

H W M M

SINGAPORE

ardwareMAG® The Power to Decide

SEPTEMBER 2009

S\$6.90 WITH GST www.hardwaremag.com

SHOOTOUT

Thin Is In

We compare the latest LED-backlit TVs

SHOWCASE

The Bigger Picture
An HD Projector Parade



REVIEWED THIS MONTH

Garmin-ASUS nuvifone G60 Navigation Phone



Shuttle SX58H7 Gamer Box



MICA (P) 183/0272009 ISSN 0219-5607
9 770219 560022

THANKS FOR THE MEMORIES DDR3 Memory Shootout



HD Cruncher

ASRock Nettop ION 330-BD

BY KENNY YEO

The Intel Atom processor might be an efficient performer, but it is woefully inadequate at processing Blu-ray and HD videos. As such, NVIDIA came to the rescue with the Ion chipset. Yet despite the Ion's undoubted abilities for processing Blu-ray and HD videos, pickup for NVIDIA's "renegade" chipset has been slow. This is largely due to the fact that Intel has been unequivocal about the Ion being an attack on their very own 945GSE and 945GC chipsets, and has refused to allow the Atom processor to be sold separately from their own chipsets.

However, that has not stopped ASRock from releasing their own Ion-based nettop, the ASRock Nettop ION 330-BD. As its name suggests, the ION 330-BD comes equipped with the more powerful dual-core Atom 330 processor. It also sports a Sony Optiarc Blu-ray drive, which means on paper at least, it'll be ideal as a HTPC.

Compared with the Acer AspireRevo, which is one of the first Ion-based nettop systems to be

made available, the ASRock ION 330-BD looks unremarkably dull and is also significantly larger. The overall design is decidedly functional. At the front, all you will find is a power and disc eject button. At the rear is where all the USB ports, video output ports and audio jacks are. To spruce things up, the ION 330-BD was given a glossy finish, but all in all, looks is not a strong suit of this nettop.

Fortunately, the ION 330-BD makes up for its lack of looks with brains and brawn. Backing up the aforementioned Atom 330 processor and Blu-ray drive is 2GB of DDR2-800 memory as well as a decent 5400rpm 320GB Seagate Momentus hard drive. Coupled with the integrated NVIDIA GeForce 9400M integrated GPU from the Ion chipset, the ION 330-BD certainly sports more than enough power to take care of video, especially in high definition.

Nevertheless, we must put the ION 330-BD to the test, and its key competitors are Acer AspireRevo along with a closely-specced system using Zotac's DIY Ion kit, which has

nearly the same exact specifications as the ION 330-BD save for its faster 7200rpm hard disk. Not surprisingly, the Zotac DIY Ion kit system managed to edge ahead of the ASRock ION 330-BD thanks to its faster hard disk. We also noted that the dual-core ION 330-BD and Zotac DIY Ion kit system performed significantly better than the single-core Acer AspireRevo.

The ASRock ION 330-BD didn't disappoint when it came to Blu-ray playback either. We tried playing a H.264-encoded movie using CyberLink PowerDVD and using Vista's in-built Performance Monitor utility, found that CPU utilization whilst playing was a healthy 26.2%. Moreover, playback was buttery smooth as we did not notice any obvious jerks nor lag.

On a whole, it is hard to fault the ASRock ION 330-BD. It might not be the most fashionable nettop in the market, but it performed well, making it ideal as a HTPC or for light computing tasks and content creation. Admittedly, with its recommended retail price of US\$720, the ION 330-BD does command a bit of a premium, but one that is wholly justified given that the Sony Optiarc Blu-ray drive it comes with costs US\$250 alone. Insofar as full-fledged HTPCs are concerned, few are as complete as the ION 330-BD.

SPECIFICATIONS

Processor	Form factor	Video	Memory	Price
Intel Atom 330 (1.66GHz) with 1MB cache	Mini-ITX	GeForce 9400M GPU	2GB DDR2-800	US\$499

Processor: Intel Atom 330 (1.66GHz) with 1MB cache
 Chipset: NVIDIA Ion
 Memory: 2GB DDR2-800
 Storage: 320GB Seagate Momentus 5400rpm
 Video: NVIDIA Ion (GeForce 9400M GPU)
 I/O: 6 x USB 2.0 ports, 1 x RJ-45 LAN port, 1 x SPDIF connector, 1 x HDMI output, 1 x VGA output
 Networking: NVIDIA Gigabit LAN controller w/ FirstPacket Technology
 Form factor: Mini-ITX
 Price: US\$499
 Website: http://www.asrock.com

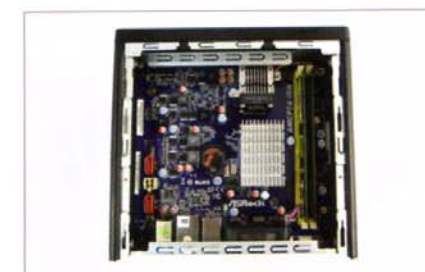
HWM'S VERDICT

Features: 8.5
 Performance: 8.5
 Value: 8.5

8.5
 Out of 10



The ASRock ION 330-BD boasts a healthy number of USB ports, but they should have dumped the VGA output port and opted for a DVI one instead.



The ASRock ION 330-BD might be larger than the Acer AspireRevo, but that's because it has a Mini-ITX motherboard. Peering inside, it's hard to imagine how ASRock could have made it any smaller.

Thanks to NVIDIA's Ion chipset, the ION 330-BD makes light weight of HD videos.

