

ModBlox7 Ecosystem

ModBlox7 already has a healthy and growing ecosystem of manufacturers with new designs to support the specification - shown here is a list of participants that continues to grow.

The combined experience of these companies and beyond are contributing to a reliable, scalable industrial PC standard that provides an innovative technology ecosystem.



Additional Committee Members:

ADLINK Technology Inc.
General Micro Systems Inc.
Intel Corp.

Kontron
Sanritz Automation

ModBlox7™

Standardizing Modular Industrial PCs



Expected release of standard in 2023



Do you have any further questions? Does your company want to participate in the new ModBlox7 standard? Please contact Jess Isquith, PICMG, or the ModBlox7 Working Group Chair Bernd Kleeberg, EKF.



Contact jess@picmg.org
or kle@ekf.de.

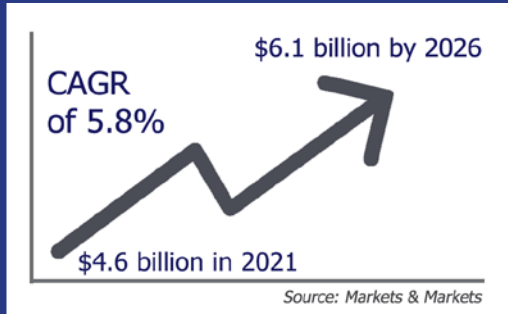


Benefits

- ✓ Meets Growing IPC Market Needs
- ✓ Modular and Cost Effective
- ✓ Scalable in Small Space Constraints
- ✓ Interoperability Across Suppliers and Users
- ✓ Enables Small Quantity Tailoring
- ✓ Only Pay for What You Need

The Importance of Standardized Industrial PCs

As some market observations confirm, the demand for industrial PCs is incredibly high, and will continue to grow over the next few years.



No wonder; industrial PCs are used in a wide range of state-of-the-art applications such as industrial automation, AI, IIoT, cloud and edge computing.

Widespread Applications



Process Control



Communications



Data Acquisition & Diagnosis



Edge Computing & IIoT

Currently, there is an almost endless number of different manufacturers with equally different products in terms of performance, interfaces, market qualification, and mechanics. These are often proprietary within their own product family. Customers therefore must select and stay with a specific product for many years, binding themselves to a single manufacturer.

Industrial PCs are increasingly demanding optimized space, weight, power and cost (SWaPc), yet have a lack of interoperability and flexibility from current offerings. This formed the motivation to create a new open specification - ModBlox7.

Leveraging the advantages of other modular architectures like CPCI and AMC, ModBlox7 is intentionally designed for applications where highly integrated BoxPCs are used.

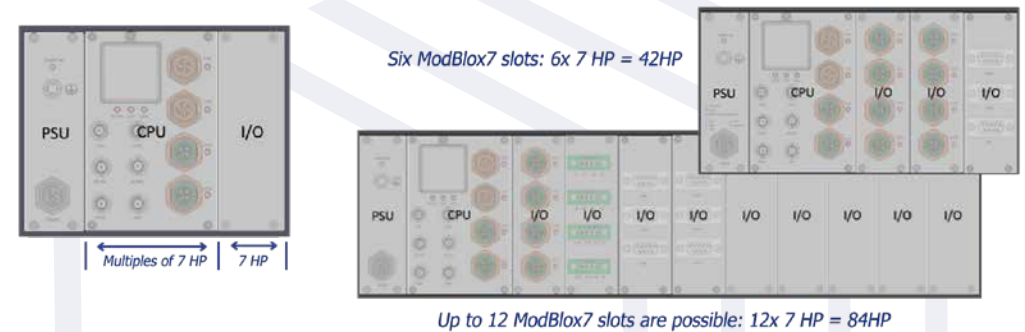
Based on a modular and flexible IPC system, every functional unit - power supply, CPU and I/O - are built in multiples of 7 HP. When combined, they can create a system (up to 12 x 7 HP) specifically tailored to individual needs using cost-effective standard modules.

The system is based on standardized mechanical and electrical interconnection between units and can be mounted multiple ways, such as wall, DIN rail, panel or 19" rackmount.

The unique mechanical and electrical modular approach means no additional expensive components like backplanes or shelf controllers are needed.

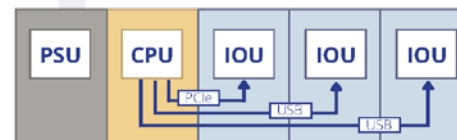
Standardized Modularity for Industrial PCs

Expandable System Widths



Architecture Examples

There are many different architectures possible. Below are two examples. High availability solutions with redundant architectures can be easily realized.



- USB 2.0 & 3.0 & PCIe communication interfaces
- Each unit distributes all interfaces, minus consumed ones, to neighbor board

- Allows for redundant architectures

