

AKHET®



The perfect industrial PC!
What makes the difference?

PYRAMID



Scalability & Customized Performance

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1. Our decision-making reaches further than our cognition

Have you ever been faced with the challenge of procuring a suitable IPC or server for a new machine or production plant?

Whether for the collection and processing of operating data, for quality control with machine vision, or for connecting to remote maintenance infrastructure: the specifications for an IPC or server are defined by very different factors:

- What CPU performance and RAM size does the software require?
- How many I/O ports with what bandwidth are needed to control the cameras or actuators used in the production process?
- What kind of user interface should be used to operate the IPC or server?

Further hardware requirements result from the operating conditions on site:

- Where is it mounted? What are the ambient operating temperatures?
- Regarding dust and splash water: How high are any immissions that affect your IPC or server?

These questions show that procuring a suitable system is not an easy task! For many applications, standard IPCs and servers from the major manufacturers are not the best choice.

Here are two examples:

For quality control by machine vision, processors with few cores and high clock speeds are sufficient. Processors with 8, 12 or even 32 cores bring no added value.

Instead, unnecessary power must be paid for and dissipated in the form of waste heat through the cooling system. In addition, space is a critical factor in almost every

machine and production facility, but due to the predetermined dimensions of standardized IPC or server solutions, the housing or the arrangement of the ports can prove unsuitable.

Which alternatives exist other than standard systems, and what are the advantages?

As a manufacturer and integrator of equipment, industrial solutions or software, you already know the requirements applicable to an IPC

These requirements determine performance criteria, choice of hardware components, housing and design, as well as services and logistics for the roll-out and after-sales of the system you are looking for.

Based on this information you can have your own IPC or server developed and manufactured.

That way, you will receive a system that is both technically customized

»How do I get a system that is technically customized and optimized for my processes?«

or server in the operating conditions in your or your customer's production environment very well.

and also optimized for your entire process chain.





CUSTOMIZATION

Modular product designs, individual adaptations, CMF for your brand



FLEXIBILITY

Quick design and engineering for product development, short time to market



EXPERIENCE

Numerous references, renowned customers, large projects & installations



QUALITY

High quality in production and manufacturing standards, managed & experienced supply chain

2. The best Method

2.1 Ambassador of your brand

If you are asking yourself: „How can I recognize a hardware manufacturer who will implement my IPC or server requirements in such a way that I am more than satisfied?“, the answer is: look for an experienced partner whose path to your desired solution consists of clearly defined and transparent individual steps. Furthermore, the partner's portfolio should include services that go beyond pure development and manufacturing. This means the partner should be able to support you, for example, by procuring certificates, rolling out the solution in your plant, or shipping to your customers.

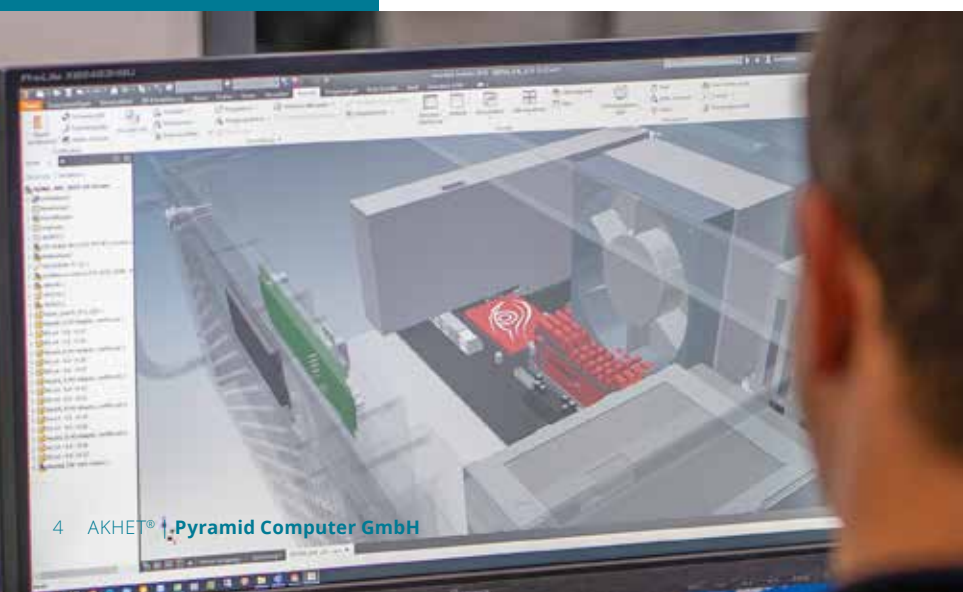
In general, the stages leading you to your desired solution should look like this:

From kick-off to serial production!

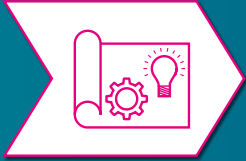
As the first step, an employee of the manufacturer who is an expert in your industry and your technologies takes on your project. This person supports you as your dedicated contact from kick-off until your system is ready for serial production. In dialogue with you, your contact person will identify your exact requirements:

- Which tasks will the future IPC or server have to fulfill in which industrial environment?
- Where exactly is the system to be installed?
- Which technical specifications result from this?
- What requirements result from your specific processes?
- Perhaps the BIOS battery has to be changed without the housing being opened, or an interface on its top has to be passed to the outside?
- By when does the solution have to be ready for use in your production or available on the market for your customers?
- Is branding desired so that the IPC or server becomes an ambassador for your brand or company?
- Do you need individual laboratory tests, national or international certifications such as UL and CCC?
- Which services will maximize your economic success after your purchase of the solution?
- Do you need support in logistics or preventative replacement of components?

In-House 3D-Design

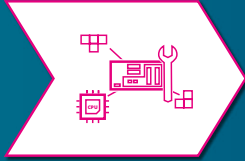


Design & Development



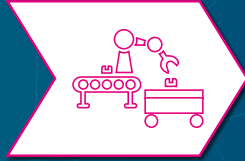
Environment, Usage, Temperature, Function, Performance, Certifications, Region, Corporate Identity

Prototyping & Tests



Configuration, Construction Sample, Field Test, Benchmark, Material Test, Design Tvaluation, EMC Test

Production & Roll-Out



Deployment Schedule, Manufacturing, Quality Assurance, Image Installation, Roll-out

Logistics & Service



Consignment Stock, Drop-Shipment, Packaging, Supply-Chain Management

RMA & After Sales



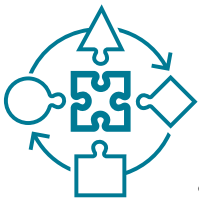
Extended Warrantly, SLA, Spare Parts, Support Hotline, On-site Service, Advance Unit Replacement

Lifecycle Management

2.2 Modular or from scratch

Design? Modular!

When all the requirements have been determined, the second step consists of deciding whether your IPC or server can be created from a modular platform or whether it has to be newly constructed by the hardware manufacturer.



Modular platforms serve as a technology foundation that can be modified or expanded to meet your requirements precisely. This is the most cost-effective approach.

For example, if the system will be maintained without a monitor by a technician or machine operator, the open design of the platform allows the integration of an LCD and a control panel with navigation keys. Many technological requirements can be realized using a suitable modular platform. Another advantage of the platform principle is short development times. Because an existing platform can be modified by using certain components or assemblies, even heavily specialized systems can be created almost off the shelf in just a few weeks.

If you want to use an IPC or server in your machine, which means close to the production and quality assurance process, you need a system with an extremely compact chassis

In addition, special immission protection is required for the harsh industrial environment.

A highly specialized system can hardly ever be developed from an existing platform. But even for a new design, you will be in good hands with an IT hardware manufacturer with lots of experience.

Your team should be made up of proven in-house specialists: product managers, engineers, CAD experts. Their accumulated experience should span several decades, and it goes without saying that their knowledge of new technologies and trends must be up to date. For you as a client, the team guarantees the targeted and rapid development of your new system.



Example products Corporate Identity

2.3 Product & Corporate Identity

What goes for the technology of your IPC or server also applies to its appearance. If you wish, the hardware manufacturer can produce the IPC system with your company's corporate design. Coating and direct

» *Benefit from a high recognition value of your products.*«

digital printing are powerful tools to realize your ideas economically and

quickly. Realistic and high-resolution imprints in millions of colors add individual branding with your company's or client's logo and color scheme.

As an example, your IPC may be a machine vision controller, which you would like to market as a product under your own brand name.

In such a case, it is of great advantage to you if the assembler is able to assist you with advice and support even after development and production. The range of services provided should result in a product that is delivered to you ready for dispatch: In a box, with a Quick Start Guide and an installation CD or USB stick – with everything branded for you.

All that remains for you will be to add the system to your inventory and deliver it when an order is placed.



2.4 Through its paces

The third step on the way to serial production of your system is the validation of prototypes. This is conducted under real conditions in your or your customer's production facility. Depending on the product, laboratory tests may also be required to put the new system through its paces. If necessary, changes are made until the system meets your or your customer's expectations 100%.

In the fourth step, you profit from the services that the hardware assembler provides for you after development and production. In terms of logistics, this includes the already mentioned packaging as a white label product, the storage of your goods in consignment warehouses from which you can call them up as needed, as well as drop shipping, which provides for both direct and blind shipments to your customers

This means, when the IPC is delivered to your customers, you will shine as the perfect technology and logistics provider.

A white-label product is a product or service produced by one company that other companies rebrand to make it appear as if they had made it.*

2.5 Aftersales



Another important service is highly a accessible customer service team, ideally consisting of in-house experts. Multilingualism and many years of experience should characterize these service pros, just as much as a good connection to the product developers. This enables customer service to process and solve your inquiries and issues promptly according to agreed SLAs.

The same should also be the case when the warranty period is over.

A complete hardware assembly portfolio also includes supply chain and lifecycle management. This will help you to keep your IPC or server technology available and up-to-date, making it future-proof. Supply chain management ensures that your product is always available according to your specifications.

Your contact person will proactively inform you when a component is coming to the end of its life and which follow-up component can replace it. Here, your hardware assembler should have your back so that you can concentrate fully on keeping the IPC running for a long time. This means you will need high version stability, efficient roll-outs and guaranteed customer satisfaction.

3. What makes the difference?

For your next IPC or server, rely on a proven hardware manufacturer with a high level of technological competence, a flexible platform principle, short paths and a comprehensive range of services at every step.

Medium-sized hardware manufacturers are usually very agile in their process management. In addition, they focus strongly on your specific requirements. As a result, you will achieve a fast time-to-market for your product.

Conclusion: Getting your perfect industrial PC or server is easy if you consider the following.

Make sure that the hardware assembler provides a direct contact person for the duration of the project. This creates short lines of communication for you. This positive effect is enhanced further if in-house experts are also provided in other areas, such as 3D design, development or service. Make sure that your product request is documented in detail.

A certified enterprise with forward-looking life cycle management ensures the high quality of your product for a long time. This allows you to concentrate on your core business.

Comprehensive services in logistics, customer service and aftersales guarantee the success of your product. With all these benefits, you can be sure that the assembler you have chosen is the right link in your value chain and that you will receive the perfect server or IPC for you!



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