ANEW MARKET DYNAMICS
Market Intelligence | Sustainability Due Diligence | Strategic Research
www.anewmarketdynamics.com

ANMD-MRS7-067

GALLIUM NITRIDE (GaN) RF AND POWER COMPONENTS

A Global Sustainability Due Diligence and Market Research Study

Shortened Table of Contents

Market Snapshot

US$ 1,925.0m 2025A market value	**US$ 2,266.4m** 2026E market value	**US$ 6,324.0m** 2032F forecast	**18.7%** CAGR 2026E to 2032F
7 regions Geographic coverage	**23 modules** Country modules	**941 exhibits** Including 175 charts	**230 + 82** Organizations and patent records
2020–2032 Historical data and forecasts		**Global** Regional and country coverage	

Report Facts

Report Attribute	Coverage
Report code	ANMD-MRS7-067 | Advanced Semiconductor Applications
Published	September 2026
Study periods	History 2020H to 2024H | Actual 2025A | Estimate 2026E | Forecast 2027F to 2032F
Length	376 pages | 34 chapters | 7 appendices | 941 exhibits including 175 charts
Geography	7 regions | 23 country modules | Residual regional groupings
Segmentation	4 product families plus substrate, application, end-user and business-model cuts, with voltage-class and RF-application overlays
Directories	230 organizations based in 23 countries and territories | 82 patent records from 6 patent jurisdictions and offices
Licences	Single-User License (SUL) | Global Corporate License (GCL)

This shortened table of contents presents the chapter architecture, main sections and selected exhibits. The detailed table of contents and sample pages are available to registered users at www.anewmarketdynamics.com.

Register at anewmarketdynamics.com to download detailed table of contents, sample pages and the report prospectus.

The full report is delivered within 24 hours of order confirmation.

https://anewmarketdynamics.com/reports/gallium-nitride-gan-rf-and-power-components

info@anewmarketdynamics.com samplepages@anewmarketdynamics.com

www.anewmarketdynamics.com

© 2026 Anew Market Dynamics

Part I

Study Framework, Executive Brief and Global Market

Study conventions, headline market findings, methodology and the global analytical foundation for GaN power and RF components.

No.	Chapter, Main Sections and Selected Exhibits	Exhibits	Page
F	**Foreword** Purpose of the study • Component-level market boundary • Intended readers		i
1	**About This Report** Methodology and quality control • Reader's guide and reporting conventions • Scope, inclusion and exclusion rules • Epiwafer-to-system boundary • Units, estimation ranges and overlays • Double-count and release controls **Selected exhibits** *Exhibit 4: Scope Contract — Inclusions and Exclusions | Exhibit 5: Measurement Boundary Along the GaN Value Chain*	9	1
2	**Executive Market Brief** Key market developments • Market in brief • Regional and country market outlook • Policy and classification environment • Key findings, risks and adoption constraints • Stakeholder implications, indicators and timeline **Selected exhibits** *Exhibit 11: Market in Brief, 2026E and 2032F | Exhibit 14: Policy and Qualification Regimes in Brief*	8 1 chart	7
3	**Executive Summary and Market Metrics Dashboard** What changed this year • Market value and product-family growth • Regional and country opportunity ranking • Policy outlook • Risk concentration • KPI dashboard **Selected exhibits** *Exhibit 18: Key Market Metrics by Product Family | Exhibit 20: Country Opportunity Ranking by Absolute Value Added, 2026E–2032F*	7 2 charts	12
4	**Global Market — Dynamics, Size and Outlook** Industry background and participant map • Market drivers and restraints • Opportunities and strategic frameworks • Global market size and forecast • Volume, price and wafer demand • Component boundary and deployment pathways **Selected exhibits** *Exhibit 28: Driver Impact Assessment | Exhibit 35: Global Market Value by Product Family, 2020H–2032F (US$ Million) (Chart)*	34 5 charts	17
5	**Regional Markets — Seven-region Overview** Regional dashboard • Value and share comparison • Regional demand character • Opportunity ranking • Fab capacity, policy support and export-control exposure map **Selected exhibits** *Exhibit 61: Regional Market Value, 2020H–2032F (Chart) | Exhibit 65: Regional Opportunity Ranking, 2026E–2032F*	8 2 charts	34
6	**How to Read the Country Modules** Module structure and conventions • Full-format and consolidated modules • Data bases and rounding • Country-module evidence requirements **Selected exhibits** *Exhibit 67: Country Module Structure | Exhibit 68: Module Tier Register*	3	38

Part II

Regional, Country, Segmentation and Demand Analysis

Seven-region coverage, 23 country modules, master series and the segmentation used to compare value, volume and demand.

No.	Chapter, Main Sections and Selected Exhibits	Exhibits	Page
7	**North America — Regional Analysis and Country Modules** United States • Canada • Mexico • Rest of North America • Country comparison **Highlights** *Value, volume and product-family series for each country | Policy matrices covering the CHIPS and Science Act, the Trusted Foundry Program and USMCA rules of origin*	89 19 charts	40
8	**Europe — Regional Analysis and Country Modules** Germany • Netherlands • France • United Kingdom • Switzerland • Nordics • Rest of Europe • Country comparison **Highlights** *Value, volume and product-family series for six country modules | Policy matrices covering the European Chips Act, IPCEI Microelectronics and France 2030*	158 34 charts	70
9	**Asia Pacific — Regional Analysis and Country Modules** China • Japan • South Korea • India • Taiwan • Southeast Asia • Rest of Asia Pacific • Country comparison **Highlights** *Value, volume and product-family series for six country modules | Policy matrices covering China's IC Investment Fund Phase III, Japan's Economic Security Promotion Act and the India Semiconductor Mission*	158 34 charts	121

© ANMD

No.	Chapter, Main Sections and Selected Exhibits	Exhibits	Page
10	**Latin America — Regional Analysis and Country Modules** Brazil • Argentina • Rest of Latin America • Country comparison **Highlights** *Value, volume and product-family series for Brazil and Argentina | Policy matrices covering Nova Indústria Brasil, Brasil Semicon and Argentina's RIGI regime*	66 14 charts	172
11	**Africa — Regional Analysis and Country Modules** South Africa • Egypt • Morocco • Rest of Africa • Country comparison **Highlights** *Value, volume and product-family series for three country modules | Policy matrices covering REIPPPP, Egypt Makes Electronics and Morocco's Industrial Acceleration Plan*	89 19 charts	191
12	**Middle East — Regional Analysis and Country Modules** Israel • Saudi Arabia • United Arab Emirates • Rest of Middle East • Country comparison **Highlights** *Value, volume and product-family series for three country modules | Policy matrices covering Israel Innovation Authority programs, Saudi Vision 2030 localization and the UAE's Operation 300bn*	89 19 charts	217
13	**Rest of World — Regional Analysis and Country Modules** Regional overview • Composition and market character • Value and outlook **Highlights** *Russia, Belarus, Central Asia and the Caucasus | Product-family mix and value series for the residual region*	6 2 charts	243
14	**Global Market Reporting — Master Series and Reference Tables** Global master series • Regional master series • Country reference tables • Physical and price master series **Selected exhibits** *Exhibit 725: Global Master Series by Product Family, Panel A: 2020H–2026E (US$ Million) | Exhibit 729: Global Product-Family Share, 2020H–2032F (Chart)*	25 3 charts	246
15	**Global Segmentation Analysis** Product-family segmentation, the primary market split • Substrate, application, end-user and business-model cuts • Voltage-class and RF-application overlays • Full annual segment series • Cross-tabulation and additivity rules **Selected exhibits** *Exhibit 761: Global Substrate Value, 2026E vs 2032F (US$ Million, Share) | Exhibit 767: Global Application Value, 2026E vs 2032F (US$ Million, Share)*	49 13 charts	255
16	**Demand Signals and Forward Indicators** Structural demand signals • Datacenter 48 V and defense RF program pipelines • Economic and adoption signals • Indicator dashboard • Leading indicators **Selected exhibits** *Exhibit 799: Program and Policy Pipeline | Exhibit 800: Indicator Dashboard*	5	271
17	**Adjacent-market Enablers** Adjacent enabler landscape and interfaces • Enabling infrastructure and platforms • Financing and service enablers • Wafer, package, thermal and software interfaces **Selected exhibits** *Exhibit 804: Adjacent Enablers | Exhibit 805: Interface Map*	2	274

Part III

Competition, Engineering, Innovation, Sustainability and Policy

Competitive structure and company profiles alongside device engineering, research, sustainability due diligence, supply chains and policy.

No.	Chapter, Main Sections and Selected Exhibits	Exhibits	Page
18	**Competitive Analysis and Company Profiles** Market shares and concentration reading • Company profiles across North America, Europe, Asia Pacific and the Middle East • Component, technology and specialist participants • Distribution, service and delivery organizations • Value-chain coverage **Selected exhibits** *Exhibit 806: Published Power-GaN Revenue Shares, 2024 | Exhibit 807: Published Power-GaN Revenue Shares, 2024 (Chart)*	44 1 chart	276
19	**Competitive Environment — Structure, Rankings and Matrices** Market structure and concentration • Competitive presence rankings • Capability matrices • Competitive outlook • Device performance and design-win benchmark **Selected exhibits** *Exhibit 850: Structural Comparison of the Two Halves | Exhibit 853: Capability Matrix — Power GaN*	6 1 chart	296
20	**Mergers, Acquisitions, Partnerships and Industry Network Analysis** M&A record • Partnership and alliance patterns • Industry network reading • Licensing, foundry, packaging and design-win network map **Selected exhibits** *Exhibit 856: GaN Transaction Record, 2023–2026 | Exhibit 858: Ecosystem Network Map*	3	299

© ANMD

No.	Chapter, Main Sections and Selected Exhibits	Exhibits	Page
21	**Product, System Engineering and Innovation** System configuration comparison • Standards and design-code frame • Application and node fit screening • Materials, durability and circularity • Innovation frontier • Emerging technology and system validation **Selected exhibits** *Exhibit 859: Configuration Comparison* | *Exhibit 862: Strategic Technology Roadmap*	6	302
22	**Research, Innovation and Funding Environment** Public research programs at imec and Fraunhofer IAF • Startup and venture activity • Standards and testing infrastructure • Research-to-volume funding pipeline **Selected exhibits** *Exhibit 865: Major Public Research Programs* | *Exhibit 867: Selected GaN Venture Activity*	4	308
23	**Sustainability Due Diligence, ESG, SDG and Climate Analysis** Carbon and embodied materials • Water, resources and circularity • Social analysis • Double materiality • SDG mapping • Climate risk and adaptation • Anti-greenwashing screen • ESG framework alignment **Selected exhibits** *Exhibit 869: Indicative Environmental Balance, 2026E and 2032F* | *Exhibit 872: SDG Contribution Map*	12	310
24	**Value Chain, Supply Chain and Geopolitical Analysis** Value-chain map • Material inputs • Components and electronics • Manufacturing footprints • Trade measures and localization • Logistics and delivery capacity **Selected exhibits** *Exhibit 881: GaN Value-Chain Map* | *Exhibit 882: Supply Concentration by Stage*	7 1 chart	328
25	**Policy, Regulation, Legal Structures and Integrated Risk** Technology, trade and export-control frameworks • Subsidy and program architecture • Standards and certification • Legal structures • Integrated policy risk • Compliance obligations **Selected exhibits** *Exhibit 888: Subsidy and Program Architecture* | *Exhibit 890: Standards and Certification Register*	5	331

Part IV

Risk, Economics, Implementation and Outlook

Observed outcome patterns, strategic and risk analysis, implementation, system economics, outlook, KPIs and the directory overview.

No.	Chapter, Main Sections and Selected Exhibits	Exhibits	Page
26	**Scenario Analysis and Observed Outcome Patterns** Scenario methodology and paths to 2032 • Observed outcomes from projects and deployments • Long-term outlook ranges • Outcome benchmark **Selected exhibits** *Exhibit 898: Deployment Archetypes* | *Exhibit 897: Long-Term Outlook Ranges (US$ Million)*	6 1 chart	334
27	**Strategic SWOT and TOWS Analysis** SWOT assessment • TOWS strategic options **Selected exhibits** *Exhibit 899: SWOT Analysis* | *Exhibit 901: TOWS Matrix*	3	337
28	**Risk Factors Identified** Integrated risk register • Likelihood-and-impact reading • Mitigants and watch indicators **Selected exhibits** *Exhibit 902: Integrated Risk Register* | *Exhibit 904: Mitigants for Principal Risks*	3 1 chart	338
29	**Observed Implementation Patterns by Stakeholder** Manufacturers and providers • Distributors, integrators and installers • End users and buyer organizations • Governments and programs • Financiers and insurers • Qualification, design-in and procurement criteria **Selected exhibits** *Exhibit 905: Observed Patterns by Stakeholder* | *Exhibit 906: Procurement Criteria Observed by Buyer Type*	2	340
30	**Community Engagement and Social Inclusion** Access and inclusion models • Gender and labor dimensions • Benefit-sharing patterns • Worker exposure, skilled talent and regional employment **Selected exhibits** *Exhibit 907: Social Outcome Summary*	1	342
31	**Pricing, System Economics and Financing** System cost structure • Buyer economics and payback • Financing context and instruments • Total cost of ownership and design-win economics **Selected exhibits** *Exhibit 908: Delivered Cost Structure of a Power-GaN Device (Indicative Shares)* | *Exhibit 914: Financing Instruments*	8 1 chart	343

© ANMD

No.	Chapter, Main Sections and Selected Exhibits	Exhibits	Page
32	**Outlook Synthesis** Where value concentrates to 2032 • What could change the path • Threshold-event indicators **Selected exhibits** *Exhibit 916: Value Added by Product Family, 2026E–2032F (US$ Million)* | *Exhibit 918: Threshold-Event Indicators*	3 1 chart	346
33	**Key Performance Indicators** Market KPIs • Sustainability KPIs • Delivery KPIs • KPI library **Selected exhibits** *Exhibit 919: Market KPIs* | *Exhibit 920: Sustainability KPIs*	6	348
34	**Company and Patent Directories — Overview** Directory method and coverage • Patent register method and coverage • Directory fields and register **Selected exhibits** *Exhibit 925: Directory Coverage by Structural Role* | *Exhibit 926: Directory and Register Field Definitions*	2	350

Appendices

Reference material, directories and registers supporting the main study.

Coverage	Exhibits	Page
Glossary of Terms and Abbreviations Definitions of terms, units and abbreviations used across the study	1	351
Corporate Directory 230 organizations by country, region, structural role, profile and website	1	353
Patent Directory 82 patent records with filing activity by product family and jurisdiction	4 1 chart	364
Projects, Policies and Case-Study Register Projects, programs, policies and case studies referenced in the study	1	374
Gallium Nitride (GaN) RF and Power Components KPI Dictionary and Data Schema KPI definitions and the data schema of the Market Numbers Workbook	2	375

Register at anewmarketdynamics.com to download detailed table of contents, sample pages and the report prospectus.

The full report is delivered within 24 hours of order confirmation.

https://anewmarketdynamics.com/reports/gallium-nitride-gan-rf-and-power-components

info@anewmarketdynamics.com samplepages@anewmarketdynamics.com

www.anewmarketdynamics.com