

# Precision Adhesive Dispensing with High-Speed Control



## Overview:

The conventional dispensing solution regulates the valve according to speed over time, requiring complex paths to reduce overflow at corners. With increasing demands for production efficiency, there is a need to seek faster and more precise solutions.

## Challenges/Requirements:

- Avoiding adhesive overflow at corners.
- Requires high-speed 2D comparison trigger.

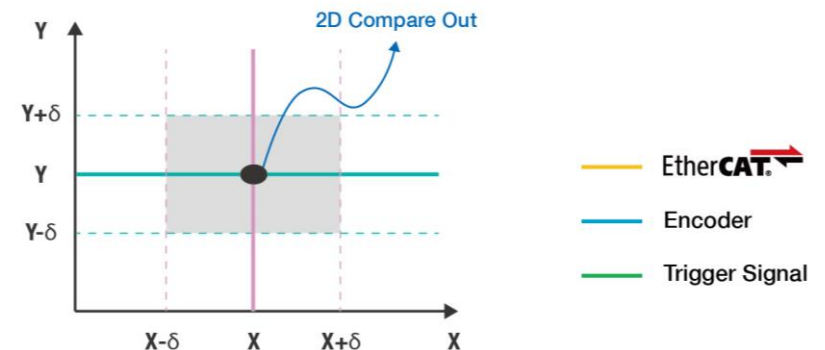
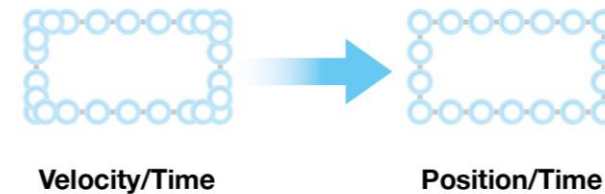
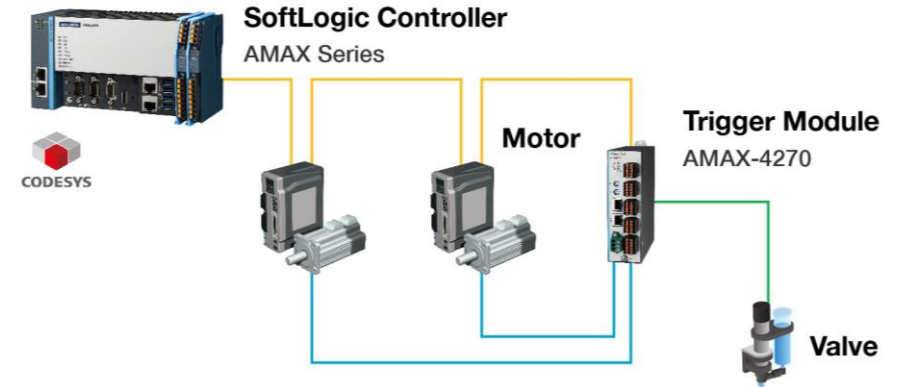
## Solution:

- Advantech's AMAX-4270 provides a 4-channel encoder input and trigger output solution to achieve the 2D comparison trigger for the process trajectory.
- With the PSO function, users input the positions that need to be compared to realize the position/time control to avoid overflow at corners.

## Benefits:

- Up to 10 kHz jetting speeds to improve equipment productivity.
- Position-triggered for precise control of adhesive dispensing locations.

## System Diagram



# High-Speed Defect Inspection for Passive Components



## Overview:

As the market demand for passive components continues to grow, meeting this demand presents challenges not only in increasing production output but also in quality control management. Consequently, there is a growing trend toward AI-based automatic optical inspection.

## Challenges/Requirements:

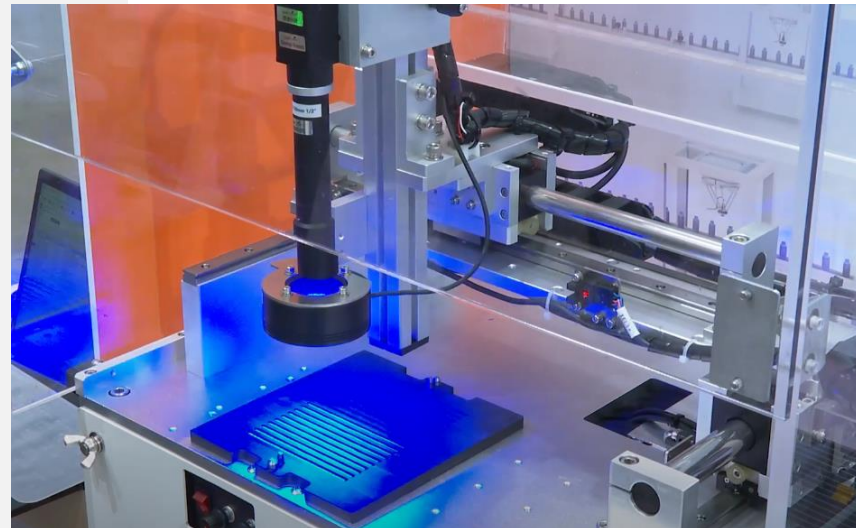
- Improve image acquisition speed.
- Enhance image quality.

## Solution:

- Advantech's AMAX-4270 is able to achieve on-the-fly image capture.
- The AMAX-4270's built-in FIFO comparison trigger for real-time output.

## Benefits:

- Processing speed of up to 12,000 pieces per minute.
- Simple control system and wiring which amounts to cost savings.



## System Diagram

