

AST-9000

Automated IC Programming System

AST-9000, the latest advanced automated programming system, specially designed for high density devices production such as NAND flash, eMMC and UFS...etc. It can support the tiniest IC packages like BGA, and CSP types.

For programming production need, AST-9000 is able to embed 8 units of gang programmers, 3D inspection, laser marker, and different input/output peripherals such as JEDEC tray loader, taping machine and tube modules.



Handler Features

- ♦ Multiple functions- Repacking, programming, 2D/3D inspection, marking...etc.
- ♦ Highest UPH up to 3000
- ♦ Highest efficiency and expansibility up to 64 socket sites once
- ♦ Various IC types supported- EEPROM, NAND/ NOR FLASH, MCU, eMMC, and UFS...etc.
- ♦ Various IC packages supported- WLCSP, CSP, BGA, SOP, SSOP, TSSOP, PLCC, QFN and LQFP etc.
- ♦ Support multiple marking methods including, built in laser marking, ink printing, inkjet printing, and labeling.
- ♦ Nickel plated sheet metal designed for full system ESD protection.
- ♦ Dual drive system enabling more stable programming automation.
- ♦ Features high-precision linear motor for exceptional programming quality.

Software Features

- ♦ User friendly interface
- ♦ Quick setup-fool proof
- ♦ Reprogramming setting
- ♦ MES integration via API
- ♦ Double feed prevention
- ♦ Unique Key customization



1. Pick & Place System	
Accuracy	XY $\pm 0.02\text{MM}$
Number of Nozzles	4
Highest Throughput	3000UPH
2. Transmission System	
Drive System	XYX axis: Motorised linear motor θ axis: Stepper Motor
Resolution- X/Y/Z	XY axis: 10000PPR Z axis: 8000PPR
Maximum Stroke- X/Y/Z	X axis: 870mm Y axis: 1010mm Z axis: 35mm
θ Axis Resolution	0.15°
3. AOI Vision System	
Camera Pixels	Upper CCD: 1.3 megapixels Bottom CCD: 3.2 megapixels
Vision Accuracy	1.3 megapixels ± 0.02 3.2 megapixels ± 0.01
Vision Process Time	0.01S/device
4. Operation System	
PC O/S	Windows10
Input Voltage	220~240V Single Phase /50-60Hz/2.5kW
Power Consumption	4.6kW
Air Flow	45L/min
Air Pressure	0.6MPa.
5. Programming System	
Programmer and Socket Sites	Aerospeed-G *8, 64 sites
Support Type of IC	UFS,eMMC. eMCP MCU/MPU.NORNAND Flash EEPROM, SP Memory, FPGA. CPLD, etc.
Support Type of IC Package	DIP, SDIP, SOP, SSOP, TSOP, PLCC, QFP, QFN, SON, BGA
6. Input / Output System	
Input / Output System	tray/tube/tape
7. Marking System	
Marking System	laser marker, Ink marker, Inkjet marker, label feeder
8. Dimension	
Dimension (W*D*H)	2145mm*1675mm*1570mm