

KEY FEATURES

INTEL COMPUTE POWER

Memory Speeds: Get up to 8 GB of LPDDR4.

Processing Power: The new Intel® Atom™, Pentium®, and Celeron® processors are available with up to quad-core, 14 nm processors running at up to 2.5 GHz.

Compact Package: The low-power FCBGA package allows it be deployed in a wide range of applications.

POWERFUL MEDIA PERFORMANCE AND IMMERSIVE 3D GRAPHICS

Enhanced Display Performance: Get support for Ultra HD 4K at 60 Hz on three independent displays via three simultaneous graphics pipes.

Resolution: Capture 13MP stills and 1080p60 video.

Enhanced API Support: Take advantage of the latest media hardware acceleration, including Intel® Media SDK (Intel® Quick Sync Video), Intel® Computer Vision SDK, DirectX® 12, and OpenGL® 4.3.

Powerful Video Analytics: Up to 15 simultaneous 1080p30 decode streams deliver high-level performance for surveillance and other videocentric applications.

THE NEXT LEVEL OF DETERMINISM

Intel® Time Coordinated Computing Technology (Intel® TCC Technology): Available on Linux® Yocto®, Intel TCC Technology coordinates and synchronizes peripherals and networks of connected devices, achieving improved determinism. It can resolve latency issues in applications, such as robotics manufacturing, by synchronizing the clocks of devices across networks to within 1 µs.

RELIABLE AND EFFICIENT COMPUTING

Error Correction Code (ECC): Delivers enhanced system reliability by helping to detect and eliminate DDR3L memory errors.

High-Temperature Rating: Available SKUs offer -40°C to 110°C junction temperature to support applications in extreme environments.

Extended Reliability: Protect your investment in industrial and automotive use cases.

Automotive-Qualified: Select SKUs offer the durability that qualifies them for automotive applications.

MORE I/Os

More I/O Ports: More USB ports, PCIe® lanes, and other ports allow for more complex configurations with fewer hubs.

High-Speed Connectivity: Six USB 3.0 ports and four PCIe ports with six lanes allow for ultrahigh data transfer rates with a greatly expanded number of peripherals.

SECURITY FEATURES OF THE INTEL® ATOM™ E3900 SERIES

FEATURES OF THE NEW INTEL® TRUSTED EXECUTION ENGINE 3.0 (INTEL® TXE 3.0) DEDICATED SECURITY COPROCESSOR

Secure Boot or Measured Boot: Helps prevent malware and other unauthorized software from replacing or tampering with the low-level firmware and OS.

Digital Rights Management (DRM), HDCP 1.4 Wired/ HDCP 2.2 Wireless, Protected Audio Video Path (PAVP): Receive, process, and transmit premium content securely.

Intel® Platform Trust Technology on Linux® OS: Stores secrets in hardware and performs crypto operations compliant to full TCG TPM2.0 specification.

ENHANCED CPU CRYPTOGRAPHY FEATURES

Intel® AES New Instructions (Intel® AES-NI), SHA-NI, RDRAND: Enables data confidentiality and integrity at higher throughput using native CPU instructions. For example, whole disk encryption, data at rest, and data in transit.

INTEL NEWS FACT SHEET



INTEL® ATOM™, INTEL® PENTIUM®, AND INTEL® CELERON® PROCESSORS FOR IOT

PROCESSOR NUMBER	CPU CORES	CPU HFM FREQUENCY	CPU SINGLE-CORE BURST FREQUENCY	CPU L2 CACHE SIZE	THERMAL DESIGN POWER	PACKAGE
Intel® Celeron® Processor N3350	2	1.1 GHz	2.4 GHz	2 MB	6W	FCBGA1296
Intel® Pentium® Processor N4200	4	1.1 GHz	2.5 GHz	2 MB	6W	FCBGA1296
Intel® Atom™ x5-E3930 Processor	2	1.3 GHz	1.8 GHz	2 MB	6.5W	FCBGA1296
Intel® Atom™ x5-E3940 Processor	4	1.6 GHz	1.8 GHz	2 MB	9.5W	FCBGA1296
Intel® Atom™ x7-E3950 Processor	4	1.6 GHz	2.0 GHz	2 MB	12W	FCBGA1296

SUPPORTED SOFTWARE

OS VENDOR	OPERATING SYSTEM (TARGETED FOR SUPPORT)	IMPLEMENTATION	DISTRIBUTION AND SUPPORT
Microsoft	Windows* 10 Enterprise (64-bit), IoT Core (32/64-bit)	Intel	Intel, Microsoft
Linux*	Wind River 8 Linux distribution (64-bit)	Wind River	Wind River
	Yocto Project* BSP tool-based embedded Linux distribution (64-bit)	Intel	Yocto Project and ISV Partners
Android*	Android 7.0 (64-bit) Nougat (Target Gold Release Q2 17)	Intel	ISV Partners
RTOS	Wind River VxWorks* 7	Wind River	Wind River