

North America GNSS Chip for Timing and Synchronization Market Size and Forecast (2021 - 2031)

<https://marketpublishers.com/r/NA6AE2DCDF58EN.html>

Date: April 2026

Pages: 164

Price: US\$ 3,450.00 (Single User License)

ID: NA6AE2DCDF58EN

Abstracts

The North America GNSS Chip for Timing and Synchronization Market is projected to grow significantly, reaching an estimated US\$ 90,696.9 thousand by 2031, up from US\$ 48,521.1 thousand in 2024. This growth represents a compound annual growth rate (CAGR) of 9.6% from 2025 to 2031.

Executive Summary and Market Analysis

The North America GNSS chip market for timing and synchronization is divided into three primary regions: the United States, Canada, and Mexico. The market is experiencing robust growth due to the evolving power systems that are adapting to increasing energy demands and a greater reliance on renewable energy sources. This shift has created a pressing need for accurate, real-time coordination across modernized grid infrastructures.

In May 2024, the Biden-Harris Administration initiated the Federal-State Modern Grid Deployment Initiative, aimed at accelerating enhancements to the electric transmission and distribution networks. These improvements are crucial for achieving the nation's goals of affordable, clean, reliable, and resilient power. As grid stakeholders face challenges such as interconnection delays, line congestion, and heightened reliability risks from extreme weather, the need for precise time synchronization through GNSS technology becomes essential. This technology is vital for managing distributed energy resources, enhancing grid stability, and ensuring the seamless integration of clean energy solutions. Consequently, the demand for GNSS chips is increasing as the grid becomes smarter and more resilient, further propelling the market for timing and synchronization solutions in the region.

Strategic Insights

Market Segmentation Analysis

The North America GNSS Chip for Timing and Synchronization Market is segmented by device and industry vertical.

By Device: The market includes Cellular Network Devices, Small Cells, Public Mobile Radios (PMR), Phazor Measurement Units (PMU), and Others. In 2024, the "Others" category held the largest market share.

By Industry Vertical: The market is categorized into Telecom and IT, Energy, Banking, Financial Services, and Insurance (BFSI), Consumer Electronics, Automotive and Transportation, and Others. The Telecom and IT sector dominated the market in 2024.

Market Outlook

Synchronization is critical in mobile networks, ensuring smooth operations and consistent service delivery across all segments. In 5G networks, which utilize time division duplex (TDD), synchronization requirements are more stringent compared to frequency division duplex (FDD) systems, as outlined by 3GPP standards. Effective synchronization is essential for optimal radio access network (RAN) performance and seamless data exchange. Strict frequency, time, and phase synchronization are necessary for technologies such as LTE TDD, elastic RAN, advanced RAN coordination, and NR TDD RAN. The Global Navigation Satellite System (GNSS) and Precision Time Protocol (PTP) are the two primary methods to meet 3GPP's stringent timing requirements.

In February 2025, u-blox, a leading provider of positioning and short-range communication technologies, announced a collaboration with Intel to develop the u-blox M2-ZED-F9T GNSS timing card. This innovative solution is designed for Intel Xeon 6 SoC platforms and aims to revolutionize the implementation of virtualized RANs (vRANs). The M2-ZED-F9T timing card supports multiple radio access technologies and provides high-precision time synchronization, which is crucial for next-generation mobile networks. This collaboration signifies a major advancement in the adoption of GNSS-based timing and synchronization chip solutions within modern mobile network

infrastructures, particularly for 5G and vRAN applications. Thus, the increasing deployment of 5G network infrastructure is a significant driver for the GNSS chips for timing and synchronization market.

Country Insights

The North America GNSS Chip for Timing and Synchronization Market is further segmented by country, with the United States, Canada, and Mexico as the primary regions. The United States held the largest market share in 2024.

In May 2025, the Department of Homeland Security (DHS) Science and Technology Directorate launched a new resource on GitHub aimed at safeguarding critical infrastructure. This initiative includes a global navigation satellite system (GNSS) test vector suite and distribution methodology, supporting Executive Order 13905, which focuses on protecting essential positioning, navigation, and timing (PNT) systems used in various industries, including energy, transportation, and telecommunications. By providing standardized test vectors and methodologies, this initiative enhances the security and resilience of GNSS-based timing solutions. The emphasis on strengthening the nation's critical infrastructure encourages industries, particularly in telecom, energy, and finance, to adopt GNSS timing chips equipped with built-in security features.

Company Profiles

Key players in the North America GNSS Chip for Timing and Synchronization Market include STMicroelectronics NV, Broadcom Inc, Safran SA, NovAtel Inc., Septentrio NV, u-blox Holding AG, Quectel Wireless Solutions Co., Ltd., Furuno Electric Co., Ltd., LOCOSYS Technology Inc., and Protempis, LLC. These companies are employing various strategies such as expansion, product innovation, and mergers and acquisitions to deliver innovative products and enhance their market share.

Contents

1. INTRODUCTION

- 1.1 Report Guidance
- 1.2 Market Segmentation

2. EXECUTIVE SUMMARY

- 2.1 Key Insights
- 2.2 Market Attractiveness

3. RESEARCH METHODOLOGY

- 3.1 Secondary Research
- 3.2 Primary Research
 - 3.2.1 Hypothesis formulation:
 - 3.2.2 Macroeconomic factor analysis:
 - 3.2.3 Developing base number:
 - 3.2.4 Data Triangulation:
 - 3.2.5 Country-level data:

4. GNSS CHIP FOR TIMING AND SYNCHRONIZATION MARKET LANDSCAPE

- 4.1 Market Overview
- 4.2 PEST Analysis
- 4.3 Ecosystem Analysis
 - 4.3.1 Raw Material Suppliers
 - 4.3.2 Manufacturers
 - 4.3.3 Distributors or Suppliers
 - 4.3.4 End-Use Industry
 - 4.3.5 List of Vendors in the Value Chain
- 4.4 Impact of Trump's Reciprocal Tariffs

5. NORTH AMERICA GNSS CHIP FOR TIMING AND SYNCHRONIZATION MARKET - KEY MARKET DYNAMICS

- 5.1 Market Drivers
- 5.2 Market Restraints

5.3 Market Opportunities

5.4 Future Trends

5.5 Impact of Drivers and Restraints:

6. GNSS CHIP FOR TIMING AND SYNCHRONIZATION MARKET - NORTH AMERICA MARKET ANALYSIS

6.1 North America GNSS Chip for Timing and Synchronization Market Revenue (US\$ Thousand), 2024 - 2031

6.2 North America GNSS Chip for Timing and Synchronization Market Forecast and Analysis

7. NORTH AMERICA GNSS CHIP FOR TIMING AND SYNCHRONIZATION MARKET REVENUE ANALYSIS - BY DEVICE

7.1 Cellular Network Devices

7.1.1 Overview

7.1.2 Cellular Network Devices: North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand)

7.2 Small Cells

7.2.1 Overview

7.2.2 Small Cells: North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand)

7.3 Public Mobile Radios (PMR)

7.3.1 Overview

7.3.2 Public Mobile Radios (PMR): North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand)

7.4 Phazor Measurement Units (PMU)

7.4.1 Overview

7.4.2 Phazor Measurement Units (PMU): North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand)

7.5 Others

7.5.1 Overview

7.5.2 Others: North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand)

8. NORTH AMERICA GNSS CHIP FOR TIMING AND SYNCHRONIZATION MARKET REVENUE ANALYSIS - BY INDUSTRY VERTICAL

8.1 Telecom and IT

8.1.1 Overview

8.1.2 Telecom and IT: North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand)

8.2 Energy

8.2.1 Overview

8.2.2 Energy: North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand)

8.3 BFSI

8.3.1 Overview

8.3.2 BFSI: North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand)

8.4 Consumer Electronics

8.4.1 Overview

8.4.2 Consumer Electronics: North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand)

8.5 Automotive and Transportation

8.5.1 Overview

8.5.2 Automotive and Transportation: North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand)

8.6 Others

8.6.1 Overview

8.6.2 Others: North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand)

9. NORTH AMERICA GNSS CHIP FOR TIMING AND SYNCHRONIZATION MARKET - COUNTRY ANALYSIS

9.1 North America

9.1.1 North America GNSS Chip for Timing and Synchronization Market Revenue and Forecast and Analysis - by Country

9.1.1.1 North America GNSS Chip for Timing and Synchronization Market Revenue and Forecast and Analysis - by Country

9.1.2 United States: North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand)

9.1.2.2.1 United States: North America GNSS Chip for Timing and Synchronization Market Share - by Device

9.1.2.2.2 United States: North America GNSS Chip for Timing and Synchronization Market Share - by Industry Vertical

9.2.3.3 Canada: North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand)

9.2.3.3.1 Canada: North America GNSS Chip for Timing and Synchronization Market Share - by Device

9.2.3.3.2 Canada: North America GNSS Chip for Timing and Synchronization Market Share - by Industry Vertical

9.3.4.4 Mexico: North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand)

9.3.4.4.1 Mexico: North America GNSS Chip for Timing and Synchronization Market Share - by Device

9.3.4.4.2 Mexico: North America GNSS Chip for Timing and Synchronization Market Share - by Industry Vertical

10 COMPETITIVE LANDSCAPE

10.1 Heat Map Analysis by Key Players

10.2 Company Market Share Analysis, 2024

11 INDUSTRY LANDSCAPE

11.1 Overview

11.2 New Product Development

11.3 Merger and Acquisition

11.4 Other Strategic Developments

12 COMPANY PROFILES

12.1 STMicroelectronics NV

12.1.1 Key Facts

12.1.2 Business Description

12.1.3 Products and Services

12.1.4 Financial Overview

12.1.5 SWOT Analysis

12.1.6 Key Developments

12.2 Broadcom Inc

12.2.1 Key Facts

12.2.2 Business Description

12.2.3 Products and Services

12.2.4 Financial Overview

- 12.2.5 SWOT Analysis
- 12.2.6 Key Developments
- 12.3 Safran SA
 - 12.3.1 Key Facts
 - 12.3.2 Business Description
 - 12.3.3 Products and Services
 - 12.3.4 Financial Overview
 - 12.3.5 SWOT Analysis
 - 12.3.6 Key Developments
- 12.4 NovAtel Inc.
 - 12.4.1 Key Facts
 - 12.4.2 Business Description
 - 12.4.3 Products and Services
 - 12.4.4 Financial Overview
 - 12.4.5 SWOT Analysis
 - 12.4.6 Key Developments
- 12.5 Septentrio NV
 - 12.5.1 Key Facts
 - 12.5.2 Business Description
 - 12.5.3 Products and Services
 - 12.5.4 Financial Overview
 - 12.5.5 SWOT Analysis
 - 12.5.6 Key Developments
- 12.6 u-blox Holding AG
 - 12.6.1 Key Facts
 - 12.6.2 Business Description
 - 12.6.3 Products and Services
 - 12.6.4 Financial Overview
 - 12.6.5 SWOT Analysis
 - 12.6.6 Key Developments
- 12.7 Quectel Wireless Solutions Co Ltd
 - 12.7.1 Key Facts
 - 12.7.2 Business Description
 - 12.7.3 Products and Services
 - 12.7.4 Financial Overview
 - 12.7.5 SWOT Analysis
 - 12.7.6 Key Developments
- 12.8 Furuno Electric Co Ltd
 - 12.8.1 Key Facts

- 12.8.2 Business Description
- 12.8.3 Products and Services
- 12.8.4 Financial Overview
- 12.8.5 SWOT Analysis
- 12.8.6 Key Developments
- 12.9 LOCOSYS Technology Inc.
 - 12.9.1 Key Facts
 - 12.9.2 Business Description
 - 12.9.3 Products and Services
 - 12.9.4 Financial Overview
 - 12.9.5 SWOT Analysis
 - 12.9.6 Key Developments
- 12.10 Protempis, LLC
 - 12.10.1 Key Facts
 - 12.10.2 Business Description
 - 12.10.3 Products and Services
 - 12.10.4 Financial Overview
 - 12.10.5 SWOT Analysis
 - 12.10.6 Key Developments

13. APPENDIX

- 13.1 About The Insight Partners

List Of Tables

LIST OF TABLES

Table 1. North America GNSS Chip for Timing and Synchronization Market Segmentation

Table 2. List of Vendors

Table 3. North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand)

Table 4. North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand) - by Device

Table 5. North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand) - by Industry Vertical

Table 6. North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand) - by Country

Table 7. United States: North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand) - by Device

Table 8. United States: North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand) - by Industry Vertical

Table 9. Canada: North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand) - by Device

Table 10. Canada: North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand) - by Industry Vertical

Table 11. Mexico: North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand) - by Device

Table 12. Mexico: North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand) - by Industry Vertical

Table 13. Heat Map Analysis by Key Players

List Of Figures

LIST OF FIGURES

- Figure 1. North America GNSS Chip for Timing and Synchronization Market Segmentation - Country
- Figure 2. PEST Analysis
- Figure 3. Ecosystem: GNSS Chip for Timing and Synchronization Market
- Figure 4. North America GNSS Chip for Timing and Synchronization Market - Key Market Dynamics
- Figure 5. Impact Analysis of Drivers and Restraints
- Figure 6. North America GNSS Chip for Timing and Synchronization Market Revenue (US\$ Thousand), 2024 - 2031
- Figure 7. North America GNSS Chip for Timing and Synchronization Market Share (%) - by Device, 2024 and 2031
- Figure 8. Cellular Network Devices: North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand)
- Figure 9. Small Cells: North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand)
- Figure 10. Public Mobile Radios (PMR): North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand)
- Figure 11. Phazor Measurement Units (PMU): North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand)
- Figure 12. Others: North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand)
- Figure 13. North America GNSS Chip for Timing and Synchronization Market Share (%) - by Industry Vertical, 2024 and 2031
- Figure 14. Telecom and IT: North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand)
- Figure 15. Energy: North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand)
- Figure 16. BFSI: North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand)
- Figure 17. Consumer Electronics: North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand)
- Figure 18. Automotive and Transportation: North America GNSS Chip for Timing and Synchronization Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand)
- Figure 19. Others: North America GNSS Chip for Timing and Synchronization Market -

Revenue and Forecast, 2021 - 2031 (US\$ Thousand)

Figure 20. North America GNSS Chip for Timing and Synchronization Market
Breakdown by Key Countries, 2024 and 2031 (%)

Figure 21. United States: North America GNSS Chip for Timing and Synchronization
Market - Revenue and Forecast, 2021 - 2031 (US\$ Thousand)

Figure 22. Canada: North America GNSS Chip for Timing and Synchronization Market -
Revenue and Forecast, 2021 - 2031 (US\$ Thousand)

Figure 23. Mexico: North America GNSS Chip for Timing and Synchronization Market -
Revenue and Forecast, 2021 - 2031 (US\$ Thousand)

Figure 24. Company Market Share Analysis, 2024

I would like to order

Product name: North America GNSS Chip for Timing and Synchronization Market Size and Forecast (2021 - 2031)

Product link: <https://marketpublishers.com/r/NA6AE2DCDF58EN.html>

Price: US\$ 3,450.00 (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/NA6AE2DCDF58EN.html>