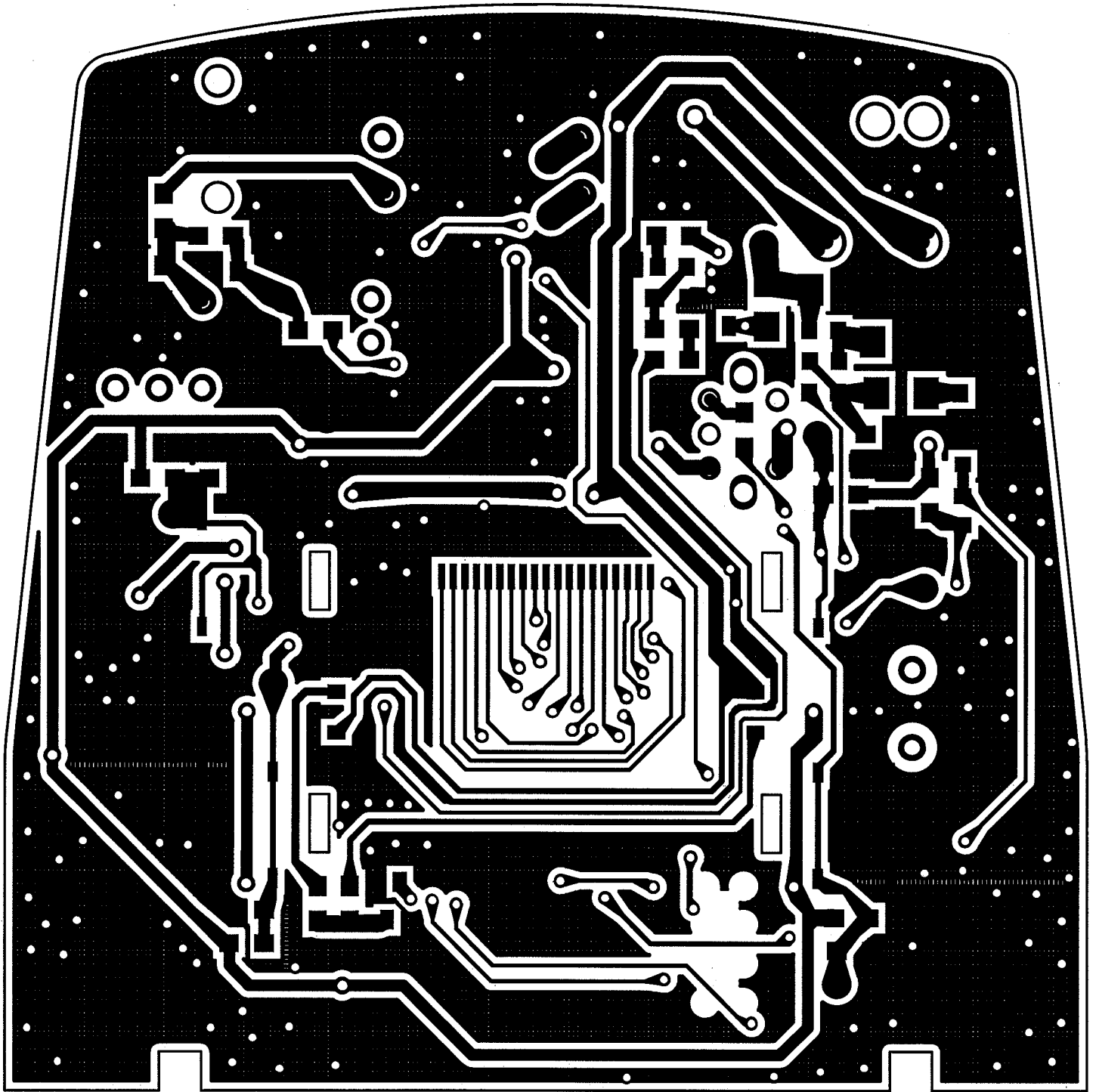


| Designator | Part Type | Footprint | Description |
|------------|---------------|-----------|--------------------|
| C1 | 10P | C0603 | Capacitor |
| C10 | 103P | C0603 | Capacitor |
| C11 | 102P | C0603 | Capacitor |
| C12 | 102P | C0603 | Capacitor |
| C13 | 102P | C0603 | Capacitor |
| C14 | 102P | C0603 | Capacitor |
| C15 | 102P | C0603 | Capacitor |
| C16 | 0.1uF(UN) | CASE-A | Capacitor |
| C17 | 0.47uF/6V(A) | CASE-A | Tantalum Capacitor |
| C18 | 103P | C0603 | Capacitor |
| C19 | 10uF/10V(A) | CASE-A | Tantalum Capacitor |
| C2 | 68P | C0603 | Capacitor |
| C20 | 10uF/10V(A) | CASE-A | Tantalum Capacitor |
| C21 | 27P | C0603 | Capacitor |
| C22 | 22P | C0603 | Capacitor |
| C23 | 51P | C0603 | Capacitor |
| C24 | 47u/6.3V(B) | CASE-B | Tantalum Capacitor |
| C25 | 6P | C0603 | Capacitor |
| C26 | 68P | C0603 | Capacitor |
| C27 | 68P | C0603 | Capacitor |
| C28 | 68P | C0603 | Capacitor |
| C29 | 103P | C0603 | Capacitor |
| C3 | 15P | C0603 | Capacitor |
| C30 | 103P | C0603 | Capacitor |
| C31 | 103P | C0603 | Capacitor |
| C32 | 104P | C0603 | Capacitor |
| C33 | 3P | C0603 | Capacitor |
| C34 | 330P | C0603 | Capacitor |
| C35 | 104P | C0603 | Capacitor |
| C36 | 103P | C0603S | Capacitor |
| C37 | 20P | CTZ | Capacitor |
| C38 | 100uF/6.3V(E) | CASE-E | Chip Capacitor |
| C39 | 10uF/10V(A) | CASE-A | Tantalum Capacitor |
| C4 | 102P | C0603 | Capacitor |
| C40 | 103P | C0603 | Capacitor |
| C41 | 103P | C0603 | Capacitor |
| C42 | 102P | C0603 | Capacitor |
| C5 | 1uF | CASE-A | Capacitor |
| C6 | 472P | C0603 | Capacitor |
| C7 | 472P | C0603 | Capacitor |
| C8 | 472P | C0603 | Capacitor |
| C9 | 103P | C0603 | Capacitor |
| D1 | 1SV217 | D-1SS | Diode |
| D2 | 1SS314 | D-1SS | Diode |
| D5 | 1SS317 | D-1SS | Diode |
| IC1 | TDA7021 | MC3361 | IC |
| IC2 | TDA7050 | BA1521 | IC |
| IC3 | TB31202FN | SSOP16 | PLL IC |

| | | | |
|-----|---------------|------------|----------------------|
| IC4 | TK11320 | SOT23L-6 | Voltage Stabilize IC |
| J1 | PHONEJACK | JACK-PHONE | JACK-PHONE |
| L1 | 4.7uH | L0805 | CHIP COIL |
| L2 | 4.7uH | L0805 | CHIP COIL |
| L3 | 4.7uH | L0805 | CHIP COIL |
| P3 | PAD | P | |
| P4 | PAD | P | |
| Q3 | BC817-40W(NU) | UMT3 | NPN Transistor |
| Q4 | 2SC2712 | SMT BCE | Transistor |
| Q5 | 2SA1037 | SMT BCE | Transistor |
| R1 | 100K | R0603 | Resistor |
| R10 | 100K | R0603 | Resistor |
| R11 | 33K | R0603 | Resistor |
| R2 | 0R | R0603 | Resistor |
| R3 | 10K | R0603 | Resistor |
| R33 | 10K(NU) | R0603 | Resistor |
| R34 | 1K | R0603 | Resistor |
| R35 | 0R | R0603 | Resistor |
| R36 | 220R | R0603 | Resistor |
| R37 | 1K | R0603 | Resistor |
| R38 | 10K | R0603 | Resistor |
| R4 | 0R | R0603 | Resistor |
| R5 | 0R | R0603 | Resistor |
| R6 | 4K7 | R0603 | Resistor |
| R7 | 560R | R0603 | Resistor |
| R8 | 4K7 | R0603 | Resistor |
| R9 | 4.7K | R0603 | Resistor |
| RA1 | 47K | R0603 | Resistor |
| T1 | GS8258 | IFTS-5EA | IFT |
| T2 | GS8258 | IFTS-5EA | IFT |
| T3 | GS-8376 | IFTS-5E | IFT |
| VR1 | SW & A10K VR | SW-1 | Traditional VR |
| X1 | 20.950MHz | XTAL | XTAL |

| Designator | Part Type | Footprint | Description |
|------------|------------|------------|--------------------|
| C43 | 102P | C0603 | Capacitor |
| C44 | 102P | C0603 | Capacitor |
| C45 | 102P | C0603 | Capacitor |
| C46 | 102P | C0603 | Capacitor |
| C47 | 102P | C0603 | Capacitor |
| C48 | 22P | C0603 | Capacitor |
| C49 | 22P | C0603 | Capacitor |
| C50 | NU | C0603 | Capacitor |
| C51 | 104P | C0603 | Capacitor |
| C53 | 103P | C0603 | Capacitor |
| C54 | 102P | C0603 | Capacitor |
| C55 | 100P | C0603 | Capacitor |
| C56 | 103P | C0603 | Capacitor |
| C57 | 102P | C0603 | Capacitor |
| CP1 | 10uf/6V(A) | CASE-A | Tantalum Capacitor |
| D3 | 2107SGC | LEDKPA2106 | LED |
| D4 | 2107SGC | LEDKPA2106 | LED |
| JP1 | 8 PIN 2.0 | FEMALE1 | 8 Pin Header |
| L4 | NU | IN | COIL |
| Q1 | DTC114YUA | UMT3BCE | Transistor |
| Q2 | NU | UMT3 | NPN Transistor |
| R12 | 100K | R0603 | Resistor |
| R13 | 100K | R0603 | Resistor |
| R14 | 100K | R0603 | Resistor |
| R15 | 10K | R0603S | Resistor |
| R16 | 10K | R0603S | Resistor |
| R17 | 10K | R0603S | Resistor |
| R18 | 180R | R0603 | Resistor |
| R19 | 180R | R0603 | Resistor |
| R20 | NU | R0603S | Resistor |
| R21 | NU | R0603S | Resistor |
| R22 | NU | R0603S | Resistor |
| R23 | 1K(NU) | R0603S | Resistor |
| R24 | 0R | R0603S | Resistor |
| R25 | 47K | R0603 | Resistor |
| R26 | 47K | R0603 | Resistor |
| R27 | 47K | R0603 | Resistor |
| R28 | 47K | R0603 | Resistor |
| R29 | 47K | R0603 | Resistor |
| R30 | 47K | R0603 | Resistor |
| R31 | NU | R0603 | Resistor |
| R32 | 330K | R0603 | Resistor |
| SW1 | A | SWPT | Touch Switch |
| SW2 | B | SWPT | Touch Switch |
| SW3 | C | SWPT | Touch Switch |
| SW4 | D | SWPT | Touch Switch |
| U1 | LCDKIT | 19P | LCD |
| U2 | 24LC02 | SOP8 | IC |

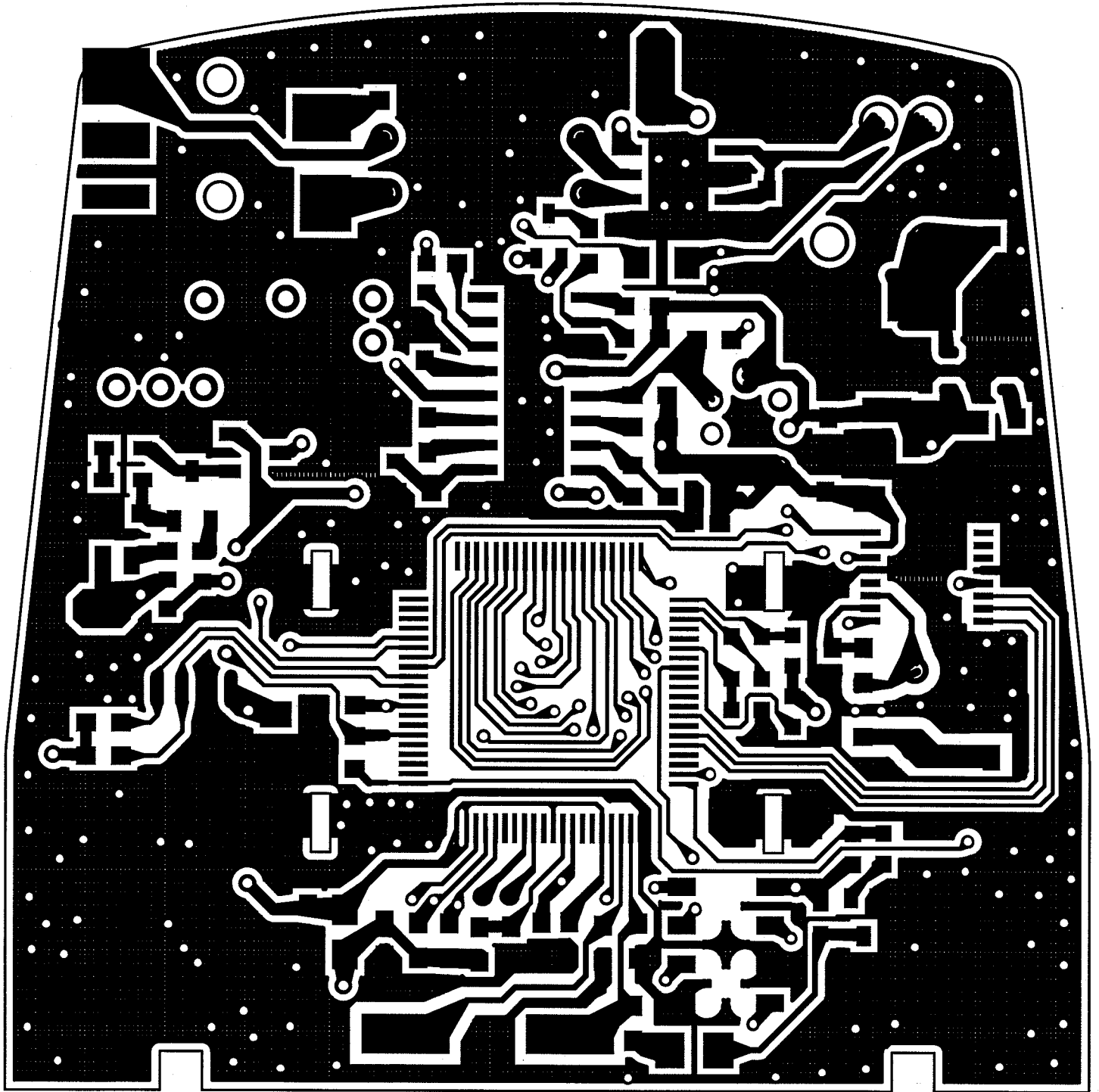
| Designator | Part Type | Footprint | Description |
|-------------------|------------------|------------------|--------------------|
| U3 | TMP86FP24 | LQFP-80P-1 | IC |
| X2 | 8MHz | CRY-X3 | XTAL |



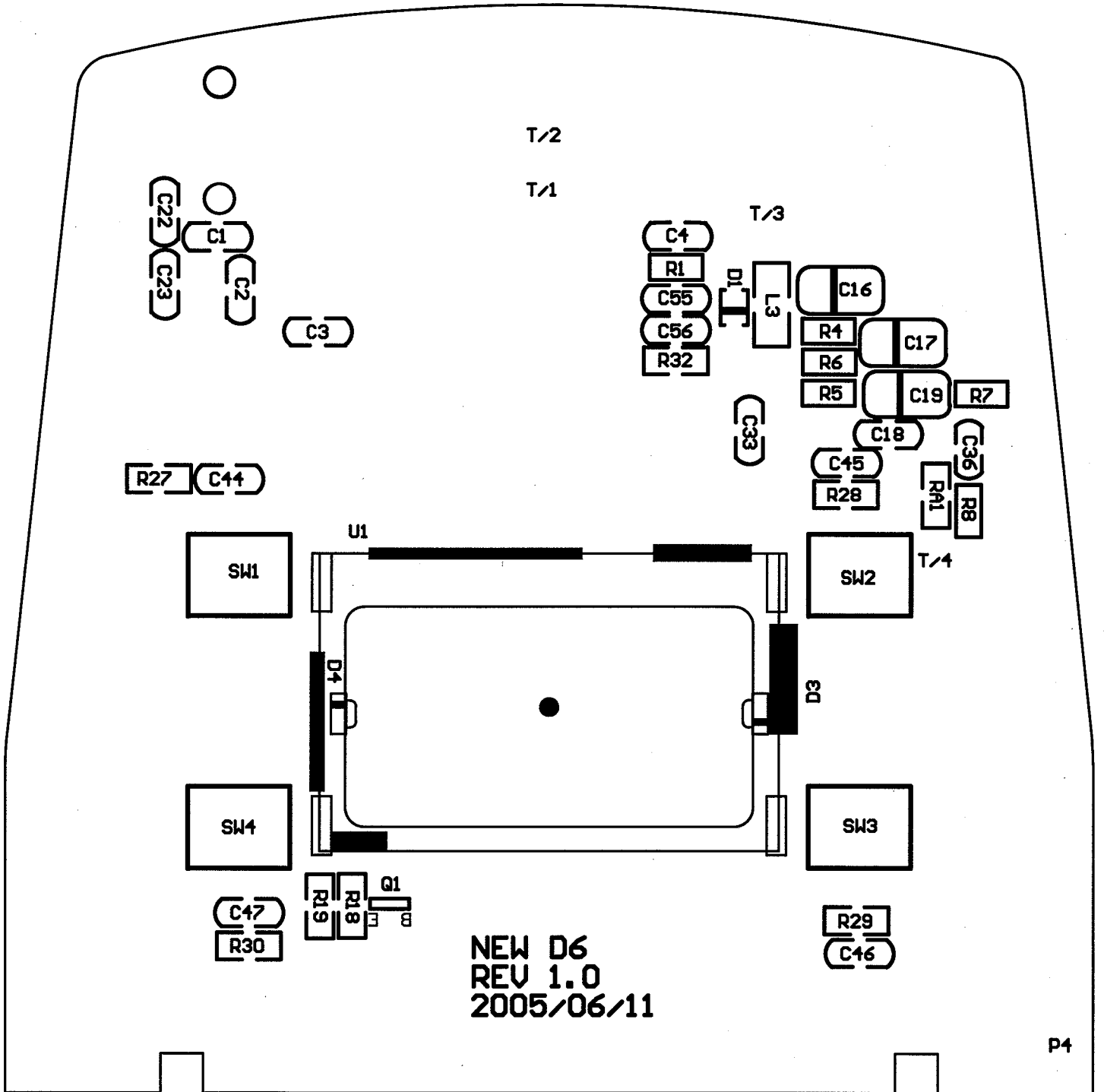
Top Layer

Keep Out Layer

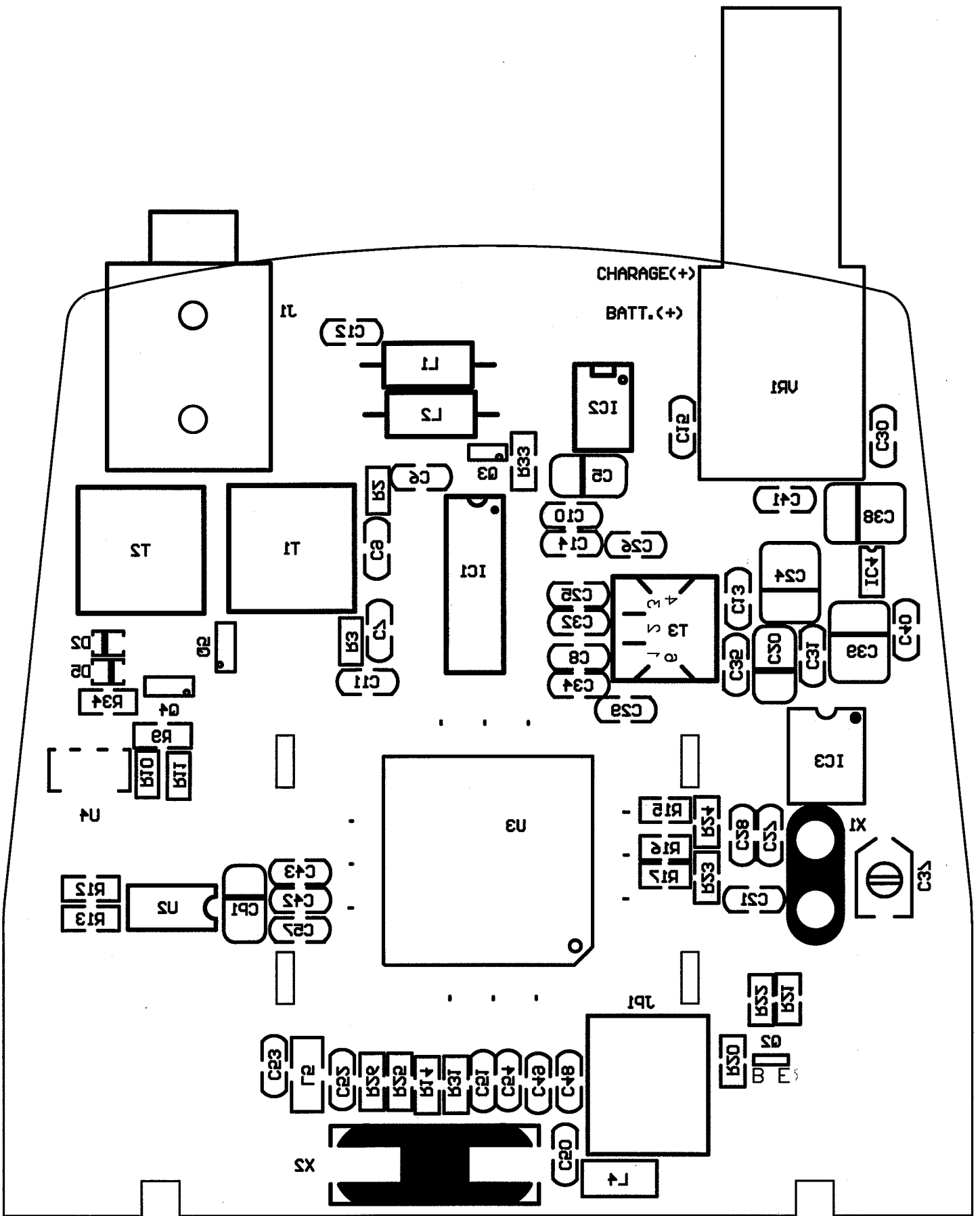
Multi Layer



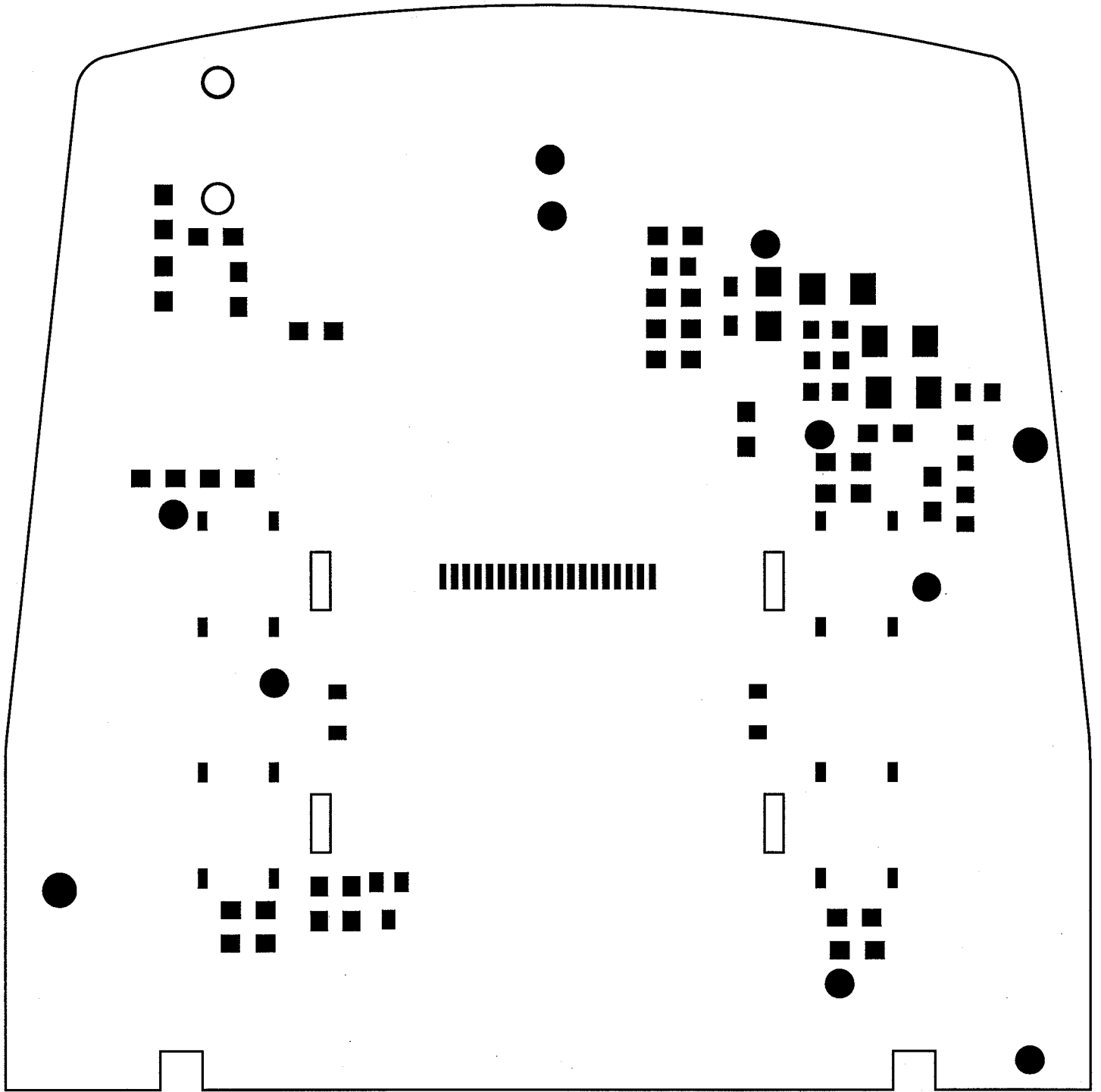
Bottom Layer
Keep Out Layer
Multi Layer



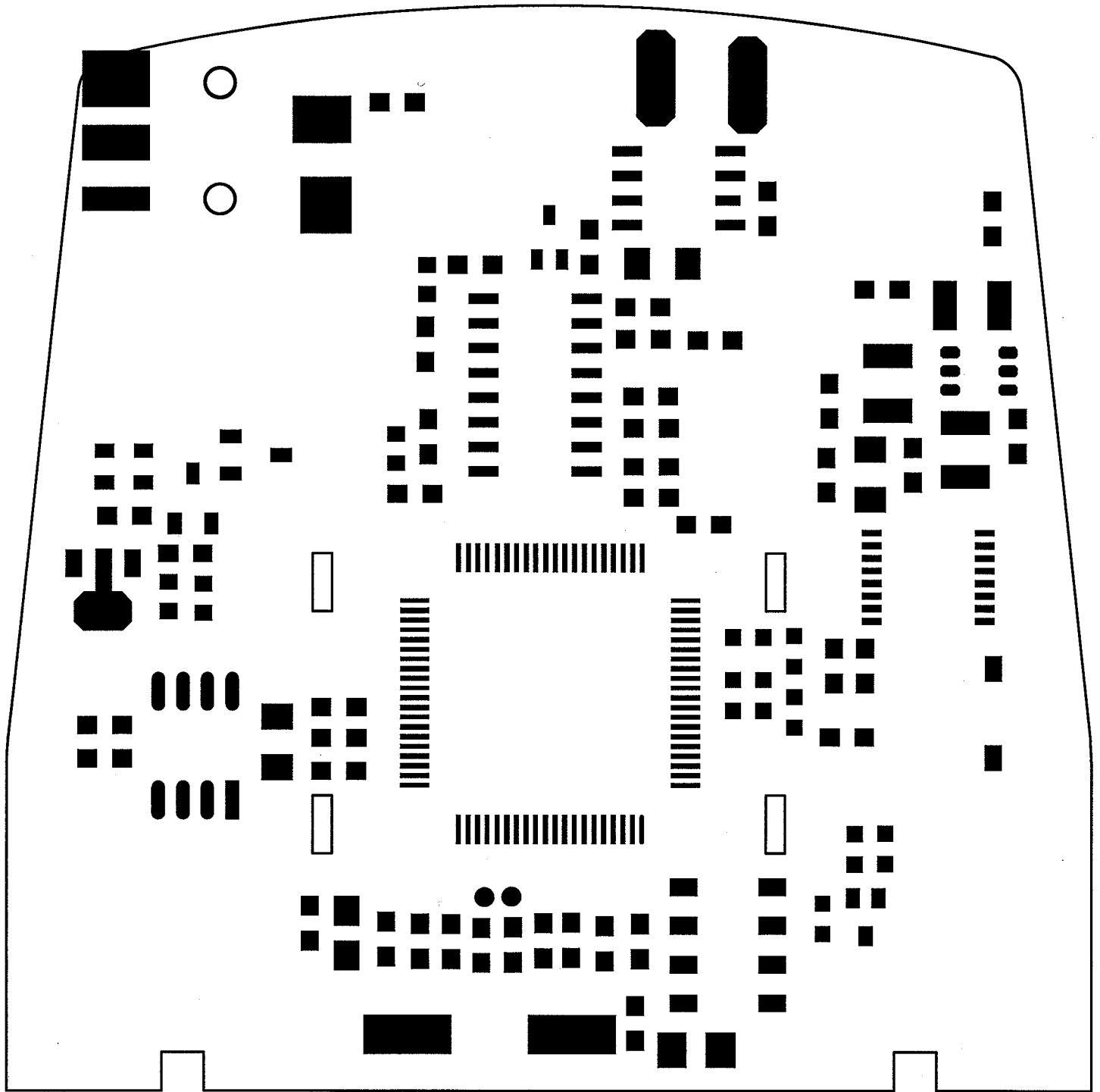
Top Overlay
 Keep Out Layer



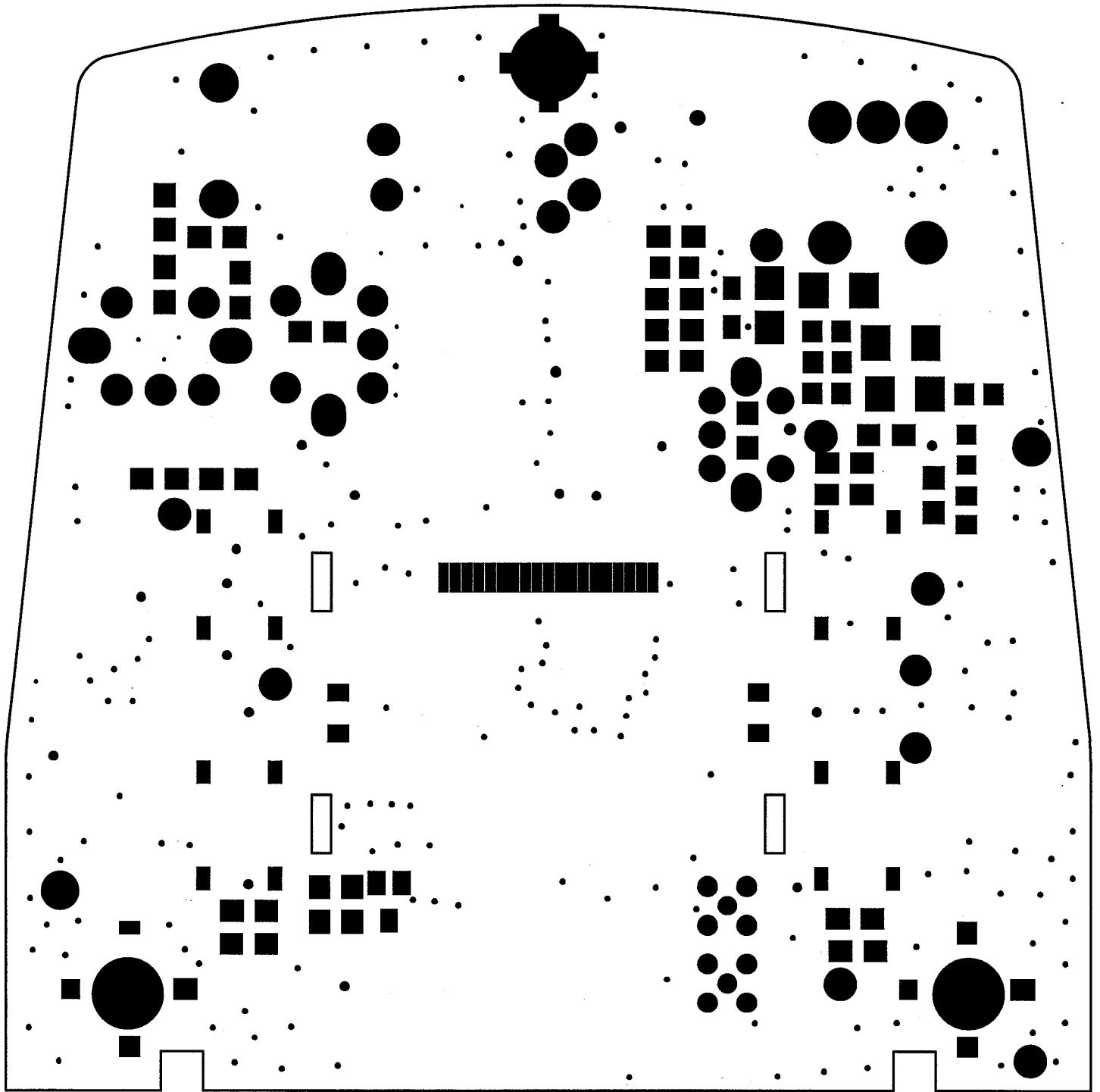
Bottom Overlay
 Keep Out Layer



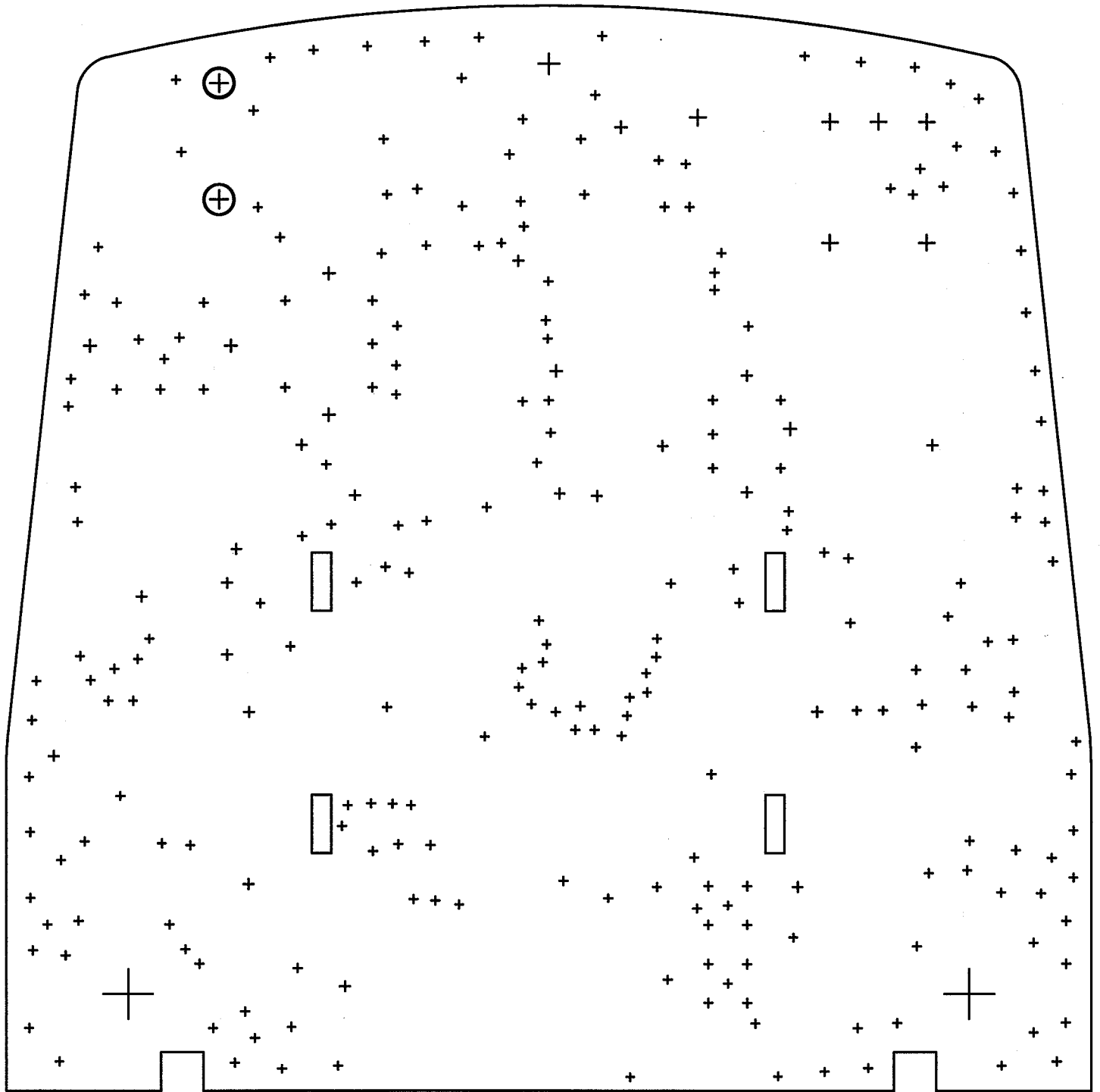
Top Paste
Keep Out Layer



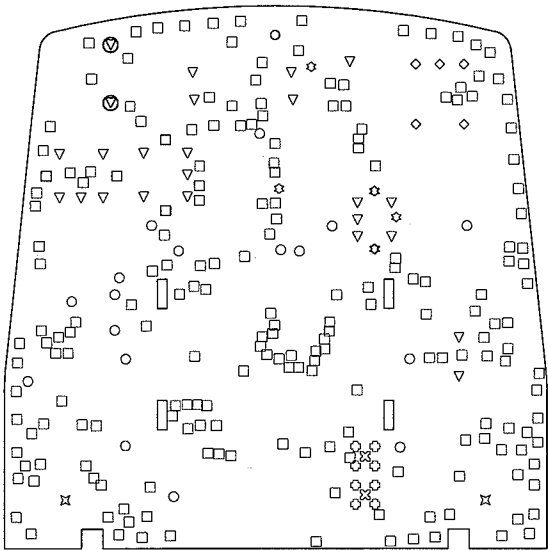
Bottom Paste
Keep Out Layer



Top Solder Mask
Keep Out Layer

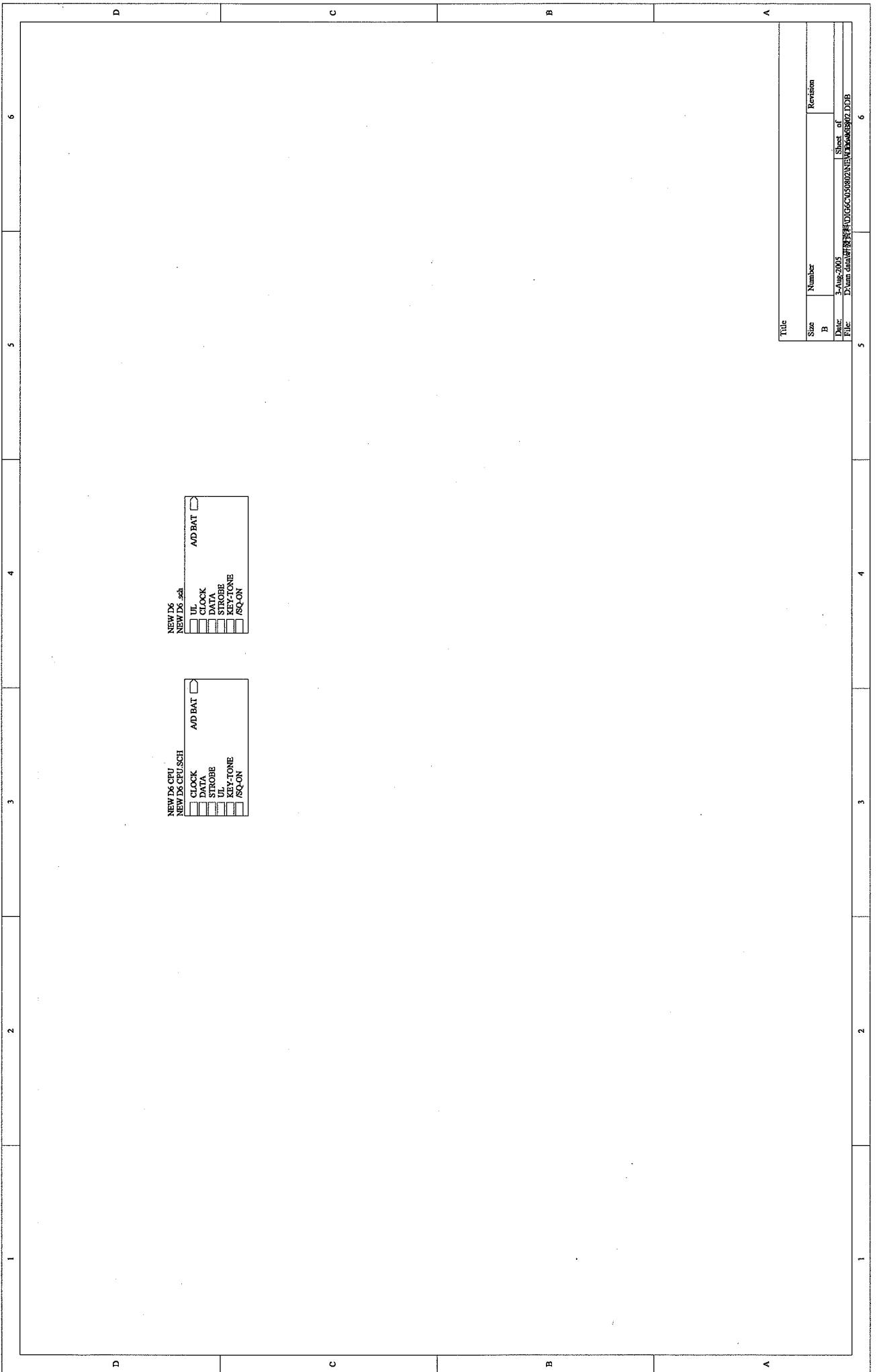


Drill Guide
Keep Out Layer



| | | | | |
|---|-----|------------|--------|------|
| □ | 199 | 15.748mil | 0.4mm | PTH |
| ○ | 17 | 19.685mil | 0.5mm | PTH |
| ✱ | 3 | 23.622mil | 0.6mm | PTH |
| ▽ | 22 | 31.496mil | 0.8mm | PTH |
| ⊗ | 2 | 31.496mil | 0.8mm | NPTH |
| ◇ | 8 | 33.465mil | 0.85mm | NPTH |
| ✱ | 2 | 39.37mil | 1mm | PTH |
| □ | 4 | 47.244mil | 1.2mm | PTH |
| ◇ | 5 | 62.992mil | 1.6mm | PTH |
| ▽ | 2 | 70.866mil | 1.8mm | NPTH |
| ○ | 1 | 82.677mil | 2.1mm | PTH |
| ⊗ | 2 | 200.787mil | 5.1mm | PTH |
| | 267 | Total | | |

Keep Out Layer



NEW D6 CPU
 NEW D6 CPUSCH
 [] CLOCK
 [] DATA
 [] STROBE
 [] UL
 [] KEY-TONE
 [] /SQ-ON
 ADBAT

NEW D6
 NEW D6 .sch
 [] UL
 [] CLOCK
 [] DATA
 [] STROBE
 [] KEY-TONE
 [] /SQ-ON
 ADBAT

Title

| | | |
|-------|-------------------------------------|----------|
| Size | Number | Revision |
| B | | |
| Date: | 2 Aug 2005 | Sheet of |
| File: | D:\data\材料\050820\NEW D6\050820.DDB | 6 |

QA TEST REPORT

MODEL: Digital 6 Plus

Order No.

Channel Spacing : 50KHz

Lot Size: pcs

Ref. No :

Test Voltage : 2.4V 3V

EN Ref No.:

Date: 03, AUG. 2005

| Test Item | | | | Unit | Limiting | 2.4V | | | Note: |
|-----------|-----------------------------|-----------|---|------|---------------|-----------|------------|----------|----------------|
| 1 | Max Output Voltage | 72.10 MHz | FM Mod. 1 KHz with ± 25 Khz Deviation -47dBm I/P | V | > 1.45 | 1.82 | | | |
| | | 75.9 MHz | | | > 1.45 | 1.7 | | | |
| 2 | 10% THD | 72.1 | FM Mod. 1 KHz with ± 25 Khz Deviation -47dBm I/P | V | >1.45 | 1.82 | | | Max. Dist 8% |
| | | 75.9 | | | >1.45 | 1.7 | | | Max. Dist 2.7% |
| 3 | 20 dB Sens, | 72.10 MHz | FM Mod. 1 KHz with ± 25 Khz Deviation o/p :1.26 V | dBm | < -92 | -96 | | | |
| | | 75.9 MHz | | dBm | < -92 | -96 | | | |
| 4 | S/N Ratio I/P: 1mV | 72.1MHz | FM Mod. 1 KHz with ± 25 Khz Deviation o/p :1.26 V | dB | > 54 | 56 | | | |
| 5 | Standby Current Consumption | 72.1MHz | VR. Min. at 3V | mA | < 23 | 19 | | | |
| 6 | Distortion - 47dBm | 72.1MHz | FM Mod. 1 KHz with ± 25 Khz Deviation o/p :1.26 V | % | < 5 | 1 | | | |
| | | 75.9MHz | | | | 0.96 | | | |
| 7 | Min. Operation Voltage | | FM Mod. 1 KHz with ± 25 Khz Deviation o/p :1.26 V | V | 2.29 | 1.89 | | | |
| 8 | Frequency Response | 6KHz | FM Mod. 1 KHz with ± 25 Khz Deviation o/p :1.26 V=odB | dB | 0 ~ -6 (Ref.) | -8.1 | | | |
| | | 100Hz | | | 0 ~ -6 (Ref.) | -0.5 | | | |
| 9 | 2.4V | | Battery Bar | Ref. | 2.34V 3Bar | 2.3V 2Bar | 2.25V 1Bar | 2.2V LO | |
| 10 | 3 V | | Battery Bar | Ref. | 2.84V 3Bar | 2.7V 2Bar | 2.5V 1Bar | 2.42V LO | |

Test condition: CMS@25KHz Dev. by Radiated

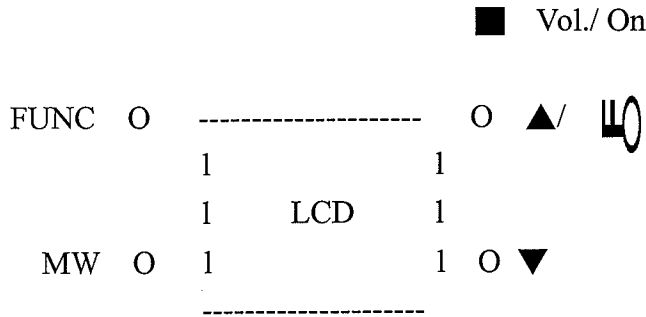
QC00401

Operation Voltage: 2.4V and 3V

Output Load: 32 Ohm

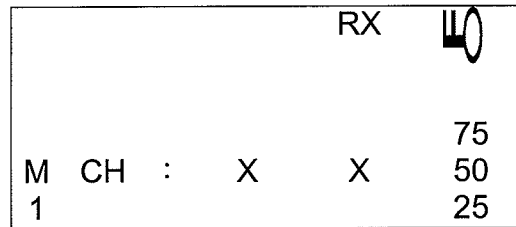
Approval by: *Charles* Checked by: *Daniel C.Y.* Tested by: *Chengfeng Kao*
 Aug 3/05

A. Outlook



B. Instructions:

- 1) LCD all segment refer to the attached pattern. Working voltage is 2V DC
- 2) CPU working voltage is 2V
- 3) The LCD screen will show Memory channel (6 CH, estimated), as follow:



"RX" icon is used for signal strength indicator, It will be flashing when didn't receive signal and stop flash after received the signal.

press <▲> or <▼> button can select from M1~M6

- 4) Press <MW> to modify memory channels and the 'M' character turns to flashing, use <▲> or <▼> to select channel from CH01 to CH37, press <MW> the second time to save and return to main screen. If there is no any keying within 5 seconds or no signal is receiving the screen will back to main screen when in modify screen, this is for alignment and QC convenient.
- 5) Press <FUNC> + <MW> can enter battery select mode, you can use <▲> or <▼> key to select normal battery 3.0v or rechargeable battery 2.4v.
Press <FUNC>+<MW> again, stored the setting and return normal display.
- 6) Using auto BACK-LIGHT method, press any button will turn on LCD back-light 5 seconds and turn off automatically.
- 7) Turn on the power and press the <▲> or <▼> button in the mean time will reset the factory default settings.
- 8) Press <FUNC> + <▲> in the mean time will lock the front button functions.
- 9) Press <FUNC> may display the working frequency(please refer to the D6 frequency list)