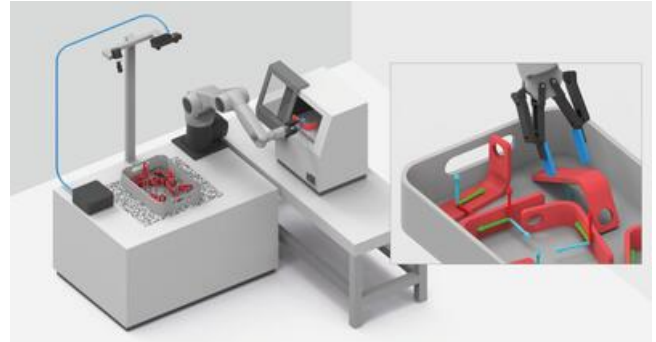# BASLER STEREO APPLICATION SOFTWARE

20052
3D ItemPick Module. Pick-and-place system

- Flexible integration through APIs in C++ and Python
- adjustable disparity range
- confidence mapping

PRODUCT DESCRIPTION

Basler Stereo Application Software is a powerful and user-friendly platform designed to work seamlessly with Basler stereo cameras for real-time 3D image processing. It includes a comprehensive suite of tools for stereo image acquisition, calibration, rectification, and 3D data generation such as disparity maps and point clouds. The software supports high-speed data handling via USB 3.0 or GigE interfaces and is optimised for GPU acceleration, enabling low-latency performance in time-critical applications. It offers flexible integration through APIs in C++ and Python, making it suitable for both rapid prototyping and deployment in complex industrial systems. Advanced features like adjustable disparity range, confidence mapping, and ROI (Region of Interest) settings provide fine control over 3D processing parameters.

In practical terms, Basler Stereo Application Software is ideal for a wide range of machine vision applications including robotics navigation, bin picking, 3D inspection, and volumetric measurement. It allows users to quickly implement and customise depth-sensing workflows, helping improve precision and operational efficiency. The software's visualisation tools make it easy to interpret depth data and debug stereo setups, while its compatibility with standard 3D data formats ensures seamless integration into existing systems. Whether used in smart factories, logistics automation, or mobile robotics, the software provides the robust 3D processing capabilities needed to unlock the full potential of stereo vision technology.