Multi-Core Processors Market Research Report - Global Forecast till 2025

Market Synopsis

The global market for multi-core processors was valued at USD 35.4 billion in 2018; it is expected to reach USD 110.8 billion by the end of the forecast period at a CAGR of 17.7%.

A multiple-core processor is a single IC that consists of multiple core processing units commonly known as cores. Multi-core processors offer the same performance as a single faster processor at a lower power dissipation at a lower clock frequency. Multi-core technology helps in dealing with challenging tasks and applications such as video editing, 3D gaming, and encoding. Multi-core processors are mainly used in consumer electronics, automotive, and healthcare sectors. Dual core, quad core, hexa core, and octa core are the types of multi-core processors.

Increasing demand for multi-core processors in the smartphone industry and increasing utilization of multi-core processors in the automotive industry are expected to drive the multi-core processors market during the forecast period. However, the short life cycle of consumer electronic products is expected to restrain the market during the forecast period.

Key Developments

- In May 2019, Apple Inc. launched 13-inch and 15-inch MacBook Pro laptops with Intel’s 9th Generation Core processors. This base model is powered by 2.6GHz, 6-core Intel Core i7 processor that can turbo boost up to 4.5GHz.
- In December 2018, Qualcomm launched Snapdragon 855 octa-core 7nm processor which offers 5G service, system on a chip (SoC), graphics chip, and signal processors, among others.

Segmentation

The global multi-core processors market has been segmented based on type, end user, and region.

By type, the multi-core processors market has been segmented into dual-core processors, quad-core processors, octa-core processors, and hexa-core processors.

By end user, the multi-core processors market has been segmented into consumer electronics, automotive, telecommunications, healthcare, energy, and others.

By region, the multi-core processors market has been segmented into North America, Europe, Asia-Pacific, the Middle East & Africa, and South America.

Regional Analysis

Globally, the multi-core processors market has been categorized into five regions—North America, Europe, Asia-Pacific, the Middle East & Africa, and South America. North America is expected to dominate the multi-core processors market during forecast period due to the presence of several
global players such as Intel Corporation and Qualcomm Technologies, Inc. the early adoption of new technologies.

Asia-Pacific is expected to be at the second position and grow at a faster rate during the forecast period due to presence of the telecommunication industry, smartphone manufacturing companies, and large consumer electronics market. MediaTek Inc., Samsung, Xiaomi Corporation, and Spreadtrum Communications are expected to drive the multi-core processors market during the forecast period.

The European market is expected to be in the third position due to the growing automotive market and healthcare industry. The market in the Middle East & Africa and South America is expected to grow at a stable rate during the forecast period.

**Global Multi-Core Processors Market, USD Billion**

<table>
<thead>
<tr>
<th>Year</th>
<th>Market Size (USD Billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>35.4</td>
</tr>
<tr>
<td>2019</td>
<td>40.9</td>
</tr>
<tr>
<td>2020</td>
<td>47.5</td>
</tr>
<tr>
<td>2021</td>
<td>55.6</td>
</tr>
<tr>
<td>2022</td>
<td>65.4</td>
</tr>
<tr>
<td>2023</td>
<td>77.5</td>
</tr>
<tr>
<td>2024</td>
<td>92.3</td>
</tr>
<tr>
<td>2025</td>
<td>110.8</td>
</tr>
</tbody>
</table>

Source: MRFR Analysis

**Competitive landscape**

The global multi-core processors market consists of various global, regional, and local service providers who are continuously evolving to enhance their market positions. The major players are likely to strengthen their presence worldwide through the mergers and acquisition of local and regional players for expanding the reach of their solutions during the review period. Improvements in the of the global economic scenario combined with technological advancements in the emerging economies such as India, South Africa, China, Brazil, and Argentina, are likely to fuel the market growth, thereby making it an ideal time to expand the multi-core processors market geographically and increase the market share.

Therefore, vendors must develop new technologies and stay abreast of emerging technologies that could affect the continuing competitiveness of their product lines in the market.

**Key Players**

The key players in the multi-core processors market are Intel Corporation (US), Qualcomm Technologies, Inc. (US), Apple Inc. (US), MediaTek Inc. (Taiwan), Samsung (South Korea), Xiaomi Corporation (China), NXP Semiconductors (Netherlands), Texas Instruments (US), Nvidia Corporation (US), Advanced Micro Devices, Inc. (US), ARM Holdings, PLC (UK), Broadcom Corporation (US), and Marvell (Bermuda).

**Intended Audience**

- Component Manufacturers
- Semiconductor Vendors
- System Integrators
- Distribution Centers
- Software Developers
- Manufacturing Companies
- Research Institutes and Organizations
- Technology Standards Organizations

Infographic Summary:
PROCESSORS MARKET

BY TYPE (Dual Core Processors, Quad Core Processors, Octa Core Processors, Hexa Core Processors), BY END USER (Consumer Electronics, Automotive, Telecommunications, Healthcare, Energy, Others), and BY REGION (North America, Europe, Asia-Pacific, Middle East and Africa, South America)

FORECAST TILL 2025

MARKET USP
Multi-core processors are used for providing high operational efficiency, high accuracy, high speed, and to limit system complexity.

Market Size (2018) – USD
~ 17.7%
35.4 BILLION

CASER (2019-2025)

Largest market due to adoption in smartphones
Largest market due to adoption of electronic appliances such as computers, smartphones, laptops, and tablets
Largest market due to adoption of latest technologies and presence of global players

MARKET SEGMENTATION

BY TYPE
- Octa Core
- Dual Core
- Quad Core
- Hexa Core

BY END USER
- Consumer Electronics
- Automotive
- Telecommunication
- Healthcare
- Energy
- Others

BY REGION
- North America
- Asia-Pacific
- Europe
- Rest of the World
- Middle East & Africa
- South America

STAKEHOLDERS CONSIDERED
- Component Manufacturers
- Semiconductor Vendors
- System Integrators
- Software Developers
- Manufacturing Companies
- Research Institutes and Organizations
- Technology Standards Organizations

KEY COMPANIES PROFILED
- INTEL CORPORATION
- QUALCOMM TECHNOLOGIES, INC.
- APPLE INC.
- MEDIATEK INC.
- SAMSUNG
- XIAOMI CORPORATION
- SPREADTRUM COMMUNICATIONS
- RFX SEMICONDUCTORS
- TEXAS INSTRUMENTS INC.
- NVIDIA CORPORATION
- ADVANCED MICRO DEVICES, INC.
- ARM HOLDINGS, PLC
- BROADCOM CORPORATION
- MARVELL TECHNOLOGIES

FACTORS STUDIED FOR MARKET FORECAST

DRIVERS
- High demand of multi-core processors in smartphone industry
- Increasing penetration of multi-core processors in electronic products

RESTRAINTS
- Short life cycle of consumer electronic products
- Economic volatility
- Overcapacity in the market
- Price wars among competitors
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