

NA Atomic Layer Deposition Market - Industry Trends and Forecast to 2029

Market Report | 2022-10-01 | 163 pages | Data Bridge Market Research

AVAILABLE LICENSES:

- Single User License \$3500.00
- Corporate Users License \$4200.00

Report description:

North America atomic layer deposition market is projected to register a 14.7% CAGR in the forecast period of 2022 to 2029. The new market report contains data for the historic year 2020, the base year of calculation is 2021, and the forecast period is 2022 to 2029

Market Segmentation:

North America Atomic Layer Deposition Market, By Product Type (Metal ALD, Aluminium Oxide ALD, Plasma Enhanced ALD, Catalytic ALD, Others), Application (Semiconductors, Solar Devices, Electronics, Medical Equipment, Research & Development Facilities, Fuel Cells, Optical Devices, Thermoelectric Materials, Magnetic Heads, Sensors, Barrier Layers, Primer Layers, Non-IC Application, Others), Country (U.S., Canada, and Mexico) Industry Trends and Forecast to 2029

Some of the major factors contributing to the growth of the North America atomic layer deposition market:

- High demand for microelectronics and consumer electronics
- Raising concern on energy harvesting resulting in high growth of photovoltaic cells

Market Players:

Some key players operating in the North America atomic layer deposition market are:

- ADEKA CORPORATION
- AIXTRON
- Applied Materials, Inc.
- ASM International
- LAM RESEARCH CORPORATION
- Tokyo Electron Limited
- Kurt J. Lesker Company
- Veeco Instruments Inc.
- ANRIC TECH.
- SENTECH Instruments GmbH

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- Oxford Instruments
- Forge Nano Inc.
- Merck KGaA
- HZO, Inc.
- Picosun Oy.

Table of Contents:

TABLE OF CONTENTS

1	INTRODUCTION	40
1.1	OBJECTIVES OF THE STUDY	40
1.2	MARKET DEFINITION	40
1.3	OVERVIEW OF NORTH AMERICA ATOMIC LAYER DEPOSITION MARKET	40
1.4	LIMITATION	41
1.5	MARKETS COVERED	41
2	MARKET SEGMENTATION	47
2.1	MARKETS COVERED	47
2.2	GEOGRAPHICAL SCOPE	48
2.3	YEARS CONSIDERED FOR THE STUDY	49
2.4	CURRENCY AND PRICING	49
2.5	DBMR TRIPOD DATA VALIDATION MODEL	50
2.6	PRODUCT TYPE LIFE LINE CURVE	53
2.7	MULTIVARIATE MODELING	54
2.8	PRIMARY INTERVIEWS WITH KEY OPINION LEADERS	55
2.9	DBMR MARKET POSITION GRID	56
2.10	MARKET APPLICATION COVERAGE GRID	57
2.11	DBMR MARKET CHALLENGE MATRIX	58
2.12	DBMR VENDOR SHARE ANALYSIS	59
2.13	SECONDARY SOURCES	60
2.14	ASSUMPTIONS	60
3	EXECUTIVE SUMMARY	61
4	PREMIUM INSIGHTS	62
5	MARKET OVERVIEW	63
5.1	DRIVERS	65
5.1.1	HIGH DEMAND FOR MICROELECTRONICS AND CONSUMER ELECTRONICS	65
5.1.2	RAISING CONCERN ON ENERGY HARVESTING RESULTS IN HIGH GROWTH OF PHOTOVOLTAIC (PV) CELLS	65
5.1.3	RAPID EXPANSION OF THE SEMICONDUCTOR INDUSTRY	66
5.2	RESTRAINT	66
5.2.1	HIGH INITIAL INVESTMENT COSTS	66
5.3	OPPORTUNITIES	67
5.3.1	TREND OF MINIATURIZATION	67
5.3.2	GROWING RESEARCH AND DEVELOPMENT IN ATOMIC LAYER DEPOSITION TECHNOLOGY	67
5.4	CHALLENGE	67
5.4.1	ALTERNATIVES OF ATOMIC LAYER DEPOSITION	67
6	NORTH AMERICA ATOMIC LAYER DEPOSITION MARKET, BY PRODUCT TYPE	69
6.1	OVERVIEW	70

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 6.2 METAL ALD 71
- 6.3 ALUMINUM OXIDE ALD 71
- 6.4 PLASMA ENHANCED ALD 72
- 6.5 CATALYTIC ALD 72
- 6.6 OTHERS 73
- 7 NORTH AMERICA ATOMIC LAYER DEPOSITION MARKET, BY APPLICATION 74
 - 7.1 OVERVIEW 75
 - 7.2 SEMICONDUCTORS 76
 - 7.2.1 METAL ALD 77
 - 7.2.2 ALUMINUM OXIDE ALD 77
 - 7.2.3 CATALYTIC ALD 77
 - 7.2.4 PLASMA ENHANCED ALD 77
 - 7.2.5 OTHERS 77
 - 7.3 ELECTRONICS 78
 - 7.3.1 METAL ALD 78
 - 7.3.2 ALUMINUM OXIDE ALD 78
 - 7.3.3 CATALYTIC ALD 78
 - 7.3.4 PLASMA ENHANCED ALD 79
 - 7.3.5 OTHERS 79
 - 7.4 SOLAR DEVICES 79
 - 7.4.1 ALUMINUM OXIDE ALD 79
 - 7.4.2 PLASMA ENHANCED ALD 80
 - 7.4.3 METAL ALD 80
 - 7.4.4 CATALYTIC ALD 80
 - 7.4.5 OTHERS 80
 - 7.5 MEDICAL EQUIPMENT 80
 - 7.5.1 METAL ALD 81
 - 7.5.2 ALUMINUM OXIDE ALD 81
 - 7.5.3 CATALYTIC ALD 81
 - 7.5.4 PLASMA ENHANCED ALD 81
 - 7.5.5 OTHERS 81
 - 7.6 OPTICAL DEVICES 82
 - 7.6.1 METAL ALD 82
 - 7.6.2 ALUMINUM OXIDE ALD 82
 - 7.6.3 CATALYTIC ALD 82
 - 7.6.4 PLASMA ENHANCED ALD 83
 - 7.6.5 OTHERS 83
 - 7.7 THERMOELECTRIC MATERIALS 83
 - 7.7.1 METAL ALD 84
 - 7.7.2 ALUMINUM OXIDE ALD 84
 - 7.7.3 CATALYTIC ALD 84
 - 7.7.4 PLASMA ENHANCED ALD 84
 - 7.7.5 OTHERS 84
 - 7.8 MAGNETIC HEADS 84
 - 7.8.1 METAL ALD 85
 - 7.8.2 ALUMINUM OXIDE ALD 85
 - 7.8.3 CATALYTIC ALD 85

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 7.8.4 PLASMA ENHANCED ALD 85
- 7.8.5 OTHERS 85
- 7.9 RESEARCH & DEVELOPMENT FACILITIES 86
 - 7.9.1 METAL ALD 86
 - 7.9.2 ALUMINUM OXIDE ALD 86
 - 7.9.3 CATALYTIC ALD 86
 - 7.9.4 PLASMA ENHANCED ALD 87
 - 7.9.5 OTHERS 87
- 7.10 FUEL CELLS 87
 - 7.10.1 METAL ALD 87
 - 7.10.2 ALUMINUM OXIDE ALD 88
 - 7.10.3 CATALYTIC ALD 88
 - 7.10.4 PLASMA ENHANCED ALD 88
 - 7.10.5 OTHERS 88
- 7.11 SENSORS 88
 - 7.11.1 METAL ALD 89
 - 7.11.2 ALUMINUM OXIDE ALD 89
 - 7.11.3 CATALYTIC ALD 89
 - 7.11.4 PLASMA ENHANCED ALD 89
 - 7.11.5 OTHERS 89
- 7.12 BARRIER LAYERS 90
 - 7.12.1 METAL ALD 90
 - 7.12.2 ALUMINUM OXIDE ALD 90
 - 7.12.3 CATALYTIC ALD 90
 - 7.12.4 PLASMA ENHANCED ALD 91
 - 7.12.5 OTHERS 91
- 7.13 PRIMER LAYERS 91
 - 7.13.1 METAL ALD 91
 - 7.13.2 ALUMINUM ALD 92
 - 7.13.3 CATALYTIC ALD 92
 - 7.13.4 PLASMA ENHANCED ALD 92
 - 7.13.5 OTHERS 92
- 7.14 NON-IC APPLICATION 92
 - 7.14.1 METAL ALD 93
 - 7.14.2 ALUMINUM ALD 93
 - 7.14.3 CATALYTIC ALD 93
 - 7.14.4 PLASMA ENHANCED ALD 93
 - 7.14.5 OTHERS 93
- 7.15 OTHERS 94
 - 7.15.1 METAL ALD 94
 - 7.15.2 ALUMINUM ALD 94
 - 7.15.3 CATALYTIC ALD 94
 - 7.15.4 PLASMA ENHANCED ALD 95
 - 7.15.5 OTHERS 95
- 8 NORTH AMERICA ATOMIC LAYER DEPOSITION MARKET, BY REGION 96
 - 8.1 NORTH AMERICA 97
 - 8.1.1 U.S. 106

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

8.1.2 CANADA	112
8.1.3 MEXICO	118
9 COMPANY LANDSCAPE: NORTH AMERICA ATOMIC LAYER DEPOSITION MARKET	124
9.1 COMPANY SHARE ANALYSIS: NORTH AMERICA	124
9.2 NEW PRODUCT LAUNCH	125
9.3 MERGERS,AWARDS AND ACQUISITIONS	126
10 SWOT ANALYSIS	127
11 COMPANY PROFILE	128
11.1 LAM RESEARCH CORPORATION.	128
11.1.1 COMPANY SNAPSHOT	128
11.1.2 RECENT FINANCIALS	128
11.1.3 COMPANY SHARE ANALYSIS	129
11.1.4 PRODUCT PORTFOLIO	129
11.1.5 RECENT UPDATE	130
11.2 APPLIED MATERIALS, INC.	131
11.2.1 COMPANY SNAPSHOT	131
11.2.2 RECENT FINANCIALS	131
11.2.3 COMPANY SHARE ANALYSIS	132
11.2.4 PRODUCT PORTFOLIO	132
11.2.5 RECENT UPDATES	132
11.3 TOKYO ELECTRON LIMITED	133
11.3.1 COMPANY SNAPSHOT	133
11.3.2 REVENUE ANALYSIS	133
11.3.3 COMPANY SHARE ANALYSIS	134
11.3.4 PRODUCT PORTFOLIO	134
11.3.5 RECENT UPDATES	135
11.4 ASM INTERNATIONAL	136
11.4.1 COMPANY SNAPSHOT	136
11.4.2 RECENT FINANCIALS	136
11.4.3 COMPANY SHARE ANALYSIS	137
11.4.4 PRODUCT PORTFOLIO	137
11.4.5 RECENT UPDATE	137
11.5 AIXTRON	138
11.5.1 COMPANY SNAPSHOT	138
11.5.2 RECENT FINANCIALS	138
11.5.3 COMPANY SHARE ANALYSIS	139
11.5.4 PRODUCT PORTFOLIO	139
11.5.5 RECENT UPDATE	139
11.6 ADEKA CORPORATION	140
11.6.1 COMPANY SNAPSHOT	140
11.6.2 RECENT FINANCIALS	140
11.6.3 PRODUCT PORTFOLIO	141
11.6.4 RECENT UPDATE	141
11.7 ANRIC TECH.	142
11.7.1 COMPANY SNAPSHOT	142
11.7.2 PRODUCT PORTFOLIO	142
11.7.3 RECENT UPDATES	142

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

11.8	BENEQ	143
11.8.1	COMPANY SNAPSHOT	143
11.8.2	PRODUCT PORTFOLIO	143
11.8.3	RECENT UPDATES	144
11.9	ENCAPSULIX	145
11.9.1	COMPANY SNAPSHOT	145
11.9.2	PRODUCT PORTFOLIO	145
11.9.3	RECENT UPDATE	145
11.10	FORGE NANO INC.	146
11.10.1	COMPANY SNAPSHOT	146
11.10.2	PRODUCT PORTFOLIO	146
11.10.3	RECENT UPDATES	147
11.11	HZO INC.	148
11.11.1	COMPANY SNAPSHOT	148
11.11.2	PRODUCT PORTFOLIO	148
11.11.3	RECENT UPDATE	148
11.12	KURT J. LESKER COMPANY	149
11.12.1	COMPANY SNAPSHOT	149
11.12.2	PRODUCT PORTFOLIO	149
11.12.3	RECENT UPDATE	149
11.13	MERCK KGAA	150
11.13.1	COMPANY SNAPSHOT	150
11.13.2	RECENT FINANCIALS	150
11.13.3	PRODUCT PORTFOLIO	151
11.13.4	RECENT UPDATES	151
11.14	OXFORD INSTRUMENTS	152
11.14.1	COMPANY SNAPSHOT	152
11.14.2	RECENT FINANCIALS	152
11.14.3	PRODUCT PORTFOLIO	153
11.14.4	RECENT UPDATE	153
11.15	PICOSUN OY.	154
11.15.1	COMPANY SNAPSHOT	154
11.15.2	PRODUCT PORTFOLIO	154
11.15.3	RECENT UPDATES	155
11.16	SENTECH INSTRUMENTS GMBH	156
11.16.1	COMPANY SNAPSHOT	156
11.16.2	PRODUCT PORTFOLIO	156
11.16.3	RECENT UPDATE	157
11.17	VEECO INSTRUMENTS INC.	158
11.17.1	COMPANY SNAPSHOT	158
11.17.2	RECENT FINANCIALS	158
11.17.3	PRODUCT PORTFOLIO	159
11.17.4	RECENT UPDATES	159
12	QUESTIONNAIRE	160
13	RELATED REPORT	163

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

NA Atomic Layer Deposition Market - Industry Trends and Forecast to 2029

Market Report | 2022-10-01 | 163 pages | Data Bridge Market Research

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	\$3500.00
	Corporate Users License	\$4200.00
		VAT
		Total

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2026-03-05"/>
		Signature	<input type="text"/>

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com