

The Global Market for Thermal Interface Materials 2023-2033

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Abstracts

The effective transfer/removal of heat from a semiconductor device is crucial to ensure reliable operation and to enhance the lifetime of these components. The development of high-power and high-frequency electronic devices has greatly increased issues with excessive heat accumulation. There is therefore a significant requirement for effective thermal management materials to remove excess heat from electronic devices to ambient environment.

Thermal interface materials (TIMs) offer efficient heat dissipation to maintain proper functions and lifetime for these devices. TIMs are materials that are applied between the interfaces of two components (typically a heat generating device such as microprocessors, photonic integrated circuits, etc. and a heat dissipating device e.g. heat sink) to enhance the thermal coupling between these devices. A range of Carbon-based, metal/solder and filler-based TIMs are available both commercially and in the research and development (R&D) phase.

Report contents include:

Analysis of recent commercial and R&D developments in thermal interface materials (TIMs).

Market trends and drivers.

Market map.

Analysis of thermal interface materials (TIMs) including:
Thermal Pads/Insulators.

Thermally Conductive Adhesives.

Thermal Compounds or Greases.

Thermally Conductive Epoxy/Adhesives.

Phase Change Materials.

Metal-based TIMs.

Carbon-based TIMs.

Market analysis. Markets covered include:

Consumer electronics.

Electric Vehicles (EV) batteries.

Data Center infrastructure.

ADAS sensors.

EMI shielding.

5G.

Global market revenues for thermal interface materials (TIMs), segmented by type and market, historical and forecast to 2033.

Profiles of 87 producers. Companies profiled include Arieca, Carbice Corporation, CondAlign, Fujipoly, Henkel, Indium Corporation, KULR Technology Group, Inc., Parker-Hannifin Corporation, Shin-Etsu Chemical Co., Ltd, and SHT Smart High-Tech AB.

Contents

1 INTRODUCTION

- 1.1 Thermal management-active and passive
- 1.2 What are thermal interface materials (TIMs)?
 - 1.2.1 Types
 - 1.2.2 Thermal conductivity
- 1.3 Comparative properties of TIMs
- 1.4 Advantages and disadvantages of TIMs, by type
- 1.5 Prices

2 MATERIALS

- 2.1 Thermal greases and pastes
- 2.2 Thermal gap pads
- 2.3 Thermal gap fillers
- 2.4 Thermal adhesives and potting compounds
- 2.5 Phase Change Materials
 - 2.5.1 Properties of Phase Change Materials (PCMs)
 - 2.5.2 Types
 - 2.5.2.1 Organic/biobased phase change materials
 - 2.5.2.1.1 Advantages and disadvantages
 - 2.5.2.1.2 Paraffin wax
 - 2.5.2.1.3 Non-Paraffins/Bio-based
 - 2.5.2.2 Inorganic phase change materials
 - 2.5.2.2.1 Salt hydrates
 - 2.5.2.2.1.1 Advantages and disadvantages
 - 2.5.2.2.2 Metal and metal alloy PCMs (High-temperature)
 - 2.5.2.3 Eutectic mixtures
 - 2.5.2.4 Encapsulation of PCMs
 - 2.5.2.4.1 Macroencapsulation
 - 2.5.2.4.2 Micro/nanoencapsulation
 - 2.5.2.5 Nanomaterial phase change materials
 - 2.5.3 Thermal energy storage (TES)
 - 2.5.3.1 Sensible heat storage
 - 2.5.3.2 Latent heat storage
 - 2.5.4 Application in TIMs
 - 2.5.4.1 Thermal pads

2.5.4.2 Low Melting Alloys (LMAs)

2.6 Metal-based TIMs

2.6.1 Solders and low melting temperature alloy TIMs

2.6.2 Liquid metals

2.6.3 Solid liquid hybrid (SLH) metals

2.6.3.1 Hybrid liquid metal pastes

2.6.3.2 SLH created during chip assembly (m2TIMs)

2.7 Carbon-based TIMs

2.7.1 Multi-walled nanotubes (MWCNT)

2.7.1.1 Properties

2.7.1.2 Application as thermal interface materials

2.7.2 Single-walled carbon nanotubes (SWCNTs)

2.7.2.1 Properties

2.7.2.2 Application as thermal interface materials

2.7.3 Vertically aligned CNTs (VACNTs)

2.7.3.1 Properties

2.7.3.2 Applications

2.7.3.3 Application as thermal interface materials

2.7.4 BN nanotubes (BNNT) and nanosheets (BNNS)

2.7.4.1 Properties

2.7.4.2 Application as thermal interface materials

2.7.5 Graphene

2.7.5.1 Properties

2.7.5.2 Application as thermal interface materials

2.7.5.2.1 Graphene fillers

2.7.5.2.2 Graphene foam

2.7.5.2.3 Graphene aerogel

2.7.6 Nanodiamonds

2.7.6.1 Properties

2.7.6.2 Application as thermal interface materials

2.7.7 Graphite

2.7.7.1 Properties

2.7.7.2 Natural graphite

2.7.7.2.1 Classification

2.7.7.2.2 Processing

2.7.7.2.3 Flake

2.7.7.2.3.1 Grades

2.7.7.2.3.2 Applications

2.7.7.3 Synthetic graphite

- 2.7.7.3.1 Classification
 - 2.7.7.3.1.1 Primary synthetic graphite
 - 2.7.7.3.1.2 Secondary synthetic graphite
 - 2.7.7.3.1.3 Processing
- 2.7.7.4 Applications as thermal interface materials
- 2.7.8 Hexagonal Boron Nitride
 - 2.7.8.1 Properties
 - 2.7.8.2 Application as thermal interface materials
- 2.8 Metamaterials
 - 2.8.1 Types and properties
 - 2.8.1.1 Electromagnetic metamaterials
 - 2.8.1.1.1 Double negative (DNG) metamaterials
 - 2.8.1.1.2 Single negative metamaterials
 - 2.8.1.1.3 Electromagnetic bandgap metamaterials (EBG)
 - 2.8.1.1.4 Bi-isotropic and bianisotropic metamaterials
 - 2.8.1.1.5 Chiral metamaterials
 - 2.8.1.1.6 Electromagnetic “Invisibility” cloak
 - 2.8.1.2 Terahertz metamaterials
 - 2.8.1.3 Photonic metamaterials
 - 2.8.1.4 Tunable metamaterials
 - 2.8.1.5 Frequency selective surface (FSS) based metamaterials
 - 2.8.1.6 Nonlinear metamaterials
 - 2.8.1.7 Acoustic metamaterials
 - 2.8.2 Application as thermal interface materials
- 2.9 Self-healing thermal interface materials
 - 2.9.1 Extrinsic self-healing
 - 2.9.2 Capsule-based
 - 2.9.3 Vascular self-healing
 - 2.9.4 Intrinsic self-healing
 - 2.9.5 Healing volume
 - 2.9.6 Types of self-healing materials, polymers and coatings
 - 2.9.7 Applications in thermal interface materials

3 MARKETS FOR THERMAL INTERFACE MATERIALS (TIMS)

- 3.1 Consumer electronics
 - 3.1.1 Market overview
 - 3.1.1.1 Market drivers
 - 3.1.1.2 Applications

- 3.1.1.2.1 Smartphones and tablets
 - 3.1.1.2.2 Wearable electronics
 - 3.1.2 Global market revenues 2022, by TIM type, millions USD
 - 3.2 Electric Vehicles (EV)
 - 3.2.1 Market overview
 - 3.2.1.1 Market drivers
 - 3.2.1.2 Applications
 - 3.2.1.2.1 Lithium-ion batteries
 - 3.2.1.2.1.1 Cell-to-pack designs
 - 3.2.1.2.1.2 Cell-to-chassis/body
 - 3.2.1.2.2 Power electronics
 - 3.2.1.2.3 Charging stations
 - 3.2.2 Global market revenues 2022, by TIM type, millions USD
- 3.3 Data Centers
 - 3.3.1 Market overview
 - 3.3.1.1 Market drivers
 - 3.3.1.2 Applications
 - 3.3.1.2.1 Router, switches and line cards
 - 3.3.1.2.2 Servers
 - 3.3.1.2.3 Power supply converters
 - 3.3.2 Global market revenues 2022, by TIM type, millions USD
- 3.4 ADAS Sensors
 - 3.4.1 Market overview
 - 3.4.1.1 Market drivers
 - 3.4.1.2 Applications
 - 3.4.1.2.1 ADAS Cameras
 - 3.4.1.2.2 ADAS Radar
 - 3.4.1.2.3 ADAS LiDAR
 - 3.4.2 Global market revenues 2022, by TIM type, millions USD
- 3.5 EMI shielding
 - 3.5.1 Market overview
 - 3.5.1.1 Market drivers
 - 3.5.1.2 Applications
- 3.6 5G
 - 3.6.1 Market overview
 - 3.6.1.1 Market drivers
 - 3.6.1.2 Applications
 - 3.6.1.2.1 Antenna
 - 3.6.1.2.2 Base Band Unit (BBU)

3.6.2 Global market revenues 2022, by TIM type, millions USD

4 GLOBAL REVENUES FOR TIMS

4.1 Global revenues for TIMs, 2022, by type

4.2 Global revenues for TIMs 2023-2033, by materials type

4.2.1 Telecommunications market by TIMS type

4.2.2 Electronics and data centers market by TIMS type

4.2.3 ADAS market by TIMS type

4.2.4 Electric vehicles (EVs) market by TIMS type

4.3 Global revenues for TIMs 2018-2033, by market

5 FUTURE MARKET PROSPECTS

6 COMPANY PROFILES 121 (87 COMPANY PROFILES)

7 RESEARCH METHODOLOGY

8 REFERENCES

List Of Tables

LIST OF TABLES

- Table 1. Thermal conductivities (?) of common metallic, carbon, and ceramic fillers employed in TIMs.
- Table 2. Commercial TIMs and their properties.
- Table 3. Advantages and disadvantages of TIMs, by type.
- Table 4. Thermal interface materials prices.
- Table 5. Characteristics of some typical TIMs.
- Table 6. Properties of PCMs.
- Table 7. PCM Types and properties.
- Table 8. Advantages and disadvantages of organic PCMs.
- Table 9. Advantages and disadvantages of organic PCM Fatty Acids.
- Table 10. Advantages and disadvantages of salt hydrates
- Table 11. Advantages and disadvantages of low melting point metals.
- Table 12. Advantages and disadvantages of eutectics.
- Table 13. Benefits and drawbacks of PCMs in TIMs.
- Table 14. Properties of CNTs and comparable materials.
- Table 15. Typical properties of SWCNT and MWCNT.
- Table 16. Comparison of carbon-based additives in terms of the main parameters influencing their value proposition as a conductive additive.
- Table 17. Thermal conductivity of CNT-based polymer composites.
- Table 18. Comparative properties of BNNTs and CNTs.
- Table 19. Properties of graphene, properties of competing materials, applications thereof.
- Table 20. Properties of nanodiamonds.
- Table 21. Comparison between Natural and Synthetic Graphite.
- Table 22. Classification of natural graphite with its characteristics.
- Table 23. Characteristics of synthetic graphite.
- Table 24. Properties of hexagonal boron nitride (h-BN).
- Table 25. Types of self-healing coatings and materials.
- Table 26. Comparative properties of self-healing materials.
- Table 27. Global revenues for TIMs, 2022, by type.
- Table 28. Global revenues for TIMs 2018-2033, by market (millions USD)
- Table 29. Carbodeon Ltd. Oy nanodiamond product list.
- Table 30. Ray-Techniques Ltd. nanodiamonds product list.
- Table 31. Comparison of ND produced by detonation and laser synthesis.

List Of Figures

LIST OF FIGURES

Figure 1. (L-R) Surface of a commercial heatsink surface at progressively higher magnifications, showing tool marks that create a rough surface and a need for a thermal interface material.

Figure 2. Schematic of thermal interface materials used in a flip chip package.

Figure 3. Thermal grease.

Figure 4. Dispensing a bead of silicone-based gap filler onto the heat sink of a power electronics module.

Figure 5. Application of thermal silicone grease.

Figure 6. A range of thermal grease products.

Figure 7. Thermal Pad.

Figure 8. Dispensing a bead of silicone-based gap filler onto the heat sink of a power electronics module.

Figure 9. Thermal tapes.

Figure 10. Thermal adhesive products.

Figure 11. Phase-change TIM products.

Figure 12. PCM mode of operation.

Figure 13. Classification of PCMs.

Figure 14. Phase-change materials in their original states.

Figure 15. Thermal energy storage materials.

Figure 16. Phase Change Material transient behaviour.

Figure 17. PCM TIMs.

Figure 18. Phase Change Material - die cut pads ready for assembly.

Figure 19. Typical IC package construction identifying TIM1 and TIM2

Figure 20. Liquid metal TIM product.

Figure 21. Pre-mixed SLH.

Figure 22. HLM paste and Liquid Metal Before and After Thermal Cycling.

Figure 23. SLH with Solid Solder Preform.

Figure 24. Automated process for SLH with solid solder preforms and liquid metal.

Figure 25. Schematic diagram of a multi-walled carbon nanotube (MWCNT).

Figure 26. Schematic of single-walled carbon nanotube.

Figure 27. Types of single-walled carbon nanotubes.

Figure 28. Schematic of a vertically aligned carbon nanotube (VACNT) membrane used for water treatment.

Figure 29. Schematic of Boron Nitride nanotubes (BNNTs). Alternating B and N atoms are shown in blue and red.

Figure 30. Graphene layer structure schematic.

Figure 31. Illustrative procedure of the Scotch-tape based micromechanical cleavage of HOPG.

Figure 32. Graphene and its descendants: top right: graphene; top left: graphite = stacked graphene; bottom right: nanotube=rolled graphene; bottom left: fullerene=wrapped graphene.

Figure 33. Detonation Nanodiamond.

Figure 34. DND primary particles and properties.

Figure 35. Flake graphite.

Figure 36. Applications of flake graphite.

Figure 37. Graphite-based TIM products.

Figure 38. Structure of hexagonal boron nitride.

Figure 39. Classification of metamaterials based on functionalities.

Figure 40. Electromagnetic metamaterial.

Figure 41. Schematic of Electromagnetic Band Gap (EBG) structure.

Figure 42. Schematic of chiral metamaterials.

Figure 43. Nonlinear metamaterials- 400-nm thick nonlinear mirror that reflects frequency-doubled output using input light intensity as small as that of a laser pointer.

Figure 44. Schematic of self-healing polymers. Capsule based (a), vascular (b), and intrinsic (c) schemes for self-healing materials. Red and blue colours indicate chemical species which react (purple) to heal damage.

Figure 45. Stages of self-healing mechanism.

Figure 46. Self-healing mechanism in vascular self-healing systems.

Figure 47. Comparison of self-healing systems.

Figure 48. Schematic of TIM operation in electronic devices.

Figure 49. Schematic of Thermal Management Materials in smartphone.

Figure 50. Wearable technology inventions.

Figure 51. Global market revenues 2022 in electronics, by TIM type, million USD.

Figure 52. Application of thermal interface materials in automobiles.

Figure 53. EV battery components including TIMs.

Figure 54. Battery pack with a cell-to-pack design and prismatic cells.

Figure 55. Cell-to-chassis battery pack.

Figure 56. TIMs in EV charging station.

Figure 57. Global market revenues 2022 in electric vehicles, by TIM type, million USD.

Figure 58. Image of data center layout.

Figure 59. Application of TIMs in line card.

Figure 60. Global market revenues 2022 in data centers, by TIM type, million USD.

Figure 61. ADAS radar unit incorporating TIMs.

Figure 62. Global market revenues 2022 in ADAS, by TIM type, million USD.

Figure 63. Coolzorb 5G.

Figure 64. TIMs in Base Band Unit (BBU).

Figure 65. Global market revenues 2022 in telecommunications, by TIM type, million USD.

Figure 66. Global revenues for TIMs, 2022, by type.

Figure 67. Telecommunications market by TIMS type 2023-2023, millions USD.

Figure 68. Electronics and data centers market by TIMS type 2023-2023, millions USD.

Figure 69. ADAS market by TIMS type 2023-2023, millions USD.

Figure 70. Electric vehicles (EVs) market by TIMS type 2023-2023, millions USD.

Figure 71. Global revenues for TIMs 2018-2033, by market.

Figure 72. Boron Nitride Nanotubes products.

Figure 73. Transtherm® PCMs.

Figure 74. Carbice carbon nanotubes.

Figure 75. Internal structure of carbon nanotube adhesive sheet.

Figure 76. Carbon nanotube adhesive sheet.

Figure 77. HI-FLOW Phase Change Materials.

Figure 78. Thermoelectric foil, consists of a sequence of semiconductor elements connected with conductive metal. At the top (in red) is the thermal interface.

Figure 79. Parker Chomerics THERM-A-GAP GEL.

Figure 80. Metamaterial structure used to control thermal emission.

Figure 81. Shinko Carbon Nanotube TIM product.

Figure 82. The Sixth Element graphene products.

Figure 83. Thermal conductive graphene film.

Figure 84. VB Series of TIMS from Zeon.

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