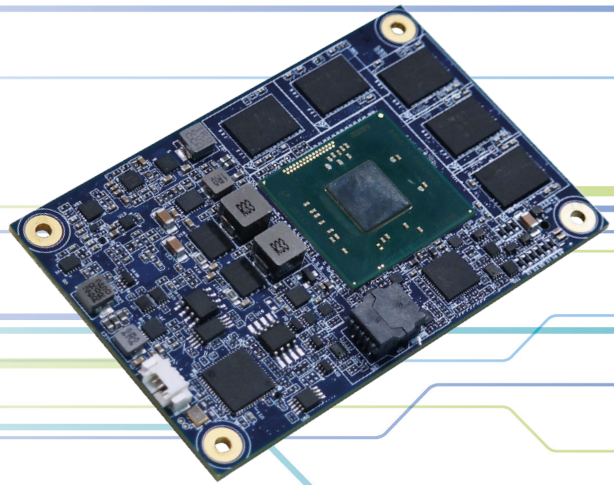


## CPU-163-15

- Intel® Atom™ E3800 Series
- COM Express® Mini Type 10
- ECC Memory
- Extended Temperature
- Fanless
- Customization Options
- IoT Middleware and Platform



## FEATURES

**Powerful** - Comes with Intel Atom E38xx CPU: one, two and four core configurations, up to 1.91GHz

**Mini** - Complies with PICMG COM Express R2.1, with a 84x55 (Mini) form factor and a Type 10 pinout

**Reliable** - Offers memory configurations up to 4GB with ECC

**Rugged** - Supports wide operating temperature (-40 to +85°C), conformal coating options, soldered memory and flash storage

**Low Power** - Enables fanless designs with a CPU TDP starting from 5W

**Professional Services** - Cuts Time-To-Market with Eurotech Professional Services, which include deep module customization, BIOS personalization, carrier board and system design and production

**IoT Native** - Provides native support for IoT, including IoT middleware and access to Eurotech IoT Integration Platform

The CPU-163-15 is a rugged COM Express module designed to meet the requirements for industrial and rugged fanless applications.

Compliant with PICMG COM Express R2.1, Type 10, the CPU-163-15 is a 84x55mm (Mini) form factor module based on the Intel Atom E38xx processor family, with 1 to 4 cores, up to 4GB ECC RAM and up to 32GB eMMC.

Other features include high speed interfaces: one Gbit Ethernet, two SATA 2.0, one USB 3.0 and eight USB 2.0, three PCIe x1, one LVDS and one DDI (supporting HDMI, DVI and DP).

With ECC soldered down memory and flash storage, the CPU-163-15 is the ideal hardware platform for applications requiring long life cycle, resistance to vibration and reliable data storage, even in extended temperature.

Supported operating systems include Windows 10 IoT Enterprise and Linux; moreover, the CPU-163-15 supports Everyware Software Framework (ESF), a commercial, enterprise-ready edition of Eclipse Kura, the open source Java/OSGi middleware for IoT gateways.

Distributed and supported by Eurotech, ESF adds advanced security, diagnostics, provisioning, remote access and full integration with Everyware Cloud (EC), Eurotech's IoT integration platform (separately available).

Professional Services are available for the CPU-163-15, starting from BIOS personalization and including carrier board design, system development and production. Deep module customization, such as feature changes are also available.

# CPU-163-15

## Specifications

## Intel Atom E3800 Series COM Express Type 10 Mini

Ordering code: CPU-163-15-XX

XX		- 01	- 02	- 03
PROCESSOR	<b>CPU</b>	Atom E3815 1.46GHz, 1 Core	Atom E3827 1.75GHz, 2 Cores	Atom E3845 1.91GHz, 4 Cores
BIOS	<b>Type</b>	AMI BIOS		
	<b>Size</b>	64Mbit SPI BIOS		
MEMORY	<b>RAM</b>	2GB 1067MHz (DDR3L-ECC)	2GB 1333MHz (DDR3L-ECC)	4GB 1333MHz (DDR3L-ECC)
STORAGE	<b>Embedded</b>	8GB eMMC		
	<b>SATA</b>	2x SATA 2.0		
I/O INTERFACES	<b>Ethernet</b>	1x 10/100/1000Mbps with Integrated Transceiver		
	<b>USB</b>	1x USB 3.0 8x USB 2.0 (4x Native, 4x via USB HSIC)		
	<b>Serial</b>	2x Serial (TX/RX)		
	<b>Digital I/O</b>	8x DI/O		
	<b>Video</b>	1x LVDS (18/24bit, Single Channel, Resolution up to 1366x768@60Hz) 1x DDI (HDMI, DVI: Resolution up to 1920x1080@60Hz, DP Resolution up to 2560x1600@60Hz) Hardware Acceleration for DirectX 11, OCL 1.2, OGL 4.0, H.264, MPEG2, MVC, VC-1, WMV9 and VP8		
	<b>Audio</b>	High Definition Audio Interface		
	<b>PCI Express</b>	3x PCIe x1 (Gen 2)		
	<b>LPC</b>	Yes		
	<b>I2C</b>	Yes		
	<b>SMBus</b>	Yes		
OTHER	<b>RTC</b>	Yes		
	<b>Watchdog</b>	Software Programmable (From 1 to 255s)		
POWER	<b>Input</b>	4.75V~20V, 5VSB, VCC_RTC (ATX Mode) 4.75V~20V, VCC_RTC (AT Mode)		
	<b>Consumption</b>	5W (CPU TDP)	8W (CPU TDP)	10W (CPU TDP)
ENVIRONMENT	<b>Operating Temp</b>	- 20 to +70°C	- 40 to +85°C	
	<b>Storage Temp</b>	- 40 to +85°C		
CERTIFICATIONS	<b>Environmental</b>	RoHS2, REACH		
	<b>Compliance</b>	PICMG COM Express R2.1, Type 10		
MECHANICAL	<b>Dimensions</b>	84x55mm (LxW) - COM Express Mini		

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### SUPPORTED SOFTWARE

<b>OS</b>	CentOS 7, Windows 10 IoT Enterprise (Professional Services: Yocto, Fedora, Other Linux and RTOS)
<b>IoT Framework</b>	Everyware Software Framework (Java/OSGi)



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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