# ALL-100

## Universal and Gang Programmer

A new universal programmer best satisfies your programming needs
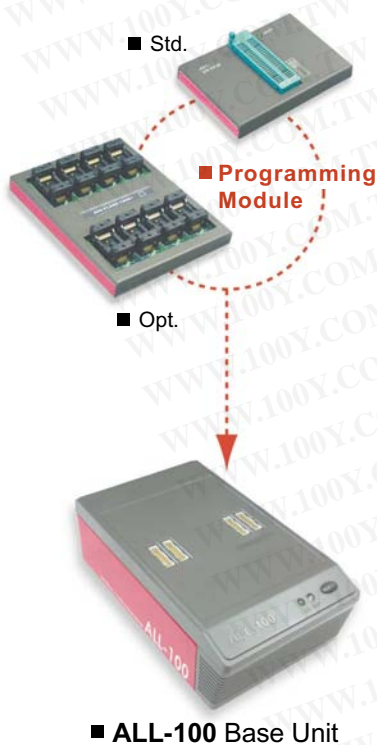
■ Std.

■ Programming Module

■ Opt.

■ **ALL-100** Base Unit

SITE Setting    USB PORT

## Introduction

**ALL-100** supports device programming for a variety of device types covering EPROM, EEPROM, Serial PROM, flash, PLD/CPLD/FPGA, MPU/MCU, etc. Most of programmable devices in DIP, SDIP, SOP, SSOP, TSOP, PLCC, QFP, or BGA package types can be programmed on a DIP48 Programming Module directly or through an appropriate ADAPTER/CONVERTER

**ALL-100** features high-tech pin drivers to provide excellent programming quality at high speed, high reliability and high expansion flexibility. All pin drivers of ALL-100 are fully programmable to meet modern programming /testing needs including newly released low voltage devices in the market

**A** high speed USB port is provided to connect to the majority of notebook or desktop PC runs on Windows 98/ Me/ 2000/ XP/ Server2003. Multiple units of ALL-100 working simultaneously are possible via tiered star USB to achieve highest throughputs

**ALL-100** is a very powerful universal programmer which could be used either with single socket Programming Module or with 8 sockets Gang Programming Module to save future expansion cost. ALL-100 is designed to help engineering as well as production lines to tackle today's challenges in device programming

## Features & Benefits

**Excellent Performance** - Utilize flexible pin drivers to get accurate waveforms, high programming speed plus over current protection,wrong insertion detection, self diagnostic etc. ensures ALL-100 excellent performance

**Wide Devices Coverage** - Wide rage of programmable devices from 8 pins up to 300 pins covering EPROM, EEPROM, Serial PROM, flash,PLD/CPLD/FPGA, MPU/MCU, etc. in DIP, SDIP, SOP, SSOP, TSOP, PLCC, QFP, or BGA etc. package types

**Inherit ADAPTER/CONVERTER from ALL-series** - Over 500 ADAPTERs, 150 CONVERTERs can be used with single socket programming module or Gang Programming Module to ensure your capital investment retained

**Easy to Use** - Runs on Windows. After master read or file download from PC, user only needs to select (Blank check, Program, Auto) function from Menu and then hit YES key on programmer to start program function. Operation is very easy

**Multiple Units Working Simultaneously-** Via tiered star USB topology to achieve highest throughputs

**Release New Device Support via Internet Weekly** - Receive new device support S/W at no charge

**Worldwide Service** - Distribution channel covers 35 countries worldwide Your problem could be taken care anywhere around the world

**Ideal for Engineering as well as Production Environment** - Wide device covering range, flexible future expansion capability help users to achieve challenging time-to-market goal

## Specification

- **Device Support**  Pin Count : from 8 pins up to over 300 pins
  Device Type: EPROM, EEPROM, Serial PROM, flash,PLD/CPLD/FPGA, MPU/MCU, etc

- **Device Contact**  Default - DIP48, Textool.
  Others - SOP, TSOP, PLCC, QFP, MLF, SDIP etc. through optional CONVERTERs or ADAPTERs

- **Max Sockets in parallel**  8 sockets on optional GANG Programming Module

- **Control**  16 bits high-speed controller with big sized FPGA & CPLD

- **Interface Port**  1x USB port

- **Data Transfer Rate**  USB 1.1 :  12 Mb/s
  USB 2.0 : 480 Mb/s

- **Max Sites in parallel**  up to 8 programmers working simultaneously via tiered star USB

- **Functions**  Load file, Read Master, Program, Verify, Auto, ID Check, Checksum ,
  Blank Check, Erase, Secure, Protect/ Unprotect, Edit, Function Configuration ,Self  Test

- **Host Computer Requirements**
  - An Intel Pentium or compatible processor with 64MB of RAM
  - At least one USB port available ( V 1.1/ 2.0 )
  - 20 MB free hard disk space with Windows 98/ Me/ 2000/ XP/ Server2003 operating system
  - CD-ROM Drive

- **Power**  AC voltage - 100-240 VAC
  Frequency - 50-60 Hz
  Power consumption - 50W

- **Dimension**  L x W x H - 260mm x 150mm x 100mm

- **Weight**  4 kg

- **Operating Temperature**  0- 40℃ ( 32-105° F )

- **Safety Standards**  CE Approved

## Ordering Information

### ALL-100
Includes  1x ALL-100 Base Unit with single socket programming module( M1- UN- DP48 )
         1x USB cable ( type A to type B ), driver S/W , user manual and device supported list in CD-ROM

**Opt. 99 :**  M1-UN-DP48 module price deduction when another module is selected during ALL-100 purchasing.

### Optional Accessory

| | |
|---|---|
| **ALL-100-PIN CARD** | Additional  PIN driver card to be mounted into ALL-100 Base Unit. Necessary only when ALL-100 programming with any type of Gang Modules or TSOP flash Module. |
| **USB Interface Card** | Approved interface card to provide USB 2.0 environment to ALL-100. PCI BUS, Runs on Windows 98/ Me/ 2000/ XP. |
| **Programming Modules** | Optional accessory to be announced. Support ALL-100 to program various device types directly including x8 Gang Flash Memory Module, x1 TSOP flash Module etc. Please refer to Programming Module List on HI-LO web site. |
| **ADAPTERs** | Support high pin count devices from 48 to over 300 pins. Please refer to ADAPTER LIST on HI-LO web site |
| **CONVERTERs** | Convert signal into different package types covering PLCC, QFP, SOP, TSOP, BGA, ....etc.ranging from 8 pins to 48 pins. Please refer to CONVERTER LIST on HI-LO web site |

# ALL-100A Universal & Gang Programmer

A high performance programmer for both engineering & production

## Introduction

ALL-100A programmer is a revised version of ALL-100 programmer. Major enhancements include: The revised core processor with built-in 8K-byte cache speeds up programming time by 10% ~ 50%; The regulated device supply voltages further improve IC programming stability; The new USB processor further speeds up and stabilizes data link / transfer.

ALL-100A programmer has 68 sets of Precise Universal Pin Driver to provide high speed, low noise, accurate and reliable programming signals for various IC products including high speed low power devices recently released to market.

ALL-100A can be setup for either single-site programming for engineering or multi-site programming for production. If required, up to 8 sets of ALL-100A can be setup for multi-set operation so up to 64 sites can be programmed simultaneously to maximize production.

The supporting software is updated weekly on web site for check / retrieve through Internet. Programming of new products will not be neglected after purchasing.

**MOUDULE**

**ALL-100A Base Unit**

**ALL-100A**

## Features & Benefits

■ Excellent performance :
ALL-100A's high freq. core circuit design significantly cut down programming time for around 10% ~ 50%. Precise Universal Pin Drivers provide high speed, low noise, accurate and reliable programming signals for various IC products including high speed low power devices recently released to market.

■ Wide range of IC coverage :
ALL-100A supports wide range of IC products including EPROM, EEPROM, Serial PROM, SPI memory, FLASH, MPU/MCU product types and DIP, SDIP, SOP, SSOP, TSOP, PLCC, QFP, QFN, SON, BGA package types.

■ Easy to setup, operate and maintain :
ALL-100A setup and operation can be done easily by connecting Programmer to PC with Windows 2000 / XP / Server 2003 / Vista through USB port, load data file or read Master IC, then select functional options (Program, Verify, Auto...etc.) to start programming. The self-diagnostic utility makes programmer easy to checkout / maintain.

■ High expansion flexibility :
From development / engineering stage using ALL-100A single-site programming to limited production stage using ALL-100A multi-site / multi-set programming, further to mass production stage using AT3-3XX automated programming, high expansion flexibility of programming platform is well prepared in advance.

■ Timely supporting software :
The supporting software is updated weekly on web site for check / retrieve through Internet. Programming of new products will not be neglected after purchasing.

■ World wide service :
Distribution channel covers 35 countries worldwide, all inquiries / problems can be served easily and timely.

**HI-LO SYSTEMS**

# Specification

■ Core controller
   16 bits high freq. core control circuit with big sized FPGA & CPLD
■ Key functions
   Load File, Read Master, Program, Verify, Auto, ID Check, Checksum, Blank Check,
   Erase, Security, Protect / Unprotect, Edit, Function Configuration, Self Test.
■ Support devices
   IC types : EPROM, EEPROM, Serial PROM, SPI memory, FLASH, MPU/MCU…etc.
   IC packages : DIP, SDIP, SOP, SSOP, TSOP, PLCC, QFP, QFN, SON, BGA…etc.
   IC leads : 8 pins ~ 300 pins
■ Device contact
   Default : DIP48 ZIF single socket on Programming Module
   Others : Dedicated sockets on Programming Module per IC package type
■ I/O channels
   ALL-100A single-site :  48 sets of Precise Universal Pin Driver
   ALL-100AP multi-site : 68 sets of Precise Universal Pin Driver
■ Parallel programming
   ALL-100A : Single-site programming
   ALL-100AP : Multi-site programming. Up to 8 sites per set.
■ Operation control
   Base Unit : YES button – Start programming
             ON indicator – Programmer on / ready    BUSY indicator – Under programming
   Socket Module : OK indicator – Pass programming
■ Data transfer interface
   Transfer port : USB x 1
   Transfer speed : USB1.1 : 12 Mb/sec.  USB2.0 : 480 Mb/sec.
■ Host computer requirement
   • An Intel Pentium 4 or compatible processor with 512MB of RAM
   • At least one USB port is available (V1.1 / V2.0)
   • 50MB free hard disk space
   • Windows 2000 / XP / Server 2003 / Vista operation system
   • CD ROM / DVD ROM Drive
■ Power
   Power source : 100~240 VAC  50~60 Hz
   Power consumption : ~ 0.5 A
■ Dimension
   W x D x H    150mm x 260mm x 100mm
■ Weight
    ~ 4.0 kg
■ Operation temperature
   0 ~ 40 °C (32 ~ 105 °F )
■ Certification
   CE certified

# Ordering Information

| Part item | ALL-100A | ALL-100AP |
|---|---|---|
| ALL-100A Base Unit (3x pin driver cards installed) | ● | |
| ALL-100A Base Unit (4x pin driver cards installed) | | ● |
| Single site DIP48 ZIF socket Programming Module | ● | ● |
| Dedicated single-site socket Programming Module | ▲ | ▲ |
| Dedicated multi-site socket Programming Module | | ▲ |
| USB cable | ● | ● |
| Driver S/W and User Manual in CD-ROM | ● | ● |
| Adapter / Converter | ▲ | ▲ |
| Note :   ● --- Standard   ▲ ---- Optional | | |