

**TC9309F-002****SINGLE CHIP DTS MICRO CONTROLLER (DTS-10)**

TC9309F-002 is a CMOS LSI designed for FM/MW/LW radio of PLL frequency synthesizer system corresponded to the requirement of the whole world.

Since DTS, clock, tape function and electronic volume control function are built in, volume, balance, tone and fader control can be used with TC9222N, TC9222F or TC9188N, TC9188F.

**FEATURES**

## ○ Receiving band

| AREA                                   | CODE<br>A2A1A0   | BAND | RECEIVING BAND<br>[Hz] | STEP [Hz] | REF [Hz] | IF [Hz] |
|----------------------------------------|------------------|------|------------------------|-----------|----------|---------|
| Europe                                 | 000<br>or<br>001 | FM   | 87.50~108.00M          | 50k       | 50k      | +10.70M |
|                                        |                  | MW   | 522~1620k              | 9k        | 9k       | +459k   |
|                                        |                  | LW   | 153~281k               | 1k        | 1k       | +450k   |
| USA 1                                  | 010              | FM   | 87.5~108.1M            | 200k      | 50k      | +10.7M  |
|                                        |                  | MW   | 520~1720k              | 10k       | 10k      | +450k   |
| USA 2                                  | 011              | FM   | 87.5~108.0M            | 100k      | 50k      | +10.7M  |
|                                        |                  | MW   | 520~1720k              | 10k       | 10k      | +450k   |
| Latin America                          | 100              | FM   | 87.5~108.0M            | 100k      | 50k      | +10.7M  |
|                                        |                  | MW   | 520~1620k              | 5k        | 5k       | +450k   |
| Australia /<br>Middle and<br>Near East | 101              | FM   | 87.5~108.0M            | 100k      | 50k      | +10.7M  |
|                                        |                  | MW   | 531~1602k              | 9k        | 9k       | +450k   |
| Japan                                  | 110              | FM   | 76.0~90.0M             | 100k      | 50k      | -10.7M  |
|                                        |                  | MW   | 522~1629k              | 9k        | 9k       | +450k   |
| South Africa                           | 111              | FM   | 87.50~108.00M          | 50k       | 50k      | -10.70M |
|                                        |                  | MW   | 531~1602k              | 9k        | 9k       | +450k   |

CODE = "000" is 3 BAND version of Europe. CODE = "001" is 2 BAND version of Europe.

## ○ Tuning function

- MANUAL TUNING (UP/DOWN)
- AUTO TUNING (SEEK AND SCAN)
- AUTO MEMORY TUNING
- PRESET MEMORY SCAN

## ○ Memory function

- FM1/FM2/FM3 : MAX 18 STATIONS
  - MW1/MW2 : MAX 12 STATIONS
  - LW : MAX 6 STATIONS
- } MAX 36 STATIONS
- Each band have last memory.

## ○ Clock function

- 24h display in EUROPE
- 12h display in other area

## ○ Other function

- RADIO : STEREO DISPLAY, STEREO/MONO, LOCAL/DX
- TAPE : METAL/NORMAL, NOISE REDUCTION, DIRECTION DISPLAY
- COMMON : LOUDNESS

## ○ Electronic volume function (with TC9222N, TC9222F or TC9188N, TC9188F)

- The control of volume, balance, tone, fader.
- Indicator of electronic volume by 5 points.
- Mute function.

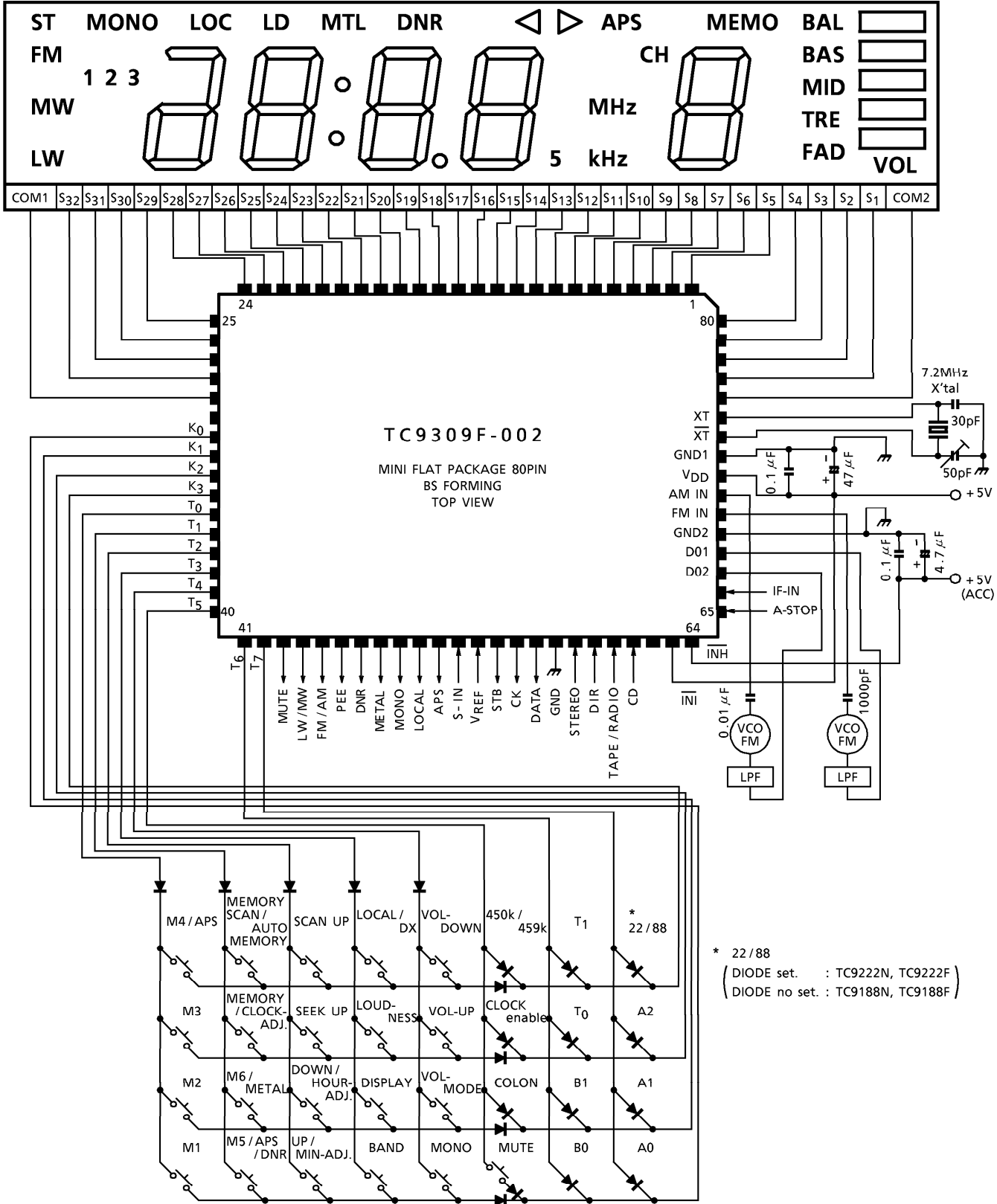
## ○ The other function

- CD input and display
- The buzzer sound is output when the function key is pushed.

## ○ Tracking data

| BAND | AREA                                                    | M1    | M2    | M3    | M4     | M5     | UNIT |
|------|---------------------------------------------------------|-------|-------|-------|--------|--------|------|
| FM   | Europe, South Africa                                    | 87.50 | 90.10 | 98.10 | 106.10 | 108.00 | MHz  |
|      | USA 1                                                   | 87.5  | 90.1  | 98.1  | 106.1  | 108.1  |      |
|      | Australia, Latin America<br>USA 2, Middle and Near East | 87.5  | 90.1  | 98.1  | 106.1  | 108.0  |      |
|      | Japan                                                   | 76.0  | 80.0  | 83.0  | 86.0   | 90.0   |      |
| MW   | Europe                                                  | 522   | 612   | 999   | 1404   | 1620   | kHz  |
|      | USA 1, 2                                                | 520   | 610   | 1000  | 1400   | 1720   |      |
|      | Latin America                                           | 520   | 610   | 1000  | 1400   | 1620   |      |
|      | Australia, South Africa<br>Middle and Near East         | 531   | 612   | 999   | 1404   | 1602   |      |
|      | Japan                                                   | 522   | 612   | 999   | 1404   | 1629   |      |
| LW   | Europe                                                  | 153   | 164   | 218   | 272    | 281    |      |

TC9309F-002 Layout



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