

Magneto Resistive RAM (MRAM) Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2023-2028

https://marketpublishers.com/r/M0903EE7342DEN.html

Date: January 2023

Pages: 143

Price: US\$ 2,499.00 (Single User License)

ID: M0903EE7342DEN

Abstracts

The global magneto resistive RAM (MRAM) market size reached US\$ 427.1 Million in 2022. Looking forward, IMARC Group expects the market to reach US\$ 4,525 Million by 2028, exhibiting a growth rate (CAGR) of 44.5% during 2023-2028.

Magneto resistive random access memory (MRAM), or magnetic RAM, is a non-volatile memory that uses magnetic charges to store information. Spin-transfer torque and toggle MRAM are some of the commonly available variants. They utilize magnetic tunnel junction (MTJ) that comprises two magnetic layers separated through a dielectric or insulation layer. It is a high-density RAM and it includes a capacitor and a transistor. In comparison to the traditionally used dynamic random-access memory (DRAM), MRAM can retain the information stored in the memory without a power source, is more cost-effective and does not require a large energy-consuming pulse. As a result, it is widely used in robotics, automobiles, consumer electronics and enterprise storage systems.

Magneto Resistive RAM (MRAM) Market Trends:

Significant growth in the consumer electronics industry is one of the key factors creating a positive outlook for the market. MRAM is widely used in various electronic gadgets, such as workstations, smart wearables, smartphones and digital cameras. Additionally, the increasing product demand in the aerospace and defense industries for high-temperature data storage is favoring the market growth. Moreover, various product innovations, such as the development of low-power MRAM variants for radiation-hardened microchips, are providing thrust to the market growth. They are power-efficient, resistant to radiations and can operate under temperature fluctuations. In line with this, the increasing demand for Internet of Things (IoT)-enabled devices and the



widespread utilization of advanced sensors and smart robots are positively impacting the market growth. Other factors, including the increasing product utilization in miniaturized and customized integrated circuits (ICs), along with the widespread adoption of MRAM-embedded medical sensors for non-invasive diagnostic testing of medical various disorder, are anticipated to drive the market toward growth.

Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global magneto resistive RAM (MRAM) market report, along with forecasts at the global, regional and country level from 2023-2028. Our report has categorized the market based on type, offering and application.

Breakup by Type:

Toggle MRAM
Spin-Transfer Torque MRAM (STT-MRAM)

Breakup by Offering:

Stand-alone

Embedded

Breakup by Application:

Consumer Electronics
Robotics
Enterprise Storage
Automotive
Aerospace and Defense
Others

Breakup by Region:

North America
United States
Canada
Asia-Pacific
China
Japan



ı	-	\sim		$\overline{}$
ı	п	()	ш	$\boldsymbol{\sim}$

South Korea

Australia

Indonesia

Others

Europe

Germany

France

United Kingdom

Italy

Spain

Russia

Others

Latin America

Brazil

Mexico

Others

Middle East and Africa

Competitive Landscape:

The competitive landscape of the industry has also been examined along with the profiles of the key players being Avalanche Technology Inc., Crocus Nano Electronics LLC, Everspin Technologies Inc., Honeywell International Inc., Infineon Technologies AG, Intel Corporation, NVE Corporation, Qualcomm Incorporated, Samsung Electronics Co. Ltd., Spin Memory Inc., Toshiba Corporation and Tower Semiconductor Ltd.

Key Questions Answered in This Report

- 1. What was the size of the global magneto resistive RAM (MRAM) market in 2022?
- 2. What is the expected growth rate of the global magneto resistive RAM (MRAM) market during 2023-2028?
- 3. What are the key factors driving the global magneto resistive RAM (MRAM) market?
- 4. What has been the impact of COVID-19 on the global magneto resistive RAM (MRAM) market?
- 5. What is the breakup of the global magneto resistive RAM (MRAM) market based on the type?
- 6. What is the breakup of the global magneto resistive RAM (MRAM) market based on the offering?
- 7. What is the breakup of the global magneto resistive RAM (MRAM) market based on the application?



- 8. What are the key regions in the global magneto resistive RAM (MRAM) market?
- 9. Who are the key players/companies in the global magneto resistive RAM (MRAM) market?



Contents

1 PREFACE

2 SCOPE AND METHODOLOGY

- 2.1 Objectives of the Study
- 2.2 Stakeholders
- 2.3 Data Sources
 - 2.3.1 Primary Sources
 - 2.3.2 Secondary Sources
- 2.4 Market Estimation
 - 2.4.1 Bottom-Up Approach
 - 2.4.2 Top-Down Approach
- 2.5 Forecasting Methodology

3 EXECUTIVE SUMMARY

4 INTRODUCTION

- 4.1 Overview
- 4.2 Key Industry Trends

5 GLOBAL MAGNETO RESISTIVE RAM (MRAM) MARKET

- 5.1 Market Overview
- 5.2 Market Performance
- 5.3 Impact of COVID-19
- 5.4 Market Forecast

6 MARKET BREAKUP BY TYPE

- 6.1 Toggle MRAM
 - 6.1.1 Market Trends
 - 6.1.2 Market Forecast
- 6.2 Spin-Transfer Torque MRAM (STT-MRAM)
 - 6.2.1 Market Trends
 - 6.2.2 Market Forecast



7 MARKET BREAKUP BY OFFERING

- 7.1 Stand-alone
 - 7.1.1 Market Trends
 - 7.1.2 Market Forecast
- 7.2 Embedded
 - 7.2.1 Market Trends
 - 7.2.2 Market Forecast

8 MARKET BREAKUP BY APPLICATION

- 8.1 Consumer Electronics
 - 8.1.1 Market Trends
 - 8.1.2 Market Forecast
- 8.2 Robotics
 - 8.2.1 Market Trends
 - 8.2.2 Market Forecast
- 8.3 Enterprise Storage
 - 8.3.1 Market Trends
 - 8.3.2 Market Forecast
- 8.4 Automotive
 - 8.4.1 Market Trends
 - 8.4.2 Market Forecast
- 8.5 Aerospace and Defense
 - 8.5.1 Market Trends
 - 8.5.2 Market Forecast
- 8.6 Others
 - 8.6.1 Market Trends
 - 8.6.2 Market Forecast

9 MARKET BREAKUP BY REGION

- 9.1 North America
 - 9.1.1 United States
 - 9.1.1.1 Market Trends
 - 9.1.1.2 Market Forecast
 - 9.1.2 Canada
 - 9.1.2.1 Market Trends
 - 9.1.2.2 Market Forecast



- 9.2 Asia-Pacific
 - 9.2.1 China
 - 9.2.1.1 Market Trends
 - 9.2.1.2 Market Forecast
 - 9.2.2 Japan
 - 9.2.2.1 Market Trends
 - 9.2.2.2 Market Forecast
 - 9.2.3 India
 - 9.2.3.1 Market Trends
 - 9.2.3.2 Market Forecast
 - 9.2.4 South Korea
 - 9.2.4.1 Market Trends
 - 9.2.4.2 Market Forecast
 - 9.2.5 Australia
 - 9.2.5.1 Market Trends
 - 9.2.5.2 Market Forecast
 - 9.2.6 Indonesia
 - 9.2.6.1 Market Trends
 - 9.2.6.2 Market Forecast
 - 9.2.7 Others
 - 9.2.7.1 Market Trends
 - 9.2.7.2 Market Forecast
- 9.3 Europe
 - 9.3.1 Germany
 - 9.3.1.1 Market Trends
 - 9.3.1.2 Market Forecast
 - 9.3.2 France
 - 9.3.2.1 Market Trends
 - 9.3.2.2 Market Forecast
 - 9.3.3 United Kingdom
 - 9.3.3.1 Market Trends
 - 9.3.3.2 Market Forecast
 - 9.3.4 Italy
 - 9.3.4.1 Market Trends
 - 9.3.4.2 Market Forecast
 - 9.3.5 Spain
 - 9.3.5.1 Market Trends
 - 9.3.5.2 Market Forecast
 - 9.3.6 Russia



- 9.3.6.1 Market Trends
- 9.3.6.2 Market Forecast
- 9.3.7 Others
 - 9.3.7.1 Market Trends
 - 9.3.7.2 Market Forecast
- 9.4 Latin America
 - 9.4.1 Brazil
 - 9.4.1.1 Market Trends
 - 9.4.1.2 Market Forecast
 - 9.4.2 Mexico
 - 9.4.2.1 Market Trends
 - 9.4.2.2 Market Forecast
 - 9.4.3 Others
 - 9.4.3.1 Market Trends
 - 9.4.3.2 Market Forecast
- 9.5 Middle East and Africa
 - 9.5.1 Market Trends
 - 9.5.2 Market Breakup by Country
 - 9.5.3 Market Forecast

10 SWOT ANALYSIS

- 10.1 Overview
- 10.2 Strengths
- 10.3 Weaknesses
- 10.4 Opportunities
- 10.5 Threats

11 VALUE CHAIN ANALYSIS

12 PORTERS FIVE FORCES ANALYSIS

- 12.1 Overview
- 12.2 Bargaining Power of Buyers
- 12.3 Bargaining Power of Suppliers
- 12.4 Degree of Competition
- 12.5 Threat of New Entrants
- 12.6 Threat of Substitutes



13 PRICE ANALYSIS

14 COMPETITIVE LANDSCAPE

- 14.1 Market Structure
- 14.2 Key Players
- 14.3 Profiles of Key Players
 - 14.3.1 Avalanche Technology Inc.
 - 14.3.1.1 Company Overview
 - 14.3.1.2 Product Portfolio
 - 14.3.2 Crocus Nano Electronics LLC
 - 14.3.2.1 Company Overview
 - 14.3.2.2 Product Portfolio
 - 14.3.3 Everspin Technologies Inc.
 - 14.3.3.1 Company Overview
 - 14.3.3.2 Product Portfolio
 - 14.3.3.3 Financials
 - 14.3.4 Honeywell International Inc.
 - 14.3.4.1 Company Overview
 - 14.3.4.2 Product Portfolio
 - 14.3.4.3 Financials
 - 14.3.4.4 SWOT Analysis
 - 14.3.5 Infineon Technologies AG
 - 14.3.5.1 Company Overview
 - 14.3.5.2 Product Portfolio
 - 14.3.5.3 Financials
 - 14.3.5.4 SWOT Analysis
 - 14.3.6 Intel Corporation
 - 14.3.6.1 Company Overview
 - 14.3.6.2 Product Portfolio
 - 14.3.6.3 Financials
 - 14.3.6.4 SWOT Analysis
 - 14.3.7 NVE Corporation
 - 14.3.7.1 Company Overview
 - 14.3.7.2 Product Portfolio
 - 14.3.7.3 Financials
 - 14.3.8 Qualcomm Incorporated
 - 14.3.8.1 Company Overview
 - 14.3.8.2 Product Portfolio



- 14.3.8.3 Financials
- 14.3.8.4 SWOT Analysis
- 14.3.9 Samsung Electronics Co. Ltd.
 - 14.3.9.1 Company Overview
 - 14.3.9.2 Product Portfolio
 - 14.3.9.3 Financials
 - 14.3.9.4 SWOT Analysis
- 14.3.10 Spin Memory Inc.
 - 14.3.10.1 Company Overview
 - 14.3.10.2 Product Portfolio
- 14.3.11 Toshiba Corporation
 - 14.3.11.1 Company Overview
 - 14.3.11.2 Product Portfolio
 - 14.3.11.3 Financials
 - 14.3.11.4 SWOT Analysis
- 14.3.12 Tower Semiconductor Ltd.
 - 14.3.12.1 Company Overview
 - 14.3.12.2 Product Portfolio
 - 14.3.12.3 Financials



List Of Tables

LIST OF TABLES

Table 1: Global: Magneto Resistive RAM Market: Key Industry Highlights, 2022 and 2028

Table 2: Global: Magneto Resistive RAM Market Forecast: Breakup by Type (in Million US\$), 2023-2028

Table 3: Global: Magneto Resistive RAM Market Forecast: Breakup by Offering (in Million US\$), 2023-2028

Table 4: Global: Magneto Resistive RAM Market Forecast: Breakup by Application (in Million US\$), 2023-2028

Table 5: Global: Magneto Resistive RAM Market Forecast: Breakup by Region (in Million US\$), 2023-2028

Table 6: Global: Magneto Resistive RAM Market: Competitive Structure

Table 7: Global: Magneto Resistive RAM Market: Key Players



List Of Figures

LIST OF FIGURES

Figure 1: Global: Magneto Resistive RAM Market: Major Drivers and Challenges Figure 2: Global: Magneto Resistive RAM Market: Sales Value (in Million US\$), 2017-2022

Figure 3: Global: Magneto Resistive RAM Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 4: Global: Magneto Resistive RAM Market: Breakup by Type (in %), 2022

Figure 5: Global: Magneto Resistive RAM Market: Breakup by Offering (in %), 2022

Figure 6: Global: Magneto Resistive RAM Market: Breakup by Application (in %), 2022

Figure 7: Global: Magneto Resistive RAM Market: Breakup by Region (in %), 2022

Figure 8: Global: Magneto Resistive RAM (Toggle MRAM) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 9: Global: Magneto Resistive RAM (Toggle MRAM) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 10: Global: Magneto Resistive RAM (Spin-Transfer Torque MRAM-STT-MRAM) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 11: Global: Magneto Resistive RAM (Spin-Transfer Torque MRAM-STT-MRAM) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 12: Global: Magneto Resistive RAM (Stand-alone) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 13: Global: Magneto Resistive RAM (Stand-alone) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 14: Global: Magneto Resistive RAM (Embedded) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 15: Global: Magneto Resistive RAM (Embedded) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 16: Global: Magneto Resistive RAM (Consumer Electronics) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 17: Global: Magneto Resistive RAM (Consumer Electronics) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 18: Global: Magneto Resistive RAM (Robotics) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 19: Global: Magneto Resistive RAM (Robotics) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 20: Global: Magneto Resistive RAM (Enterprise Storage) Market: Sales Value (in Million US\$), 2017 & 2022



Figure 21: Global: Magneto Resistive RAM (Enterprise Storage) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 22: Global: Magneto Resistive RAM (Automotive) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 23: Global: Magneto Resistive RAM (Automotive) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 24: Global: Magneto Resistive RAM (Aerospace and Defense) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 25: Global: Magneto Resistive RAM (Aerospace and Defense) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 26: Global: Magneto Resistive RAM (Other Applications) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 27: Global: Magneto Resistive RAM (Other Applications) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 28: North America: Magneto Resistive RAM Market: Sales Value (in Million US\$), 2017 & 2022

Figure 29: North America: Magneto Resistive RAM Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 30: United States: Magneto Resistive RAM Market: Sales Value (in Million US\$), 2017 & 2022

Figure 31: United States: Magneto Resistive RAM Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 32: Canada: Magneto Resistive RAM Market: Sales Value (in Million US\$), 2017 & 2022

Figure 33: Canada: Magneto Resistive RAM Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 34: Asia-Pacific: Magneto Resistive RAM Market: Sales Value (in Million US\$), 2017 & 2022

Figure 35: Asia-Pacific: Magneto Resistive RAM Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 36: China: Magneto Resistive RAM Market: Sales Value (in Million US\$), 2017 & 2022

Figure 37: China: Magneto Resistive RAM Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 38: Japan: Magneto Resistive RAM Market: Sales Value (in Million US\$), 2017 & 2022

Figure 39: Japan: Magneto Resistive RAM Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 40: India: Magneto Resistive RAM Market: Sales Value (in Million US\$), 2017 &



2022

Figure 41: India: Magneto Resistive RAM Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 42: South Korea: Magneto Resistive RAM Market: Sales Value (in Million US\$), 2017 & 2022

Figure 43: South Korea: Magneto Resistive RAM Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 44: Australia: Magneto Resistive RAM Market: Sales Value (in Million US\$), 2017 & 2022

Figure 45: Australia: Magneto Resistive RAM Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 46: Indonesia: Magneto Resistive RAM Market: Sales Value (in Million US\$), 2017 & 2022

Figure 47: Indonesia: Magneto Resistive RAM Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 48: Others: Magneto Resistive RAM Market: Sales Value (in Million US\$), 2017 & 2022

Figure 49: Others: Magneto Resistive RAM Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 50: Europe: Magneto Resistive RAM Market: Sales Value (in Million US\$), 2017 & 2022

Figure 51: Europe: Magneto Resistive RAM Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 52: Germany: Magneto Resistive RAM Market: Sales Value (in Million US\$), 2017 & 2022

Figure 53: Germany: Magneto Resistive RAM Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 54: France: Magneto Resistive RAM Market: Sales Value (in Million US\$), 2017 & 2022

Figure 55: France: Magneto Resistive RAM Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 56: United Kingdom: Magneto Resistive RAM Market: Sales Value (in Million US\$), 2017 & 2022

Figure 57: United Kingdom: Magneto Resistive RAM Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 58: Italy: Magneto Resistive RAM Market: Sales Value (in Million US\$), 2017 & 2022

Figure 59: Italy: Magneto Resistive RAM Market Forecast: Sales Value (in Million US\$), 2023-2028



Figure 60: Spain: Magneto Resistive RAM Market: Sales Value (in Million US\$), 2017 & 2022

Figure 61: Spain: Magneto Resistive RAM Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 62: Russia: Magneto Resistive RAM Market: Sales Value (in Million US\$), 2017 & 2022

Figure 63: Russia: Magneto Resistive RAM Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 64: Others: Magneto Resistive RAM Market: Sales Value (in Million US\$), 2017 & 2022

Figure 65: Others: Magneto Resistive RAM Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 66: Latin America: Magneto Resistive RAM Market: Sales Value (in Million US\$), 2017 & 2022

Figure 67: Latin America: Magneto Resistive RAM Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 68: Brazil: Magneto Resistive RAM Market: Sales Value (in Million US\$), 2017 & 2022

Figure 69: Brazil: Magneto Resistive RAM Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 70: Mexico: Magneto Resistive RAM Market: Sales Value (in Million US\$), 2017 & 2022

Figure 71: Mexico: Magneto Resistive RAM Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 72: Others: Magneto Resistive RAM Market: Sales Value (in Million US\$), 2017 & 2022

Figure 73: Others: Magneto Resistive RAM Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 74: Middle East and Africa: Magneto Resistive RAM Market: Sales Value (in Million US\$), 2017 & 2022

Figure 75: Middle East and Africa: Magneto Resistive RAM Market: Breakup by Country (in %), 2022

Figure 76: Middle East and Africa: Magneto Resistive RAM Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 77: Global: Magneto Resistive RAM Industry: SWOT Analysis

Figure 78: Global: Magneto Resistive RAM Industry: Value Chain Analysis

Figure 79: Global: Magneto Resistive RAM Industry: Porter's Five Forces Analysis



I would like to order

Product name: Magneto Resistive RAM (MRAM) Market: Global Industry Trends, Share, Size, Growth,

Opportunity and Forecast 2023-2028

Product link: https://marketpublishers.com/r/M0903EE7342DEN.html

Price: US\$ 2,499.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer

Service:

info@marketpublishers.com

Payment

First name:

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/M0903EE7342DEN.html

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

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 https://marketpublishers.com/docs/terms.html

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

