES TABLE 90 INTEL CORPORATION: DEALS 11.1.2 ADVANCED MICRO DEVICES, INC. TABLE 91 ADVANCED MICRO DEVICES, INC.: COMPANY OVERVIEW FIGURE 50 ADVANCED MICRO DEVICES, INC.: COMPANY SNAPSHOT TABLE 92 ADVANCED MICRO DEVICES, INC.: PRODUCTS/SOLUTIONS/SERVICES OFFERED TABLE 93 ADVANCED MICRO DEVICES, INC.: PRODUCT LAUNCHES TABLE 94 ADVANCED MICRO DEVICES, INC.: DEALS 11.1.3 APPLE INC. TABLE 95 APPLE INC .: COMPANY OVERVIEW FIGURE 51 APPLE INC.: COMPANY SNAPSHOT TABLE 96 APPLE INC .: PRODUCTS/SOLUTIONS/SERVICES OFFERED TABLE 97 APPLE INC.: PRODUCT LAUNCHES TABLE 98 APPLE INC .: DEALS 11.1.4 IBM TABLE 99 IBM: COMPANY OVERVIEW FIGURE 52 IBM: COMPANY SNAPSHOT



TABLE 100 IBM: PRODUCTS/SOLUTIONS/SERVICES OFFERED TABLE 101 IBM: PRODUCT LAUNCHES TABLE 102 IBM: DEALS 11.1.5 MARVELL TABLE 103 MARVELL: COMPANY OVERVIEW FIGURE 53 MARVELL: COMPANY SNAPSHOT TABLE 104 MARVELL: PRODUCTS/SOLUTIONS/SERVICES OFFERED TABLE 105 MARVELL: PRODUCT LAUNCHES TABLE 106 MARVELL: DEALS 11.1.6 MEDIATEK INC. TABLE 107 MEDIATEK INC.: COMPANY OVERVIEW FIGURE 54 MEDIATEK INC.: COMPANY SNAPSHOT TABLE 108 MEDIATEK, INC.: PRODUCTS/SOLUTIONS/SERVICES OFFERED TABLE 109 MEDIATEK, INC.: PRODUCT LAUNCHES TABLE 110 MEDIATEK. INC.: DEALS **11.1.7 NVIDIA CORPORATION** TABLE 111 NVIDIA CORPORATION: COMPANY OVERVIEW FIGURE 55 NVIDIA CORPORATION: COMPANY SNAPSHOT TABLE 112 NVIDIA CORPORATION: PRODUCTS/SOLUTIONS/SERVICES OFFERED TABLE 113 NVIDIA CORPORATION: PRODUCT LAUNCHES **TABLE 114 NVIDIA CORPORATION: DEALS** 11.1.8 ACHRONIX SEMICONDUCTOR CORPORATION TABLE 115 ACHRONIX SEMICONDUCTOR CORPORATION: COMPANY OVERVIEW TABLE 116 ACHRONIX SEMICONDUCTOR CORPORATION: PRODUCTS/SOLUTIONS/ SERVICES OFFERED TABLE 117 ACHRONIX SEMICONDUCTOR CORPORATION: PRODUCT LAUNCHES TABLE 118 ACHRONIX SEMICONDUCTOR CORPORATION: DEALS 11.1.9 RANOVUS TABLE 119 RANOVUS: COMPANY OVERVIEW TABLE 120 RANOVUS: PRODUCTS/SOLUTIONS/SERVICES OFFERED **TABLE 121 RANOVUS: PRODUCT LAUNCHES TABLE 122 RANOVUS: DEALS** 11.1.10 ASE TABLE 123 ASE: COMPANY OVERVIEW FIGURE 56 ASE: COMPANY SNAPSHOT TABLE 124 ASE: PRODUCTS/SOLUTIONS/SERVICES OFFERED TABLE 125 ASE: PRODUCT LAUNCHES TABLE 126 ASE: DEALS



- 11.2 OTHER PLAYERS
 - 11.2.1 CADENCE DESIGN SYSTEMS, INC.
 - 11.2.2 SYNOPSYS, INC.
 - 11.2.3 ALPHAWAVE SEMI
 - 11.2.4 ELIYAN
 - 11.2.5 NETRONOME
 - 11.2.6 TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY LIMITED
 - 11.2.7 NHANCED SEMICONDUCTORS
 - 11.2.8 CHIPULLER
 - 11.2.9 SIFIVE, INC.
 - 11.2.10 RAMBUS
 - 11.2.11 AYAR LABS, INC.
 - 11.2.12 TACHYUM
 - 11.2.13 X-CELEPRINT
 - 11.2.14 KANDOU BUS SA
 - 11.2.15 RAIN NEUROMORPHICS
- 11.2.16 TENSTORRENT

*Details on Business overview, Products/Solutions/Services offered, Recent

Developments, MNM view might not be captured in case of unlisted companies.

12 APPENDIX

12.1 DISCUSSION GUIDE

12.2 KNOWLEDGESTORE: MARKETSANDMARKETS' SUBSCRIPTION PORTAL

12.3 CUSTOMIZATION OPTIONS

12.4 RELATED REPORTS

12.5 AUTHOR DETAILS



I would like to order

- Product name: Chiplet Market by Processor (Field-Programmable Gate Array (FPGA), Central Processing Unit (CPU), Graphics Processing Unit (GPU), APU, AI ASIC Co-Processor), Packaging Technology (SiP, FCCSP, FCBGA, 2.5D/3D, WLCSP, Fan-Out) – Global Forecast to 2028
 - Product link: https://marketpublishers.com/r/C4093B65D53EEN.html
 - Price: US\$ 4,950.00 (Single User License / Electronic Delivery) If you want to order Corporate License or Hard Copy, please, contact our Customer Service: info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <u>https://marketpublishers.com/r/C4093B65D53EEN.html</u>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name: Last name: Email: Company: Address: City: Zip code: Country: Tel: Fax: Your message:

**All fields are required

Custumer signature ____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <u>https://marketpublishers.com/docs/terms.html</u>



To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970