

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.

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

| | | |
|-----------------------|-------------|--|
| PROCESSOR | CPU | Atom E3845 1.91GHz, 4 Cores |
| MEMORY | RAM | 4GB DDR3L ECC 1333MHz Memory Down |
| STORAGE | SATA | 1x SATA 2.0 (up to 3Gb/s), 1x Mini SATA Slot (SATA 2.0 Signal) |
| I/O INTERFACES | 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) |
| OTHER | 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 |
| POWER | 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

| | | |
|-----------------|----|----------|
| SOFTWARE | OS | CentOS 7 |
|-----------------|----|----------|

Included Accessories

| | | |
|-----------------------|---------------|--|
| BASEBOARD | CARRIER BOARD | CAR-521-10 Mini-ITX COM Express Carrier Board |
| STORAGE | SSD | 1x 64GB mSATA SSD |
| I/O INTERFACES | SATA | 1x SATA Data and Power Cable |
| | Video | 1x DP Male to HDMI Female Adapter |
| POWER SUPPLY | 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) |
| OTHER | Heatsink | 1x Heatsink |

(*) LVDS Support requires BIOS customization.