Platform Brief
Intel® Atom™ Z8000 Processor Series

Enjoy Rich, Personalized, and Secure Mobile Experiences

Immerse yourself in rich experiences

A tablet with the new Intel® Atom™ Z8000 Processor Series gives you performance you can experience from the moment you power it on. A powerful multi-core, multitasking processor with next-generation (Gen 8) Intel HD graphics[1] provides support for up to three cameras, speech/gesture/face analysis, and 1080p60 video encode/decode to turn your tablet into a play and work powerhouse you can use equally in real and imaginary worlds.

This next-generation SoC enables tablets with Intel® RealSense™ Technology. Intel RealSense Technology[2] lets you enjoy 3D capture with accurate depth details, and allows you to use your images in a digital virtual world. Intel's hardware acceleration in the processor for Real Time Communications (RTC) and the VP8 video codec allow you to engage in high-quality, wideband voice and videoconferencing for immersive learning and collaboration.

Enjoy rich experiences with a tablet powered by Intel® Atom™ Z8000 Processor Series.

Live without wires, worries, and passwords

Tablets with the new Intel Atom Z8000 Processor Series let you live more freely by enabling your tablet manufacturer to give you more with less—with fewer wires, worries, and passwords. Intel powered tablets help simplify your life, so you can more easily enjoy the experiences you've grown to love from your tablet.

Live Wire-free

Intel® Wireless Display makes your Intel-powered tablet your personal media and data sharing center. Use your Intel Atom Z8000 Processor Series-powered tablet to easily share content on TVs[3,4] at work and home. Wirelessly connect to your big screen at home to enjoy your favorite photos and videos as big as life, and wirelessly display content on the conference room screen at work for easy collaboration—from the same device.

Live Worry-free

Context Aware features in tablets based on this new processor enable a personalized experience. Using various sensors, including accelerometer, sound, and light, and information from the cloud, the platform can determine your context or environment, and then provide information based on your surroundings. The tablet learns what settings and content you prefer based on time, location, the application in use, sounds around you, and the position of the device (face up or down). It can then personalize your experiences contextually, such as these examples:

- Limit notifications to text messages from your close friends while you watch a movie.
- Automatically switch your Bluetooth connectivity according to your preferences and location: at and away from home, or just while in the car.
- Prepare the news for you before you wake up in the morning and prepare for the day.
- Notify you when the weather and traffic on your commute will force a delay, and automatically prepare a text or email message for you to send to your affected appointments.

Tablets with Intel® Inside can personalize your experience based on context.

Low-power sensing enables your device to always stay aware of you and what you are doing. Your tablet can help simplify your life and keep you organized and informed with each step you take. Knowing your voice, it wakes up when you're ready to go. Head out on your favorite walk, and the accelerometer can start tracking your exercise, while keeping you informed of upcoming appointments, so you don't miss them. Take your tablet everywhere, and you'll never miss what's important.

Built-in security[5,6,7] hardware in this new processor, plus McAfee software, enable a secure mobile experience with a device you can use nearly everywhere and for almost every task. Proactive protection from malware, virus scanning that doesn't slow you down, identity protection, and data encryption will help you live worry-free while enjoying all you can do with your device.

Great battery life lets you enjoy your tablet and worry less about recharging.

Live Password-free

Forget your password! With an Intel Atom Z8000 Processor Series-powered tablet, you are the password. It's that simple. Simplify access to your digital world without the hassle of having to remember multiple usernames and passwords. True Key™ by Intel Security[8] unlocks your apps, websites, and devices using factors unique to you, such as your facial features and devices you own.
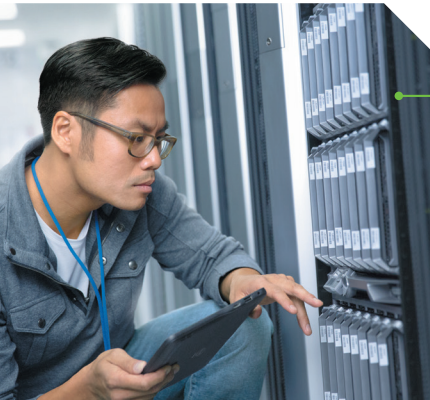
Features

Performance you can experience

- Enables great performance on popular applications.
- Gen 8 Intel HD Graphics with optimized performance and power simultaneously supports up to three independent displays.
- Up to 2X graphics performance improvement[9] allows better 3D gaming experience.
- Multitasking over multiple displays lets you play games on a big screen over HDMI, have a video chat over Wireless display on another screen, while listening to a podcast on your tablet.
- Optimized 32-bit and 64-bit kernel support.

Highly secure platform to help protect you from harmful malware and theft

- Intel® Device Protection Technology 2.X[10] enables proactive malware protection, on-device encryption, secure boot, and native mobile device management for BYOD, as well as other device protection technologies.
- Intel® Identity Protection Technology helps protect against unauthorized access to your online accounts.[11]
- Multifactor authentication allows the device to use multiple methods—such as voice, facial characteristics, fingerprint, and other biometric features—to grant access without a password.

Display

- Support for Intel® Pro WiDi, Intel® WiDi 5.x, and Miracast* enable great sharing experiences at work and at home.
- 4k external display support over HDMI allows you to see imagery at a deeper, more vivid level.
- Supports three independent displays so you can enjoy multiple things at once.

Advanced Imaging

- World-facing 3D camera solutions and Intel RealSense technology for innovative new imagery uses in and out of this world, enabled by amazing imagery apps.
- Easily remove a live background and use your 3D image for immediate interaction on the device for work and play, whether adding to a report or a virtual reality experience.
- Augmented reality support for new levels of experiences and applications.

Wireless Connectivity

- Go nearly anywhere with seamless, wireless connectivity enabled by Intel® LTE-advanced modems coupled with the Intel Atom Z8000 Processor Series (WAN modem solutions are optional).
- Up to 300 Mbps downlink and up to 50 Mbps uplink speeds with select carriers and tablets using the new Intel Atom rocessor and Intel XMM 726X plus Gigabit Wi-Fi.

Stay in touch and connected

Play and work in more places with a tablet built on the Intel Atom Z8000 Processor Series and Intel's latest generation communications chips. Enjoy incredibly fast 4G download and upload speeds with the latest generation of LTE-Advanced technology. Get up to 300 Mbps downlink and up to 50 Mbps uplink speeds with Intel® XMM® 726X plus Gigabit Wi-Fi* in the same tablet. Intel enables you to have an incredibly versatile, fast, go anywhere, do anything tablet.

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SPECIFICATIONS

Intel® Atom™ Processor Z8000 Series	• Frequency up to 2.40 GHz
Number of Cores/Threads	• 4/4
Graphics	• Intel® HD Graphics (Gen 8) with Intel® Clear Video HD Technology²
Display Support	• Up to three monitors • External 4k display support over HDMI • Intel® WiDi, Intel® Pro WiDi
Camera Support	• Intel® RealSense Technology • Up to 24 MP camera
Security Support	• Intel® Device Protection Technology • Intel® Identity Protection Technology • Multifactor authentication
Communications Support	• Intel® XMM726X with LTE, Cat-6, and carrier aggregation • Intel WLAN solution with Wi-Fi 802.11ac 2x2, BT4.0, WiDi, Pro WiDi, WiDi, and Miracast* • Common Connectivity Framework
Compatibility	• Full Windows* 8.1 compatibility for desktop mode, touch user interface and Windows* Store applications • Android Lollipop

1   Built-in visual features are not enabled on all PCs and optimized software may be required. Check with your system manufacturer. Learn more at http://www.intel.com/go/biv.

2   Must be enabled and configured by OEM with support for three cameras.

3   Requires an Intel® Wireless Display enabled PC, compatible adapter, and TV. 1080p and Blu-Ray* or other protected content playback only available on Intel® Atom™ processor-based tablets with built-in visuals enabled. Consult your PC manufacturer. For more information, see http://www.intel.com/go/widi.

4   Features and benefits depend on system configuration and may require enabled hardware, software or service activation. Learn more at intel.com, or from the OEM or retailer.

5   No computer system can provide absolute security. Requires an enabled Intel® Atom processor, enabled chipset, firmware, software and may require a subscription with a capable service provider (may not be available in all countries). Intel assumes no liability for lost or stolen data and/or systems or any other damages resulting thereof. Consult your Service Provider for availability and functionality. For more information, visit http://www.intel.com/go/anti-theft. Consult your system manufacturer and/or software vendor for more information.

6   No computer system can provide absolute security. Requires an Intel® Identity Protection Technology-enabled system, including an enabled Intel® processor, enabled chipset, firmware, software, and Intel integrated graphics (in some cases) and participating website/service. Intel assumes no liability for lost or stolen data and/or systems or any resulting damages. For more information, visit http://ipt.intel.com/. Consult your system manufacturer and/or software vendor for more information.

7   No computer system can provide absolute security. Requires an enabled Intel® processor and software optimized for use of the technology. Consult your system manufacturer and/or software vendor for more information.

8   Must have True Key™ from Intel Security and an Intel Atom Z8000 Processor Series to enable this functionality.

9   Source: Intel Based on GFXBench* 2.7 T-Rex HD Offscreen benchmark. Measured value of 21 frames per second on HP* ElitePad 1000G2 with Intel® Atom™ Processor Z3795 (4C Silvermont @ up to 2.4GHz), 4GB RAM, 64GB storage, 10" display with 1920x1200 resolution, Intel Gen 7 LP graphics, Windows 8 OS compared with an estimated value of 49 frames per second on Intel® Atom™ processor Z87xx (4C Airmont @ up to 2.4GHz), 2CH LPDDR3-1600, Intel Gen 8 LP graphics.

10 No computer system can provide absolute security. Requires an enabled Intel® processor, enabled chipset, firmware, software and may require a subscription with a capable service provider (may not be available in all countries). Intel assumes no liability for lost or stolen data and/or systems or any other damages resulting thereof. Consult your Service Provider for availability and functionality. For more information, visit http://www.intel.com/go/anti-theft. Consult your system manufacturer and/or software vendor for more information.

11 No computer system can provide absolute security. Requires an Intel® Identity Protection Technology-enabled system, including an enabled Intel® processor, enabled chipset, firmware, software, and Intel integrated graphics (in some cases) and participating website/service. Intel assumes no liability for lost or stolen data and/or systems or any resulting damages. For more information, visit http://ipt.intel.com/. Consult your system manufacturer and/or software vendor for more information.