

## LEAPER-56 Pocket Universal Programmer

Smart-phone size and ICT level universal programmer



- Portable mini size. Without socket, only 136mm(L)\* 90mm(W)\* 20mm(H). You just need to connect with USB cable to use. No additional power supply.
- Provide with DUT 75MHz bandwidth and  $< \pm 2.5\text{nS}$  signal skew. In addition to the high processing speed, you can verify whether the ICs processing frequency meets the specifications.
- Provide with DUT device pin checking and memory components ID verification. Ensure the best yield rate of processing.

## LP-456 Universal Gang 4 Programmer

Universal Pin-driver of high performance



- Provides with DUT 75MHz bandwidth and  $< \pm 2.5\text{nS}$  signal skew.
- Provides Hands-free Operation. The asynchronous and concurrent operation allows a chip to begin programming immediately upon insertion of chip.
- Provides mass-production-oriented software. There is used a Project file to control LP-456 to minimize the operator error. Moreover, it provides programming history and yield statistic for needs of production managements.

## SU-320 Stand-alone Universal & Gang Programmer

High-Expansion Flexibility



- Provides the stand-alone mode operation. Just use 5 keys and 20x4 LCD, you can select a project and start to program.
- Portable and compact design allow you to use everywhere.
- Provides IC insertion test and contact check before programming. Under the AUTO mode, just insert the IC, SU-320 will start the processes automatically.
- Provides high-expansion flexibility modular design. It can use as single-side universal programmer or SPI gang programmer.

## SU-3280 Stand-alone Universal Gang Programmer

High-expansion Flexibility



- Provides the stand-alone mode operation. Just use 5 keys and 20x4 LCD, you can select a project and start to program.
- Provides asynchronous and concurrent operation for the 4 modules which allows chips to begin programming immediately upon insertion the chip fully on the same module. There is a message show on the LCD to inform operator to take off the finished device and inserts a new device.
- Provides mass-production-oriented software. There is used a project file to control to minimize the operator error. Moreover, the log file help the production managements.

## SU-600 Flash Programmer

The best solution for programming high-density Flash



- Supports NAND Flash analysis function, able to find the bad block location and the relative size.
- Ultra high programming speed: 32M bits/sec.
- Supports NAND Flash Bad Block Skip programming and verifying.
- Intelligent NAND Flash master reading, you can select Bad Block Skip or whole device reading.
- Provides device data used map analysis function. Let you easily know the whole device data distributed situation.

## SU-6000 Flash Gang 4 Programmer

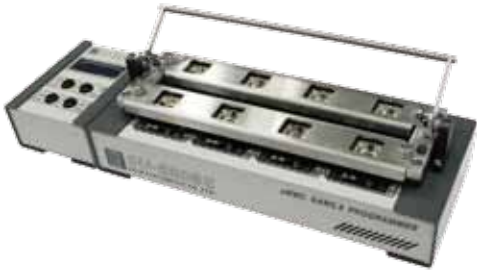
The best solution for programming high-density Flash



- Support NAND Flash Bad Block Skip programming & verifying on 4 sites simultaneously.
- Ultra high NAND Flash programming speed: 32M bits/sec.
- Intelligent NAND FLASH master reading: Bad Block Skip or whole device reading.
- High speed data transmission: 480M Bytes/minute.
- Stand-alone industrial LED start button: Pass, Fail, Work LEDs on each site.
- Operating software for mass production: working by project, control programming quantity, yield rate statistics, etc.

## SU-6808S Stand-alone eMMC Gang 8 Programmer

The low cost solution for programming eMMC



- Provide 20x4 LCD and 4 keys for Standalone mode. Just need to select the project file and start programming.
- User-friendly for Copy and Verification operation.
- Supports auto-detect function for the wrong insertion and bad connection of pins.
- Provide Socket Actuator as an option. It makes the operation easy and efficient for the higher throughout and longer socket lifetime.
- Programming speed is up to 8 bits/200MHz.

## LER-121A&123A EPROM Eraser

The low cost solution for EPROM Eraser



- Equipped with electronic starter, extend the product life.
- The timer can be set from 0 to 60 minutes.
- Powerful UV tube, all ICs are ensured for maximum UV exposure.
- Protect users from UV exposure by equipped with automatic UV shut off switch when opening the device drawer.
- LED on the top panel to indicate the status of UV tube.
- Provide almost completely erase area.
- Light, rugged metal construction.
- The erase time is approximately 15 minutes.

## ICT-6D Digital IC Tester

Reliable & user friendly desktop design



- 16x1 character 8x5 dot matrix LCD back light display.
- Built in 6 function keys and 10 numerical keys.
- Identify over 1800 CMOS / TTL digital ICs (up to 28 pins).
- High-test speed: generally test an IC in 0.6 second.
- Support low voltage device test.
- Voltage range: 2.5V/3.0V/3.3V/5V
- Device type: 1. 54/74 xxxx TTL series  
2. 40/45/14xxx CMOS series  
3. 20xx/28xx Driver IC series

## ICT-7A Linear IC Tester

Reliable & user friendly desktop design



- 16x1 character LCD display.
- Built in 6 function keys and 10 numerical keys.
- The following IC series can be tested under +/-5 ~ +/-24V. TIMEER, OP AMP, COMPARATOR, REGULATORS, ZENER, PHOTO COUPLER, COMMUNICATIONS IC, DIRVER, SWITCHING POWER SUPPLY IC.
- Various "BUZZER" sounds to present the test result "FAIL" or "PASS".

## LEAPER-1A Handy Digital IC Tester

Easy-operating, particularly designed for the digital ICs



- Support low voltage device test.
- Voltage range: 2.5V/3.0V/3.3V/5V
- Device type: 1. 54/74 xxxx TTL series  
2. 40/45/14xxx CMOS series  
3. 20xx/28xx Driver IC series
- Provide idle mode for saving power.
- High-test speed: generally test an IC in 0.6 second.
- Small, portable, light and power-saving, usable with batteries.
- Display: 16 characters in 1 line LCD.

## LEAPER-2 Handy Linear IC Tester

Easy-operating, particularly designed for the linear ICs

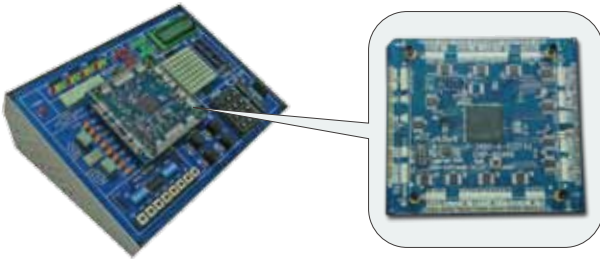


- Supported IC: OP, COMPARATORS, OPTO, REG., Special Function Device, Transistor Array
- Small, portable, light and power-saving, usable with batteries.
- Average test time: 0.8 second.
- Equipped with empty-load test, and Auto Power Off function.
- Auto identify the unknown ICs and list the P/N of the IC which has same function.

## LP-2900+CPLD/FPGA CHIP BOARD

### CPLD/FPGA Trainer

The most popular trainer for electronic program

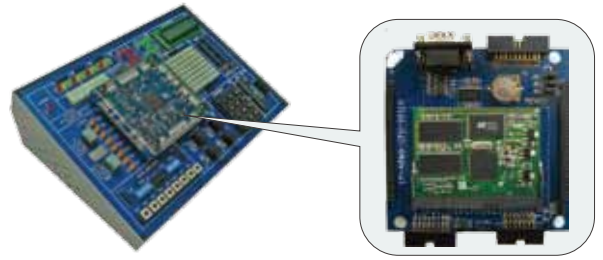


The application program included:

1. Fundamental logic program
2. Digital circuit design program
3. Digital system design circuit program
4. Micro processor principle program
5. VLSI design program
6. CPLD/FPGA chip design program
7. 8051 single chip program
8. Thematic preparation

## LP-2900+ARM9 CHIP BOARD ARM trainer

Bring You into System & Embedded World



- Support Samsung S3C24C10 x 32-bits RISC Microprocessor which is under SARM920T frame.
- Use Xilinx Spartan-3E FPGA XC3S250E PQFP208 which contains 250,000 logic gate counts. Let you process ARM+FPGA experiments or topic research.
- Modular design, able to change other CUP boards for learning.
- Provide BootLoader function, able to use C or Assembly for writing Language, via the cable to download to the LP-2900 platform for experiment and verification.
- Able to connect to PC via RS-232 interface. Use the simple terminal program for control and process program download and execute.

## LP-2600 Smart Logic Design Experimental Kit

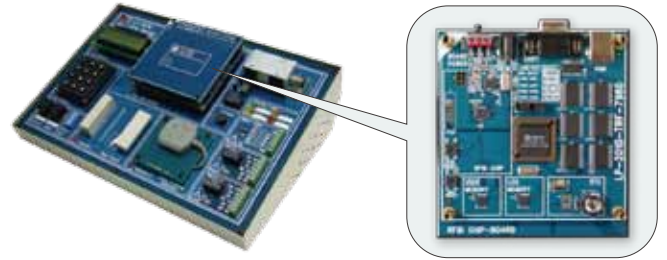
The best getting started kit for educational field



- No need TTL and CMOS devices to do experimental circuits. Saving materials and time.
- Help users learn about practical experiments and basic logic programs quickly without soldering IC components.
- Provide smart INPUT and OUTPUT circuit linkage function.
- Provide practical input control settings. Reveal each gate, IC gate and output linkage results on output circuit.
- Provide the pin of measurement point for convenience to measure various test point virtually.

## LP-2010 RFID Experimental Trainer

Provide 10 experimental modules



- Use the standard controller chip TI TRF 7960, meets ISO 14443A & ISO 15693.
- Built-in RTC (Real Time Clock).
- Provide data storing function with loop design to expand the life time of the memory.
- Support VC, VB, Assembly ... with simple but practical example programs.
- All the example programs are close to real applications.
- Designed as open system, user can realize all the programs clearly.

## GP-6W Green Power Lab

With the portable suitcase design



- Application of MPPT algorithm.
- LCD shows input/out voltage, current and power value.
- DC TO DC CONVERTER Module for learning experiment of output transduction.
- DC TO AC INVERTER Module for learning experiment of output transduction.
- Learn the regeneration use of solar power through Charging Module.
- Learn the regeneration use of solar power through Load Module. EX: LED shining.
- The kit is based on Open Design. User can change operating procedure during experiment.

## uP-2 MCS-51 / AVR / PIC MCU Experimental Board

Applied subjects are included MCS-5X/AVR/PIC16F8XX



- Support 20 or 40 pin MUC.
- Compatible with many brands of emulators.
- System is designed on stand-alone CPU, interface separately.
- Provide 26 circuit units.
- All of the circuits are able to combined with cable wires by users.
- No need to Solder, saving time.
- 385 holes on the board which provide users for extended application or subjective experiments.
- The Power is provided two kinds of input, 9V adapter or DC 9V.

## IWT-5000A Impulse Winding Tester

Non-destructive testing for motor, transformer, inductance



- Testing Voltage: 200V~5000V (±3%)
- Output Energy: 0.25J (Max)
- Inductance Range Of Test Coil: 10μH and above
- Sampling Rate: 8bit / 10ns (100MHz)
- Sampling Memory Depth: 5000 Byte
- Input Resistance: 10MΩ
- Display Measure: 5.6 inch Colored LCD (320 x 234)
- Comparison Measures: Area Size Comparison, DiffZone Comparison, Corona Amount, Comparison Corona Number Comparison

## DSO-3000 Series Digital Storage Oscilloscope

The best getting started instrument



Model	Real-time sample rate	Equivalent sample rate	Memory depth	Bandwidth	Function/Arbitrary Waveform Generator
DSO-3062B	1Gsp/s	50Gsp/s	2.4Mpts	60MHz	----
DSO-3102B	1Gsp/s	50Gsp/s	2.4Mpts	100MHz	----
DSO-3202B	1Gsp/s	50Gsp/s	2.4Mpts	200MHz	----
DSO-3062BS	1Gsp/s	50Gsp/s	2.4Mpts	60MHz	20MHz
DSO-3102BS	1Gsp/s	50Gsp/s	2.4Mpts	100MHz	40MHz
DSO-3202BS	1Gsp/s	50Gsp/s	2.4Mpts	200MHz	40MHz

## LA-2050/2025 Stand-Alone Logic Analyzer Series

Provide the best measurement solution



LA-2025 / LA-2050

Model	LA-2025	LA-2050
Timing Analysis	250MHz	500MHz
State Analysis	200MHz	200MHz
Bandwidth	200MHz	200MHz
Channels	32CH	32CH
RAM Size	2M Bytes	4M Bytes
Storage Depth per Channel	512K bits x 32CH	1M bits x 32CH
Maximum Input Voltage	±15V	±15V
Threshold Range	-4V~+4V	-4V~+4V

## PLA-2532/1016 PC-based Logic Analyzer & Data Logger

Provide the most economical measurement solution



PLA-1016 / PLA-2532

Model	PLA-1016	PLA-2532
Timing Analysis	100MHz	250MHz
State Analysis	100MHz	100MHz
Bandwidth	100MHz	100MHz
Channels	16CH	32CH
RAM Size	256K Bytes	2M Bytes
Storage Depth per Channel	128K bits x 16CH	512K bits x 32CH
Maximum Input Voltage	±5V	±5V
Threshold Range	-4V~+4V	-4V~+4V

## LPP-3030T Programmable DC Power Supply Series

Provide two completely separate power output



- 2 programmable DC outputs: 0.1V~30V, 0.01A~3.0A
- 1 fixed DC output: off/1.8/2.5/3.0/3.3/5, 3A
- Support low-voltage digital circuits
- OVP (Over voltage protection)/OCP (Over current protection) functions.
- V.Set Limit function.
- The resolution of V (voltage)/I (current) can raised up to 10mV/1mA.
- Memorizes up to 10 formats setting of OCP, OVP and V.Set Limit.
- Provides USB interface for PC-Link power scope software.

## mPD-501 DC Electronic Load

The best R&D tool for power



Power	50W*1	Power Read	
Current	0~8A	Range	0~50W*1
Voltage	40V	Resolution	10mV
CC MODE		Modes of Protection	
Range	0~8A	OPP	50W
Resolution	2mA	OCP	8A
Accuracy	0.01%+/-0.1%FC	OVP	40V
CV MODE		Modes of Operation (Max)	
Range	0~40V	Current (CC)	8A
Resolution	10mV	POWER (CP)	50W*1

## Programming & Testing Service

Leap offers comprehensive programming service and well-organized process to ensure each IC quality.

All of the facilities and consumable are produced by us which make our quotation very competitive.

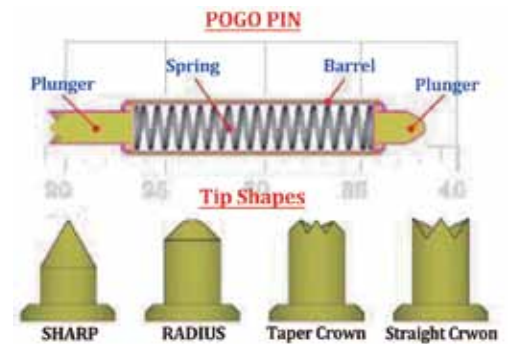


- Support IC Types: eMMC, NAND / NOR / SPI Flash, EEPROM, Microcontroller
- Support IC Packages: BGA, CSP, QFN, WSON, MLF, LQFP, TSOP, SOP, PLCC, DIP.
- IC Marking
- Tape & Reeling
- Dry Packing
- Customized Process
- Programming Facilities: AH-640, AH-480, AH-400, AH-160

## Pogo Pin Socket & Fixture Custom Design

### Features

- Package: BGA, CSP, QFN, WSON, MLF, LQFP, TSOP, SOP, PLCC, DIP.
- Pitch: 0.2~1.27mm
- Life time: 200~500K
- Low Resistence: < 50mΩ
- High Bandwidth: Over 6 GHz
- Current: 1A
- Insulator: Torlon or Peek
- Varied tips design, material, coating, geometry for multi purpose test.
- For manual, Auto-test and Burn In Application.



Please indicate the following info when you send the inquiry:

- Device application
- Testing frequency
- Testing temperature range
- Consumption power
- Open top or clamshell
- Handler type
- Socket for Engineering test only or use for ATE production run as well
- Any specific socket design structure request



## Custom Design & Manufacturing for Component Equipment Capabilities



### Specialized Modularization Type

- Bulk Feeding
- Pick & Place
- Intelligent motion
- Vision Systems
- Temperature Control
- Test Fixture & Socket
- Component Tester / Sorter



# PRODUCT QUICK VIEW

## **AH-480 Series** Automated Programming Equipment The high C/P for production



- High-performance for reel / tray / tube in & out media
- Intelligent Operation
- High-speed up to 3000 / UPH programming system
- Marking machine
- Convenient maintenance
- Powerful operation software
- Supports HDCP programming function
- AOI calibration module-option

## **AH-160M** eMMC Programming Equipment Office automation for eMMC small production



- Ultra-high Throughput: AH-160M is special design for automatic tray-in/out programming solution. The state-of-art robotics deliver 550/UPH at the zero programming time. Moreover, it's no need to stop the machine during change the tray.
- Flexible Ultra-high Programming module: AH-160M build in special eMMC programmer x2 which is able to support 16 reliable and outstanding quality programming.
- Friendly Operation: AH-160M provides easy-to-learn and easy-to-use software and hardware.

## **AIM-101** Automated Ink Marker Supporting 15 Trays Automatically Fed In



- Multi-Tray Feeding: Supporting up to 15 JEDEC trays pre-placed.
- Quick Selection: Supporting 16 sets of configurations for immediate use.
- Processes All In One: Integrating automated feeding, marking, and tray-piling.
- User-Friendly Interface: Equipped with modularized buttons for easy operation.
- Security System: Equipped with standard LED alarm & Emergency button.
- Eco-Friendly: Equipped with easily replaceable paint markers in Gold/Silver.
- UPH up to 6800.

## **ATM-32** Automated Taping Machine For Stand-alone Use and System Integration



- Adjustable track assembly for tape widths from 8 to 32mm.
- User-friendly software assures ease of setup and operation.
- Current operating parameters and count are saved at power down and restored at power up.
- Optional tape-out mark and optical inspection available.
- Seal type: Constant-pressure self-adhesive seal
- Inspection: Out of Carrier, Out of Tape, Empty, Floating, Location Error