

Service Manual

AX-100 (Black)



TOWA Business Precision Electronics (Zhong Shan) CO., LTD.

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. Product Specification

1 . General Specification

1、 Front display 8 digits, 8-segments LED(Including decimal point)

Your cash register has one 8-segments displays for the operator. It displays prices, subtotals, change due, status codes and so on. This display can show up to eight digits.

2、 Rear display: as same as the front display

3、 Printer

SII CO.,LTD single-station thermal printer

Model : LTP 8235B

Specification: (Actual use value)

Drive voltage: 7V

Printing column: Symbol Max 24(12x24)

Printing speed: Max 10 lines/sec ; Average 7 lines/sec

Paper roll size: 56.5-57.5 mm (2.22-2.26 inches)

Sensor : Lack of paper sensor, over hot sensor

4、 Port A RS232 Port , adopt the RJ45 terminal (male port) , RS232 Port can be connected to communicate with the PC and the Bar code reader.

5、 Power supply adopt single-route output transformer (input 220V AC or 240V AC $\pm 10\%$, 50Hz , output AC11V 2A)

6、 Save data dry battery.

7、 Keyboard

Type : Raised type only

Key number : 1 feed key

There are 38 free keys can be set, The CASH TEND key is a double size key,

each key has been preset a function with silk-screen name and attaches key cap

Control lock : 5 different modes : P , L , R , X , Z

8、 Drawer Model N26 or NP33

9、 Software supports language for printing and display English

2 . Function Specification

- 1、 Support the setting of date、 time、 machine number、 receipt number、 setting password、 training password、 report number and so on
- 2、 Department number 16 (there are 8 direct departments number , by pressing the Department Shift Key the department number can be achieve 16)
 - 1)Name 16 characters
 - 2)Unit price Max can be set up to 8 digits (include decimal) when in sale can be manually input 7 digits (include decimal) ,
 - 3)Flag Flag 1 Assign the department to a group (0-9).
Flag 2 Single / more item sale , +%、 -% allow and negative department
Flag 3 High amount lock out (HALO) (It's only effective for the manually input price)
Flag 4 Set up departments application tax rate info Tax1,Tax2,Tax3,Tax4
 - 4)Other Support periodical report and daily report , when the department single transaction amount exceeds 9 digits then a warning will give out , quantity 8 digits (4 integer , 4 decimal)
- 3、 PLU number 200
 - 1)Name 16 bytes ,
 - 2)Unit price Max can be set up to 8 digits (include decimal) when in sale can be input 7 digits (include decimal)
 - 3) Linked department 1 byte (1 - 16)
 - 4)Bar code Max 13 digits
 - 5)Other Support periodical report and daily report , when single transaction amount of department exceeds 9 digits then a warning will give out , quantity 8 digits(4 integer , 4 decimal)
- 4、 -% 1 , +% 1, - 1
- 5、 Tax rate You can set up to 4 types of tax to be added to each item (VAT or ADD tax or tax table)
- 6、 Clerk 10
 - 1)Name 12 bytes
 - 2)Password 4 digits
 - 3)Clerk report content :net sale ,cash amount ,check amount ,credit card amount ,VOID amount

(include return and VOID) , Non-add sale amount

7、 LOGO Max 5 lines , each line max 24 bytes

8、 MESSAGE Max 5 lines , each line max 24 bytes

9、 Support main flag setting

10、 Support keyboard setting

11、 Support transaction name setting

12、 Report function

Department group sales report (read report)

Full department sales report (read report)

Individual PLU sales report (read report)

Full PLU sales report (read and reset report)

Individual PLU link department sales report (read report)

Full PLU link department sales report (read report)

Individual clerk sales (read and reset report)

Full clerk sales (read and reset report)

Full report (read and reset report)

Drawer report (read and reset report)

Cash Declaration report (daily reset report)

Hourly Report

Training Report

13、 Payment type

Supports Cash、 Check、 Credit card、 Keep accounts、 Foreign currency and Coupon payment

14、 Other functions

Cancel operation

VOID operation

Return merchandise operation

Copy receipt

Time or date display

Report count function

X1 : Daily read report

X2 : Periodical read report

Z1 : Daily reset report

Z2 : Periodical reset report

Non-sales count

Half-height fonts print

Clerk login and logout function

Single-item sales function

Multiplication function (number*price mode)

Calculator function(addition, subtraction, multiplication, division)

Department and PLU repeat entry function

Barcode enter and look for PLU price (PLU number and Barcode number input)

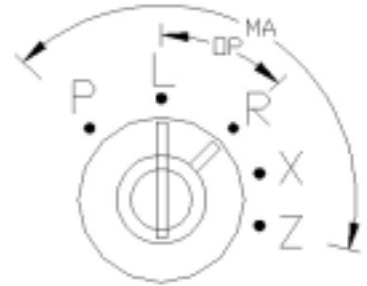
RA, PO operation

Electronic journal function

. Initialization

1 . Control lock and its function

The control lock allows you to change the cash register mode. Your cash register has 5 different modes. Conversion mode is the mode in which you can insert manager key (MA) or operator key (OP) in the control lock and shift to any position you need to carry out operation. The manager key can choose any mode while the operator key can only choose “L” or “R” position.



The following table shows the modes the cash register is equipped with.

| Mark | Mode Name | Functions |
|----------|---------------|--|
| P | Program mode | Used to programming various cash register functions. |
| L | Lock mode | Used to turn off the cash register. This mode disables all operations. |
| R | Register mode | Used for normal checkout operations. |
| X | Read mode | Used to print sales information reports. |
| Z | Reset mode | Used to read and reset the sales informant |

2 . System clear

Before programming the cash register, you must clear the cash register’s memory

Notice

* Please do not perform the following steps during programming or normal operation. These steps will clear all of the settings you have programmed and erase all sales information in the register.

1. Turn the manager’s key to the “L” position.
2. Remove the power cord from the outlet.
3. Turn the manager’s key to the “P” position.
4. Plug the power cord while pressing the **CLR** Key and hold the key down for at least two seconds. When you release the key, “1” will appear in the display. At this point, the register has been initialized.

Notice : These steps will clear all of the settings you have programmed and erase all sales information in the register.

3 . System reset

It is possible at some point in the programming or operation of the cash register due to a wrong entry to cause the system to go into a loop. Use the following sequence to return to an operating mode.

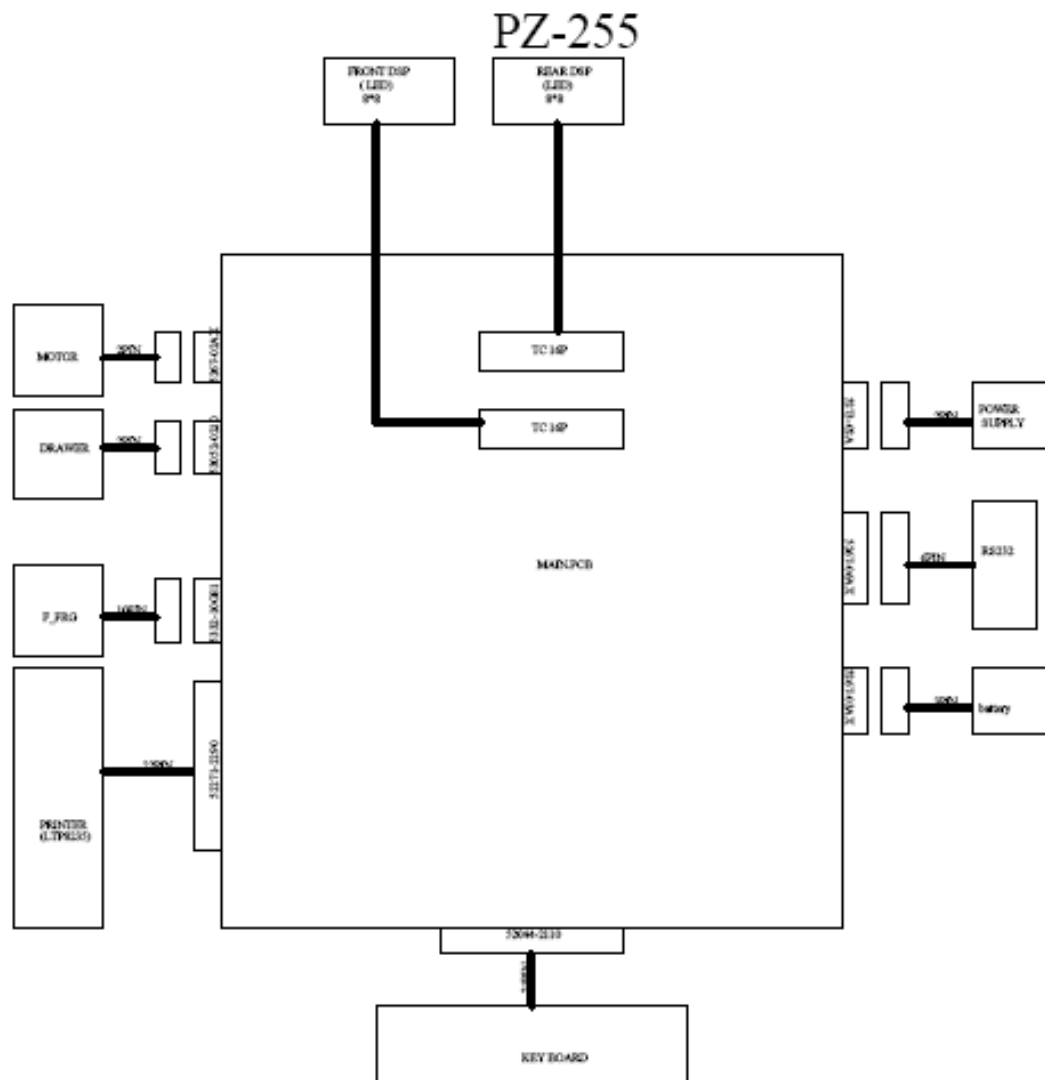
Notice

* Current transaction data will be lost, but, you will not lose any of the program or sales data. The only data lost will be any sale not yet finalized by a method of payment.

1. Turn the manager’s key to the “L” position and remove the power cord from the outlet;
2. Turn the manager’s key to “P” position;
3. Plug the power cord into the outlet;
4. Turn the manager’s key to “R” position.

Note : Current transaction data will be lost, but, you will not lose any of the program or sales data.

. Module connection diagram



. Circuit instruction

1 . Power supply circuit

This cash register power is supplied by transformer , Input : 220V AC or 240V AC $\pm 10\%$ /50Hz 0.15A , Output : AC11V/2A.

1-1, +VCC : As shown in **Fig.1** , AC11V power supplied by transformer is input to mainboard through PN4 terminal ,After commuting, it will get the stable DC voltage +VCC (DC 15V).

1-2, +VCC : +13.1V ~ 16.8V. Buzzer work voltage.

1-3, +5V : As shown in **Fig.1**, After the +VCC is converted by DC/DC chip IC2 (7805) , it will

output the steady DC+5V voltage which supplies for LED、 COM、 CPU、 Flash and other logic chips.

1-4、 +VHH :As shown in **Fig.2** ,After the +VCC converted by DC/DC chip IC3(PQ1CG3032FZ), it will output +VHH voltage which provides to the printer.

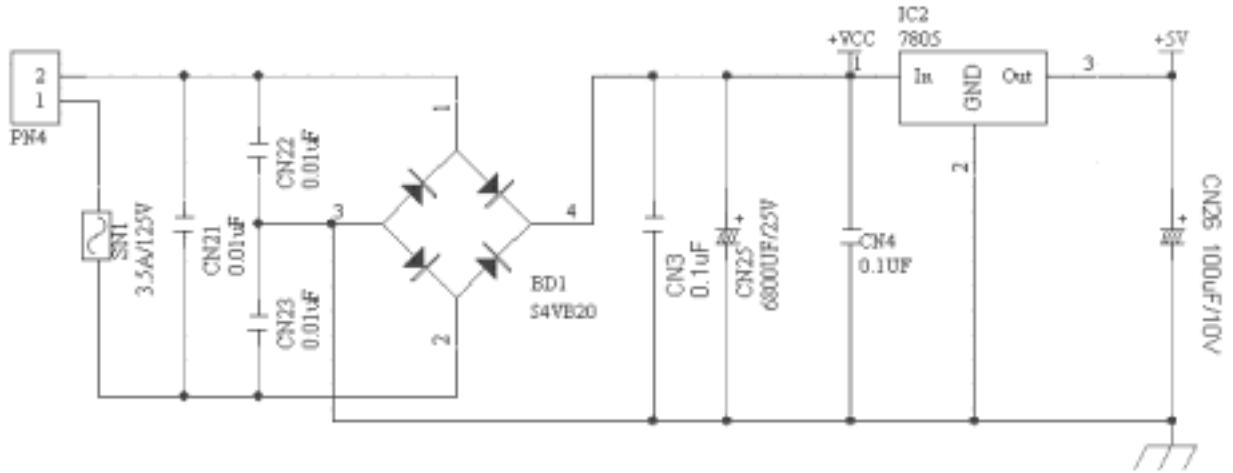


Fig.1

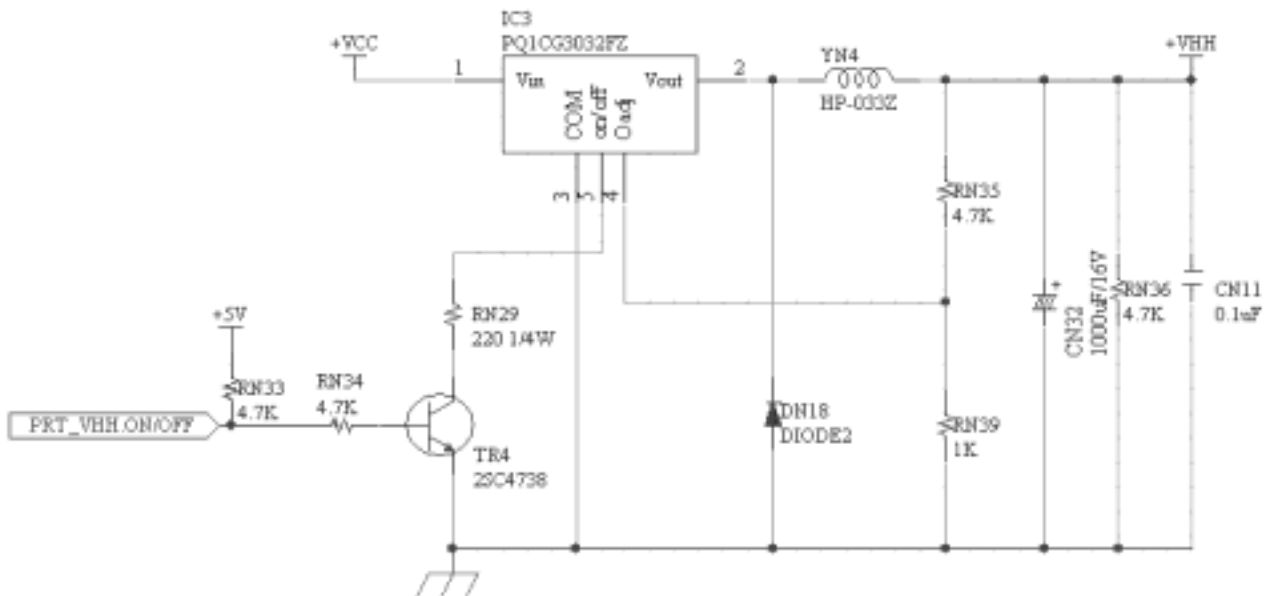


Fig.2

1-5、 Battery backup circuit

The cash register adopts 4.5V dry battery , As shown in **Fig.3** , when power is on , DN17 close , Vmm voltage is supplied by +5V , The battery is charged up at this time. When power supply shuts off , DN19 and DN20 close but DN17 open , The battery discharges to supply the voltage to

Vmm so as to preserve RAM and CPU data. The BT signal is connected to CPU I/O port for checking the voltage of the battery.

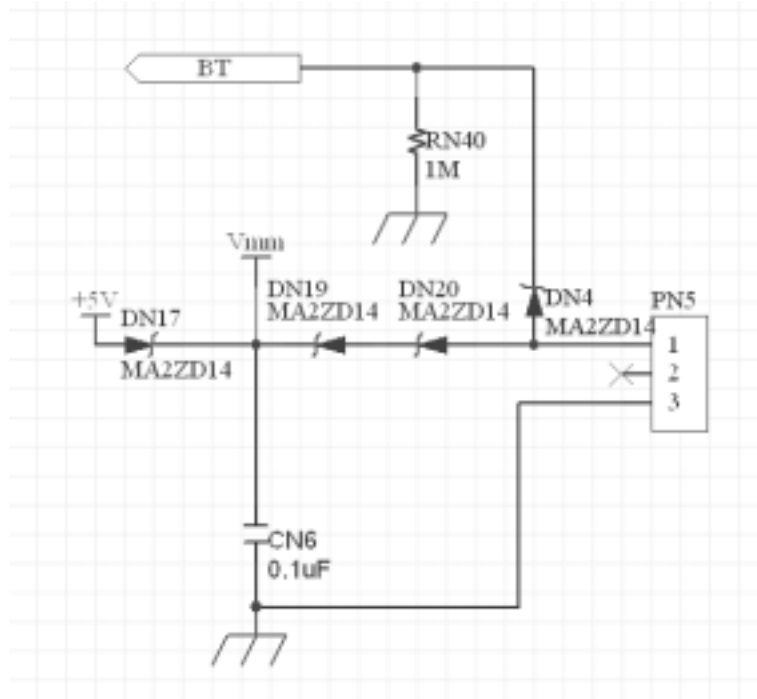


Fig.3

2 . Reset and power failure circuit

As shown in Fig.3 , after the machine power on,the IC4 (S-80846) output high level , After the high level signal pass through the transistor circuit, then the reset signals of the CPU(/RESET) come into being. Because of the CN27 effect , the CPU/RESET signal will be 6 ms later than (/RESET) signal.

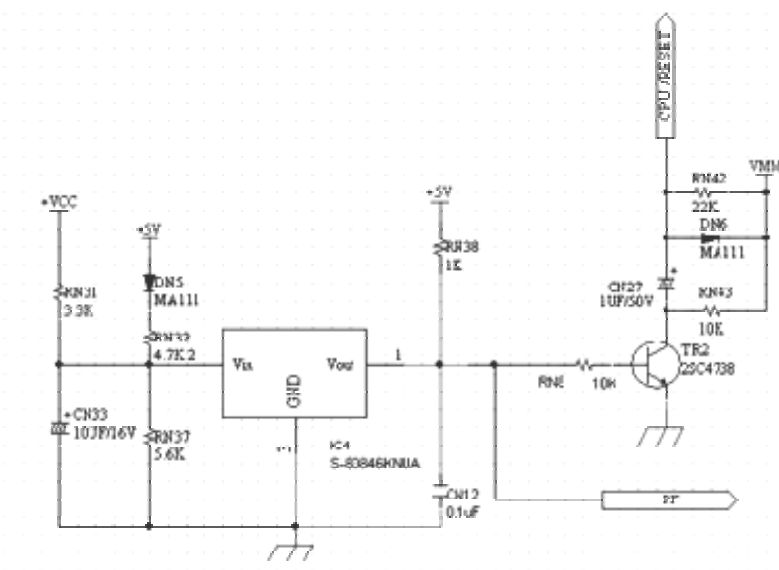


Fig.4

As shown in **Fig.5** ,after power off ,When the IC4(S-80846)input voltage below 4.7V ,Vout output low level ,At this time the PF signal comes into being ,CPU will execute power off process.

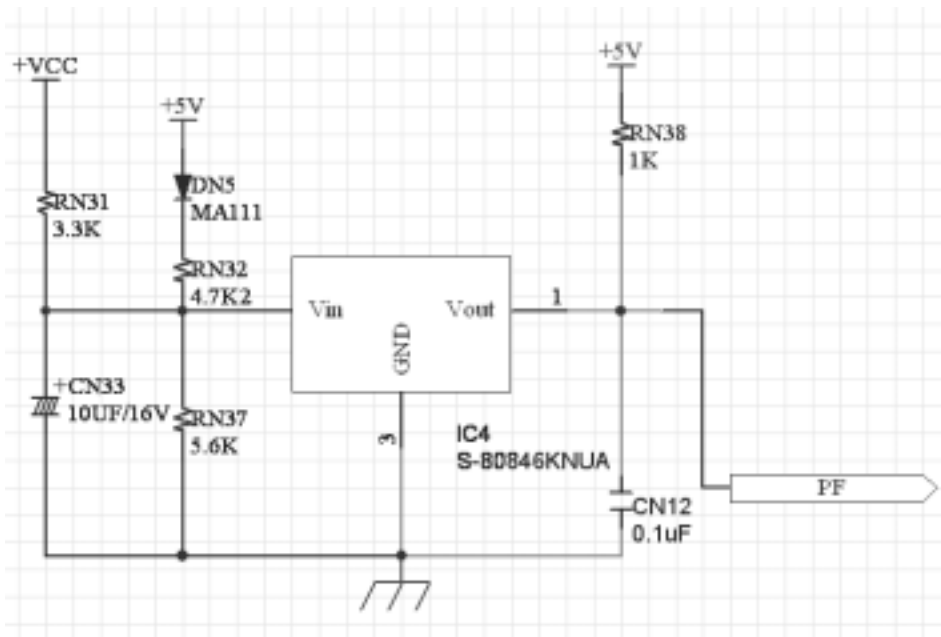


Fig.5

3 . Front display control and keyboard scan circuit

This cash register front display adopts 8 digits(DN1-DN2),8 segments LED, As shown in **Fig.6** , The front display LED of voltage is provided by +2.2V+2.4V.

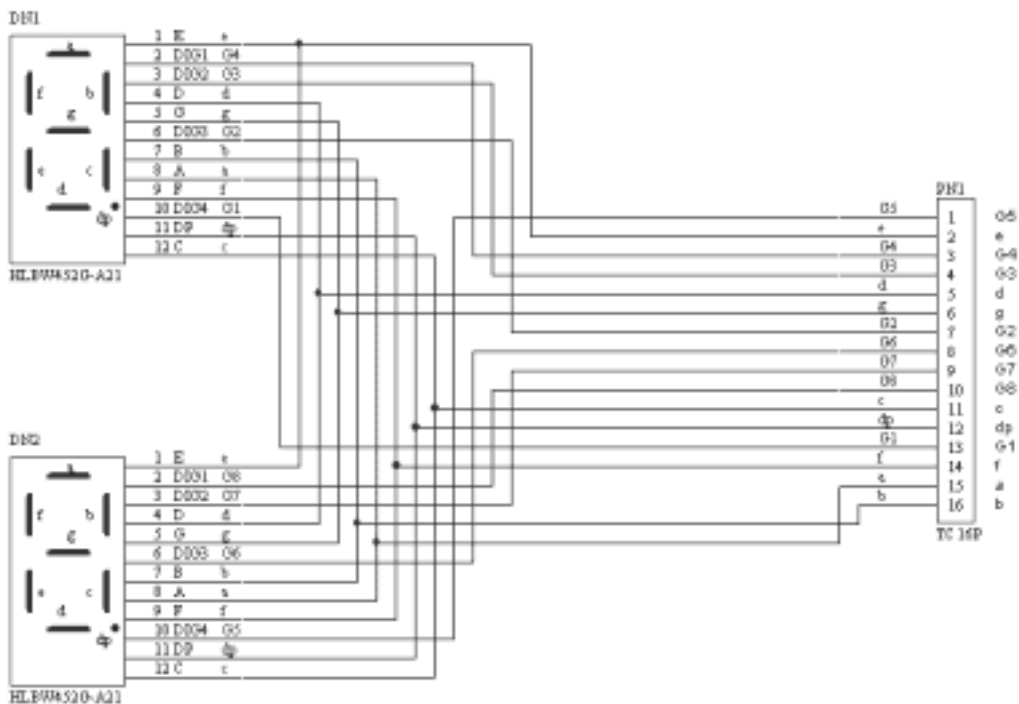


Fig.6

As shown in **Fig.7**, this cash register keyboard is line- row scanning type keyboard, it adopts low electricity level signal to scan (KS1-KS9) lines. Return signal by (KR1-KR5)lines retrace, C7、 C5、 C4、 C3、 C2、 C1 are the lines used to scan P、 R、 X、 Z lock signal, C6 is common signal back line by lock.

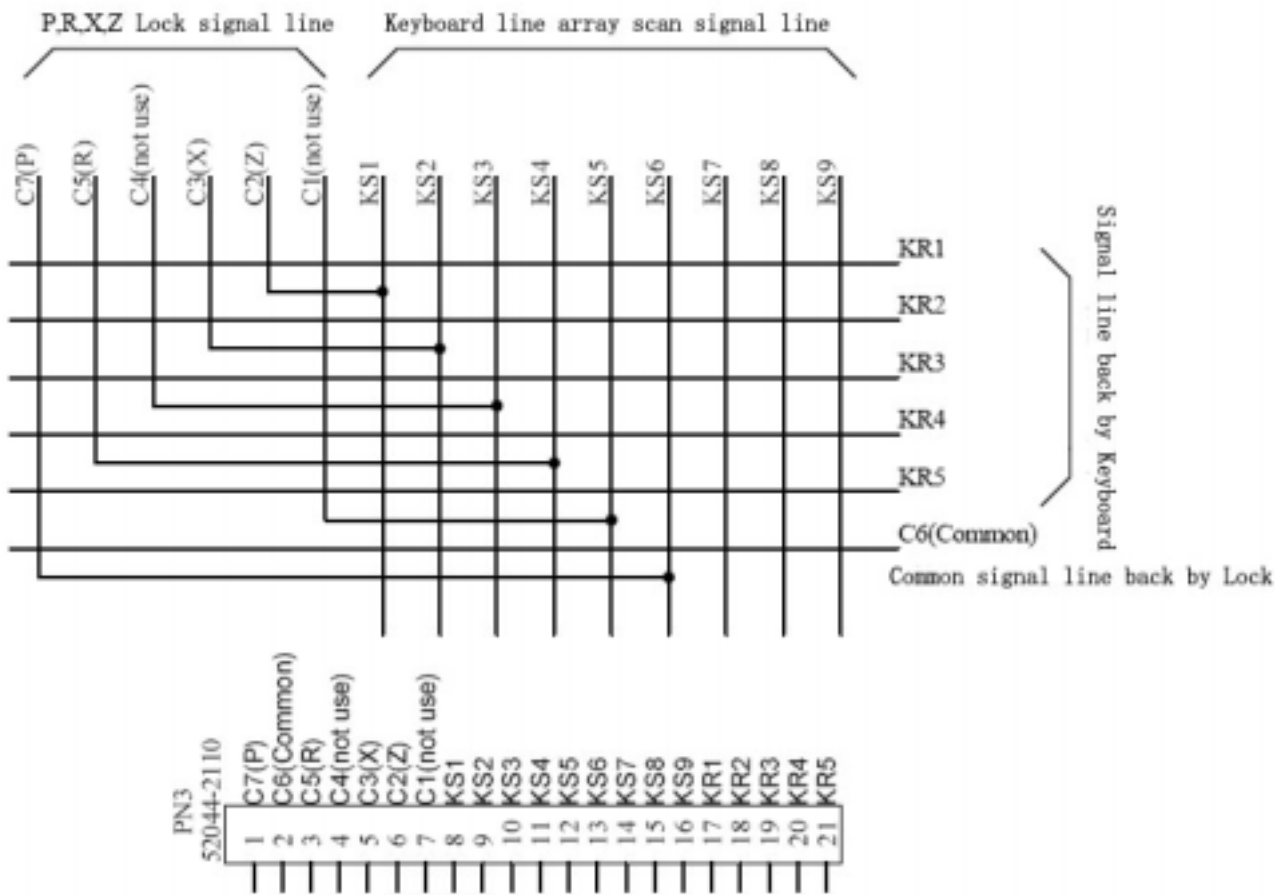


Fig.7

4 . Rear display control circuit

As shown in **Fig.6**, this cash register front display adopts 8 digits(DN1-DN2),8 segments LED, The rear display LED of voltage is provided by +2V+2.2V。 G1-G8 are selection signals, sa-sg、 dp are segment signals.

5 . Print circuit

This cash register uses thermal printer ,As shown in **Fig.9** , +VHH provides drive voltage for the internal motor of the printer , +5V provides drive voltage for heating the printer head , The printer work is directly controlled by the CPU Port。

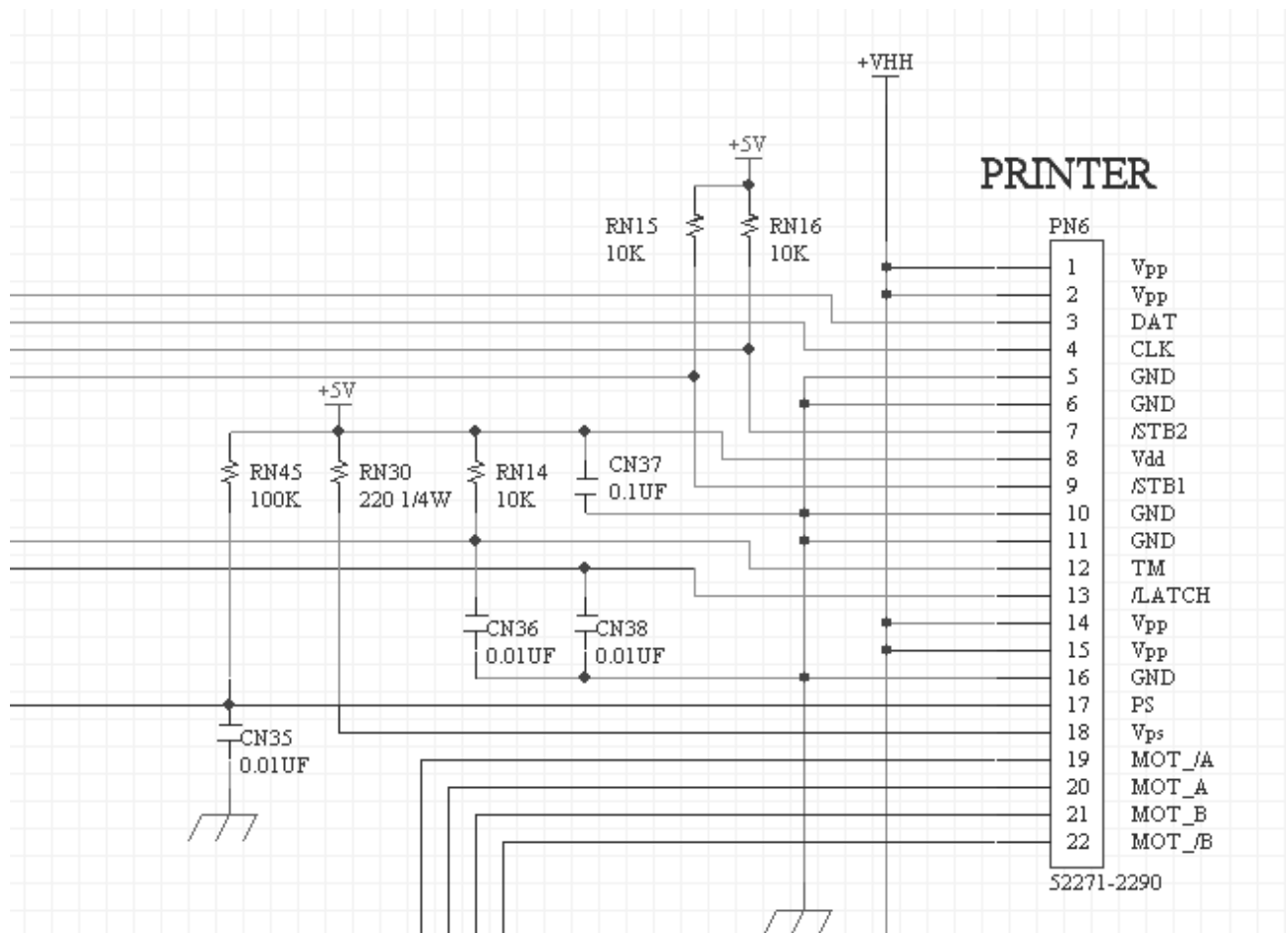


Fig.9

6 . Communication circuit

As shown in **Fig.10** , this cash register adopts RJ45 connection Port , IC1 (MAX202SE) is used to convert level between TTL/COMS and the RS232 , thus achieve the COM communication.

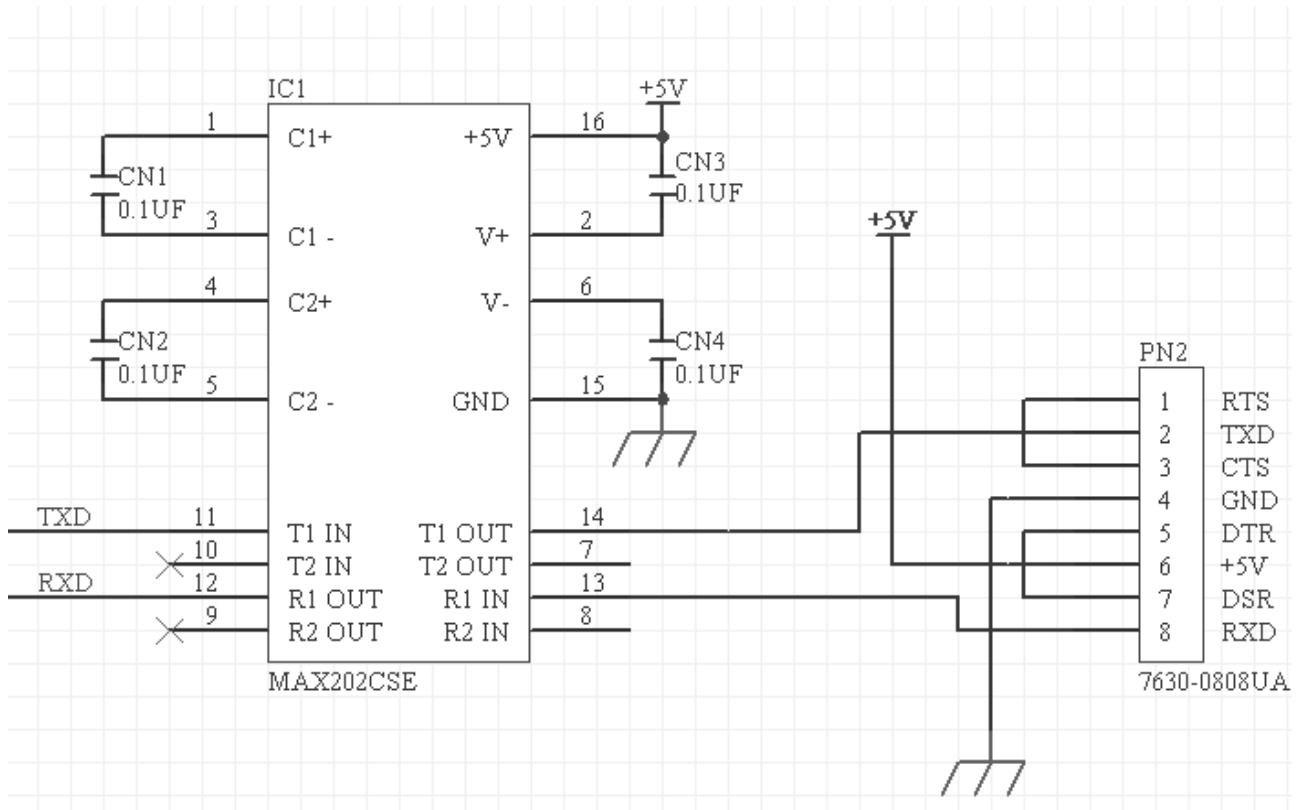
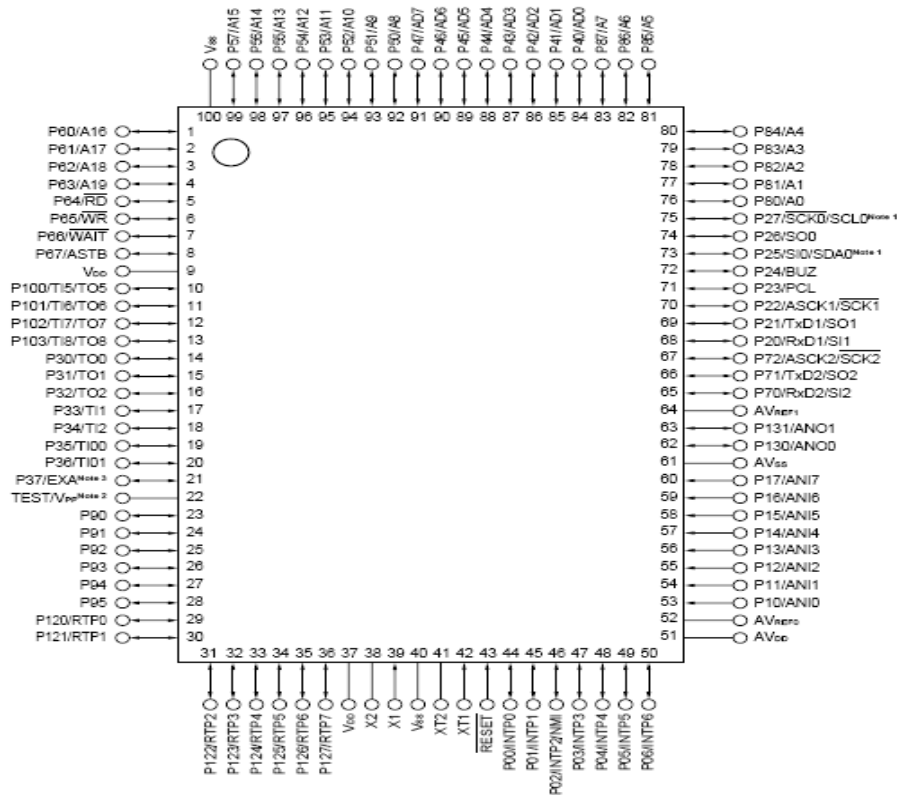


Fig.10

7 . CPU (IC1) Resource allocation

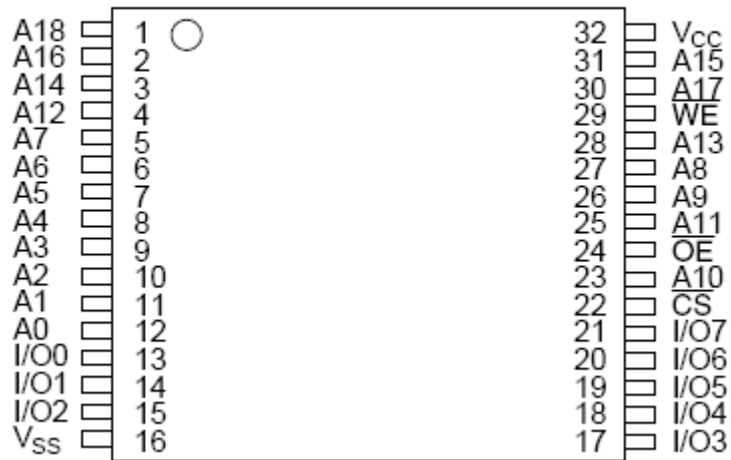


| PIN NO | PIN NAME | I/O | DESCRIPTION | PIN NO | PIN NAME | I/O | DESCRIPTION |
|--------|----------|-----|-------------|--------|----------|-----|----------------|
| 1 | A16 | I/O | A16 | 21 | EXA | I/O | KS9 |
| 2 | A17 | I/O | A17 | 22 | Vpp/TEST | | |
| 3 | A18 | I/O | A18 | 23 | | I/O | LED_a |
| 4 | A19 | I/O | A19 | 24 | | I/O | LED_b |
| 5 | /RD | | /RD | 25 | | I/O | LED_c |
| 6 | /WR | | /WR | 26 | | I/O | LED_d |
| 7 | /WAIT | | no use | 27 | | I/O | LED_e |
| 8 | ASTB | | no use | 28 | | I/O | LED_f |
| 9 | VDD1 | | | 29 | RTP0 | I/O | PRT_M.A |
| 10 | TI5/TO5 | I/O | KS1 | 30 | RTP1 | I/O | PRT_M.A\ |
| 11 | TI6/TO6 | I/O | KS2 | 31 | RTP2 | I/O | PRT_M.B |
| 12 | TI7/TO7 | I/O | KS3 | 32 | RTP3 | I/O | PRT_M.B\ |
| 13 | TI8/TO8 | I/O | KS4 | 33 | RTP4 | I/O | PRT_DST1 |
| 14 | TO0 | I/O | AS18 | 34 | RTP5 | I/O | PRT_DST2 |
| 15 | TO1 | I/O | AS19 | 35 | RTP6 | I/O | PRT_VHH.ON/OFF |
| 16 | TO2 | I/O | AS20 | 36 | RTP7 | I/O | DRAWER |
| 17 | TI1 | I/O | KS5 | 37 | VDD2 | | |
| 18 | TI2 | I/O | KS6 | 38 | X2 | | 12.288MHz(OUT) |
| 19 | TI00 | I/O | KS7 | 39 | X1 | | 12.288MHz(IN) |
| 20 | TI01 | I/O | KS8 | 40 | GND | | |

| | | | | | | | |
|----|------------|-------|----------------|-----|-----------|-----|-----------|
| 41 | XT2 | | 32.768KHz(OUT) | 71 | PCL | I/O | no use |
| 42 | XT1 | | 32.768KHz(IN) | 72 | BUZ | I/O | BUZZER |
| 43 | /RESET | | RESET | 73 | SI0/SDA0 | I/O | PRT_LATCH |
| 44 | INTP0 | I/O | EU/JP | 74 | SO0 | I/O | PRT_DAT |
| 45 | INTP1 | I/O | PRT_PS | 75 | SCL0/SCK0 | I/O | PRT_SCKO |
| 46 | INTP2/NMI | I/O | POWER FAIL(PF) | 76 | A0 | I/O | A0 |
| 47 | INTP3 | I/O | no use | 77 | A1 | I/O | A1 |
| 48 | INTP4 | I/O | UPDATE KEY | 78 | A2 | I/O | A2 |
| 49 | INTP5 | I/O | UPDATE | 79 | A3 | I/O | A3 |
| 50 | INTP6 | I/O | F_/RESET | 80 | A4 | I/O | A4 |
| 51 | AVDD | | | 81 | A5 | I/O | A5 |
| 52 | AVREF0 | | | 82 | A6 | I/O | A6 |
| 53 | ANI0 | Input | KR1 | 83 | A7 | I/O | A7 |
| 54 | ANI1 | Input | KR2 | 84 | AD0 | I/O | D0 |
| 55 | ANI2 | Input | KR3 | 85 | AD1 | I/O | D1 |
| 56 | ANI3 | Input | KR4 | 86 | AD2 | I/O | D2 |
| 57 | ANI4 | Input | KR5 | 87 | AD3 | I/O | D3 |
| 58 | ANI5 | Input | KR6 | 88 | AD4 | I/O | D4 |
| 59 | ANI6 | Input | PRT_TH | 89 | AD5 | I/O | D5 |
| 60 | ANI7 | Input | BT | 90 | AD6 | I/O | D6 |
| 61 | AVSS | | | 91 | AD7 | I/O | D7 |
| 62 | ANO0 | I/O | LED_g | 92 | A8 | I/O | A8 |
| 63 | ANO1 | I/O | LED_h | 93 | A9 | I/O | A9 |
| 64 | AVREF1 | | | 94 | A10 | I/O | A10 |
| 65 | RXD2/SI2 | I/O | RXD1 | 95 | A11 | I/O | A11 |
| 66 | TXD2/SO2 | I/O | TXD1 | 96 | A12 | I/O | A12 |
| 67 | ASCK2/SCK2 | I/O | no use | 97 | A13 | I/O | A13 |
| 68 | RXD1/SI1 | I/O | RXD | 98 | A14 | I/O | A14 |
| 69 | TXD1/SO1 | I/O | TXD | 99 | A15 | I/O | A15 |
| 70 | ASCK1/SCK1 | I/O | no use | 100 | VSS2 | | |

8 . RAM (IC3)

HM628512BLTT Series



| Pin | Function |
|-----|----------|
|-----|----------|

| | |
|-----------|----------------|
| A0 to A18 | Address Inputs |
|-----------|----------------|

| | |
|--------------|---------------------|
| I/O0 to I/O7 | Data Inputs/Outputs |
|--------------|---------------------|

| | |
|------------------------|-------------|
| $\overline{\text{CS}}$ | Chip Select |
|------------------------|-------------|

| | |
|------------------------|---------------|
| $\overline{\text{OE}}$ | Output Enable |
|------------------------|---------------|

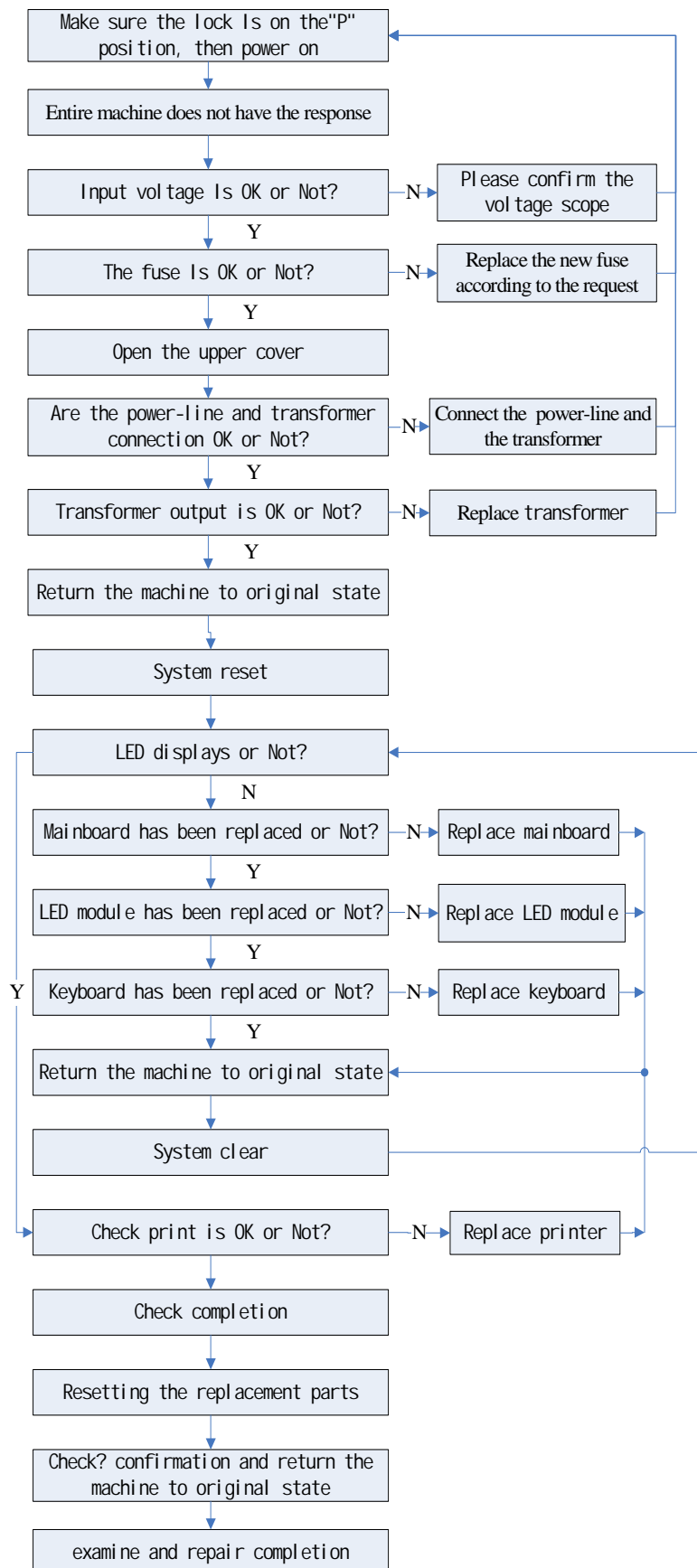
| | |
|------------------------|--------------|
| $\overline{\text{WE}}$ | Write Enable |
|------------------------|--------------|

| | |
|-----------------|--------|
| V _{SS} | Ground |
|-----------------|--------|

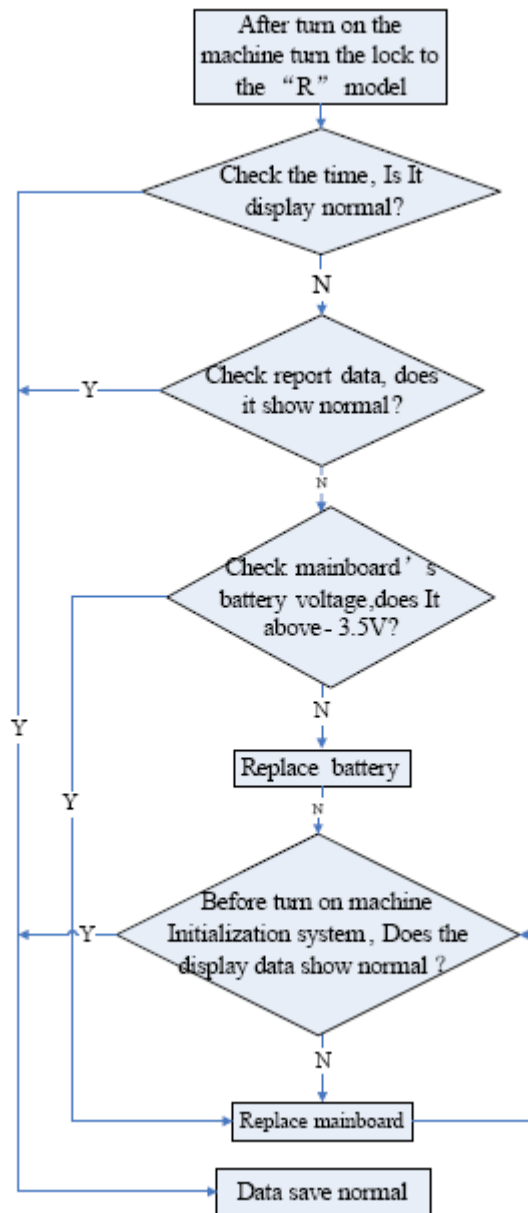
| | |
|-----------------|--------------|
| V _{CC} | Power Supply |
|-----------------|--------------|

. Classify by common malfunctions and dispose of method

(1) Entire machine exceptionally



(2) Data exceptionally



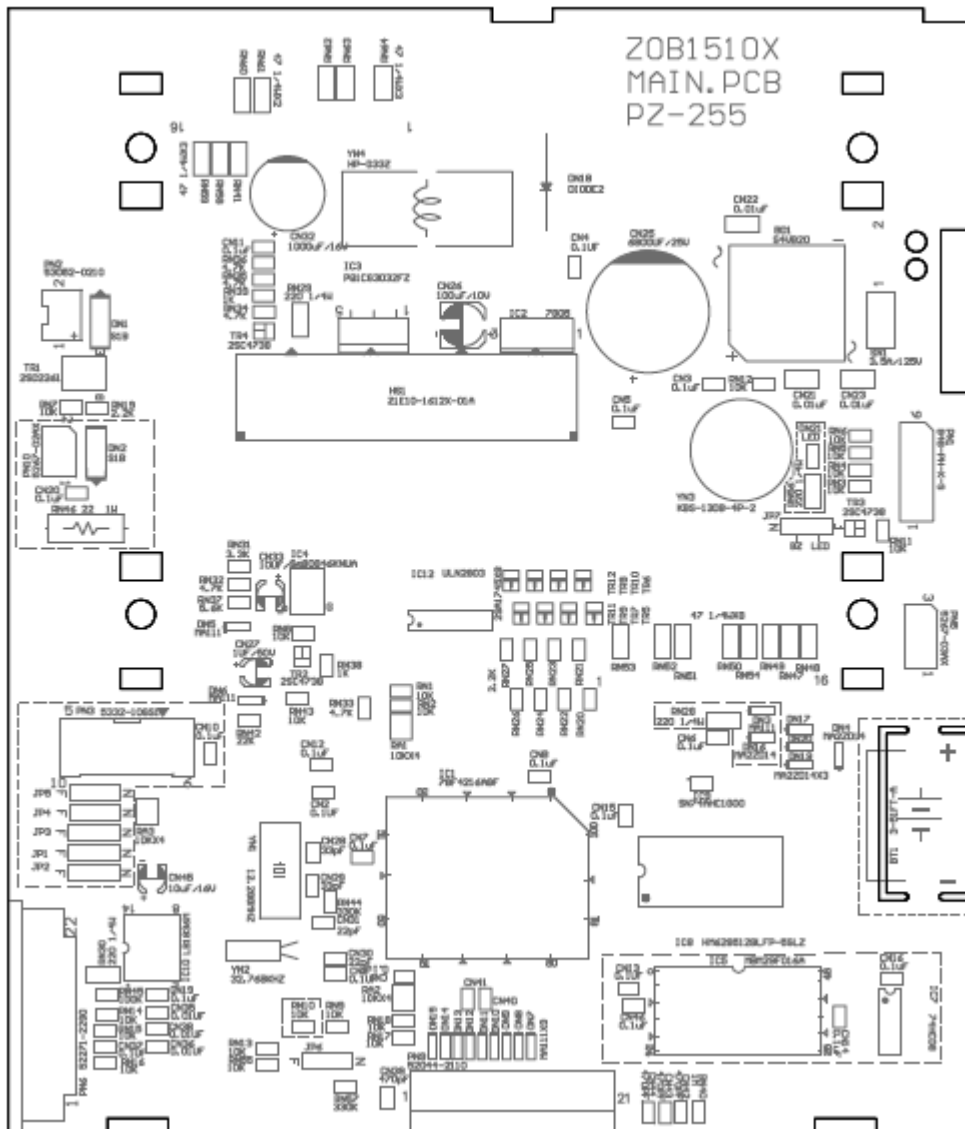
Notice :

This cash register adopts standard 125V, 3.5A fuse. Before replacing the fuse, please cut off the power supply, the new fuse parameter must be as same as the machine required, When assembly just twist the fuse properly to its position, do not put with strong force, in order to avoid damaging its internal structure.

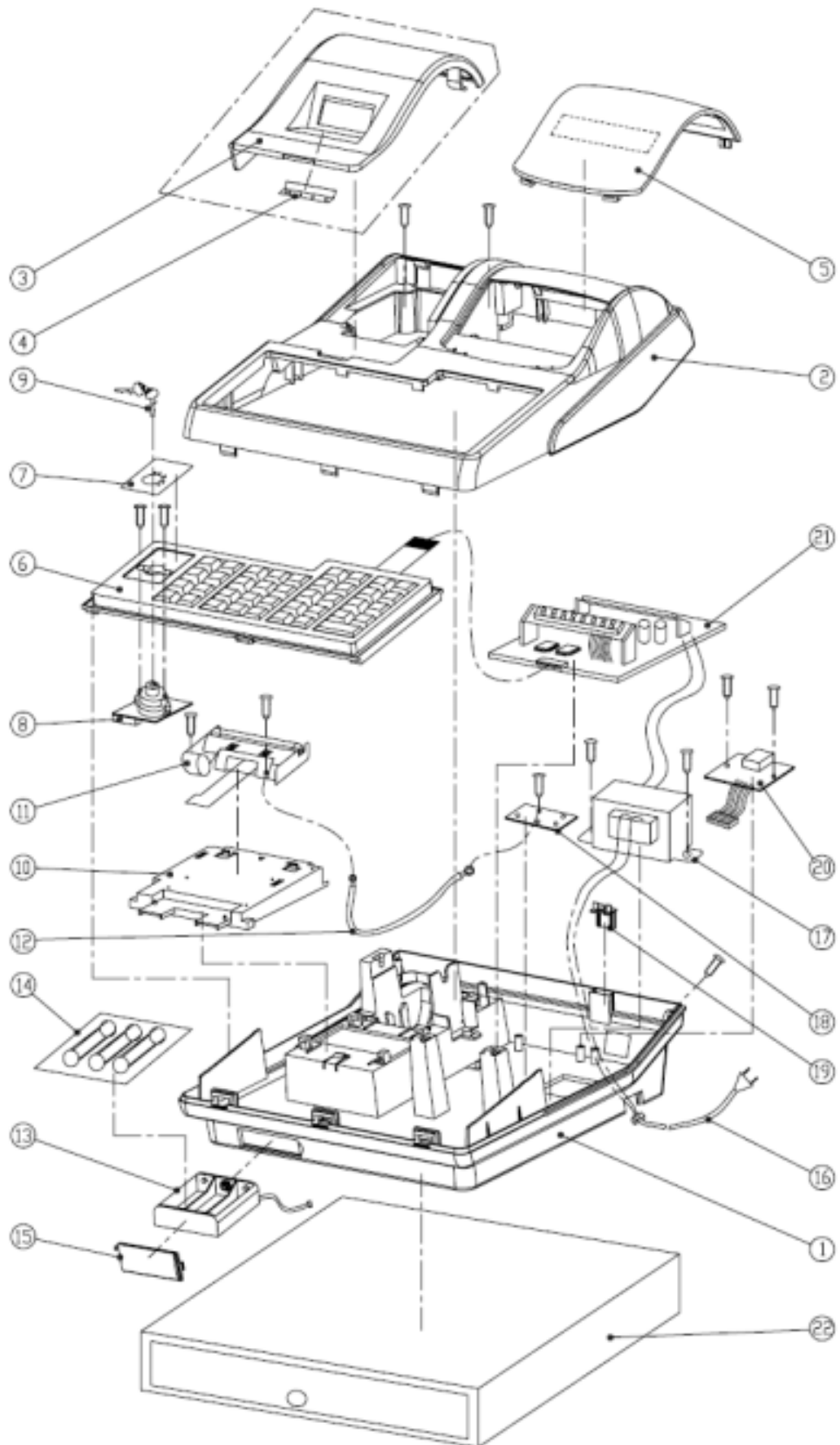
This cash register dry battery is 4.5V, please pay attention when you replace the dry battery, do not mistake the dry battery polarity, in order to avoid bad consequence.

If it comes across insolubility problem as above, please contact the manufacturer.

、 PCB layout diagram (Top layer)



、 List of entire machine



| | PARTS NAME | QTY | NOTE |
|------------------------|--|-----|---|
| DISPLAY UNIT | FOR PZ-255 | 1 | |
| PZ-255 PCB DSP | FR-1 1F 25*120 | 1 | PCB1 |
| JPCABLE 16P 2.0 50L | UL2651-P AWM 4 × 26AWG (TASC.SUS) LF P=2.0 | 1 | PN1 |
| LED YELLOW | HLBW452G-A21 | 2 | DN2 DN1 |
| | | | |
| SIO BOARD UNIT | FOR PZ-255 | 1 | 20 |
| PZ-255 PCB S.I_0 | FR-1 1F 30*45 | 1 | PCB1 |
| 50V/0.1UF CER S 1608 | ECJ1VF1H104Z(PB FREE | 5 | CN3 CN4 CN1 CN2 CN5 |
| DRV SOP16 MAX202 | MAX202CSE(PB FREE | 1 | IC1 |
| JPCABLE 4P 2.0 145L | UL2651-P AWM 16 × 26AWG (TASC.SUS) LF P=2.0 | 1 | PN1 |
| MODULAR DIP 8P | 7630-0808UA | 1 | PN2 |
| | | | |
| MAIN P.C.B UNIT | FOR PZ-255 | 1 | 21 |
| ARY 10K X 4 3.3MM | MNR14E0ABJ103(PB FRE | 3 | RA3 RA2 RA1 |
| PZ-255 PCB MAIN | CEM-3 2F 142*165 | 1 | PCB1 |
| 25V/6800UF ELE D KME | KME25VB6800ME(PBFREE | 1 | CN25 |
| 50V/22PF CER S 1608 | C1608COG1H220J(PBX) | 2 | CN30 CN31 |
| 50V/0.1UF CER S 1608 | ECJ1VF1H104Z(PB FREE | 16 | CN37 CN4 CN9 CN2 CN7 CN15 CN11 CN3 CN47 CN8 CN1 CN19 CN6 CN12 CN5 CN17 |
| 50V/33PF CER S 1608 | ECJ1VC1H330J(PB FREE | 2 | CN29 CN28 |
| 50V/470PF CER S 1608 | ECJ1VC1H471J(PB FREE | 6 | CN44 CN41 CN42 CN43 CN39 CN40 |
| 50V/0.01UF CER S 160 | ECJ1VF1H103Z(PB FREE | 3 | CN35 CN38 CN36 |
| 50V/1UF ELE S S | 50CE1FS(PB FREE) | 1 | CN27 |
| 10V/100UF ELE S S | EEE1AA101SP(PB FREE) | 1 | CN26 |
| 16V 10UF ELE S | EEE1CA100SR(PB FREE) | 2 | CN45 CN33 |
| 50V/0.01U FIL S 3216 | ECHU1H103JX5(PB FREE | 3 | CN23 CN21 CN22 |
| 16V/1000UF ELE D LOW | LXZ16VB1000MJ20(PBX) | 1 | CN32 |
| DIODE STACK 4A | S4VB20-5000 | 1 | BD1 |
| SW 100MA/80V S 1608 | MA2J111(PB FREE) | 11 | DN15 DN10 DN7 DN13 DN14 DN11 DN12 DN5 DN6 DN9 DN8 |
| SCHOTTKY DIODE 3A | 31D006 | 1 | DN18 |
| POW 1A/50V D | 1N4001(M1) (PB FREE) | 1 | DN1 |

| | | | |
|-------------------------|----------------------|----|---|
| SBD 100MA/20V S 1608 | MA2ZD14(PB FREE) | 4 | DN19 DN20 DN17 DN4 |
| RFGU T0-220 5V | KA7805ETU | 1 | IC2 |
| RAM SOP32 1M | KM681000CLG-7L(PBX) | 1 | IC8 |
| RESET SMT 4.6V T0-89 | S-80846KNUA-D2C-T2G | 1 | IC4 |
| REGU T0220 3.5A | PQ1CG3032FZ(PBFREE) | 1 | IC3 |
| DRV SOP14 LB1836 | LB1836ML-TLM-E(PBFRE | 1 | IC10 |
| MASK CPU PZ-255 APL V . | UPD784214AGF | 1 | IC1 |
| SOP 74HC1G00 (1 GATE) | 74HC1G00GW | 1 | IC9 |
| TR ARY NPN X8 500MA | ULN2803L-S18-R | 1 | IC12 |
| FFC DIP 21P 1.25 | 52044-2145 | 1 | PN9 |
| CONN DIP 3P 2.5 | 5267-03A(PB FREE) | 1 | PN5 |
| CONN DIP 2P 2.5 | 53052-0210(PB FREE) | 1 | PN2 |
| HOUSING DIP | 90059-0014(PB FREE) | 2 | JT6 JT7 |
| HEADER 3P | 5548-3A(PB FREE) | 2 | JP6 JP7 |
| CONN SMT 22P 1.0 | 52271-2290 | 1 | PN6 |
| CONN DIP 4P 2.0 | B4B-PH-K-S | 1 | PN1 |
| SW 150MA/50V SMT NPN | 2SC4738 TE 85R(PBX) | 3 | TR4 TR2 TR3 |
| DAR 2.5A/80V SMT NPN | 2SD2261-TD-E(2038A) | 1 | TR1 |
| SW 500MA/15V SMT PNP | 2SA1745-6-TL-E | 8 | TR9 TR8 TR6 TR7 TR5 TR12 TR10 TR11 |
| 47 1/4 SMT 3216 | ERJ8GEYJ47RV | 16 | RN51 RN50 RN52 RN53 RN54 RN48 RN47 RN49 RN41 RN58 RN59 RN60 RN61 RN62 RN63 RN64 |
| 1K 1/10 CER S 1608 | ERJ3GEYJ102V(PB FREE | 2 | RN38 RN39 |
| 10K 1/10 SMT 1608 | ERJ3GEYJ103V(PB FREE | 19 | RN8 RN3 RN15 RN18 RN9 RN17 RN12 RN11 RN7 RN1 RN2 RN16 RN14 RN5 RN6 RN4 RN55 RN13 RN43 |
| 22K 1/10 SMT 1608 | ERJ3GEYJ223V(PB FREE | 1 | RN42 |
| 3.3K 1/10 SMT 1608 | ERJ3GEYJ332V (PB FRE | 1 | RN31 |
| 330K 1/10 SMT 1608 | ERJ3GEYJ334V(PB FREE | 2 | RN57 RN44 |
| 4.7K 1/10 SMT 1608 | ERJ3GEYJ472V(PB FREE | 5 | RN32 RN35 RN33 RN34 RN36 |
| 5.6K 1/10 SMT 1608 | ERJ3GEYJ562V(PB FREE | 1 | RN37 |
| 2.2K 1/10 SMT 1608 | ERJ3GEYJ222V(PB FREE | 9 | RN21 RN27 RN25 RN26 RN20 RN19 RN24 RN22 RN23 |

| | | | |
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| 100K 1/10 SMT 1608 | ERJ3GEYJ104V(PB FREE) | 1 | RN45 |
| 220 1/4 SMT 3216 | RMC-18221JR(PB FREE) | 2 | RN30 RN29 |
| 1M 1/10 SMT 1608 | ERJ3GEYJ105V | 1 | RN40 |
| CHIP FUSE 3.5A | SST3.5(PB FREE) | 1 | SN1 |
| 32.768KHZ | OS-032768.KB | 1 | YN2 |
| BUZZER DIP | KBS-13DB-4P-2 | 1 | YN3 |
| COIL 100UH DIP | TC131M-4A-8026-B20 | 1 | YN4 |
| XTAL SMT 12.288MHZ | SMD-49 12.288MHZ(PBX | 1 | YN1 |
| HEAT SINK | | 1 | HS1 |
| DSP UNIT PZ-255 | FOR PZ-255 | 2 | JP8 JP9 |
| DISPLAY SUPPORT F | FOR PZ-255 | 2 | |
| DISPLAY SUPPORT R | FOR PZ-255 | 2 | |
| | | | |
| PZ-255 230V PROCESS | FOR PZ-255 | 1 | |
| AC CORD EUROPE 2P | FOR ERP 2P (H05VV-F) | 1 | 16 |
| POWER TRANSFORMER | FOR PZ-255 230V | 1 | 17 |
| CONTROL LOCK SWITCH | 1LB3A001(PB FREE) | 1 | 8 |
| KEYBOARD ASSY | FOR PZ-255 | 1 | 6 |
| THRML LINE PRINTER | LTP8235B | 1 | 11 |
| CONTROL KEY SET | "2LB3A201 OP,MA" | 2 | 9 |
| G. WIRE L=180 3X4 | UL1015 #18 GR | 1 | 12 |
| BATTERY UM-3 | UM-3 | 3 | 14 |
| RECEIPT CUTTER | FOR PZ-1 | 1 | 4 |
| DISPLAY FILTER | FOR PZ-1FB | 1 | 5 |
| UPPER COVER | FOR PZ-1 FB | 1 | 2 |
| PRINTER COVER | FOR PZ-1 FB | 1 | 3 |
| BOTTOM COVER | FOR PZ-255 | 1 | 1 |
| BATTERY CASE ASSY | FOR CX-1 | 1 | 13 |
| NP33 DRAWER | FOR CH-1 NP33DR | 1 | 22 |
| CONTROL LOCK PLATE | FOR PZ-255 | 1 | 7 |
| EARTH BRACKET | FOR PX-1 | 1 | 18 |
| BATTERY BOX COVER | FOR PZ-255 | 1 | 15 |
| PRINTER BASE | FOR CH-1 | 1 | 10 |
| MAIN PCB SUPPORT | FOR PZ-255 | 1 | 19 |

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