

DP1000-G5

Automated Programming System

www.dediprogram.com



DP1000-G5 automated programming system is the latest generation of DP1000, which supports different input/output peripherals to provide an overall solution for IC programming. It supports most of the IC families, such as EEPROM, NAND/NOR FLASH, MCU, eMMC, and UFS, etc.

The system can embed with 2 sets of NuProgPlus series programmer to provide up to 32 programming sites with stable quality and high throughput. Additionally, the Auto Teach Feature will automatically adjust the parameter to increase the productivity.

Features

High Throughput

The system will be able to perform up to 3,000 UPH (Units per Hour).

High Expansibility

Able to embed two sets of NuProgPlus Series programmer (Universal & UFS) to expand up to 32 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 (Manufacturing Execution System)

DediProg handlers can apply different MES; production line via API protocol is easily to be integrating with their internal server. Work report can be converted to excel file as a record.

One Click Project Execution (OPRJ)

New software integration included both machine project & programming project to avoid any human setting error.

IC Marking Functions

Provides a variety of labeling methods

1. Ink Marker supports dot, character, or number.
2. Laser Marker supports precise character marking.
3. Label Printer supports QR Code and barcode.
4. 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.

Pick & Place System	Placement Accuracy	±0.01mm
	Pick & Place Device	Vacuum Nozzle x 2
	Throughput	Up to 3,000 UPH
Transmission System	X-Y-Z Drive	High Performance Servo Drive System
	Transmission	Ball Screw & Linear Guide Mechanism
	Resolution	X axis: 0.003mm, Y axis: 0.003mm, Z axis: 0.008mm
	Maximum Stroke	X axis: 690mm, Y axis: 505mm, Z axis: 85mm
	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 8~32mm 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 x 2 or NuProgPlus-S16-E x 2
	Programming Site	16 sockets or 32 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), character and number (2mm x 3mm)
	Label Printer	4x4~10x10mm Label; prints QR Code, Data Matrix, Barcode, String
	Label Feeder	3x3~10x10mm Label
Operation Environment	Input Voltage	200±15% Vac, 40/60Hz
	Power Consumption	6A/1.3kVA
	Air Flow	46liters/min
	Air Pressure	0.6MPa (~6.0kg/cm2)
Dimension (W x D x H) (Monitor Wide Opened and Alarm LED light)	Main Unit (MU)	1517 x 1140 x 1618mm
	MU+Tape Loader	1517 x 2170 x 1618mm
	MU+Tray Loader (Front)	1517 x 1704 x 1618mm
	MU+Tray Loader (Back)	1517 x 1798 x 1618mm
	MU+Tray Loader (F+B)	1517 x 2362 x 1618mm
	Weight	600kg
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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