

DP3T Plus

Automated Programming System

www.dediprogram.com



DP3T Plus responds to the industry's ever-evolving demands by handling down to 1x1mm packages. Able to support laser/labeling/inkjet marking, and a maximum of 16 programming sockets to boost productivity for extreme high-capacity devices. The highest UPH goes up to 1300.

With the NuProgPlus series programmer, the system supports dual sockets & highest read/write speed goes up to 180/mb. Auto Teach feature improves productivity by reducing the project setup time. This system is the epitome of versatility, making it an ideal solution for low-volume, high-mix production teams seeking efficiency without compromise.

Features

High Throughput

The system will be able to perform up to 1,300 UPH (Units per Hour).

High Expansibility

Able to embed with one set of NuProgPlus-S8-E or NuProgPlus-S16-E, up to 16 programming sites.

Support All IC Families

1. Supported IC: EEPROM, NAND/NOR FLASH, MCU, eMMC, and UFS, etc.
2. Supported IC Package: SOP, SSOP, TSSOP, PLCC, QFN, LQFP, and BGA, etc.
3. Minimum supported size: 1x1mm CSP.

Adjustable Socket Actuating Kit

Adjust socket actuating kits make it easier and quicker to switch to different types of socket adaptors according to the socket size. Therefore, you will not need extra socket actuating kits!

Software Supports Work Project

Able to create a programming file directly through DediWare according to your programming demands. It allows you to start programming right after loading the project, which will greatly reduce human errors.

Clamp Positioning Check

The system will automatically check if the clamps are installed properly before production to avoid machine/product damage caused by unmanned staff mistakes.

Support Different Input/Output Peripherals

Input/Output: Tube, Tape, and Tray.

Auto Teach Feature

1. Proceduralize- Automatically adjust handler's parameters step by step.
2. Digitalized- Automatically adjust the heights of nozzles.
3. Increase the speed of system adjustment.
4. Self-detection Function- Increase the accuracy & stabilities for nozzles' pick and place.

MES API

DediProg's handler can be easily integrated into different MES systems via the API protocol. It is capable of integrating remote control functions, fool-proof programming, and error management to enhance production yield and simplify management.

One Click Project Execution (OPRJ)

The OPRJ one-click activation feature enables fool-proof production (machine process and programming project), remote project editing, project preview, and machine qualification management. It can also integrate into MES systems through the API Protocol.

IC Marking Functions

Provides a variety of labeling methods

1. Ink Marker supports dot, character, or number.
2. Inkjet Printer supports string.
3. Laser Marker supports precise character marking.
4. Label Printer supports QR Code and barcode.
5. Label Feeder automatically supplies labels to IC for identification.

IC Inspection

Provide 2D inspection capabilities to detect pin failures in SOP, QFP, QFN, and BGA packages.

Specification

Pick & Place System	Placement Accuracy	±0.01mm	
	Pick & Place Device	Vacuum Nozzle x 1	
	Throughput	Up to 1,300 UPH	
Transmission System	X-Y-Z Drive	High Efficiency Step-Servo Drive System	
	Transmission	Ball Screw (X&Y axis) / Belt (Z axis) & Linear Guide Mechanism	
	Resolution	X axis: 0.0015mm, Y axis: 0.0015mm, Z axis: 0.01mm	
	Maximum Stroke	X axis: 655mm, Y axis: 365mm, Z axis: 55mm	
	θ Axis Resolution	0.1125°	
	Input/Output System	Tube In	Manual Tube In Loader; capacity: 4 Tubes
Tube Out		Manual Tube Out Loader; capacity: 6 Tubes	
Tape In		Electrical Tape Feeder; support 8~44mm tape width	
Tape Out		Automated Taping Machine; PSA and Heat Sealing; Support 8~44mm tape width; up to 32mm carrier tape depth	
Tray In/Out		1. Manual Input JEDEC Tray 2. Manual Output JEDEC Tray 3. Automatic Tray In/Out Loader; capacity of 25 JEDEC/Non JEDEC Trays 4. NG IC Trays	
Vision System	Camera	1440 x 1080 (1.6M Pixels)	
	Vision Alignment	IC corner leads	
	Vision Accuracy	±0.01mm	
	Vision Process Time	~0.03sec/unit	
Programming System	Programmer	NuProgPlus-S8-E x1 or NuProgPlus-S16-E x1	
	Programming Site	Up to 16 sockets	
	Support IC	EEPROM, NAND/NOR FLASH, MCU, eMMC, and UFS, etc.	
	IC Package	SOP, SSOP, TSSOP, PLCC, QFN, LQFP, and BGA, etc.	
Marking/Labeling System	Laser Marker	Characters with a height greater than 0.3mm.	
	Ink Marker	Different color available; support dot (1.5~2.0mm) for above 3mmx3mm IC, character and number (2mm x 3mm) for 4mm x 4mm IC	
	Inkjet Printer	Min Character height ≥ 2mm ; Support IC size ≥3mm ; Printable time ≤ 3hrs	
	Label Printer	4x4~10x10mm Label; prints QR Code, Data Matrix, Barcode, String	
	Label Feeder	3x3~10x10mm Label; Label Width ≤28mm	
Operation Environment	Input Voltage	200±15% Vac, 40/60Hz	
	Power Consumption	5A/1.0kVA	
	Air Flow	46liters/min	
	Air Pressure	0.6MPa (~6.0kg/cm ²)	
Dimension (W x D x H) (Monitor Wide Opened and Alarm LED light)	Main Unit (MU)	1460 x 790 x 1620mm	MU+Tape Loader 1460 x 1940 x 1620mm
	MU +Tray Loader	1520 x 790 x 1620mm(Side)	1460 x 1240 x 1620mm(Front)
	Weight	350kg	
Control System	PC O/S	Windows 10 IOT	
	Display	19"LCD	
	Input Devices	Keypad & Mouse	

※Specifications are subject to change without notice.

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