

CPU-161-18 Development Kit



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-15xx 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

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-15xx 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

Embedded Board Development Kit

Specifications

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 2.0/3.0, 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

OS	CentOS 7
----	----------

INCLUDED ACCESSORIES

CARRIER BOARD		CAR-363-13 Micro ATX 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

Note: The information in this document is subject to change without notice and should not be construed as a commitment by EUROTECH. While reasonable precautions have been taken, EUROTECH assumes no responsibility for any error that may appear in this document. All trademarks or registered trademarks are the properties of their respective companies.

ETH_CPU-161-18 Dev Kit_DS_EN_12/2017