



- **Powerful**
- **High Performance Graphics**
- **Rugged and Fanless**
- **Customizable**
- **Professional Services**

Features

Powerful - Supports server-class, power efficient Xeon E3-1500 v6 CPUs

High Performance Graphics - Features Intel HD Graphics, with VGA, LVDS and two HDMI/DP++/DVI displays, and HW accelerated video encoding and decoding

Rugged and Fanless - Operates from - 40 to +85°C, with error correcting code memory and soldered CPU for reliable, fanless design

Customizable - Comes with optional personalization and full customization services, ranging from factory options to deep HW/SW configuration changes

Professional Services - Provides the foundation for Eurotech Professional Services that span from carrier board development to complete system design, certification and manufacturing

Description

The CPU-162-24 is a COM Express Type 6 Basic (125x95mm) module based on the Intel® Xeon® E3-1505L v6 and 1505M v6 processors and supports up to 2 DDR4 SO-DIMMs with ECC, for a total capacity of 32GB.

Ideal for high performance graphics applications, the CPU-162-24 features Intel HD graphics, an integrated GPU that provides up to three simultaneous video outputs, with VGA, LVDS and HDMI/DP++/DVI (eDP also available as a factory option). It also features one PCIe x16 and one PCIe x8 links, to enable discrete GPUs, RAID controllers and other high performance peripheral expansions.

With a long-life cycle, optional conformal coating and a soldered down CPU, the CPU-162-24 is a reliable building block for fanless Edge devices that need to perform consistently in harsh environmental conditions.

Eurotech Professional Services are offered as an option and include BIOS personalization, carrier board design, system development and production. Deep module customization, such as feature changes are also available.

The CPU-162-24 supports Eurotech Everyware Linux and Windows 10 Enterprise; customer carrier board enablement and RTOS are available through Eurotech Professional Services, just like the full integration with [Eurotech's IoT Edge Framework Everyware Software Framework](#) (ESF), that provides native connectivity with many IoT Cloud services and among them, [Everyware Cloud](#) (EC – separately available), Eurotech's IoT Integration Platform, which allows remote device and data management and integration with analytics and IT applications.

| Ordering code: CPU-162-24-XX | | | |
|------------------------------|--------------------|--|---|
| XX | | -01 | -03 |
| PROCESSOR | CPU | Xeon E3-1505L v6 2.20GHz (3.00GHz), 4 Cores | Xeon E3-1505M v6 3.00GHz (4.00GHz), 4 Cores |
| MEMORY | RAM | 2x DDR4-ECC SODIMM for up to 32GB, Dual Channel | |
| BIOS | Size | 128Mbit SPI BIOS | |
| STORAGE | SATA | 4x SATA 3.0 (up to 6Gb/s); Support for RAID 0/1/5/10 | |
| I/O INTERFACES | Ethernet | 1x 10/100/1000Mbps | |
| | USB | 4x USB 3.0, 8x USB 2.0 | |
| | Serial | 2x UART (TX/RX) | |
| | Digital I/O | 1x 8bit Digital I/O | |
| | Video Ports | 1x VGA (DDI3 Factory Option), 1x LVDS/eDP (eDP Factory Option), 2x DDI (HDMI/DVI/DP++), Triple Display: VGA+LVDS+DDI or VGA+DDI1+DDI2 or eDP + 2x DDI | |
| | Video Resolution | VGA Resolution: 1920x1200@60Hz; LVDS Resolution: 1920x1200@60Hz, Dual Channel, 24bit; HDMI Resolution: 4096x2160@30Hz, 24bpp; DVI Resolution: 1920x1200@60Hz; DP++/eDP Resolution: 4096x2304@60Hz, 24bpp | |
| | Video Acceleration | HW Encode: HEVC/H.265, VP8, M/JPEG, MPEG2; HW Decode: HEVC/H.265, H.264, VP8 (8bit), VP9 (10 bit), VC1/WMV9, M/JPEG, MPEG2 | |
| | Audio | High Definition Audio Interface | |
| | PCI Express | 1x PCIe x16 or 2x PCIe x8 (Gen 3), 8x PCIe x1 or 2x PCIe x4 or 4x PCIe x3 (Gen 3) | |
| | LPC | Yes | |
| | I2C | Yes | |
| | SMBus | Yes | |
| OTHER | RTC | Yes | |
| | Watchdog | Yes, Dedicated Chip | |
| | TPM | Factory Option | |
| | Sensors | Temperature | |
| POWER | Input | 12V, 5VSBY, 3V_RTC (ATX Mode) 12V, VCC_RTC (AT Mode) | |
| | Consumption | 25W (CPU TDP) | 35-45W (CPU TDP) |
| ENVIRONMENT | Operating Temp | - 40 to + 85°C | |
| | Storage Temp | - 40 to + 85°C | |
| | Humidity | 5% to 90% RH | |
| | | | |
| CERTIFICATIONS | Regulatory (§) | CE, FCC, ISED | |
| | Environmental | RoHS3, REACH | |
| | Compliance | PICMG COM Express R2.1, Type 6 | |
| MECHANICAL | Dimensions | 125x95mm (LxW) - COM Express Basic | |

S: Designed to Meet

| Software | | |
|----------|---------------|---|
| SOFTWARE | OS | Eurotech Everyware Linux,(Professional Services: Windows 10 IoT Enterprise, Other Linux and RTOS) |
| | IoT Framework | Everyware Software Framework (Java/OSGi) |