

Intel Z68 Motherboards

ASRock Z68 Pro3

In the grand scheme of things it's fair to say that the ASRock Z68 Pro3 has an average set of features. The four memory slots support up to 32GB of DDR3 RAM running up to 2133MHz and there's a single PCI-E 2.0 16x graphics slot that accommodates any graphics card on the market. If you plan on using dual graphics cards you'll have to look elsewhere, but that excludes a tiny percentage of the buying public. In addition to the graphics slot there are three PCI-Express 1x slots and two legacy PCI slots.

On the I/O panel there is one PS/2 port, two USB3 ports and four USB2 ports with mid-board headers for four more ports. Added to that we have surround sound audio facilitated via optical S/PDIF, as well as HDMI, DVI-D and VGA graphics connectors.

That's par for the course and it would only take a couple of extra USB ports to lift the ASRock to a

higher level. It's worth noting that there's a screened area on the board that's been laid out to support another USB3 header, which is presumably available on another model.

The Z68 Pro3 is slightly slimmer than a regular ATX board at 305x210mm, which is a style of motherboard we used to regularly see from MSI. ASRock has made life easier for its customers with its Combo Cooler Option system, which consists of eight mounting holes around the LGA1155 socket for the CPU cooler instead of the usual four holes. This means you can use a cooler that's intended for Core 2 LGA775 instead of LGA1155 and 1156. We have a number of Core 2 coolers on the shelf that can handle considerably more heat than a Sandy Bridge CPU, so this strikes us as a very handy feature.

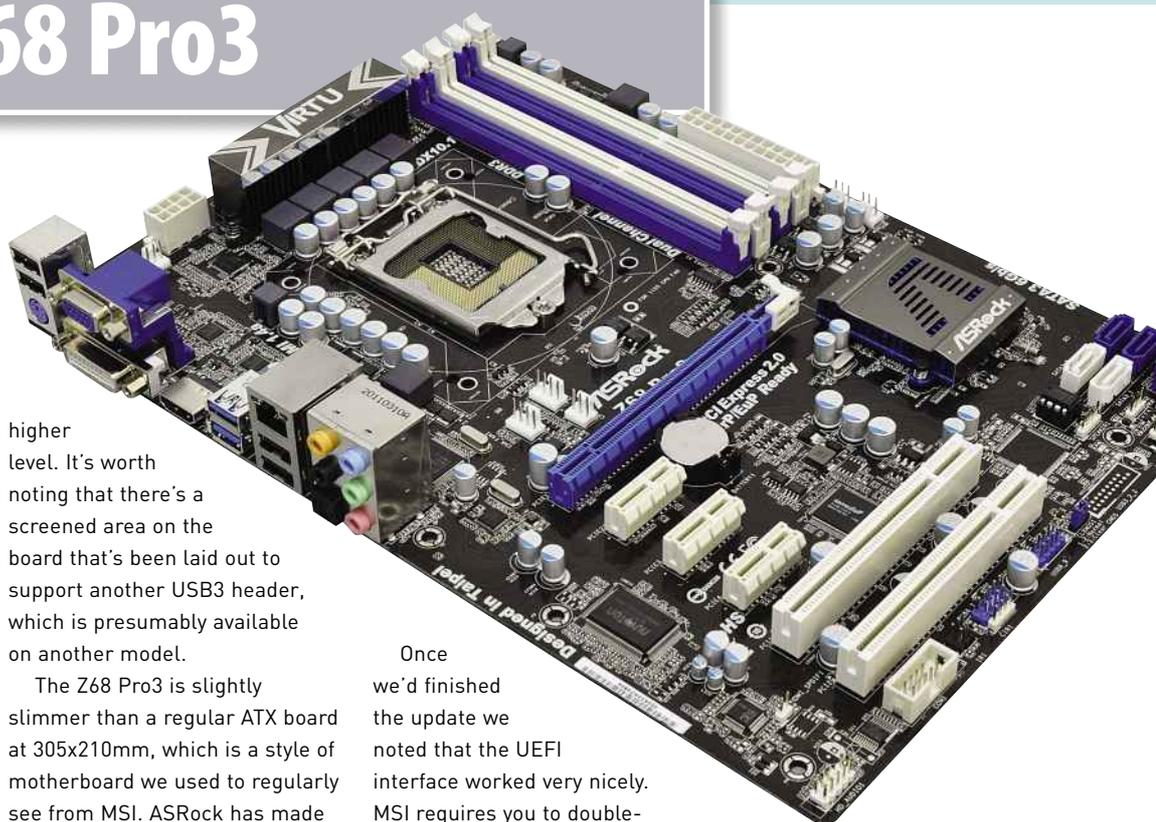
Before we could use Intel Smart Response we were required to update the BIOS from v1.10 to V1.20, which is straightforward thanks to the Instant Flash feature in the setup screen. It's not quite as slick as the Asus and Gigabyte systems, but it works well enough.

Once we'd finished the update we noted that the UEFI interface worked very nicely. MSI requires you to double-click your UEFI choices, but the ASRock setup screen works more slickly, although it has to be said that the movement of the cursor across the screen is a touch jerky. At first the CPU fan roared away at full speed until we changed the setting from Full Speed to Auto, but that was only the start of the process. You can select a target CPU temperature and also choose a fan target speed using no less than nine choices. We plumped for five, which was still a touch noisy until we reduced it to setting three. Some work is required here, perhaps.

We were disappointed by the supplied eXtreme Tuner utility because it doesn't come with preset profiles and neither does it give you control over Turbo Boost,

which is the only setting that actually matters with Sandy Bridge. Other software includes a 3TB disc unlocker, Instant Boot and XFast USB. In a world with USB3 we're not sure there's a need for enhanced USB2 drivers, so our advice is to ignore the software on the disc.

At this stage we found that the UEFI screen offers a series of 'Load Optimized CPU OC settings' that consist of 4.0GHz, 4.2GHz, 4.4GHz, 4.6GHz and 4.8GHz. That's ambitious and the system blue screened during benchmarks at 4.8GHz, but it did, however, perform flawlessly at 4.6GHz, which is impressive for a motherboard that costs a mere £95.



Details

Price: £95

Manufacturer: ASRock

Website: www.asrock.com

Ratings

Quality: ★★★★★☆☆ OVERALL

Value: ★★★★★☆☆

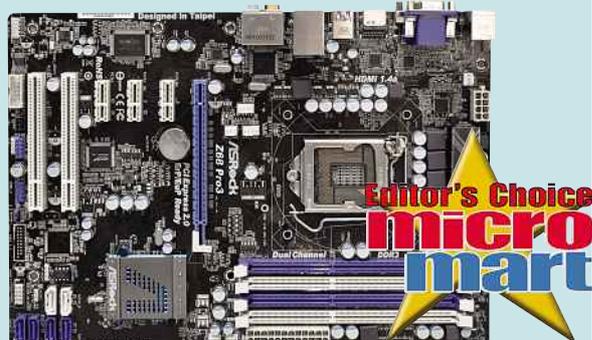
A great overclocker with good features

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>How we tested... We started testing by plugging in a Core i5-2500K with 4GB of Kingston KHX1600 RAM and a Radeon HD5850 graphics card. Initially, we used a 1TB WD Caviar Black HDD in conjunction with a 20GB Intel SSD to test the Smart Response RAID feature. After that, we switched to a 40GB SSD in a single drive configuration to get performance figures at both stock and overclocked speeds.

Make and Model	ASRock Z68 Pro3	Biostar TZ68A+	Gigabyte Z68MX-UD2H-B3	Intel DZ68DB	MSI Z68A-GD65	Zotac Z68-ITX WiFi
Price	£95	£93	£125	£105	£155	£125
Graphics Expansion	PCI-Express 2.0 16x	PCI-Express 2.0 16x	Dual PCI-Express 2.0 16x	PCI-Express 2.0 16x	Dual PCI-Express 2.0 16x	PCI-Express 2.0 16x
Graphics Connectors On I/O Panel	HDMI, DVI-D, VGA	HDMI, DVI-I, VGA	HDMI, DVI-D, DisplayPort, VGA	HDMI, DVI-D, DisplayPort	HDMI, DVI-D, VGA	Dual HDMI, Mini DisplayPort
CrossFireX And SLI	n/a	n/a	CrossFireX and SLI	n/a	CrossFireX and SLI	n/a
Memory Support	32GB DDR3-2133MHz in four DIMMS	32GB DDR3-2200MHz in four DIMMS	32GB DDR3-2133MHz in four DIMMS	32GB DDR3-1333MHz in four DIMMS	32GB DDR3-2133MHz in four DIMMS	16GB DDR3-2133MHz in two DIMMS
SATA 6Gbps/SATA 3Gbps/eSATA	Two/four/none	Two/four/none	Four/three/one	Two/three/one	Four/four/none	Two/two/none
PCI-E/PCI Slots	Three 1x/two PCI	One 4x, one 1x/two PCI	One 4x, one 1x/no PCI	Two 1x/three PCI	Three 1x/two PCI	One mini PCI-Express slot
USB3 Ports	Two on I/O	Two on I/O	Four (2 on I/O, 2 mid-board)	Two on I/O	Four (2 on I/O, 2 on supplied bracket)	Four (2 on I/O, 2 on supplied bracket)
USB2 Ports	Eight (4 on I/O, 4 mid-board)	Eight (2 on I/O, 6 mid-board)	14 (4 on I/O, 10 mid-board)	14 (6 on I/O, 8 mid-board)	Ten (4 on I/O, 6 mid-board)	Eight (4 on I/O, 4 mid-board)
BIOS Or UEFI Setup Screen	UEFI	UEFI	BIOS	BIOS	UEFI	UEFI
Fan Connectors	Six	Three	Two	Three	Five	Two
Form Factor	ATX 305x210mm	ATX 305x230mm	Micro-ATX 244x244mm	ATX 295x244mm	ATX 305x244mm	Mini-ITX 170x170mm
PCMarkVantage x64 Overall	16,484	16,607	16,388	16,460	16,188	16,987
PCMarkVantage x64 Gaming	19,732	20,458	20,459	17,401	17,004	21,419
PCMarkVantage x64 HDD	21,872	21,709	22,898	22,528	24,724	24,348
Power Draw Idle/Loaded	70W/180W	70W/170W	80W/180W	65W/165W	65W/165W	65W/165W

> EDITOR'S CHOICE



ASRock Z68 Pro3

Decent features, low price and overclocks like a champ.

> HIGHLY COMMENDED



MSI Z68A-GD65

Lovely hardware and simple overclocking. Shame about the price.