+357 96 030922
info@marketpublishers.com

Global Space On-board Computing Technology Supply, Demand and Key Producers, 2026-2032

https://marketpublishers.com/r/G77681882338EN.html
Date: June 2026
Pages: 144
Price: US$ 4,480.00 (Single User License)
ID: G77681882338EN

Abstracts

The global Space On-board Computing Technology market size is expected to reach $ 1799 million by 2032, rising at a market growth of 6.4% CAGR during the forecast period (2026-2032).

Space On-board Computing Technology refers to an embedded hardware and software technology system specifically designed for spacecraft platforms (satellites, space stations, deep space probes, etc.) to perform functions such as data acquisition, signal processing, mission scheduling, autonomous control, and scientific computing in extreme space environments. Its core lies in overcoming the constraints of strong radiation, high vacuum, severe temperature differences, and limited power consumption, weight, and volume (SWaP) that traditional terrestrial computing cannot withstand. It ensures the long-term stable operation of the computing system in orbit by employing radiation-hardened processors, fault-tolerant computing architectures, real-time operating systems, and low-power, high-reliability integrated circuits. This technology covers multiple levels, from attitude and orbit control calculations, payload data processing, and inter-satellite link communication protocol management to autonomous mission planning, and is the core foundation for spacecraft to achieve autonomous 'perception-decision-execution.' As space missions develop towards intelligence, networking, and on-orbit services, spaceborne computing is gradually integrating artificial intelligence processing and heterogeneous accelerated computing capabilities, becoming a key supporting technology for promoting real-time applications of space information and deep space exploration.

The space on-board computing technology market has been witnessing steady growth driven by increased space exploration missions, satellite deployments for communication and earth observation, and advancements in satellite technology. On-

+357 96 030922
info@marketpublishers.com

board computing systems play a crucial role in enabling spacecraft and satellites to perform various functions, such as communication, navigation, scientific research, and data processing. The space on-board computing technology market is global in nature, with key players and manufacturers distributed across various regions. Major players in this market are often based in countries with well-established space industries, such as the United States, Russia, European Union countries, China, and India. Additionally, space technology collaborations and partnerships between countries also influence the market dynamics.

This report studies the global Space On-board Computing Technology demand, key companies, and key regions.

This report is a detailed and comprehensive analysis of the world market for Space On-board Computing Technology, and provides market size (US$ million) and Year-over-Year (YoY) growth, considering 2025 as the base year. This report explores demand trends and competition, as well as details the characteristics of Space On-board Computing Technology that contribute to its increasing demand across many markets.

Highlights and key features of the study
Global Space On-board Computing Technology total market, 2021-2032, (USD Million)
Global Space On-board Computing Technology total market by region & country, CAGR, 2021-2032, (USD Million)
U.S. VS China: Space On-board Computing Technology total market, key domestic companies, and share, (USD Million)
Global Space On-board Computing Technology revenue by player, revenue and market share 2021-2026, (USD Million)
Global Space On-board Computing Technology total market by Type, CAGR, 2021-2032, (USD Million)
Global Space On-board Computing Technology total market by Application, CAGR, 2021-2032, (USD Million)

This report profiles major players in the global Space On-board Computing Technology market based on the following parameters - company overview, revenue, gross margin, product portfolio, geographical presence, and key developments. Key companies covered as a part of this study include BAE Systems, Thales Group, L3Harris Technologies, Lockheed Martin Corp, Honeywell International, Raytheon Technologies, Saab AB, Northrop Grumman, Airbus, Cobham Gaisler, etc.

This report also provides key insights about market drivers, restraints, opportunities,

+357 96 030922
info@marketpublishers.com

new product launches or approvals.

Stakeholders would have ease in decision-making through various strategy matrices used in analyzing the world Space On-board Computing Technology market

Detailed Segmentation:

Each section contains quantitative market data including market by value (US$ Millions), by player, by regions, by Type, and by Application. Data is given for the years 2021-2032 by year with 2025 as the base year, 2026 as the estimate year, and 2027-2032 as the forecast year.

Global Space On-board Computing Technology Market, By Region:

United States

China

Europe

Japan

South Korea

ASEAN

India

Rest of World

Global Space On-board Computing Technology Market, Segmentation by Type:

Nano Satellite

Micro Satellite

Small Satellite

+357 96 030922
info@marketpublishers.com

Medium Satellite

Large Satellite

Others

Global Space On-board Computing Technology Market, Segmentation by Computational Tasks:

Platform Management and Attitude/Orbit Control Calculations

Payload Data Processing

Autonomous Mission Planning and Decision-Making Calculations

Inter-Satellite Link and Network Communication Calculations

Global Space On-board Computing Technology Market, Segmentation by Architecture:

CPU (Central Processing Unit) Architecture

FPGA (Field-Programmable Gate Array) Architecture

GPU/DSP (Graphics/Digital Signal Processor) Architecture

ASIC (Application-Specific Integrated Circuit) Architecture

Heterogeneous Convergence Architecture

Global Space On-board Computing Technology Market, Segmentation by Application:

Communication

Earth Observation

Navigation

+357 96 030922
info@marketpublishers.com

Meteorology

Others

Companies Profiled:

BAE Systems

Thales Group

L3Harris Technologies

Lockheed Martin Corp

Honeywell International

Raytheon Technologies

Saab AB

Northrop Grumman

Airbus

Cobham Gaisler

EnduroSat

GAUSS Srl

Leonardo

Loft Orbital

KP Labs

SkyServe

+357 96 030922
info@marketpublishers.com

Terma

GALAXYSPACE

CAST

China AerospaceScience and Technology Corporation

Key Questions Answered

1. How big is the global Space On-board Computing Technology market?
2. What is the demand of the global Space On-board Computing Technology market?
3. What is the year over year growth of the global Space On-board Computing Technology market?
4. What is the total value of the global Space On-board Computing Technology market?
5. Who are the Major Players in the global Space On-board Computing Technology market?
6. What are the growth factors driving the market demand?

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

5 MARKET ANALYSIS BY TYPE

+357 96 030922
info@marketpublishers.com

6 MARKET ANALYSIS BY COMPUTATIONAL TASKS

7 MARKET ANALYSIS BY ARCHITECTURE

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

10 INDUSTRY CHAIN ANALYSIS

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

List Of Tables

LIST OF TABLES

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

List Of Figures

LIST OF FIGURES

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Global Space On-board Computing Technology Supply, Demand and Key Producers, 2026-2032

Product link: https://marketpublishers.com/r/G77681882338EN.html

Price: US$ 4,480.00 (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 https://marketpublishers.com/r/G77681882338EN.html