SPECIALIZE IN LEAD-FREE

FONTON

MAKE BGA SOLDERING & DESOLDERING EFFICIENT

BGA-936USB

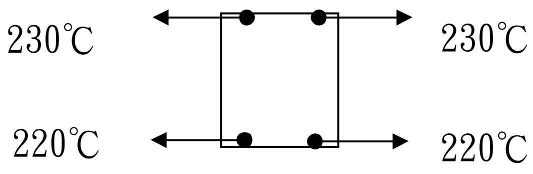
1. Reflow Feature

- Adopt HIGH VOLUME (250l/min),
  LOW PRESSURE (0.22kg/cm^2),
  LOW TEMP. REWORK
  (220°C Sn/Pb), (240 °C Sn/Ag/Cu)

completely guarantee BGA chips electricity and soldering quality.

- **THE SOLE DESIGN FOR ADJUSTABLE HOT AIR FORCIBLE GUIDE** (patented in Taiwan and USA).

This design can heat the chips around with uneven temp. as below photo. When the chips on the board dissipate heat with uneven temperature distribution, the advantage of the nozzle can adjust the chips temperature on the PCB. This is the point that other brand can't solve the problems.



- **EXTRA LARGE BOTTOM PREHEATING SYSTEM (The heat area is 360mm x 260mm)**

It can be divided into 3 zones, which can be heated synchronously or independently. This can completely solve the bend or twist problem due to the uneven heating.

- **QUICK COOLING SYSTEM:**

Drastically reduce cooling time by 50% than other brand.

- **SUPER LARGE PCB FIXTURE:**

Standard Model: P.C.B. Size Capacity is 600 x 455mm.
Option Model: P.C.B Size Capacity is 600 x 680mm.

- **VERY CLOSE TO 100% GOOD SOLDERING RATE:**

  Take Intel 82845G or Intel 82810EB for example, the process of rework successful rate is close to 100%. (Bad solder balls and bad chip electricity feature to the exception.)

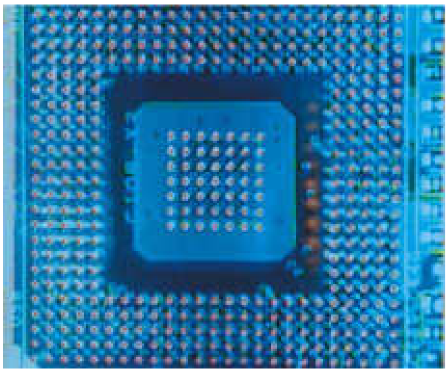
- **LEAD-FREE SOLDERS PROCESS:**

  To cooperate with the lead-free soldering process, BGA-936USB can add Nitrogen Reflow equipment to solve the lead-free solders strict requirement.

2. Different Color Alignment System

- **FIRST DEVELOPED DIFFERENT COLOR ALIGNMENT SYSTEM:**

This design is for μBGA, Tiny BGA, CSP, Fine pitch BGA, LLP, CPU socket and make them more clear and accurate.



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- **SUPER BIG PRISM DESIGN (52*52MM):**
It can process on bigger BGA parts like socket 478 and LGA775 etc

- **COAXIAL ALIGNMENT SYSTEM:**
To avoid forming the part’s displacement from moving alignment, BGA-936USB has applied the coaxial alignment system to make both the part’s soldering and alignment performed in identical position.

  There’s no need to do alignment on one side and soldering on the other side. This can completely avoid aligned IC chips deviation due to the movement.

- The available BGA sizes vary from 1mm to 70 mm and amplification factor from 10X to 50X.

- The thoughtful micro-tuning design can perform micro tuning in X, Y axis direction, Θ as well in vertical direction.

3. Operational Feature

- **PC BASED INDUSTRY LEVEL MICROPROCESSOR SYSTEM WITH LCD PANEL**

accurate and stable processed system. All soldering parameters can be set up, saved and equipped with USB Mobile Disk. All the process can be recorded without extra PC or equipment connection. It can be independently operated.

- **HAVE 99 SETS OF PROGRAM MEMORY MODE:**

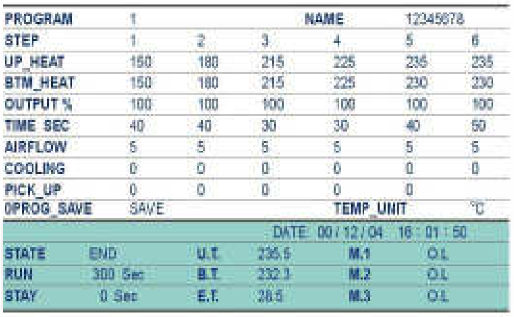
This can completely solve the reset program problem due to BGA chips difference and will completely save time and enhance operational efficiency.

- **SIMPLE OPERATION MODE:**

All parameter can be directly completed in the panel without using any other facility. It is also equipped with extra movable remote controller for easy operation. It is easy to execute by one-touch operation.

- **MICROPROCESSOR PROGRAM CONTROL**

All temp. profile can be memorized and can be done by general operator. Easy to learn for profile setting. Training time can be completed within one hour.



PROGRAM	1			NAME	12345678	
STEP	1	2	3	4	5	6
UP_HEAT	150	180	215	225	235	235
BTM_HEAT	150	180	215	225	230	230
OUTPUT %	100	100	100	100	100	100
TIME SEC	40	40	30	30	40	50
AIRFLOW	5	5	5	5	5	5
COOLING	0	0	0	0	0	0
PICK_UP	0	0	0	0	0	
0PROG_SAVE	SAVE			TEMP_UNIT		℃
			DATE: 00 / 12 / 04 16 : 01 : 50			
STATE	END	U.T.	236.5	M.1	O.L	
RUN	300 Sec	B.T.	232.3	M.2	O.L	
STAY	0 Sec	E.T.	28.5	M.3	O.L	

Clear Temperature Parameter List

- **3 SETS OF THERMOCOUPLE SENSORS**

can measure the heating characteristic of BGA and P.C. board directly. Therefore, the reflow profile can be 100% set up. The operator can also directly set up the parameters.

- Quickly and easily movement, accurate location with aviation industrial precision linear motion guide.

- **NO NEED FOR EXTRA AIR COMPRESSOR.**

For movement, it is very convenient, simple and efficient as long as there’s AC power.

- **AUTO PICK-UP VACUUM FUNCTION**

can work with profile on microprocessor and can accurately reflow BGA or take BGA chips apart.

- Equipped with XYZ axis micro-adjustment. Nozzle can be rotated freely with a range of 360° . This is the most fitted for different PC board and future extension.

- Utilization of hot air forcible guide, nozzle will match with PC Board while heating. Totally uninfluenced to other components on PC Board.

4. Operational Efficiency (productivity analysis)

LEADED:

- Soldering: ex. Intel 82845G or 82810EB, the min. soldering time is 120s/PC, normally soldering time is 180s/PC (the cleaning time for tin residue is not included).
- Desoldering: ex. Intel 82845G or 82810EB, the min. desoldering time is 90s/PC, normal desoldering time is 120s/PC (If the chips were not used any more, the speed can be even faster.)

LEAD FREE

- Soldering: ex. Intel 82845G or 82810EB, the min. soldering time is 300s/PC, normally soldering time is 360s/PC (the cleaning time for tin residue is not included).
- Desoldering: ex. Intel 82845G or 82810EB, the min. desoldering time is 250s/PC, normal desoldering time is 300s/PC (If the chips were not used any more, the speed can be even faster.)

5. Repair and maintenance

- All BGA-936USB parts are certified by ISO9001 as module design. As doing the repair, the only thing is to replace the broken parts. The suspension is less than 30 minutes.

- SIMPLE MAINTENANCE: all parts are based on non-maintenance as top policy. (Except for the rail, this potion should be added oil every month) This is for timesaving and cost saving.

6. After Service

- Provide professional BGA reflow and reballing technique educational training, temperature profile setting and worldwide BGA chips soldering feature experience share. (Fonton is established member of SMT and lead-free association in Taiwan, all Fonton service staff were with SMT, BGA related training and with enthusiastic service attitude).

- All Fonton products are guaranteed for one-year after-service. (Not including consumable).

- Fonton is an ISO 9001 certified manufacturer and imported company. There're different kinds of product working machine and accurate testing instruments. Any parts replaced, specific fixture and tech support can be completely supported by us without abroad company support. This is for reaching economical, fast and efficient requirement.

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BGA-936USB

CUSTOMERS LIST FOR REFERENCE

acer
ADVANTECH
ALi

ATi
ATMEL
ASUS

Chroma
DELTA
D-Link

ECS
FLEXTRONICS
FOXCONN THE ART OF MORE

GIGABYTE
HITACHI Inspire the Next
lenovo

MSI Link to the Future
nVIDIA

Panasonic
SAMSUNG
SIEMENS

SiS
SPIL
TEXAS INSTRUMENTS

tyco
VIA we connect
wistron

PARTS OF BGA-936 CUSTOMER LIST FOR REFERENCE

MOTHERBOARD
ASUSTEK COMPUTER INC.
FOXCONN ELECTRONICS INC.
FLEXTRONICS
WISTRON INFOCOMM CORPORATION
GIGA-BYTE TECHNOLOGY CO., LTD.
MICRO-STAR INT'L CO., LTD.
ELITEGROUP COMPUTER SYSTEM CO., LTD
AOPEN INS
AZZA PRO TEAMCOMPUTER CORPORATION
ABIT COMPUTER CORPORTION
SOLTEK COMPUTER INC.
DFI INC.
ACORR ELECTRONICS CO., LTD
EPOX COMPUTER CO., LTD
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TYAN COMPUTER CORP.
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FABIA TECHNOLOGIES
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SIRTEC INTERNATIONAL CO.,LTD
HOSONIC CO,LTD
GTA ELECTRONICS CO.,LTD.
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PARTNER TECH CORP
AMPAK TECHNOLOGY INC.
LANTECH COMPUTER COMPANY
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