



APPLICATIONS

The **EM Box® PC-NUCA** is the perfect communication gateway for industrial IoT applications. Especially designed for low-power, noiseless and extreme temperature environments. No fans or other rotating devices are used. It is a german engineered and produced high quality BoxPC system, offering high performance in tough environments.

- _ Automotive Solutions
 automotive grade power supply
- _ Gateways
- _ Medical Solutions ARM® performance
- _ Automation Control scalable, long term availability, flexible expansion
- _ Information Systems
- _ Rugged Industrial Systems no rotating parts, low-power Measurement

eNUC





BoxPC system with high computer performance and small dimensions.



With a large number of interfaces in a small package, a wide range of applications are supported.



The BoxPC is designed for industrial-grade communication applications in extreme temperature environments.



A customized frontpanel design is optional available.



Expand your system with various USB options.



Optimized system for harsh and tough environments.









SPECIFICATIONS

CPU NXP i.MX6 processor¹

Max. memory Up to 2 GB DDR3L soldered memory

onboard

Gigabit Ethernet Up to 2² (Micrel KSZ9031RNX,

Intel® I210 with IEEE1588)

LTE/4G (OPTIONAL) 300 Mbps max./EMEA, APAC/Diversity/

GNSS

WiFi/BT (OPTIONAL/not in combination with LTE/4G) 802.11 AC with diversity/ Bluetooth Version 5

SSD (OPTIONAL) M.2 SATA / 64 - 512 GB

SD-Card Up to 2 MicroSD-Card sockets

USB ports Up to 4 USB 2.0
USB client port 1 Micro-USB 2.0
Serial port (OPTIONAL) 1 RS-232/485

CAN ports (OPTIONAL) 2 ports, 1 Mbps per port

HDMI connector 1 standard HDMI connector v1.4
Sound 3.5 mm MIC In / headphone Out

Other RTC | Watchdog | Temperature sensor

Power supply Min. 8 V / Max. 32 V (DC) automotive grade | KL15

Fanless Designed for fanless operation

Max. operating temp. -40 °C to +85 °C ambient industrial grade

Max. storage temp. $-40 \,^{\circ}\text{C}$ to $+105 \,^{\circ}\text{C}$

Max. rel. humidity 95 % @ 40 °C, non-condensing

Housing Sturdy metal case

Mounting Stand alone or hat rail

Dimensions approx. 117 x 120 x 45 mm

Weight approx. 550 grams + options

Conformity CE, ROHS, REACH

OS support Linux (Yocto Project w/ FSL Community BSP 2.3)

¹ 15 years availability according to CPU manufacturers specification

² 1st GbE port currently limited to 480 MBit/s

MOBILE APPLICATIONS EQUIPPED WITH AN AUTOMOTIVE POWER SUPPLY



Ordering Code System	Description	Туре
BPCNAA	eNUC System passive cooled	i.MX6 Solo / 800 MHz 256 MB memory down 1 GbE 1 MicroSD-Card
BPCNAB	eNUC System passive cooled	i.MX6 Quad / 800 MHz 2 GB memory down 2 GbE 2 MicroSD-Cards PCIe MiniCard w/o PCIe (USB only)

OVERVIEW

The EM Box® PC-NUCA is the perfect industrial grade communicator for secure and reliable IoT communication. It is designed as a flexible low power system with an excellent performance-per-watt ratio.

SUMMARY

- ► Al performance level
- ► Flexible communication
- ► OEM/ODM with customer branding in small quantities available
- ► Easy mounting
- ► High performance
- ► Small dimensions

OPTION	Description	
SSD	SATA SSD 64 - 512 GB	
LTE	LTE/4G Modem Not in combination with WBT	
WBT	WiFi/BT card BPCNAB only Not in combination with LTE	
COM	COM 1 RS-232/485 Port	
CN1	CAN 1 Port	
CN2	CAN 2 Port	
LNX	Linux Yocto Project	

The information contained in this document has been carefully checked and is believed to be reliable. However, E.E.P.D. cmbH makes no guarantee or warranty concerning the accuracy of said information and shall not be responsible for any loss or damage of what ever nature resulting from the use of, or reliance upon, it. E.E.P.D. does not guarantee that the use of any information contained herein will not infringe upon the patent, trademark, copyright or other rights of third parties, and no patent or other license is implied hereby. AMD and the AMD logo are trademarks of Advanced Micro Devices, Inc. Intel and the Intel logo are trademarks of Intel Corporation or its subsidiaries in the U.S. and/or other countries.

This document does not in any way extend E.E.P.D. 's warranty on any product beyond that set forth in its standard terms and conditions of sale. E.E.P.D. reserves the right to make changes in the products or specifications, or both, presented in this publication at any time and without notice.

LIE SUPPORT APPLCATIONS: E.P.D. 's products are not intended for use as critical components in life support appliances, devices or systems in which the failure of a E.P.D. product to perform could be expected to result in personal injury. All mentioned trademarks are registered trademarks of their owner.

© 2024 by E.E.P.D. GmbH. All rights reserved. March 12 2024 – Version 2.3

E.E.P.D. Electronic Equipment Produktion & Distribution GmbH Gewerbering 3

85258 Weichs - Germany Phone +49 8136 2282-0 Internet: www.eepd.de E-Mail: sales@eepd.de