

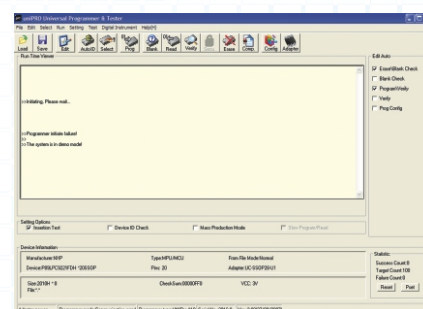
### Hardware Features

- ▶ **Computer Interface**  
USB
- ▶ **Universal Pin Drivers**  
48 Pin ZIF socket with universal 48pin-drivers., No adapter required for DIP devices
- ▶ **Algorithms with machine architecture**  
Constructed around FPGA to achieve ultra-high programming speed.
- ▶ **Super programming speed**  
Programs 89C58 in less than 4 seconds.
- ▶ **Over current & over voltage protection**  
Added on each pin, to protect programmer hardware from destroying, due to bad chip, short circuit and ESD.
- ▶ **User-selectable verification.**  
Select verification voltage, e.g., V<sub>cc</sub>, V<sub>cc</sub> ±5%, V<sub>cc</sub> ±10%. This verification ensures that your device has been programmed properly, preventing failures due to programming errors and ensuring data retention.
- ▶ **Device insertion and contact checks**  
Performs device insertion and contact check before it programs each device & can detect poor pin contact & devices inserted upside down or in the wrong position. This function prevents chip from getting damaged due to operator error.
- ▶ **Remote Laptop Programming**  
No external AC adapter needed for most devices [for Devices having V<sub>p</sub> < 12V]. Works on supply taken from USB port.
- ▶ **Universal PLCC, SOIC, SSOP.. to DIP adapters**  
No need to purchase a new adaptor for different devices of same package.
- ▶ **Over 45 different adapters**  
To support PLCC, SOIC, TQFP, TSSOP & other SMD devices.
- ▶ **Stand Alone Mode**  
Program devices without the computer being connected.
- ▶ **User Set Quantity**  
Quantity can set by the user-Maximum 999 Pcs in Mass Production Mode. If Mass Production Mode & Target count is not set, user can program as many pieces by pressing Repeat Switch on the Programmer.



### Software Features

- ▶ **Support Windows OS**  
WIN 2000/ME/XP/Vista OS/Win 7.
- ▶ **File formats supported**  
Binary, Intel Hex, Motorola S, Tektronix, formats and auto find format.
- ▶ **Identifies the manufacturer and type of E(E)PROMs<sup>#</sup>**  
Many EPROM and Flash memories have a build-in device ID and manufacturer ID. Programmer can read the device ID by selecting a checkbox, to detect the ID and compare its database to determine the chip's correct vendor and product number. This feature is especially useful with second hand chips and devices that have had their part number accidentally (or intentionally) removed (<sup>#</sup> function only applies to 28/32 pin EPROM and Flash memories only.
- ▶ **User-friendly interfaces**  
With pull-down menus, pop-up dialogue box and help.
- ▶ **OTP- security for AT89C5X.**  
Function available for AT89C51/52. Applying this function will disable Re-programming.
- ▶ **Mass Production mode**  
Programmer automatically detects & programs device, you don't need to press any key. Furthermore, in the mass- production mode the system keyboard is automatically disabled, preventing the worker from making any accidental mistakes. For Quantity Production, user can connect 4 UNIPro programmers to a single computer. Quantum users who would like know more about this feature please contact our Customer Support Engineer.



► **Project file save and load**

User can create and save a project file which contains device selection, buffer data and all the programming set-up options. This project file can be called upon at any time for future use, without having to go through the setting up procedure again. Your design file can easily be sent to production department without any operator error.

► **Make your own SMD Adapter**

If you wish to build an adapter on your own, UNIPro Software provides SMD adapter pin swapping tables.

► **Supports all operations**

Such as read, blank check, erase, program, secure, verify and so on.

► **Set addresses intelligently**

Device start address, device end address, from buffer address and so on.

► **Integrated editors**

To modify HEX files, JEDEC files with commands - fill, copy, move, swap, etc.

► **Supports most of the compilers for PLD's in JEDEC format**

ABEL, CUPL, PALASM, OrCAD PLD, PLD Designer and ISDATA

► **Adjustable IC parameters**

Adjustable programming algorithms such as Vpp voltage, and impulse width. N.B - To be used by an experienced user only, etc.

► **Serialization function**

If your devices need individual serial numbers with different increment sequence and initial value, the programmer simply increments the serial numbers in the buffer each time a new device is inserted.

► **Digital IC Tester ^**

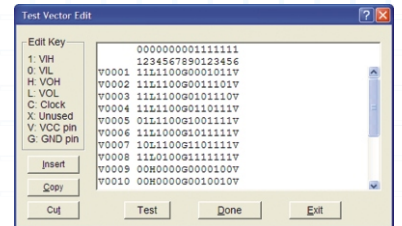
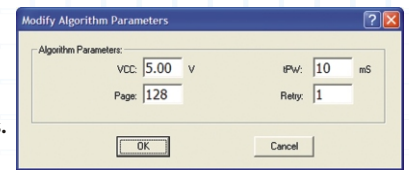
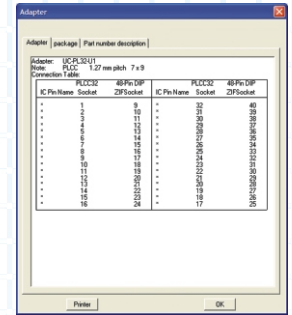
Tests TTL 74xxx 54/74 (LS/HCT/ALS/S/AS/F/..) xxx series. Tests 40XX, 41XX, 45XX CMOS IC's. You can add a new device by entering test vector tables of the new device to be tested.

► **Auto Find Device**

Conducts exhaustive functional tests & finds out of the number of an unknown device (TTL & CMOS).

► **Add on's**

Built in 8- channel, logic analyzer, Frequency generator 125Khz, & Frequency meter upto 100KHz.



**Specifications**

- Programmer dimensions : 192mm L x 187mm W x 30mm H
- Power supply : Input : AC 100 to 240V Output : 9V / 1.5A.
- Weight : 262gms

**Device Support**

MULTIPRO 99U	EPROM / EEPROM's	SPROM's	MCU's	PLD's	SRAM / DRAM's	IC Tester	Total Device
	8087	6457	7005	2487	495	335	24876
For a Detailed device support list Please visit <a href="http://www.ucmicrosys.com">www.ucmicrosys.com</a>							Ver.UNIPro 4.20*

**After Sales**

The Multipro 99u has additional safety features such as a built-in current limit function. This prevents damage from faulty chips during the programming cycle. As a result we have provided a 1 year limited warranty.

**Software update**

Free software updates available via web at [www.ucmicrosys.com](http://www.ucmicrosys.com)

**Programmer Package Contents**

Standard package contains the following :

- A programmer
- A USB connecting cable
- An AC adapter
- Installation software CD
- User's Guide
- Registration card

**System Requirements**

The minimum requirements are as follows:

- A PC, IBM or compatible, desktop or laptop, with one USB port
- Win 2000/ME/Xp/Vista OS/Win 7
- CD-ROM driver
- Hard disk of at least 100MB of spare capacity



Optional socket adapters to accommodate PLCC, SOIC, TQFP and TSSOP package types are also available.