

#### For immediate release

# Elevate your HDI projects with VT-47LT Where reliability meets innovation.

March 11, 2025 – Ventec International Group announce launch of VT-47LT IPC4101 / 126 Prepreg.

## Are Microvia Failures Plaguing Your HDI Any Layer Designs?

High-density interconnect (HDI) designs are pushing the envelope - higher layer count HDI relies on complex microvia designs: skip vias, staggered microvias, and stacked microvias in sequential laminations. But there's a critical flaw: microvias fail far more often than plated through-holes in advanced designs, putting reliability on the line.

The root cause? Thermal mismatch. Differences in coefficient of thermal expansion (CTE) between the microvia fill material and surrounding dielectric create stress during thermal excursions, weakening the microvia barrel and cap. It gets worse, copper and epoxy expand and contract at different rates under thermal cycling, with epoxy's higher CTE driving tensile stress on the copper cap plating. Repeated thermal cycling intensifies this fatigue initiating micro-cracks that spread into the microvia barrel or epoxy core, threatening the integrity of the entire interconnect.

## Introducing VT-47LT: Next-Generation Low CTE prepreg for HDI Innovation

Ventec's VT-47LT, a cutting-edge IPC 4101/126 prepreg that steps up to meet the demands of modern HDI technology, avoiding the need for time consuming and expensive requalification of alternative IPC4101 grades. With best-in-class Z-axis CTE, it delivers unrivalled reliability right where you need it. Its advanced low-CTE epoxy slashes thermal expansion mismatches, easing stress on microvia structures and tackling the persistent challenge of failures head-on.

Engineered with optimized properties, best-in-class Z-axis CTE and superior thermal resilience, VT-47LT cuts stress on microvias, reducing crack risks and boosting durability. It's a game-changer delivering robust, long lasting HDI PCBs

Elevate your HDI projects with VT-47LT — where reliability meets innovation!

Further information about Ventec's solutions and the company's wide variety of products is available at <a href="https://www.venteclaminates.com">www.venteclaminates.com</a>.



#### Available images

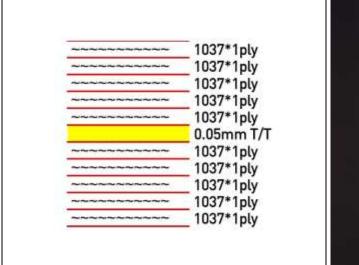


Image source: Ventec

Caption: VT-47LT Stackup



Image source: Ventec

Caption: VT-47LT Stacked Microvia

## **About Ventec International Group**

Ventec International Group Co., Ltd. is a Taiwan Stock Exchange listed (TWSE:6672.TT) global supplier of advanced base materials for the PCB industry worldwide. Ventec's range of laminates & prepregs include signal integrity/high-speed digital, RF/Analog & high-performance IMS material technology, and an advanced range of thermal management solutions designed for specialized use in industries including automotive, communication, aerospace, and defense. Ventec also provides value-added one-stop shop services to support PCB manufacturing and distributes a range of third-party materials and automated production equipment that complement its core product offering. Operating its own fully controlled and managed global supply chain and worldwide sales and technical support network, Ventec has manufacturing, and distribution facilities located throughout Asia, Europe, and the US, certified to AS9100 Revision D, IATF 16949:2016 and ISO 9001:2015. For more information, visit www.venteclaminates.com.



#### Safe Harbor Statement

This press release contains projections and other forward-looking statements regarding future events or our future financial performance. All statements other than present and historical facts and conditions contained in this release, including any statements regarding our future results of operations and financial positions, business strategy, plans and our objectives for future operations, are forward-looking statements. These statements are only predictions and reflect our current beliefs and expectations with respect to future events and are based on assumptions and subject to risk and uncertainties and subject to change at any time. We operate in a very competitive and rapidly changing environment. New risks emerge from time to time. Given these risks and uncertainties, you should not place undue reliance on these forward-looking statements. Actual events or results may differ materially from those contained in the projections or forward-looking statements. Some of the factors that could cause actual results to differ materially from the forward-looking statements contained herein include, without limitation: (i) the contraction or lack of growth of markets in which we compete and in which our products are sold (ii) unexpected increases in our expenses, including manufacturing expenses, (iii) our inability to adjust spending quickly enough to offset any unexpected revenue shortfall, (iv) delays or cancellations in spending by our customers, (v) unexpected average selling price reductions, (vi) the significant fluctuation to which our quarterly revenue and operating results are subject, (vii) our inability to anticipate the future market demands and future needs of our customers, (viii) our inability to achieve new customer wins or for customer wins to result in shipments of our products at levels and in the timeframes we currently expect, (ix) our inability to execute on strategic alliances, (x) the impact of natural disasters on our sourcing operations and supply chain, and(xi) other factors detailed in documents we file from time to time with the Securities and Exchange Commission.

#### **Media Contact**

### Lee Bullett

Marketing & Graphic Communications
Ventec International Group

Email: lee.bullett@ventec-europe.com

Mobile: +44 (0)7951 168558

www.venteclaminates.com