

Vision Processing Unit Market by End-Use Application (Smartphones, ADAS, Camera, Drones, AR/VR Products), Vertical (Consumer Electronics, Automotive, Security and Surveillance), Fabrication Process and Geography – Global Forecast to 2024

https://marketpublishers.com/r/V4153A3B840EN.html

Date: July 2019

Pages: 126

Price: US\$ 5,650.00 (Single User License)

ID: V4153A3B840EN

Abstracts

"VPU market to grow at 18.69% CAGR from 2018 to 2024"

The VPU market is expected to grow from USD 1.3 billion in 2019 to USD 3.2 billion by 2024 at a CAGR of 18.7%. The need for VPUs is mainly governed by the increasing adoption of premium smartphones, growing adoption of edge AI, rising demand for highend computing capabilities for computer and machine vision. However, the availability of CPUs and GPUs with high capabilities can hinder the adoption of VPUs.

VPU market for AR/VR to grow at highest CAGR during forecast period

The increasing awareness regarding the benefits of implementing this technology—such as increased interaction, richer user experience, and engagement of virtual information in the real world—in AR/VR applications is fueling this market. The growing interest of technology giants in emerging technologies, such as AR/VR, has been one of the major factors driving the growth of the market for AR/VR applications. For example, in June 2016, Movidius (US) partnered with Lenovo (Hong Kong) to provide Myriad 2 VPU and custom computer vision algorithms for various VR products of Lenovo.

Consumer electronics to hold largest size of VPU market during forecast period

Increasing deployment of VPUs in smartphones, VR products, drones, etc., is driving the VPU market for consumer electronics. Continuous innovations in these products,



bringing advanced features and functionalities, contribute to their growing adoption. Need to bring sophisticated products with improved consumer experience and advanced functionalities drive the adoption of VPUs by OEMs.

APAC to record highest CAGR in VPU market during forecast period

Smartphones, drones, industrial robots, and automotive, among other applications, hold huge growth potential for VPU providers in APAC. The leading drone manufacturers and smart camera providers, integrating VPUs in their products, are based in APAC. For instance, DJI (China) introduced ultracompact Spark mini-drone and Phantom 4 Drone integrated with Intel Movidius Myriad 2 VPUs. In January 2018, Ryze, a China-based drone startup, launched Tello, a toy drone enabled with cutting-edge technologies from drone experts such as DJI and Intel.

Breakdown of primary participants' profile:

By Company Type: Tier 1 - 27%, Tier 2 - 41%, and Tier 3 - 32%

By Designation: C-Level Executives – 26%, Directors – 40%, and Others – 34%

By Region: North America – 47%, Europe – 28%, APAC – 19%, and RoW – 6%

Samsung (South Korea), Movidius (US), Cadence (US), CEVA (US), NXP (Netherlands), HiSilicon Technologies (China), Google (US), MediaTek (Taiwan) are among the leading players in the VPU market.

Research Coverage:

Various market segments covered in this report include end-use application, vertical, fabrication process, and region. It also provides a detailed view of the market across 4 main regions: North America, Europe, APAC, and RoW.

Reasons to Buy Report:

This report includes statistics pertaining to the VPU market in terms of end-use application, vertical, fabrication process, and region along with their respective market sizes.



Major drivers, restraints, opportunities, and challenges pertaining to the VPU market have been provided in detail in this report.

The report includes illustrative segmentation, analysis, and forecast for the VPU market based on its segments and subsegments.



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