**POLYHEX**

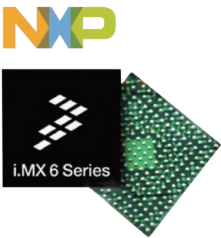# Fanless Embedded Box PC Based on NXP i.MX 6 Series CPU with RS232/485, Dual Display and GPIO Function
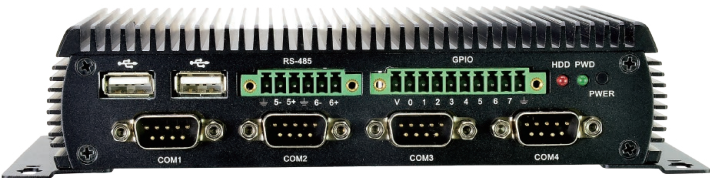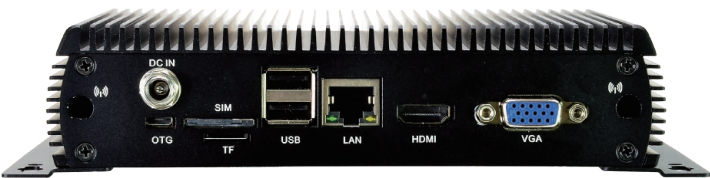


NXP
i.MX 6 Series

- NXP i.MX 6DualLite 1.0Ghz (NXP i.MX 6Solo/NXP i.MX 6Dual/NXP i.MX 6Quad optional)
- Onboard 1GB DDR3 RAM and 8G eMMC (default)
- Support 1 x mini PCIe, 4 x RS232, 1 x RS485, 8 x GPIO
- Support dual display: VGA/HDMI
- Supports Yocto 2.5.2, Ubuntu 16.04, Android 9.0
- Slim vent-hole free with dustproof and fanless aluminum enclosure

CE  FC  RoHS 2002/95/EC  CCC

## Front view



## Back view



## Ordering Information

| Part Number | CPU | RAM | Storage | Display | GbE | USB | Audio | Mini-PCIe | SATA | Operating Temp |
|---|---|---|---|---|---|---|---|---|---|---|
| BPC-iMX6Se-01 | NXP i.MX6 Dual Lite 1.0GHz | 1GB DDR3 | 8GB eMMC | HDMI + VGA | 1 | 4 x USB 2.0 1 x Mcro USB | 1 | 1 | 2 | -20~70°C |

## Introduction

The BPC-iMX6Se-01 is a small form factor fanless embedded PC based on NXP i.MX 6 Series processors. The system supports one Gigabit LAN, four RS232, one RS485, eight port GPIO, and also a wide array OS options including Yocto embedded Linux, Ubuntu Linux and Android, making it well-suited to a range of in-field applications. The rich I/Os and slim fanless design fits perfectly for digital signage, kiosk, network security, IoT gateway and other industrial computer applications.

## Technical Specifications

| System | |
|---|---|
| Processor | NXP i.MX 6DualLite 1.0Ghz (Default) |
| | Also support NXP i.MX 6Solo/NXP i.MX 6Dual/NXP i.MX 6Quad |
| Architecture | ARM Cortex-A9 |
| Memory | Onboard 1GB DDR3(Default), up to 2GB |
| Storage | eMMC 8GB Default, 16GB/32GB(option) |
| Operating System | Yocto 2.5.2, Ubuntu 16.04, Android 9.0 |
| **Connectivity** | |
| LAN | 1 x RJ45 AR8033 |
| WiFi | 1 x RTL8188WEUS |
| Bluetooth | 1 x RTL8723 (optional) |
| **External Connectors** | |
| USB Host | 4 x Type A USB2.0 |
| SIM Card Slot | 1 x SIM |
| SD Card Slot | 1 x microSD card slot |
| USB OTG | 1 x Micro USB |
| RS-232 COM | 4 |
| RS-485 | 1 |
| GPIO | 8 |
| **Internal Connectors** | |
| SATA | 2 |
| Mini PCIE | 1 full length mini PCIE |
| **Display** | |
| VGA | 1 |
| HDMI | 1 |
| **Power Supply** | |
| Power Input | 12V DC |
| Power Consumption | Depending on Configuration |
| **Mechanical & Environment** | |
| Enclosure Material | Stainless Steel + Aluminum |
| IP Rating | IP69K |
| Dimensions | 169.42 (W) x 38.9 (H) x 124 (D) mm |
| Size | 146mm x 102mm (L x W) |
| Gross Weight | 780 grams |
| Temperature | Industrial: -20° to +70° C |
| Relative Humidity | 10 to 90 % |
| MTBF | >50 000 Hours |
| Shock | 15G half-sine 11 ms duration |
| Vibration | 1 Grms random 5-500Hz hr/axis |
| Certification | Compliant with CE / FCC / RoHS / REACH directives |

**POLYHEX**
Beyond the Embedded Deployment

### ABOUT POLYHEX

As a board level and system level designer and manufacturer, Polyhex, with 9- year experience, always delivers best-in-class embedded computing solutions based on both ARM and X86 architecture, including hardware customization and software debugging etc. Partnered with silicon vendors like Intel, NXP, ST, Rockchip, Allwinner and so on, we have earned trust from clients worldwide in over 30 countries. Polyhex is also certified with ISO9001 and ISO13485 for the self-owned manufacture facility.