AP ADVANCED PACKAGING

MEDIA PACK 2026-27

advancedpackaging.news

Editor's **viewpoint**

Advanced Packaging is emerging as the critical enabler of next-generation semiconductor performance, integration and system-level innovation. Through the magazine and website, this new platform delivers timely news, expert insight and in-depth analysis across the rapidly evolving packaging landscape, from chiplet architectures and heterogeneous integration to advanced interconnects and thermal management.

As scaling challenges reshape the industry, packaging is no longer a back-end process but a central driver of performance, efficiency and functionality. Coverage will focus on 2.5D and 3D integration, wafer-level and panel-level packaging, advanced substrates, high-density interconnects and the co-design of power, signal and thermal systems.

The Advanced Packaging ecosystem continues to expand, bringing together materials innovators, equipment manufacturers, OSATs, foundries and system designers. This publication tracks that convergence, highlighting real-world applications across AI, high-performance computing, automotive and next-generation communications.

With a global editorial scope, Advanced Packaging provides a trusted source of technical content, from detailed feature articles and industry interviews to conference reports and emerging research. Delivered in print, digital formats and through regular news updates, it connects the entire value chain and offers a powerful platform for companies shaping the future of semiconductor integration.

OVERVIEW

productoverview

THE ADVANCED PACKAGING PORTFOLIO INCLUDES:

- Advanced Packaging magazine: Global circulation – **advancedpackaging.news**
- AP International: Dedicated international conference – **ap-international.net**
- Weekly E-Mail news alerts: Global broadcast

INTERCONNECT BREAKTHROUGH

AOR TCB™ paves the way to higher HBM4 stacks

Current advanced packaging technology is reaching its limits in terms of the roadmap for high-bandwidth memory. Among ASMPT's solutions to enable the next generation of HBM is thermocompression bonding with active oxide removal (AOR).

DR. AMI EITAN, SVP, CHIEF SCIENTIFIC OFFICER, ASMPT

IN THE PAST, advances in hardware found their application; today, in the age of AI, it is the applications that place specific demands on the further development of chips and their processing. This is particularly true for high-bandwidth memory (HBM). HBM is increasingly becoming a potential bottleneck in the advancement of AI devices, in terms of both capability and capacity to meet the global demand for AI products. Therefore, memory suppliers will continue to push HBM performance and look for high-quality processes to enable the manufacture of HBM stacks. The number of memory dies to be stacked continues to increase, as do the potential die sizes. In April 2025, JEDEC officially released the HBM4 specification. It supports data rates of up to 8 Gb/s per pin across a 2048-bit interface, delivering aggregate bandwidth of up to 2 TB/s and supporting 4-Hi to 16-Hi DRAM stack configurations with per-die densities of 24 Gb or 32 Gb, enabling total stack capacities of up to 64 GB. The roadmap is in place, and various bonding technologies are being used in high-volume manufacturing. Currently, Mass Reflow-Moulded Underfill (MR-MUF) and Thermocompression with Non-Conductive Film (TC-NCF) are used in the high-volume manufacturing of HBM. However, when it comes to stack height, current advanced packaging technologies are reaching their limits.

Where the challenges lie

The key challenges in stacking more and more layers of dies are:

- Die warpage during the bonding process
- Chip gap height control
- High thermal and electrical conductivity
- A residue-free underfill process

All these aspects must be considered to ensure quality and reliability. In addition, advancing HBM performance requires continued pitch scaling of the interconnects between dies as the industry moves from HBM3E to HBM4 and beyond to HBM5. The two leading methods can be evaluated against these challenges as follows. Mass Reflow-Moulded Underfill (MR-MUF). Mass reflow melts all bumps at once, followed by moulded underfill encapsulating and filling gaps in a single, integrated step. The primary advantage is the superior thermal dissipation due to the high thermal conductivity of moulded underfill, which is ideal for high-power and tall HBM stacks. MR-MUF is a highly efficient process combining bonding and underfill in one step. It prowvides strong structural support for tall 12–16-Hi stacks. However, it is difficult to control the warpage, and the chip gap height and uniformity when heating the full stack.

In contrast, Thermocompression with Non-Conductive Film (TC-NCF) simultaneously forms

joints and fills gaps die by die. The key advantage of this technology with a pre-laminated non-conductive film is its ability to handle ultra-fine pitches of less than 20 µm. Its high alignment accuracy makes it ideal for increasingly dense I/O designs, such as fine-pitch HBM stacking and advanced 2.5D/3D packaging, where tight keep-out zones and precise alignment are critical. It enables good warpage control with thin dies, and a separate capillary underfill step is not required because the NCF fills the gap during bonding. Another advantage of TC-NCF is that it enables better control of the chip gap height. The disadvantages are lower throughput and higher cost, as well as lower thermal conductivity due to the polymer NCF.

With the transition to next-generation HBM, tighter chip gap height control and improved uniformity have become essential for precise stack height management. The HBM roadmap should therefore move towards hybrid bonding to improve thermal and electrical conductance and achieve very tight chip gap heights. This is in addition to pitch scaling, which requires high bonding accuracy while limiting solder volume. This is important because, as we move from HBM3E to HBM4 and then HBM5, pitch scaling for the joints between the dies is being driven in order to advance HBM performance. ASMPT proposes a new approach to enable the next generation of HBM: thermocompression bonding with active oxide removal. The thermocompression bonding solution, FIREBIRD TCB, is a highly capable platform offering high force capability, high accuracy and high-throughput processes. It provides all the necessary functions for the HBM device bonding process, for the short term and long-term roadmap of memory suppliers.

Residue-free fluxless bonding

AOR TCB™ is a new fluxless first-level interconnect (FLI) process with active oxide removal (AOR). Using a plasma-based approach, the AOR technology empowers 3D chiplet integration and the HBM devices with fine bump pitch roadmaps as well as new package architectures. By eliminating flux residue and the costly cleaning solutions typically associated with traditional methods, AOR will mark a new era in FLI bonding processes, enabling high-volume manufacturing and driving advancements in advanced packaging technology. Deploying the AOR approach aims to improve package interconnect yield at both finer pitch levels and overall larger package sizes. As stack heights increase, even tiny variations in chip gap, residue, or warpage can cascade into significant yield loss. For memory manufacturers operating on a large scale, yield is not just a technical metric; it directly affects profitability and time to market. HBM4 requires consistent bonding quality across every layer of the stack. AOR TCB™ reduces rework and scrap, thereby reducing cost per bit. Fluxless, residue-free bonding significantly reduces failures caused by voids or contamination, providing a measurable cost advantage, while better uniformity enables faster time-to-yield for new HBM nodes. The controlled chip gap and oxide-free bonding of AOR TCB™ shorten the optimisation phase when fabs transition from HBM3E to HBM4, enabling high-volume manufacturing (HVM) to stabilise more quickly.

In-situ cleaning

The fluxless HBM die stack TCB faces a significant challenge with formic-acid-based oxide removal, where salt crystal residues may persist and negatively impact the moulded underfill (MUF) process, by leaving voids and foreign material (FM). These residues and FM can impede underfill adhesion and cause reliability failures. An additional post-bond cleaning step is therefore essential to remove these residues before the MUF process. In contrast, AOR's plasma cleaning process produces only water vapour, creating a highly oxide-free surface on the bump and pad for joint formation. As the plasma-based approach generates no residues, no downstream cleaning operations are required to remove salts and other FM generated by the

Figure 1: Formic acid oxide removal process results in the formation of microcrystals that can be deposited on the die, wafer, or substrates being bonded, potentially leading to reliability issues. SOURCE: ASMPT

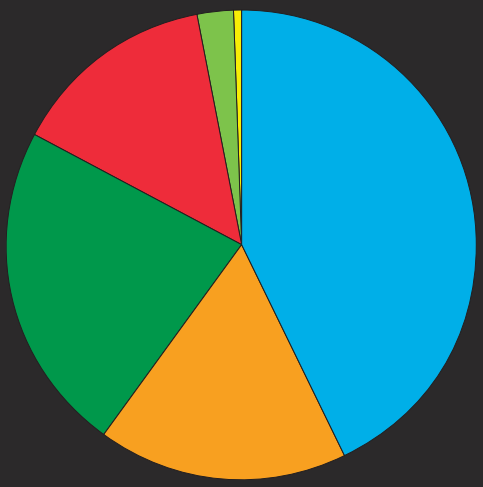
editorial **calendar**

Advanced Packaging and its associated website deliver comprehensive coverage of the industry, from chiplet integration, 2.5D and 3D packaging to interconnects, substrates, thermal management and manufacturing innovation.

ISSUE	COPY DATE	PRIMARY THEME	SECONDARY THEME	PRE-SHOW DISTRIBUTION
2026				
Issue 1 Ad Copy Mailed	15-07-26 29-07-26	Chiplet Integration	Advanced Substrates	
Issue 2 Ad Copy Mailed	15-09-26 29-09-26	2.5D / 3D Integration	Design & Simulation	
Issue 3 Ad Copy Mailed	15-12-26 29-12-26	Wafer-Level Packaging	Back-end Processing	
2027				
Issue 1 Ad Copy Mailed	15-02-27 01-03-27	High-Density Interconnects	Supply Chain & Materials	-
Issue 2 Ad Copy Mailed	15-04-27 29-04-27	Thermal Management	Reliability & Testing	-
Issue 3 Ad Copy Mailed	15-06-27 29-06-27	Heterogenous Integration	Advanced Deposition & Bonding	
Issue 4 Ad Copy Mailed	15-08-27 29-08-27	Panel-Level Packaging	Inspection & Metrology	
Issue 5 Ad Copy Mailed	15-10-27 29-10-27	AI & HPC Packaging	Yield & Process Control	
Issue 6 Ad Copy Mailed	15-12-27 29-12-27	Advanced Materials & Substrates	Integration Roadmaps	-

magazine**circulation**analysis

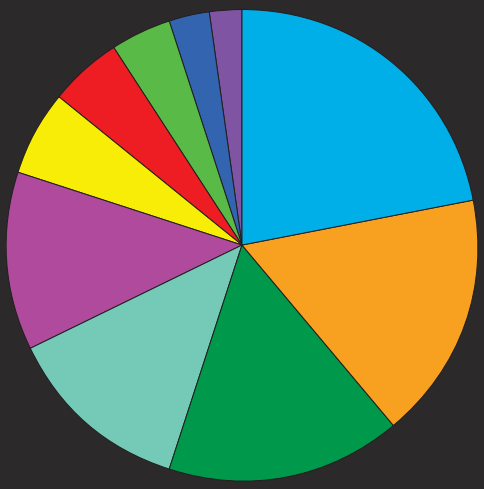
Advanced Packaging reaches a highly targeted global audience of 40,000 advanced packaging professionals, spanning design, materials, manufacturing and system integration. This audience is actively involved in technology selection, process development, packaging strategy and capital investment, making AP a highly effective platform for engaging decision-makers across the semiconductor value chain.



GEOGRAPHICAL BREAKDOWN: %

- EUROPE - 17,200 (43%)
- MIDDLE EAST & AFRICA - 1000 (2.5%)
- ASIA - 5,600 (14%)
- NORTH AMERICA - 9,200 (23%)
- UK & IRELAND - 6,800 (17%)
- SOUTH AMERICA - 200 (0.5%)

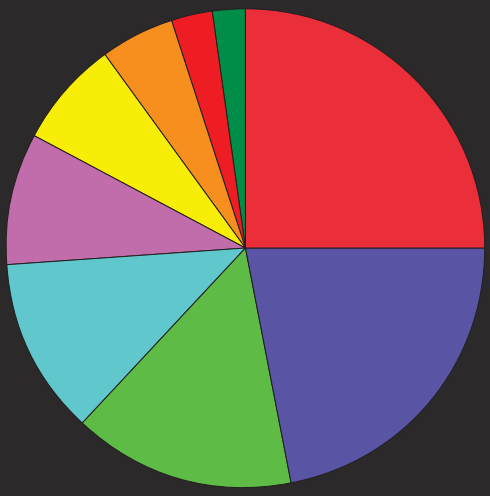
TOTAL: 40,000



COMPANY TYPE: %

- CONSULTANTS & INDUSTRY BODIES - 800 (2%)
- POWER ELECTRONICS & MODULE MANUFACTURERS - 1200 (3%)
- PHOTONICS & ADVANCED INTEGRATION COMPANIES - 1,600 (4%)
- RESEARCH INSTITUTES & ACADEMIA - 2,000 (5%)
- EDA & DESIGN TOOLS - 2,400 (6%)
- FABLESS & SYSTEM COMPANIES (AI, HPC, AUTOMOTIVE) - 4,800 (12%)
- MATERIALS SUPPLIERS (SUBSTRATES, CHEMICALS, POLYMERS) - 5,200 (13%)
- EQUIPMENT MANUFACTURERS (DEPOSITION, LITHOGRAPHY, INSPECTION) - 6,400 (16%)
- OSAT & PACKAGING SPECIALISTS - 6,800 (17%)
- SEMICONDUCTOR MANUFACTURERS & FOUNDRIES - 8,800 (22%)

TOTAL: 40,000



JOB FUNCTION: %

This breakdown reflects **true influence on packaging decisions**, with emphasis on engineering, process and design authority

- COMMERCIAL & BUSINESS DEVELOPMENT - 800 (2%)
- SUPPLY CHAIN & PROCUREMENT - 1200 (3%)
- TEST, RELIABILITY & QUALITY - 2,000 (5%)
- PRODUCT & TECHNOLOGY STRATEGY - 2,800 (7%)
- EQUIPMENT & PROCESS DEVELOPMENT - 3,600 (9%)
- EXECUTIVE LEADERSHIP (CEO,VP, DIRECTOR) - 4,800 (12%)
- MATERIALS SCIENCE & R&D - 6,000 (15%)
- PROCESS ENGINEERING & MANUFACTURING - 8,800 (22%)
- DESIGN, PACKAGING & SYSTEM ARCHITECTURE - 10,000 (25%)

TOTAL: 40,000

displayrates

Size	6x	4x	1x
Full Page	6,920	7,230	7,570
Half Page	4,770	4,900	5,290
Half Island	5,050	5,250	5,680
Third Vertical	3,020	3,260	3,630
Quarter Page	2,360	2,560	2,770
Inside Cover	7,260	7,580	7,970
Outside Cover	7,610	8,020	8,330

Contact: Jackie Cannon
T: +44 (0)2476 718 975 **E:** jackie.cannon@angelbc.com

STANDOUT from the **Crowd**

Front Cover Promotion Package

THE FRONT COVER of Advanced Packaging Magazine is the most prestigious position in the magazine. It allows for an image and a technology story connected to your company to be showcased in front of a global audience. Advanced Packaging Magazine is distributed to over 40,000.

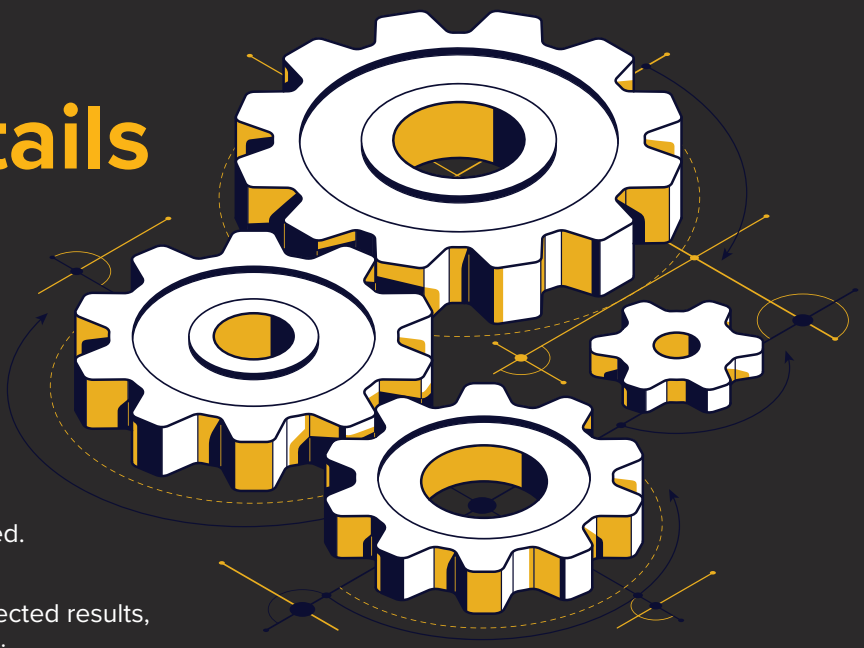
WHAT DO YOU GET?

- Cover image with your branding
- 2,000 words of editorial within magazine
- Full page advertisement
- Magazine hosted on **advancedpackaging.news** for six weeks
- 30 copies for promotion
- PDF of your cover and article for web promotion

Price on Application

Contact: Jackie Cannon **T:** +44 (0)2476 718 975 **E:** jackie.cannon@angelbc.com

mechanical**details**



FILE FORMAT

High Resolution PDF.

- Files must be CMYK, images should be high resolution 300 dpi, with ALL fonts embedded.
- Files must contain printers marks and show bleed.

Any file supplied non-CMYK, may print with unexpected results, due to possible colour shifts during CMYK conversion.

DELIVERY METHODS

Email: mitch.gaynor@angelbc.com

or use: wetransfer.com / mailbigfiles.com **or any other method**

If you require any assistance please contact:

Mitch Gaynor

Design & Production Manager

T: +44 (0)1923 690 214 or **E:** mitch.gaynor@angelbc.com

Advertisement Size	Trim Size (mm) (w) Width x (h) Height	Bleed (+3mm)
A - DPS (Double Page Spread)	420 x 297	426 x 303
B - Full Page A4	210 x 297	216 x 303
C - 1/2 Page Horizontal	177 x 130	-
D - Island (On request)	121 x 186	-
E - 1/3 Page Vertical	55 x 237	-
F - 1/3 Page Horizontal	177 x 75	-
G - 1/4 Page Horizontal	177 x 58	-
Corporate Partnership	55 x 27	-

website**advertising**options

LEADER BOARD
DURATION: 1 MONTH
€3,300
MAIN DISPLAY SIZE:
1109 x 92 *(Please supply as 1281 x 105)*

RECTANGULAR BANNER
DURATION: 1 MONTH
€1,980
MAIN DISPLAY SIZE:
475 x 238 *(Please supply as 700 x 350)*

SKYSCRAPER
DURATION: 1 MONTH
€1,450
MAIN DISPLAY SIZE:
158 x 389 *(Please supply as 335 x 825*)*

SQUARE BANNER
DURATION: 1 MONTH
€1,760
MAIN DISPLAY SIZE:
158 x 158 *(Please supply as 335 x 335)*

NEWS SECTION BANNER
DURATION: 1 MONTH
€1,450
MAIN DISPLAY SIZE:
426 x 90 *(Please supply as 888 x 188)*

VIDEO
DURATION: 1 MONTH
€1,450
MAIN DISPLAY SIZE:
340 x 170 *(Please supply as 1280 x 720)*

NATIVE BANNER
DURATION: 1 MONTH
€2,640
MAIN DISPLAY SIZE:
600 x 300 *(Please supply as 1000 x 500)*

CORPORATE PARTNERS
DURATION: 12 MONTHS
€2,310
MAIN DISPLAY SIZE:
Landscape logos will appear larger than portrait logos

FLOOR BANNER
DURATION: 1 MONTH
€2,640
MAIN DISPLAY SIZE:
1481 x 122 *(Please supply as 1568 x 130)*

All banners and logos must be supplied as GIF, JPG with “alt” text and a URL to which to link the banner or logo. Advertisers must warrant that they have tested adverts for technical stability on Internet Explorer. Firefox, Opera, Safari and Google Chrome browsers prior to supply. For the purposes of these guidelines, stability is defined as not causing error messages, dialogue windows, excessive CPU usage, browser crashes or system crashes.

Positions subject to availability

email**news**newsletter

THE ADVANCED PACKAGING EMAIL NEWS ALERTS deliver the latest industry news direct into the inboxes of our subscribers, and provide our news alert sponsors a fantastic opportunity to get their message seen by over 40,000 industry professionals.

Sponsors enjoy:

- Sponsor's message (up to 100 words)
- 728 x 90 banner
- Cost: €1,800

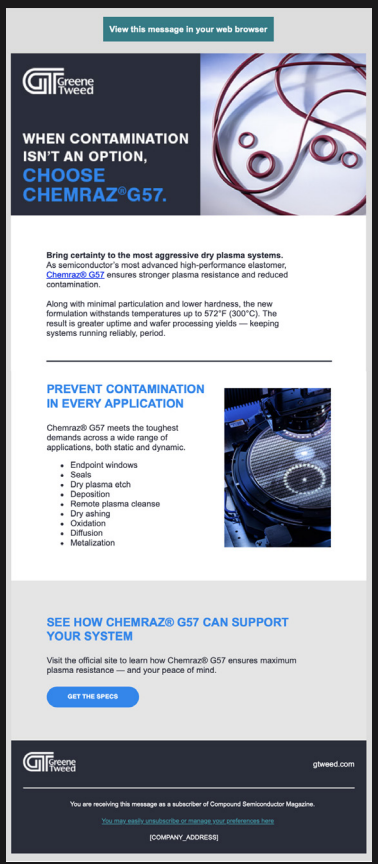
Custom HTML email

Would you like your company, products or services to reach over 40,000 industry professionals?

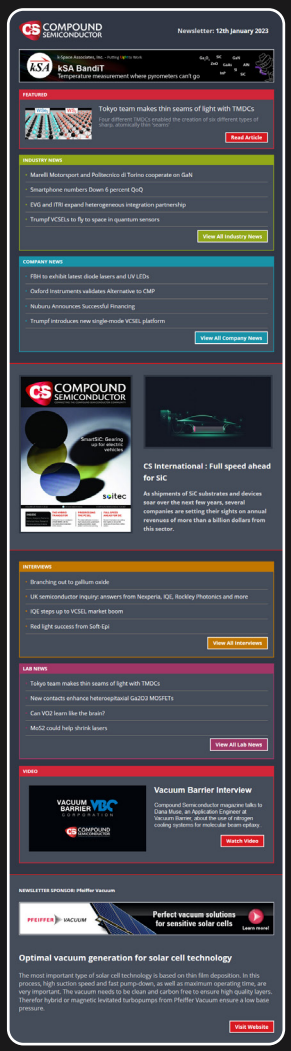
If the answer is yes, then a custom HTML mailing would be a perfect marketing promotion to the 40,000 AP readership. A customised HTML will give your company massive exposure to your target market. You can create the HTML mailing and we send it to the database. Alternatively, you can use our in-house multimedia team to create the HTML for you for a small fee.

Price €2000

CUSTOM HTML



NEWS LETTER



AP **ZOOM** interview

- The 15 min interview allows for multiple topics to be addressed. As well as promoted through our platforms, it also is a useful asset for your company
- Moderated by the editor
- Questions prepared and shared in advance
- An opportunity to edit file(s) in advance
- This video would be a useful asset for any company to use on their website and social media platforms
- This interview would be publicised for four weeks through all our mediums including:
  - On two AP Newsletters
  - Promoted once through our social media platforms

Cost per ZOOM interview

- 15 mins **€995** (This allows for discussion based around a single issue or product announcement)

corporate**partnership**program

WHAT YOU GET?

- **PRINT:** A Corporate Partnership entry in 6 issues of AP Magazine (Size W x H) 55mm x 27mm
- **WEBSITE:** A Corporate Partnership box (size 160 x 60 pixel) under Corporate Partners section on Advanced Packaging homepage, **advancedpackaging.news** for 12 months linking to your website
- Enhance directory listing within AP Buyers Guide
- **NEWSLETTER:** One sponsorship of AP E-News Alert with a 728 x 90 pixel banner + text (100 words)
- A banner (size 160 x 60) on the AP E- Newsletter, linking to your company home page

PROGRAM 1

Price: €2900

Promoting your products or your brand through a Corporate Partnership Program in is an economical way to generate interest and drive prospects.

Your message will reach over 40,000 professionals worldwide through 3 different mediums of magazine, website and newsletter which creates maximum visibility.

PROGRAM 2

Price: €3900

Corporate Partnership 2 will include all Program 1 benefits PLUS the following:

- 1 x half page advertisement in classified section
- 1 x half page Vendor View feature which includes 150 words and a photograph of product or program.

AP WEBINAR

Dedicated webinars for the advanced packaging industry

- Based around a hot topic for your company, this 60-minute recorded, moderated zoom roundtable would be a platform for debate and discussion
- Moderated by an editor, this can include 3 speakers
- Questions prepared and shared in advance
- There would be an opportunity to view and edit out any unflattering bloopers

Package cost €7500

This event would be publicised for 4 weeks through all our mediums including:

- A banner on the Advanced Packaging homepage for 8 weeks
- 4x weekly dedicated HTMLs
- 4x news pieces which would also appear on the weekly e-newsletters
- Promoted through our social media platforms for 8 weeks (pre and post event)
- Available as an on-demand asset through all mediums
- All registered attendees' details would be made available to you

CONTACT:
Jackie Cannon
jackie.cannon@angelbc.com

contactus

EDITORIAL

Editor
Sarab Chopra — **E:** sarab.chopra@angelbc.com

Contributing Editor
Dr. Richard Stevenson — **E:** richard.stevenson@angelbc.com

Contributing Editor
Phil Alsop — **E:** philip.alsop@angelbc.com

PUBLISHING & SALES

Publishing Director
Jackie Cannon — **E:** jackie.cannon@angelbc.com — **T:** +44 (0)2476 718 975

PRODUCTION

Design & Production Manager
Mitch Gaynor — **E:** mitch.gaynor@angelbc.com — **T:** +44 (0)1923 690 214

Graphic Design & Multimedia Assistant
Harvey Watkins — **E:** harvey.watkins@angelbc.com

CEO
Sukhi Bhadal — **E:** sukhi.bhadal@angelbc.com — **T:** +44 (0)2476 718 970

CTO
Scott Adams — **E:** scott.adams@angelbc.com — **T:** +44 (0)2476 718 973

Angel BUSINESS COMMUNICATIONS

Unit 6, Bow Court, Fletchworth Gate, Burnsall Road, Coventry, CV5 6SP, UK.
T: +44 (0)2476 718 970 **E:** info@angelbc.com **W:** angelbc.com