AI that moves the world.

That's the power of Intel Inside®.

JHCTECH x intel

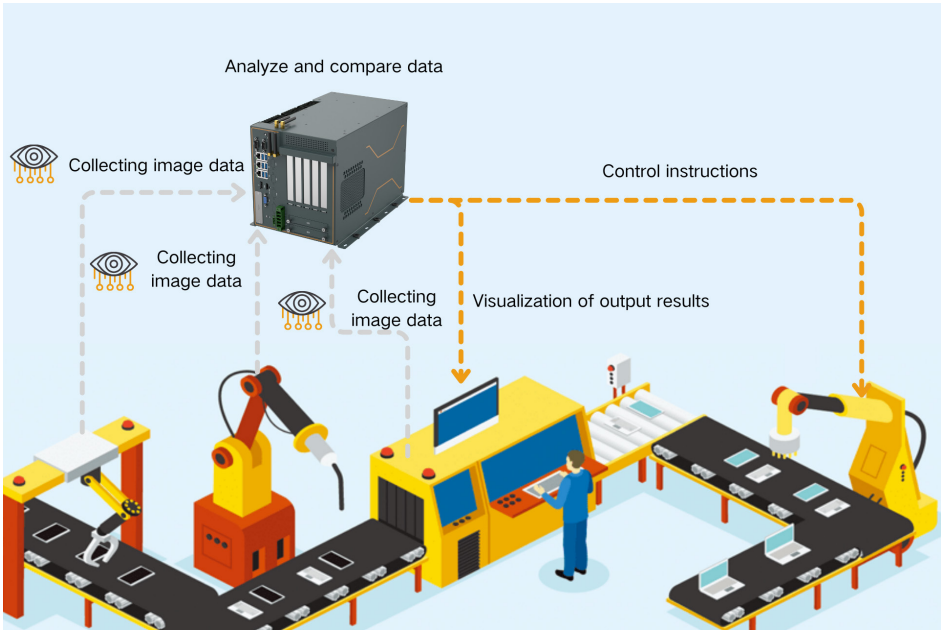
Booth 3-644

Empowering Machine Vision in Brazil | Smarter, Faster, and More Reliable Production Lines

Written by JHCTECH Team

From Human Eyes to AI Vision

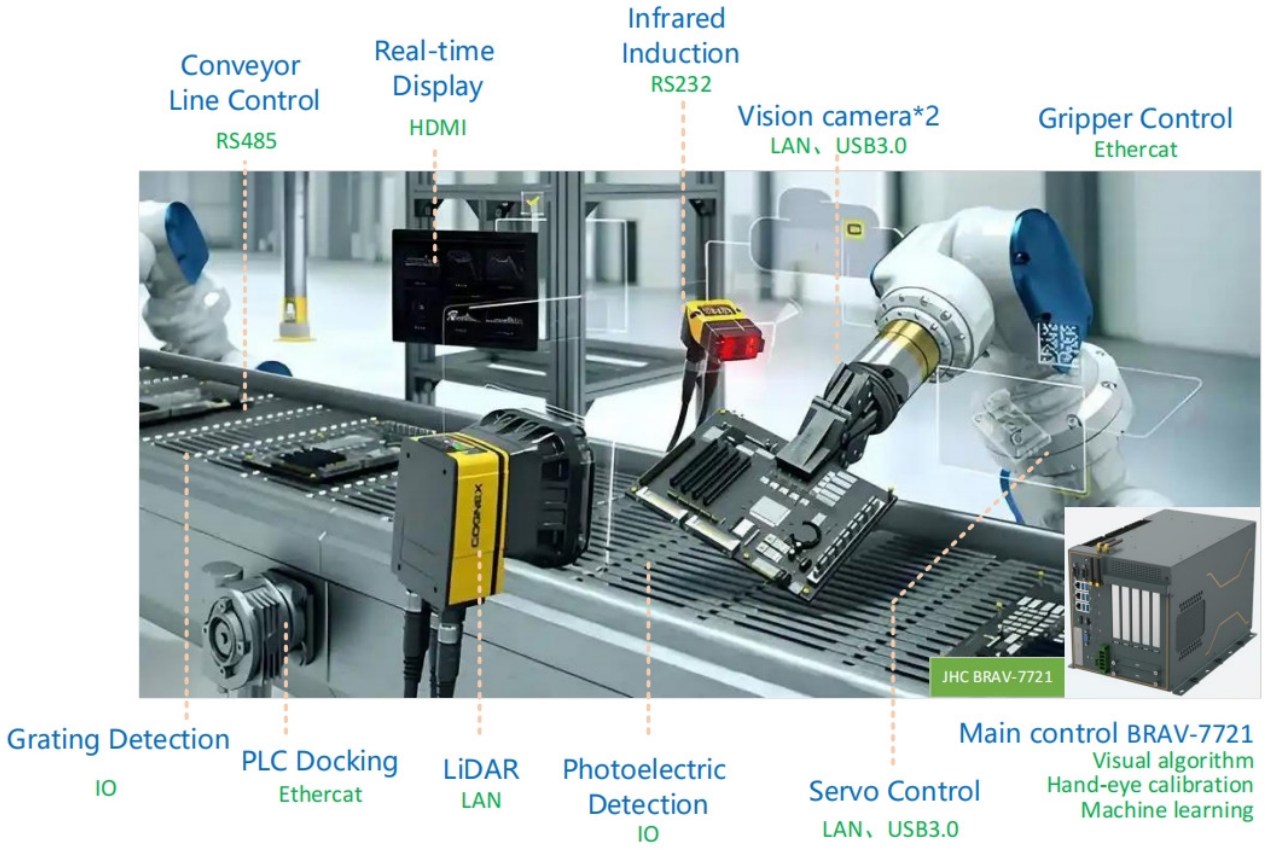
How do you ensure flawless quality in the fast-moving world of industrial production? In Brazil, one of the country's leading machine vision solution providers turned to JHCTECH for the answer. By integrating **edge AI industrial computing** into automated inspection, the customer transformed its production line—achieving real-time defect detection, precise measurement, and intelligent control.



Challenges in Machine Vision

For modern factories, machine vision systems must do more than just "see." They need to **analyze, decide, and act**—all in real time. The Brazilian customer required an industrial computer that could:

- **Deliver high-performance computing** to handle complex algorithms and AI-driven image analysis.
- **Operate reliably in harsh environments** with heat, dust, and vibration.
- **Provide scalability and expansion** for future integration of additional cameras and sensors.
- **Support mainstream OS and software tools** (Windows/Linux) for seamless compatibility with machine vision applications.

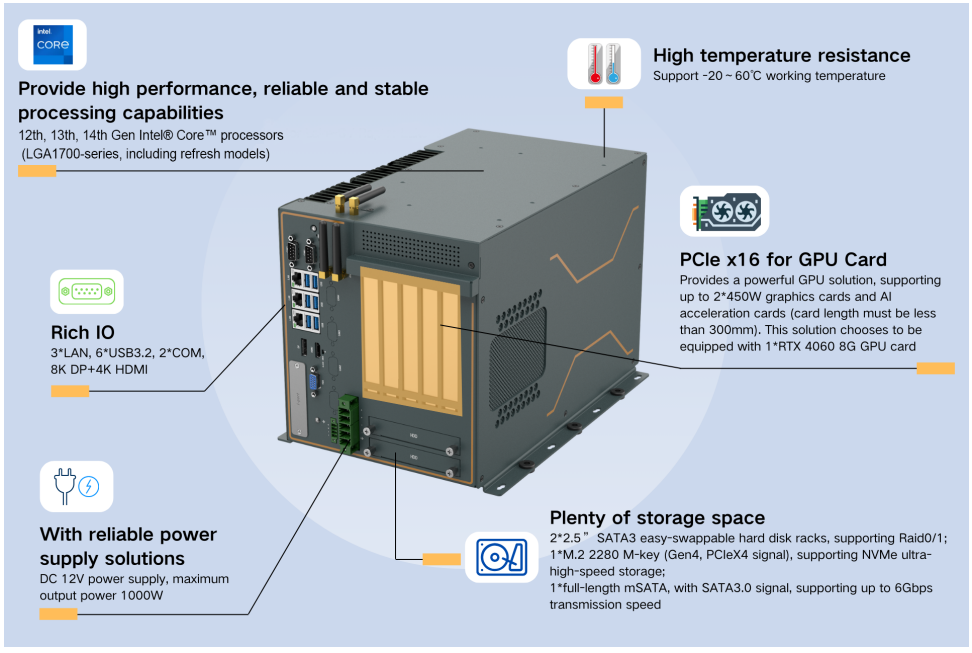


The JHCTECH Solution

The customer chose JHCTECH's **BRAV-7721 Industrial AI Computer** as the backbone of its automated vision inspection system.

- **AI-Powered Processing**

  Equipped with 12th, 13th, 14th Gen Intel® Core™ processors (LGA1700-series, including refresh models) and support for multiple GPU cards, BRAV-7721 delivers the computing power needed for real-time AI image processing. In this deployment, the system integrated an RTX 4060 8GB GPU to accelerate deep learning–based defect detection.



- **Flexible Expansion & Connectivity**

  With 6× USB 3.2, 3× LAN, 2× COM ports, and 4× PCIe slots, the system connects seamlessly with multiple high-speed cameras and sensors—ensuring accurate, multi-angle inspection.

- **Industrial-Grade Reliability**

  Designed for demanding factory environments, BRAV-7721 supports up to 1000W power output, dual 450W GPUs, and features an MTBF of 50,000 hours. This ensures uninterrupted operation in high-temperature and vibration-prone settings.

Results & Impact

By deploying BRAV-7721, the Brazilian manufacturer:

- Automated defect and quality inspection across its production line.
- Increased production efficiency with AI-driven real-time decision-making.
- Improved product reliability and consistency—enhancing competitiveness in the global market.

Conclusion

From Brazil's production floors to smart factories worldwide, JHCTECH continues to deliver **rugged, AI-ready industrial computing platforms** that power next-generation machine vision. With BRAV-7721, manufacturers can achieve **smarter, faster, and more reliable production lines**.

Learn More

Want to explore how JHCTECH can accelerate your machine vision projects? Visit our website or contact our team to explore edge AI computing tailored to your project.

Edge AI Partner Spotlight - Solution Hub | Intel® Industry Solution Builders