



- Ready to Plug
- Intel® Core™ 6th Generation
- Triple Display, SIM, mPCIe
- Fanless
- Professional Services

## Features

**Mini-ITX Launchpad** - A Mini-ITX Development Kit that provides a complete platform for development, validation and testing of the CPU-521-17

**All Inclusive** - Bundles one Mini-ITX Single Board Computer and a complete set of cables and accessories, including the operating system preinstalled on an mSATA drive

**Rugged and Performant** - The CPU-521-17 supports wide operating temperature (-20 to +70°C) and it is powered by Intel Core i7, i5, i3 and Celeron CPUs, up to two cores and 15W TDP

**Feature Rich** - Provides a wide range of standard interfaces, including triple display, two Gbit Ethernet, one PCIe x4 slot, two Mini PCIe sockets, two SATA 3.0 ports, 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-521-17 Development Kit allows a quick development and prototyping of embedded applications on a pre-validated platform which brings out a rich set of the chipset functionalities. The kit targets all aspects of an embedded application from hardware interfacing to development of on-board software.

Low-profile at just 16.5mm, the CPU-521-17 offers the 6th Generation Intel Core processor family (i7, i5, i3 and Celeron), with two cores and up to 16GB SO-DIMM RAM.

Other features include high speed interfaces: two Gbit Ethernet, two SATA 3.0 with RAID support, four USB 3.0 and four USB 2.0, two full-size Mini PCIe sockets, four PCIe Gen 3 lanes, and three independent video ports (LVDS, DP++ and HDMI supporting up to 4096x2304@60Hz).

The CPU-521-17 is a solid building block for projects where reliability in harsh conditions is mandatory, thanks to an operating temperature of -20 to +70°C, a soldered-down CPU, support for RAID 0/1, optional conformal coating and long term support/lifecycle programs.

Professional Services are available for the CPU-521-17, starting from BIOS personalization and including board design, system development and production.

# CPU-521-17 Development Kit

Mini-ITX SBC - Intel Core and Celeron



| Ordering code: CPU-521-17-XX-DK01 |             |  |  |
|-----------------------------------|-------------|--|--|
| XX                                |             | - 01   | - 03                                   |
| PROCESSOR                         | CPU         | Celeron 3955U 2.0GHz, 2 Cores  | Core i7 6600U 2.6GHz (3.4GHz), 2 Cores |
| MEMORY                            | RAM         | 2x SODIMM Sockets - up to 16GB DDR3L 1600MHz - Dual Channel  |  |
| STORAGE                           | SATA        | 2x SATA 3.0 (up to 6Gb/s), 1x Mini SATA Slot (Shared with PCIe/USB)  |  |
| I/O INTERFACES                    | Ethernet    | 2x 10/100/1000Mbps - RJ45  |  |
|                                   | USB         | 4x USB 3.0 (Type A), 4x USB 2.0 (Header)   |  |
|                                   | Serial      | 2x RS-232 (Header), 2x RS-232/RS-422/RS-485 (Header)   |  |
|                                   | Video       | Triple Independent Displays: 1x LVDS* (Header), 1x HDMI, 1x DisplayPort++  |  |
|                                   | Audio       | HD Audio: 1x Line-out, 1x Mic-in (3.5mm Jack), 1x S/PDIF (Header)  |  |
|                                   | PCI Express | 1x PCIe x4 (Gen 3) Slot – 1x Full/Half Size Mini PCIe Slot (PCIe/USB/mSATA Signals)<br>– 1x Full/Half Size Mini PCIe Slot (PCIe/USB/SIM Signals) |  |
| OTHER                             | RTC         | Yes (Lithium 3V 210mAh Battery)  |  |
|                                   | Fan Conn.   | 2x System Fan  |  |
|                                   | LEDs        | 1x SATA Activity   |  |
|                                   | Buttons     | 1x Power-on, 1x Reset  |  |
| POWER                             | Input       | 12V (DC-in, Screw-lock Jack)   |  |

For more specifications and certifications, please check the CPU-521-17 datasheet.

| Pre-installed Software |    |          |
|------------------------|----|----------|
| SOFTWARE               | OS | CentOS 7 |

| Included Accessories |           |  |
|----------------------|-----------|--|
| MEMORY               | RAM       | 2x 2GB DDR3L SODIMM Modules  |
| STORAGE              | SSD       | 1x 64GB mSATA SSD MLC  |
| I/O INTERFACES       | SATA      | 2x SATA Data and Power Cable   |
|                      | USB       | 2x Dual USB 2.0 Female Cables  |
|                      | Serial    | 4x Serial DB9 Male Cables  |
|                      | 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.

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