



Automotive Electronic Devices

When you have critical automotive electronics in your car you can't "reboot" them. They need to work flawlessly everytime.



➔ Your application requires version control, traceability

➔ You demand the highest quality & reliability

➔ Your devices are mission critical - they must work

➔ You require the highest programming yield

When Quality Matters



When you drive down the road at 60 mph you cannot reboot the ABS system. The brakes **need** to work every time!

Best Practices for Quality Programming

To meet high quality standards productions mangers look for ways to optimize programming into the production process by:

- Eliminating opportunity for human error
- Automating device handling processes
- Ensuring data integrity



Offline Automated Programming

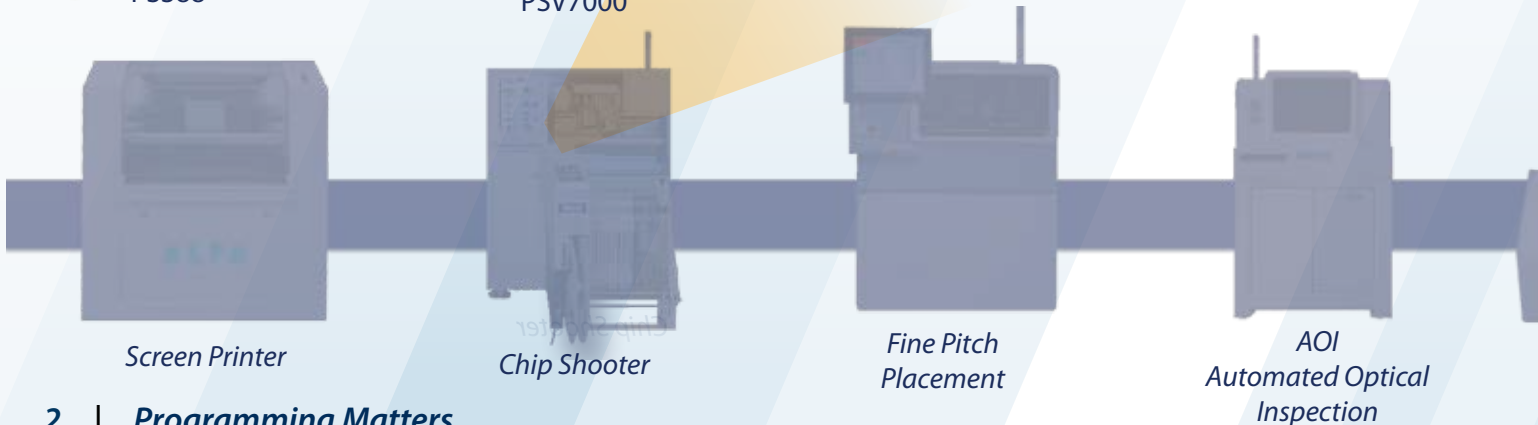


PS388

Award winning
PSV7000



Just-in-Time Programmer
RoadRunner3



Screen Printer

Chip Shooter

Fine Pitch
Placement

AOI
Automated Optical
Inspection

Choosing the right programming solution might be a matter of life and death. Production managers are under tremendous pressure to do more with less, maximize profits and maintain highest quality standards.

Solution



Eliminate opportunities for human error with automatic job selection and download from the line's master recipe by integrating programming with your factory's Manufacturing Execution System (MES).



Automate handling process: True 3D Coplanarity Vision Systems measure the leads of each device after programming to ensure they are within specified tolerances before being placed in output media. Data I/O integrates our second generation 3D Coplanarity Vision System with our **award winning PSV7000** for precision handling and reliability making it ideal for parts of any size.



Ensure data integrity: Not all programmers are created equal. Data I/O's universal FlashCORE III programming engine with Superboost technology is the **only programmer** validated by a leading semiconductor manufacturer to **reliably program** small lithography MLC NAND devices when following published Best Practice guidelines for preprogramming.

Offline Programming vs. OnBoard

	OnBoard	Offline
File Sizes:		
Small	●	●
Large	●	●
Cost of labor to maintain	\$\$\$\$	\$
Creation of algorithm	Inhouse	Provided
Bad Block Management	highly complex	
Scalability to meet production	●	●
Coplanarity check	●	●
Cost of scrap	\$\$\$	\$
Devic Mix:		
Low	Easy	Easy
High	Complex	Easy



Reflow Solder

ICT

Functional Test

Trusted by the leading automotive electronics manufacturers worldwide

Customize your automated programming systems to meet your quality & production requirements

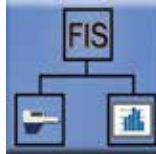
Serial Number Server



Version Control



Factory Integration Software (FIS)



Secure Data Management



Enhanced Yield Programming Controls



3D Coplanarity Check



Tape Label Generator



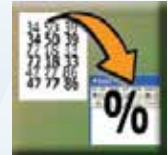
DataMapper



Confirm Input Device



Enhanced Statistical Process Control



Support Available 24/7

Serving global electronics manufacturers with over 60 trained field service & support engineers

- Local service support
- Local engineering support
- Regional spare parts

"We rely on Data I/O to support us on dozens of projects on four continents. No one else can give us this level of support."

- Global Electronics Manufacturer



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