

# CPU-163-15 Development Kit

COM Express Mini Type 10 - Intel Atom, ECC Memory



- Ready to Plug
- Intel® Atom™ E3800 Series
- Rugged and Efficient
- Feature Rich
- Professional Services

## Features

**COM Express Launchpad** - A COM Express Type 10 Development Kit that provides a complete platform for development, validation and testing of the CPU-163-15

**All Inclusive** - Bundles one COM Express module, one Mini-ITX carrier board and a complete set of cables and accessories, including the operating system preinstalled on an mSATA drive

**Rugged and Efficient** - The CPU-163-15 supports wide operating temperature (- 40 to +85°C) and it is powered by Intel Atom E3800 CPUs, up to four cores and starting from 5W TDP

**Feature Rich** - Provides a carrier board with plenty of interfaces, including dual display, one Gbit Ethernet, one PCIe x1 slot, three Mini PCIe sockets, and a SIM slot

**Professional Services** - Constitutes the first step for Eurotech Professional Services, that range from carrier board development to complete system design, certification and manufacturing

## Description

The CPU-163-15 Development Kit allows a quick development and prototyping of embedded applications on a pre-validated platform which brings out a rich set of the module functionalities. The kit targets all aspects of an embedded application from hardware interfacing to development of on-board software.

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 E3800 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.

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 Development Kit

COM Express Mini Type 10 - Intel Atom, ECC Memory

Ordering code: CPU-163-15-03-DK01

<b>PROCESSOR</b>	CPU	Atom E3845 1.91GHz, 4 Cores
<b>MEMORY</b>	RAM	4GB DDR3L ECC 1333MHz Memory Down
<b>STORAGE</b>	SATA	1x SATA 2.0 (up to 3Gb/s), 1x Mini SATA Slot (SATA 2.0 Signal)
<b>I/O INTERFACES</b>	Ethernet	1x 10/100/1000Mbps - RJ45
	USB	1x USB 3.0, 5x USB 2.0 - Type A
	Serial	2x RS-232 (9 Wires) - DB9
	Video	Dual Independent Displays: 1x LVDS* (Header), 1x DisplayPort
	Audio	HD Audio: 1x Line-In, 1x Line-out, 1x Mic-in (3.5mm Jack), 1x Front Audio (Header), 1x S/PDIF (Header)
	PCI Express	1x PCIe x1 (Gen 2) Slot – 1x Full/Half Size Mini PCIe Slot (PCIe/USB/SIM Signals) – 1x Half Size Mini PCIe Slot (PCIe/USB Signals)
<b>OTHER</b>	RTC	Yes (Lithium 3V 210mAh Battery)
	Fan Conn.	1x CPU Fan, 1x System Fan
	LEDs	1x SATA Activity
	Buttons	1x Power-on, 1x Reset
	SIM Slot	Yes
<b>POWER</b>	Input	5~19VDC (12VDC Default, DC-in, Screw-lock Jack)

For more specifications and certifications, please check the CPU-163-15 datasheet.

## Pre-installed Software

<b>SOFTWARE</b>	OS	CentOS 7
-----------------	----	----------

## Included Accessories

<b>BASEBOARD</b>	CARRIER BOARD	CAR-521-10 Mini-ITX COM Express Carrier Board
<b>STORAGE</b>	SSD	1x 64GB mSATA SSD
<b>I/O INTERFACES</b>	SATA	1x SATA Data and Power Cable
	Video	1x DP Male to HDMI Female Adapter
<b>POWER SUPPLY</b>	AC-DC PSU	1x 100W 100/240VAC-in 12VDC-out (Jack Conn. with Screw) Level VI Power Supply Unit
	Cables	3x Power Cables (US, JP, EU, UK)
<b>OTHER</b>	Heatsink	1x Heatsink

(\*) LVDS Support requires BIOS customization.