

# **SuperBot-2 Automated IC Programmer**

- **☆** High throughput up to 1200 UPH
- **☆** Four built-in SuperPro 7100 programmers, each with up to 4 sockets (16 sockets total). Throughput 30 times higher than SuperBot-1 for eMMC devices
- **☆** Supports tray, tape and tube input and output
- **☆** Supports laser and ink marking
- **☆** Short change-over time
- ☆ Intelligent software cuts learning curve and setup time while simplifying task management
- **☆** Compact size







# Key Features

**High throughput:** High performance servo system, up to 1200 UPH for devices with programming time less than 36 sec. Throughput 0.6 to 30 times higher than SuperBot-1, especially higher for large capacity devices like eMMC, NAND /NOR FLASH,SPI FLASH. Suitable for both small and large capacity devices.

Prog. Time (S)	36	40	60	120	180	240
UPH	1200	1080	720	360	340	180

**Accurate positioning:** Equipped with high performance servo system, precise CCD cameras for sockets / pick & place spots positioning.

**High performance programmers:** 4 ultra-high speed universal gang programmers - SuperPro 7100. Each with up to 4 sockets, with a total of up to 16 sockets in the system.

**Varied I/O devices:** Supports tray, tape, tube input and output, laser and ink marking, and packing conversion. Can perform as a packing conversion machine alone.

**Short change-over time:** I/O devices and socket adaptor are easily interchangeable. Socket positioning can be performed automatically. Projects can be loaded automatically with barcode scanning.

**Powerful and intelligent software:** Setup data saved for next operation, log file and statistic reports available for quality assurance and traceability purposes, flexible sockets (with socket checking technology) convenient for unattended operation, graphical user interface cuts learning curve.

**Remote Control:** Remote project loading, quality monitoring, volume control, file security.

## Motion System

High precision servo drive system.

Resolution: X axis: ±0.02mm; Y axis: ±0.02mm;

Z axis:  $\pm 0.02$ mm;  $\theta$  axis:  $\pm 0.1$ °

Stroke: X axis: 1000mm; Y axis: 500mm; Z axis:  $40mm_{\circ}$ 

Pick & Place header accuracy: ±0.07mm.

Operable chip size: min: 2x2mm; max: 25x25mm

Maximum throughput: 2000 UPH.

## Vision System

Downward CCD camera for sockets / pick & place spots

positioning.  $512 \times 512$  pixels. Field of view: 30 mmX 30 mm

Vision accuracy:  $\triangle x = \triangle y = 0.07 \text{ mm}$ ,  $\triangle \theta = 0.1^{\circ}$ 

### Programmer

Four ultra-high speed universal gang programmers - SuperPro 7100. Faster programming speed than SuperPro 5000. Each with up to 4 sockets. Supports device voltages as low as 1.2V Capable to support MCU, CPLD, serial and parallel NOR/NAND FLASH. Only pay for algorithm needed.

## Control System

Built-in Industrial PC with OS Windows XP, 19" LCD display, keyboard and mouse. Communication interface: USB and LAN.

#### I/O Devices

#### Manual Tray (Standard equipped)

One tray each time. Change tray manually.

#### **Tape-out Device**

Heat sealing and pressure sealing modes. Tape width adjustable between 8 and 32mm.

#### Tape-In Device

YAMAHA pneumatic feeder. Tape width between 8 and 32mm applicable.

#### **Auto Tray Device**

Moves blank tray in and passed tray out the machine automatically, marking the tray (optional). Stack up to 15 JEDEC trays.

#### **Tube-In Device**

Moves chips in the machine. Chip guider for different chip width optional.

#### **Tube-Out Device**

Moves chips out the machine. Chip guider for different chip width optional.

#### Tape Ink-Marker

An attachment to the tape-out device. Put a ink dot on the chip.

# Auto Tray Ink-Marker

An attachment to the auto tray device. Scan and put dots on the passed chips.

# Laser-Marker

An optional attachment to the tape-out or the auto tray device. Marks up to 4 characters on the passed chips.

# Accessories

Programming adaptors, nozzles, socket pressing adaptors.

## Electrical and Mechanical Specification

Power Supply: AC 200  $\sim\!240\text{V}/50\!\sim\!60\text{Hz},$  single phase

Power Consumption: 1.5KVA.

> Tape-out:  $1100(L)\times380(W)\times1300(H)$ Main machine: 250

Weight: Main machine: 250 Kg Auto tray: 80 Tape-out: 50





CE Compliant

RoHS Compliant

July 9, 2013 www.xeltek.com 2/2