



- Ready to Plug
- HPEC and Microserver Ready
- Powered by Xeon® D-1500
- Hybrid RAM Architecture
- Compact Size with PCIe x16 Port

## Features

**COM Express Launchpad** - A COM Express Type 6 Development Kit that provides a complete platform for development, validation and testing of the CPU-161-18

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

**Rugged and Performant** - The CPU-161-18 supports wide operating temperature (- 40 to +85°C) and it is powered by server-class Intel Xeon D-1500 CPUs, up to twelve cores

**Feature Rich** - Provides a carrier board with plenty of interfaces, including one Gbit Ethernet, six PCIe x1 slots, one PEG slot, two Mini PCIe sockets, and four SATA 3.0 ports

**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-161-18 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.

The CPU-161-18 combines a high performance and truly embedded CPU with an innovative hybrid RAM architecture that offers the ruggedness of soldered memory and the expandability of SO-DIMMs. The standard configuration provides 8GB of memory soldered directly on the PCB and supports up to 24GB DDR4 RAM with ECC error correction through a SO-DIMM slot.

The CPU-161-18 can be configured with any member of the Xeon/Pentium D-1500 family; standard versions support extended temperature CPUs, closing the gap between traditional embedded applications and servers.

The CPU-161-18 is a headless unit that provides a fast upgrade path to existing projects and that allows the creation of new high-performance ones: a notable feature of this Compact size module is the availability of a x16 PCIe Gen 3 port in addition to the x8 one, a characteristic that is more commonly found only on larger modules.

# CPU-161-18 Development Kit

COM Express Compact Type 6 - Rugged Intel Xeon D

## Ordering code: CPU-161-18-XX-DK01

XX		- 05	- 07
<b>PROCESSOR</b>	CPU	Pentium D1519 1.50GHz, 4 Cores	Xeon D-1539 1.60GHz, 8 Cores
<b>MEMORY</b>	On-board	8GB DDR4 ECC Memory Down	
	On-socket	1x DDR4 ECC SODIMM up to 16GB	
<b>STORAGE</b>	SATA	4x SATA 3.0 (up to 6Gb/s)	
<b>I/O INTERFACES</b>	Ethernet	1x 10/100/1000Mbps - RJ45	
	USB	4x USB 3.0, 3x USB 2.0 - Type A	
	Serial	2x UART (TX/RX) - Header	
	Video	Mini PCIe Graphic Card: 2x VGA (up to 1920x1080@75Hz Vertical Rate)	
	PCI Express	1x PCIe x16 (Gen 3) Slot – 6x PCIe x1 (Gen 2) Slots – 2x Full/Half Size Mini PCIe Slots (PCIe Signal Only)	
<b>OTHER</b>	RTC	Yes (Lithium 3V 210mAh Battery)	
	Sensors	Temperature Sensor	
	LEDs	1x SATA Activity, 1x Debug	
	Buttons	1x Power-on, 1x Reset	
<b>POWER</b>	Input	12V (DC-in, Screw-lock Jack)	

For more specifications and certifications, please check the CPU-161-18 datasheet.

## Pre-installed Software

<b>SOFTWARE</b>	OS	CentOS 7
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## Included Accessories

<b>BASEBOARD</b>	CARRIER BOARD	CAR-363-13 microATX COM Express Carrier Board
<b>STORAGE</b>	SSD	1x 2.5" 64GB SATA SSD MLC
<b>I/O INTERFACES</b>	SATA	3x SATA 3.0 Data Cables, 1x SATA Power Cable
	Video	1x Mini PCIe Graphic Card, 1x Dual VGA Cable
<b>POWER SUPPLY</b>	DC-DC PSU	1x 150W DC-DC ATX Power Supply Unit
	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