



- **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.

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

XX		- 05	- 07
PROCESSOR	CPU	Pentium D 1519 1.50GHz, 4 Cores	Xeon D-1539 1.60GHz, 8 Cores
MEMORY	On-board	8GB DDR4 ECC Memory Down	
	On-socket	1x DDR4 ECC SODIMM up to 16GB	
STORAGE	SATA	4x SATA 3.0 (up to 6Gb/s)	
I/O INTERFACES	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)	
OTHER	RTC	Yes (Lithium 3V 210mAh Battery)	
	Sensors	Temperature Sensor	
	LEDs	1x SATA Activity, 1x Debug	
	Buttons	1x Power-on, 1x Reset	
POWER	Input	12V (DC-in, Screw-lock Jack)	

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

Pre-installed Software

SOFTWARE	OS	CentOS 7
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Included Accessories

BASEBOARD	CARRIER BOARD	CAR-363-13 microATX COM Express Carrier Board
STORAGE	SSD	1x 2.5" 64GB SATA SSD MLC
I/O INTERFACES	SATA	3x SATA 3.0 Data Cables, 1x SATA Power Cable
	Video	1x Mini PCIe Graphic Card, 1x Dual VGA Cable
POWER SUPPLY	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)
OTHER	Heatsink	1x Heatsink