Enabling the way for next-generation intelligent applications

The Intel® Atom™ Processor E3800 Product Family Development Kit — which is based on Intel® Intelligent System Extended Form Factor Reference Design — is a full-featured fanless computing platform in a 4.4 × 4.6 inch form factor. Featuring improvements in integration, computing performance, and power utilization, this development kit opens the possibility for embedded developers to realize the next-generation of intelligent applications.

Balancing performance and power usage with greater integration

A system-on-chip (SoC) design that integrates the processing engine, graphics engine, and I/O controller, the Intel® Atom™ processor E3800 product family in this development kit is ideal for intelligent systems because of its rich I/O connectivity options and a wide operating temperature range from 0°C to 45°C.

The improved video and image processing capabilities make the Intel® Atom™ Processor E3800 product family that powers this development kit ideal for delivering the visually appealing and interactive content of intelligent applications.

The Intel® Atom™ Processor E3800 Product Family Development Kit is a scalable solution with single-, dual-, and quad-core processors — with Thermal Design Power (TDP) ratings from 5W to 10W — allowing embedded developers to achieve a balance of performance and power usage.

Ensuring ample I/O connectivity for intelligent applications, this development kit provides one SuperSpeed USB 3.0 port, one Hi-Speed USB 2.0 port, two Gigabit Ethernet LAN ports, integrated WiFi, and a micro-SIM card slot for 3G access.

Enhancing media processing with built-in graphics engine

The improved video and image processing capabilities make the Intel® Atom™ Processor E3800 Product Family Development Kit ideal for delivering the visually appealing and interactive content of intelligent applications.

Up to two displays are supported via one HDMI port and one Micro HDMI port on the development kit.

Accelerating Design to Deployment

The Intel® Atom™ Processor E3800 Product Family Development Kit accelerates the time to market because it can be used as-is without any further modifications. Alternatively, embedded developers can contact Intel sales representatives to obtain the necessary collaterals to customize the board design.
For more information on the Intel® Atom™ Processor E3800 Product Family Development Kit based on Intel®
Intelligent System Extended Form Factor Reference Design, visit www.intel.com/go/embedded

**TECHNICAL SPECIFICATIONS**

**PROCESSOR**
- Intel® Atom™ Processor E3815/E3825
- System-on-Chip (SoC) design that combines the CPU, GPU, and I/O controller into one package
- Supports Intel® 64 architecture
- Supports Intel® Virtualization Technology

**GRAPHICS**
- Intel® HD Graphics
- Supports high resolution displays up to 2560 × 1600 @60Hz
- Supports Intel® Wireless Display (Intel® WiDi) technology through Miracast
- Supports hardware acceleration of media encode and decode

**PERIPHERAL CONNECTIVITY**
- Two Gigabit Ethernet LAN port
- Micro-SIM card slot for 3G support
- Built-in Wi-Fi support
- One Hi-Speed USB 2.0 port
- One SuperSpeed USB 3.0 port
- One Micro USB port

**SYSTEM BIOS**
- 64Mb SOIC-8 serial flash memory

**SYSTEM MEMORY**
- 1 × 4GB DDR3L 1066MT/s memory support
- 8GB max

**AUDIO**
- Output via HDMI and Mini DisplayPort outputs
- Audio-In (Microphone) and Line Out jack

**STORAGE**
- 64GB Solid-State Drive (SSD)

**MECHANICAL CHASSIS SIZE**
- 122mm × 117mm × 17.4mm

**POWER REQUIREMENTS**
- Single 12V @4.0A (48W) DC input

**OPERATING TEMPERATURE**
- 0°C to +45°C

**OPTIONAL ACCESSORIES**
- Other DDR3 memory configurations
- Other Solid-State Drives (SSD) configurations

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### Notes

1. Intel® Atom™ Processor E3815/E3825: A System-on-Chip (SoC) design with highly integrated functionality for reduced size and power consumption, without sacrificing performance.

2. Intel® Virtualization Technology requires a computer system with an enabled Intel® processor, BIOS, and virtual machine monitor (VMM). Functionality, performance or other benefits will vary depending on hardware and software configurations. See http://www.intel.com/go/virtualization for more information.

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