Immerse yourself in rich 3D experiences

A new tablet or 2 in 1 with Intel® Atom™ x5 or Atom x7 gives you exciting, immersive 3D experiences and performance you can see the moment you power it on. Next-generation (Gen 8) Intel HD graphics¹ and a powerful multi-core, multi-tasking processor provide support for 3D capture, console-like gaming experiences, 4K displays,² and 1080p60 video encode/decode to turn your tablet into a play and work powerhouse you can use equally in real and imaginary worlds.

These new SoC designs bring all the exciting new features of Windows 10* and Android* 5.1 (Lollipop) into your digital world, including:

- Cortana*, Edge*, PlayReady® 3.0 DRM, and a seamless transition experience between touch and keyboard modes on Windows 10.

Intel Atom x5 and Atom x7 based devices with Intel® RealSense™ depth camera lets you capture the environment with accurate depth details, so you can use your images in a digital virtual world. Intel’s hardware acceleration in the processor for Web Real Time Communications (WebRTC) and the VP8 video codec allow you to engage in high-quality, wideband voice and videoconferencing for immersive learning and collaboration.
IDENTITY PROTECTION FOR YOUR ONLINE ACTIVITIES. Intel® Identity Protection Technology (Intel® IPT) enables multiple hardware-enhanced methods to help keep your identity safe. One Time Password (OTP) supports online services that require a secure, unique number you enter. Protected Transaction Display (PTD) helps stop keylogger and screenscraper malware from capturing sensitive data, while confirming your physical presence for transactions. Near Field Communications (NFC) with Intel's own Intel® Wireless-NFC 4000 chip enables easy Tap-and-Connect usages.

FORGET YOUR PASSWORD! With True Key™ by Intel Security, built-in Multi Factor Authentication (MFA), and factors unique to you, such as your facial features and devices you own, you can securely access your digital world without the hassle of multiple usernames and passwords.

LOW-POWER SENSING enables your tablet to always stay aware of you and what you are doing. It 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.

Live Without Wires
Intel powered devices help simplify your life—without wires—so you can more easily enjoy the experiences you’ve grown to love from your tablet or 2 in 1.

INTEL® WIRELESS DISPLAY makes your Intel-powered device your personal media and data sharing center. Use it to easily share content on TVs 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.

**ENJOY UP TO 10 HOURS OF BATTERY LIFE**—longer battery life with a smaller battery—while playing full HD movies and video.12

**Stay in touch and connected—wirelessly.**
Play and work in more places with your tablet or 2 in 1. Intel’s own single-solution communications chips designed with Intel Atom x5 and Atom x7 -based devices in mind let you enjoy incredibly fast connectivity nearly anywhere.

- Intel® XMM® 726X modems deliver up to 300 Mbps downlink and up to 50 Mbps uplink rates. Enjoy incredibly fast 4G download and upload speeds with the latest generation of LTE-Advanced technology.

- Intel® Wireless-NFC 4000 enables simple and instant near field communications support for fast Tap-and-Connect device pairing, and convenient shopping with NFC-enabled product tags.

- Intel® Wireless-AC8x70 with Wi-Fi and Bluetooth® lets you move at the speed of life with high quality connectivity every moment for your wireless needs.

- Intel® Wireless-GNSS 2100 provides continuous GPS to help you know your location and enable tracking, geo-fencing, and geo-location logging for fitness, driving, social media, and business uses.

**PLAY & WORK IN MORE PLACES WITH YOUR TABLET OR 2 IN 1**
**FEATURES**

**Performance, power efficiency, and scalability you can experience**
- Supports new Windows 10 Desktop and Android 5.1 enhanced features.
- Gen 8 Intel HD Graphics with dynamic frequency and power sharing for optimized performance supports up to three independent displays.
- Up to 2X graphics performance improvement\(^1\) allows console-quality 3D gaming experience.
- Low-power sensor hub and low-power always-listening\(^2\) to respond to you instantly.
- Single USB Type-C port for charging, displaying, and connecting to devices simplifies your life.
- Supports from 7- to 10+-inch tablets and 2 in 1 form factors.
- Optimized 32-bit and 64-bit OS support.

**Highly secure platform to help protect your identity and data**
- Intel® Identity Protection Technology with OTP and PTD helps protect against unauthorized access to your online accounts.\(^3\)
- Multi-factor authentication allows the device to use multiple methods—such as voice, facial characteristics, and devices you own—to grant access without a password.

**Display**
- Support for Intel® Pro WiDi, Intel® WiDi, and Miracast* enable great sharing experiences at work and at home.
- 4K external display support over HDMI allows you to see imagery at a higher resolution.
- Multi-tasking over multiple displays lets you simultaneously view tablet and big screen over WiDi. Supports up to three independent displays.

**Advanced Imaging**
- Intel RealSense™ depth camera enables innovative new uses in and out of this world, using amazing imaging apps.
- Immersive scene perception lets you play games, learn, and interact with virtual objects in real environments.
- Experience images in new ways with refocus, cinematic effects, selective filters, measurement, and viewpoint shift.
- Easily remove a live background and use the camera for immediate interaction on the device for work and play, whether adding to a report or a virtual reality experience.

**Intel Wireless Connectivity Solutions**
- Go nearly anywhere and enjoy seamless, wireless connectivity and speeds up to 300 Mbps downlink and up to 50 Mbps uplink with select carriers, enabled by Intel XMM 726X LTE-advanced modems.
- Simplify your shopping with NFC-enabled product tags, and instantly connect to other devices with Tap-and-Connect, using Intel Wireless-NFC 4000.
- Blazing fast Wi-Fi connectivity and convenient Bluetooth 4.1 to pair your device to peripherals, car kits, fitness sensors, and smart home sensors using Intel Wireless-AC8x70.
<table>
<thead>
<tr>
<th>Specifications</th>
<th>INTEL® ATOM™ X5-Z8500</th>
<th>INTEL® ATOM™ X5-Z8300</th>
<th>INTEL® ATOM™ X7-Z8700</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU</td>
<td>14nm</td>
<td>14nm</td>
<td>14nm</td>
</tr>
<tr>
<td>Memory</td>
<td>1x32, 1x64 DDR3L-RS 1600, 1-2GB</td>
<td>2x64 LPDDR3 1600, 2-8GB</td>
<td>2x64 LPDDR3 1600, 2-8GB</td>
</tr>
<tr>
<td>Display Resolution</td>
<td>INTERNAL: up to 1280x800 (1x32 1GB), 1920x1200 (1x64 2GB) (MIPI-DSI or LVDS) EXTERNAL: Intel® HD Graphics 2560x1600</td>
<td>INTERNAL: up to 256x16 (MIP-DI or eDP) EXTERNAL: up to 4K2K (HDMI)</td>
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</tr>
<tr>
<td>MODEM (discrete)</td>
<td>Intel XMM™ 7260/62 LTE (M.2)</td>
<td>Intel XMM™ 7260/62 LTE (COB or M.2)</td>
<td>Intel XMM™ 7260/62 LTE (COB or M.2)</td>
</tr>
<tr>
<td>Connectivity</td>
<td>Intel WLAN, Intel WWAN (M.2 modules), Intel NFC</td>
<td>Intel WLAN, Intel WWAN (Intel XMM 726x), Intel NFC</td>
<td>Intel WLAN, Intel WWAN (Intel XMM 726x), Intel NFC</td>
</tr>
<tr>
<td>Input Output</td>
<td>6x1IC, 2xHSUART, 1xSDIO, 3x125, SPI5, PCIe 2.0 x1, 1x12C (ISH), 1x12C (NFC)</td>
<td>7x1IC, 2xHSUART, 1xSDIO, 3x125, 1xLPC, 1xSPI, PCIe 2.0 x2, 1x12C (ISH), 1x12C (NFC)</td>
<td>7x1IC, 2xHSUART, 1xSDIO, 3x125, 1xLPC, 1xSPI, PCIe 2.0 x2, 1x12C (ISH), 1x12C (NFC)</td>
</tr>
<tr>
<td>USB</td>
<td>1xUSB3 OTG, 2xHSIC, 3xUSB</td>
<td>1xUSB3 OTG, 3xUSB</td>
<td>1xUSB3 OTG, 3xUSB</td>
</tr>
<tr>
<td>Storage</td>
<td>eMMC 4.51</td>
<td>eMMC 4.51</td>
<td>eMMC 4.51</td>
</tr>
<tr>
<td>ISP / Camera</td>
<td>Up to 8MP 2D camera</td>
<td>Up to 13MP 2D camera with Intel® RealSense™ depth camera</td>
<td>Up to 13MP 2D camera with Intel® RealSense™ depth camera</td>
</tr>
</tbody>
</table>

Contact your local Intel sales office or your distributor to obtain the latest specifications and before placing your product order.

Copies of documents which have an order number and are referenced in this document, or other Intel literature, may be obtained by calling 1-800-548-4725, or go to: http://www.intel.com/design/literature.htm

Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance tests, such as SYSmark and MobileMark, are measured using specific computer systems, components, software, operations and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products.

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/blv.
2  Through HDMI cable.
3  Must be enabled and configured by OEM with support for three cameras.
4  No system can provide absolute security under all conditions. Requires an enabled chipset, BIOS, firmware and software and a capable Service Provider. Consult your system manufacturer and/or Service Provider for availability and functionality. Intel assumes no liability for lost or stolen data and/or systems or any other damages resulting thereof. For more information, visit http://www.intel.com/go/anti-theft.
5  No computer system can provide absolute security. Requires 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://intel.com.com.
6  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.
7  Supported on Windows 8.1 and Android only.
8  Wake on Voice support only on Android 5.0 and 5.1
9  Supported through Intel® Context SDK. Requires third party software.
11  Features and benefits depend on system configuration and may require enabled hardware, software, or service activation. Learn more at intel.com.
12  As measured by Tears of Steel: configuration 1080p, 23.976fps, H264, 3000kbps, rep.1.2/1.5/1.5, DPt=ON, no dimming, balanced, Wi-Fi connected to MM12 router. Hardware: Microsoft® Surface 3™ (pre-production unit), SOC: Intel® Atom x7-Z8700 (4C, up to 2.4 GHz 05); Windows® 8.1; mem: 2GB; storage: 64GB; display size: 10.1”; SDIO: 1920x1280; Battery Size: 27 Whr; Default Browser: IE; Chrome Browser: ver 40.0.2214.94; Soft. Build: 1.17.0.644; Measured on: 03/27/2015
13  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 (B380) @ up to 2.4GHz, 2CH LPDDR3-1600, Intel Gen 8 LP graphics.
14  Intel is a registered trademark of Intel Corporation in the U.S. and other countries.

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