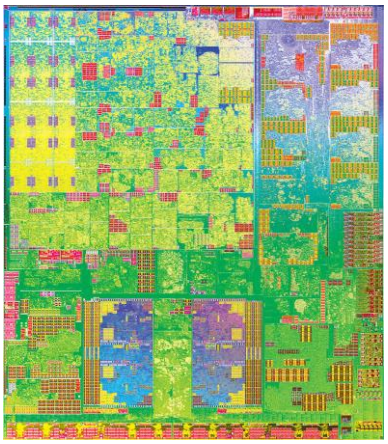
INTEL NEWS FACT SHEET

The New Intel® Pentium® and Celeron® Processors

Best Balance of Performance, Experiences and Cost for Entry-Level PCs



The new Intel® Pentium® and Celeron® processors for entry-level PCs provide the best balance of performance, experiences and cost for everyday computing. These new processors are flexible and will be found in a wide range of devices – from convertible 2 in 1s to mini PCs to desktops – running Chromebook*, Windows* and Linux* operating systems. These platforms will also be able to support up to three external monitors, Intel® HD Audio and long battery life.

The new Intel Pentium and Celeron processors integrate Intel® HD Graphics with up to 49 percent more 3D graphics performance on Windows* compared to the previous generation[1] designed for casual game playing and richer visual experiences.

Key Features

- Intel HD Graphics 505/500
- Performance: up to 30 percent better processor[2] performance and 49 percent better 3D graphics performance[1] on Windows over previous generation
- Supports up to three external monitors
- Windows 10 Modern Standby* and Cortana* ready[3]
- Strong security[4] support with Intel® Platform Trust Technology (Intel® PTT), plus Advanced Encryption Standard (AES) and Secure Hash Algorithm (SHA) new instructions for fast encryption/decryption performance
- Long battery life: up to 11 hours on Windows[5] to enjoy your favorite videos and get more done
- Supports a wide range of form factors starting at a 10.1-inch screen size running Windows/Linux/Chrome OS operating systems at prices from $149 to $399
- Delivers great user experiences in clamshells, 2 in 1s, All-in-Ones, mini PCs, desktop PCs and desktop motherboards
- Enables quiet, fanless designs and lighter devices
- Memory supported: DDR3L solder down + DIMM configurations, LPDDR3 and LPDDR4 for alternative BOM optimization and power savings
- Connectivity supported: USB Type C[7], Wi-Fi, Bluetooth*, NFC[7], LTE[3,7], and 3G[7]

Key Usage Benefits

- **More productive** – Productivity apps run up to 1.3X faster[2] than previous generation (1.5X faster than 5-year-old systems[2]) to help you get more done.
- **Beautify photos faster** – Now beautify, blend and convert over 25 photos per minute[6].
- **Post videos sooner** – Convert videos 7 percent quicker[8] than previous generation.
- **Discover amazing 3-D graphics** – Enjoy new 3D experiences with 49 percent better graphics performance.[1]
- **Share music faster** – Mix songs and create podcasts 23 percent faster[9] than previous generation.
- **Make homework a breeze** – Get homework done up to 30 percent sooner[2], including complex science computations that can run up to 65 percent faster.[10]

SKUs

	Intel® Pentium® Processor N4200	Intel® Celeron® Processor N3450	Intel® Celeron® Processor N3350
Cores/Threads TDP (SDP)	4/4 6W (4W)	4/4 6W (4W)	2/2 6W (4W)
Single-core Frequency Multi-core Frequency	2.5 GHz 2.4 GHz	2.2 GHz 2.1 GHz	2.4 GHz 2.3 GHz
Graphics	Intel® HD Graphics 505 18EUs @ 750 MHz	Intel® HD Graphics 500 12EUs @ 700 MHz	Intel® HD Graphics 500 12 EUs @ 650 MHz

	Intel® Pentium® Processor J4205	Intel® Celeron® Processor J3455	Intel® Celeron® Processor J3355
Cores/Threads TDP	4/4 10W	4/4 10W	2/2 10W
Single-core Frequency Multi-core Frequency	2.6 GHz 2.4 GHz	2.3 GHz 2.2 GHz	2.5 GHz 2.4 GHz
Graphics	Intel® HD Graphics 505 18EUs @ 800 MHz	Intel® HD Graphics 500 12EUs @ 750 MHz	Intel® HD Graphics 500 12 EUs @ 700 MHz
SKUs for B1 steppings[a]	S-R2ZA [951843]	S-R2Z9 [951842]	S-R2Z8 [951841]

[a] Details for production SKUs will be published on ark.intel.com. Software and productivity loads 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. For more complete information, visit http://www.intel.com/performance. Results have been estimated based on internal Intel analysis and are provided for informational purposes only. Any difference in system hardware or software design or configuration may affect actual performance.

Intel technologies' features and benefits depend on system configuration and may require enabled hardware, software or service activation. Performance varies depending on system configuration. No computer system can be absolutely secure. Check with your system manufacturer or retailer or learn more at intel.com.

[1] 3DMark* 1.2 is a benchmark from Futuremark* that measures DX* 9 / OpenGL* ES 2.0, OpenGL ES 3.0/3.1, DX 10 and DX 11 gaming performance. There are five main tests: "Ice Storm" for DX 9 / OpenGL ES 2.0, "Sling Shot" for OpenGL ES 3.0/3.1, "Cloud Gate" for DX 10, "Sky Diver" for DX11 and "Fire Strike" for DX 11 graphics. Reported metrics: Graphics Score (GPU), Physics Score (CPU), Combined Score (GPU & CPU) and an overall 3DMark Score (higher is better for all Scores). OS support: Desktop Windows*, Android*, iOS* and Windows RT. Measured on: Intel® Pentium® Processor N4200 vs. Intel® Pentium® Processor N3710.

[2] SYSmark* 2014 is a benchmark from the BAPCo* consortium that measures the performance of Windows* platforms. SYSmark

tests three usage scenarios: Office Productivity, Media Creation and Data/Financial Analysis. SYSmark contains real applications from Independent Software Vendors such as Microsoft* and Adobe*. Reported metrics: SYSmark 2014 Rating and a rating for each scenario result (higher is better for all). Scaling efficiencies: CPU dominant, sensitive to frequency, core count and memory. QSV enabled. Using configuration above.

[3] Available for Windows* devices only.

[4] No computer system can be absolutely secure.

[5] Windows 10* 1080p 24fps Local Video Playback Component Average Power Disconnect all USB devices, connect to a local WiFi access point and set the screen brightness to 200 nits (disable DPST, set brightness to 200 nits on a white background and enable DPST). Wait for 10 mins for the OS to completely idle. Launch Tears of Steel (1080p H264 10MBps 24fps) video using the Windows Movie & TV App. Measure and calculate average power for the duration of the video. Report 3 run median.

[6] TouchXPRT* 2016 is a benchmark from Principled Technologies* that measures light media editing performance. TouchXPRT has five usage case categories: Beautify Photos, Blend Photos, Convert Videos for Sharing, Create Music Podcast, Create Slideshow from Photos. Reported metrics: Overall score, beautify photos, blend photos, convert videos for sharing, create music podcast, create slideshow from photos subscore. TouchXPRT* 2016 Beautify Photos Subtest using configuration above.

[7] Dependent on configuration.

[8] TouchXPRT* 2016 is a benchmark from Principled Technologies* that measures light media editing performance. TouchXPRT has five usage case categories: Beautify Photos, Blend Photos, Convert Videos for Sharing, Create Music Podcast, Create Slideshow from Photos. Reported metrics: Overall score, beautify photos, blend photos, convert videos for sharing, create music podcast, create slideshow from photos subscore. TouchXPRT* 2016 Convert Video Subtest using configuration above.

[9] TouchXPRT* 2016 is a benchmark from Principled Technologies* that measures light media editing performance. TouchXPRT has five usage case categories: Beautify Photos, Blend Photos, Convert Videos for Sharing, Create Music Podcast, Create Slideshow from Photos. Reported metrics: Overall score, beautify photos, blend photos, convert videos for sharing, create music podcast, create slideshow from photos subscore. TouchXPRT* 2016 Create Music Podcast Subtest using configuration above.

[10] WebXPRT* 2015 is a benchmark from Principled Technologies* that measures the performance of web applications using six usage scenarios: Photo Enhancements, Organize Album, Local Notes, Stock Option Pricing, Sales Graphs, and Explore DNA Sequencing. WebXPRT tests modern browser technologies such as HTML5 Canvas 2D, HTML5 Table, HTML5 Local Storage, as well as JavaScript*. Reported metrics: elapsed time in seconds (lower is better) for each scenario, plus an overall score (higher is better). Scaling efficiencies: CPU dominant (newer browsers are GPU accelerated), sensitive to frequency. WebXPRT is very sensitive to browser type and version. OS support: Any OS that supports an HTML5 browser. WebXPRT* 2015 Explore DNA Sequencing Subtest using configuration above.

System Configurations:

Intel® Pentium® Processor N4200 (1.1GHz upto 2.5GHz, 4C/4T, 2MB, 6W TDP) measured on Intel Reference Platform, Memory: 2x4GB, Storage: 240GB SSD, Display: 11.6" 19x10, OS: Windows* 10 TH2 64-bit, Battery: 35WHr, Browser: Microsoft* Edge (for WebXPRT* 2015).

Intel® Pentium® Processor N3710 (1.6GHz upto 2.56GHz, 4C/4T, 2MB, 6W TDP) measured on Intel Reference Platform, Memory: 2x4GB, Storage: 240GB SSD, Display: 11.6" 19x10, OS: Windows* 10 TH2 64-bit, Browser: Microsoft* Edge (for WebXPRT* 2015).

CONTACT: Scott Massey
1-503-696-1785
scott.massey@intel.com