



- **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
<b>PROCESSOR</b>	CPU	Xeon E3-1505L v6 2.20GHz (3.00GHz), 4 Cores	Xeon E3-1505M v6 3.00GHz (4.00GHz), 4 Cores
<b>MEMORY</b>	RAM	2x DDR4-ECC SODIMM for up to 32GB, Dual Channel	
<b>BIOS</b>	Size	128Mbit SPI BIOS	
<b>STORAGE</b>	SATA	4x SATA 3.0 (up to 6Gb/s); Support for RAID 0/1/5/10	
<b>I/O INTERFACES</b>	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 (10bit), 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		
<b>OTHER</b>	RTC	Yes	
	Watchdog	Yes, Dedicated Chip	
	TPM	Factory Option	
	Sensors	Temperature	
<b>POWER</b>	Input	12V, 5VSBY, 3V_RTC (ATX Mode) 12V, VCC_RTC (AT Mode)	
	Consumption	25W (CPU TDP)	35-45W (CPU TDP)
<b>ENVIRONMENT</b>	Operating Temp	- 40 to + 85°C	
	Storage Temp	- 40 to + 85°C	
	Humidity	5% to 90% RH	
<b>CERTIFICATIONS</b>	Regulatory (S)	CE, FCC, ISED	
	Environmental	RoHS3, REACH	
	Compliance	PICMG COM Express R2.1, Type 6	
<b>MECHANICAL</b>	Dimensions	125x95mm (LxW) - COM Express Basic	

S: Designed to Meet

### Software

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