

TOSHIBA CMOS Digital Integrated Circuit Silicon Monolithic

# TC9309AF-125

Single Chip Digital Tuning System for 3 Disc CD Changer Unit

TC9309AF-125 is a CMOS LSI designed for a PLL frequency synthesizer radio system corresponded to the requirement of 2 areas.

Since TC9309AF-125 can be used for TC9284BF the CD processor and receive remote control signal, a low cost compact 3 CD with radio system can be constructed.

## Features

### Receiving Band and Preset Memory

| AREA   | CODE | BAND | RECEIVING<br>FREQUENCY [Hz] | STEP [Hz] | REFERENCE<br>FREQUENCY<br>[Hz] | INTERMEDIATE<br>FREQUENCY<br>[Hz] |
|--------|------|------|-----------------------------|-----------|--------------------------------|-----------------------------------|
|        | AREA |      |                             |           |                                |                                   |
| EUROPE | 0    | FM   | 87.50~108.00M               | 50k       | 50k                            | + 10.70M                          |
|        |      | MW   | 522~ 1620k                  | 9k        | 9k                             | + 450k                            |
|        |      | LW   | 150~ 285k                   | 1k        | 1k                             |                                   |
| USA    | 1    | FM   | 87.5~ 108.0M                | 100k      | 50k                            | + 10.7M                           |
|        |      | AM   | 520~ 1710k                  | 10k       | 10k                            | + 450k                            |

**Tuning Functions and Preset Memory**

- Manual up/down tuning
- Seek up/down tuning
- Scan up tuning
- IF count (FM = 10.7 MHz, MW (AM), LW = 450 kHz)
- Preset memory
  - Europe area: FM 10 stations, MW 5 stations, LW 5 stations
  - USA area FM 10 stations, AM 10 stations
- Indication of STEREO mark.

**CD Functions**

- CD F-SKIP, R-SKIP
- CD FF/REW
- Repeat play or track repeat play
- Memory play (max 20 preset)
- Tray open/close control
- 3 disk CD changer control (mecha: SAMSUNG [CMS-CR3])
- Synchro recording mode

**Clock Functions**

- 24 H clock (Europe area)
- 12 H clock (USA area)

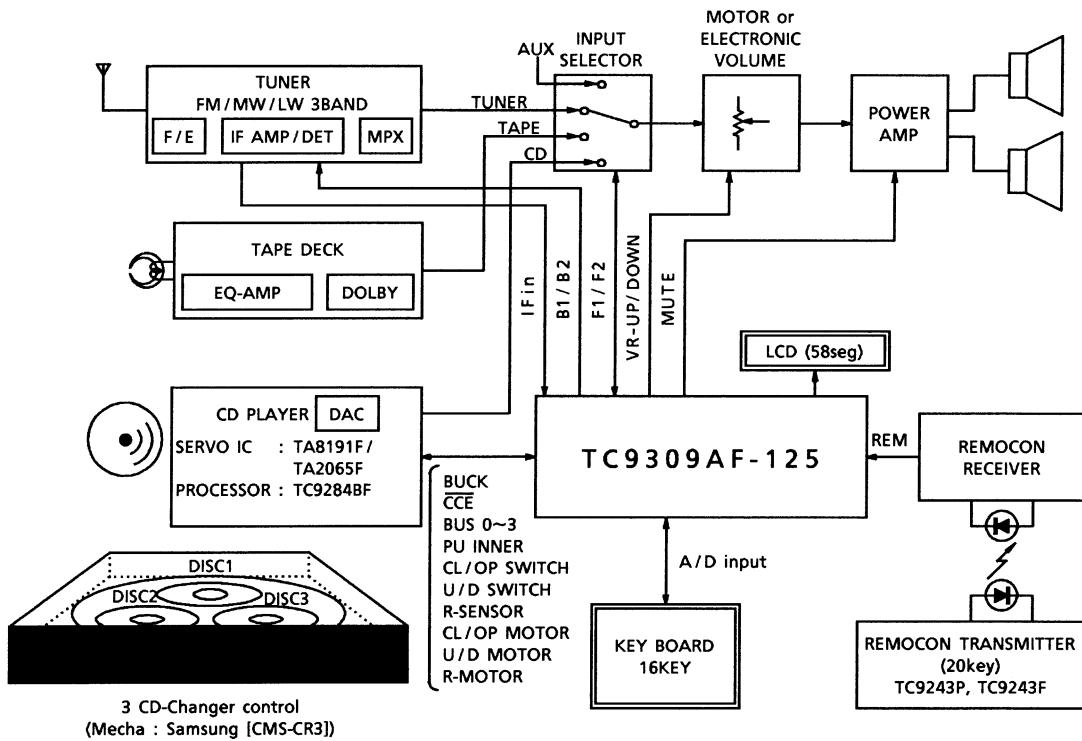
**Remote Control Functions**

- Volume up/down control
- Mute ON/OFF control

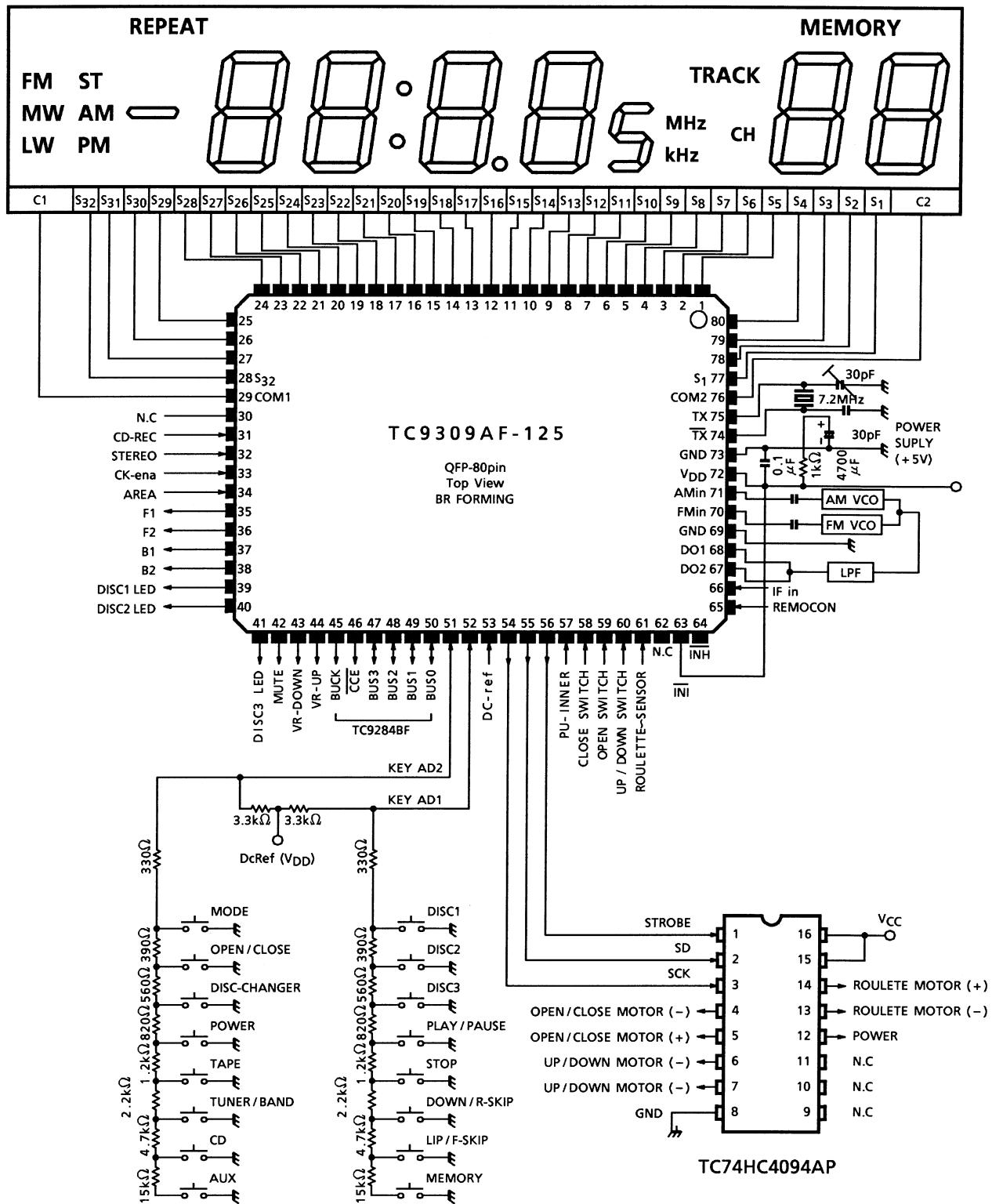
**Other Functions**

- Function change (CD/TUNER/TAPE/AUX)
- Power ON/OFF key

## Block Diagram



## Layout



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