Welcome to Issue 223

Highlights

08 Broken promises
Richard Swinburne laments the lacklustre announcements regarding AMD’s latest and last round of AM4 desktop CPUs.

10 Facebook fears
Tracy King turns a sceptical eye on Facebook’s vision of the metaverse.

16 MSI MPG Z690 Carbon EK X
MSI’s ludicrously expensive new motherboard includes a custom-built waterblock that cools the CPU, VRMs and an M.2 SSD.

18 Thermaltake Toughair 310
Cheap but effective, Thermaltake’s new CPU cooler is ideal for lower and mid-range CPUs.

20 LG Ultragear GP9
LG has entered the PC speaker market with an intriguing and pricey Bluetooth soundbar.

22 HP Omen 16
HP’s new all-AMD powered gaming laptop houses an excellent screen and is surprisingly affordable.

34 120mm AIO liquid coolers
Antony Leather puts a whopping count of nine all-in-one liquid coolers to the test.

44 VA gaming monitors
Prized for their high contrast ratio, Edward Chester tries out five of the latest VA gaming monitors.

64 Forza Horizon 5
Rick Lane thinks the latest instalment in the Forza series is perhaps its best yet.

66 Call of Duty: Vanguard
The latest addition to the CoD series sees players return to the WWII setting. Is there anything of meaning left to explore?

70 50 tips to build a better PC
Take your PC building skills up a notch with our tips to speed up, cool down and quieten your machine.

82 Sim racing rig buyer’s guide
Find out all the information you need to take your virtual racing to the next level.

88 Mouse modding
Learn how to change switches, shed some of your mouse’s weight or just add some style to your mouse with our modding guide.

102 How to
Learn how to spray-paint your rigid water-cooling tubing and mount your graphics card vertically.

110 Readers’ drives
Steve Grever’s touch-screen-equipped PC features a load of custom 3D-printed parts.
Cover guide

Cover guide

Regulars

3 From the editor
8 Richard Swinburne
10 Tracy King
12 Incoming
30 Custom kit
54 How we test
56 Elite products
62 Inverse look
68 Reality check
94 Hobby tech
100 Customised PC
102 How to guides
107 For the win
108 Retro tech
110 Readers’ drives
114 James Gorbold

Reviewed

MOTHERBOARDS
16 MSI MPG Z690 Carbon EK X

CPU COOLERS
18 Thermaltake Toughair 310

PC SPEAKERS
20 LG Ultragear GP9

MICROPHONES
21 NZXT Capsule

GAMING LAPTOPS
22 HP Omen 16

PC SYSTEMS
26 PC Specialist Magnus Supreme
28 AlphaSync iCUE Gaming PC

Custom kit
30 Tile Mate 2022
30 Perfect Part Thumbstick Caps
30 Nobo Desktop Whiteboard
31 Havit Headset and Phone Stand
31 Luminoodle Click

120mm AIO CPU cooler Labs
35 Aerocool Pulse L120F
36 Antec Neptune 120 ARGB
37 be quiet! Silent Loop 2 120mm
38 Corsair iCUE H60i RGB Pro XT
39 Deepcool Gammaxx L120 V2
40 EK AIO 120 D-RGB
41 GameMax Ice Chili 120 ARGB
42 NZXT Kraken 120
43 SilverStone PF120 ARGB

VA gaming monitor Labs
45 AOC CQ27G3SU
46 BenQ Mobiuz EX2710R
47 Gigabyte G27FC
48 MSI Optix MAG322CQR
49 Samsung Odyssey G5 LC27G55TQRXXU

Games

63 Age of Empires 4
64 Forza Horizon 5
66 Call of Duty: Vanguard
67 Exo One
68 Warhammer: Age of Sigmar - Tempestfall

Hobby tech

94 Bangle.js 2
98 Crackers II: The Data Storm