

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 FREQUENCY [Hz]	STEP [Hz]	REFERENCE FREQUENCY [Hz]	INTERMEDIATE FREQUENCY [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)

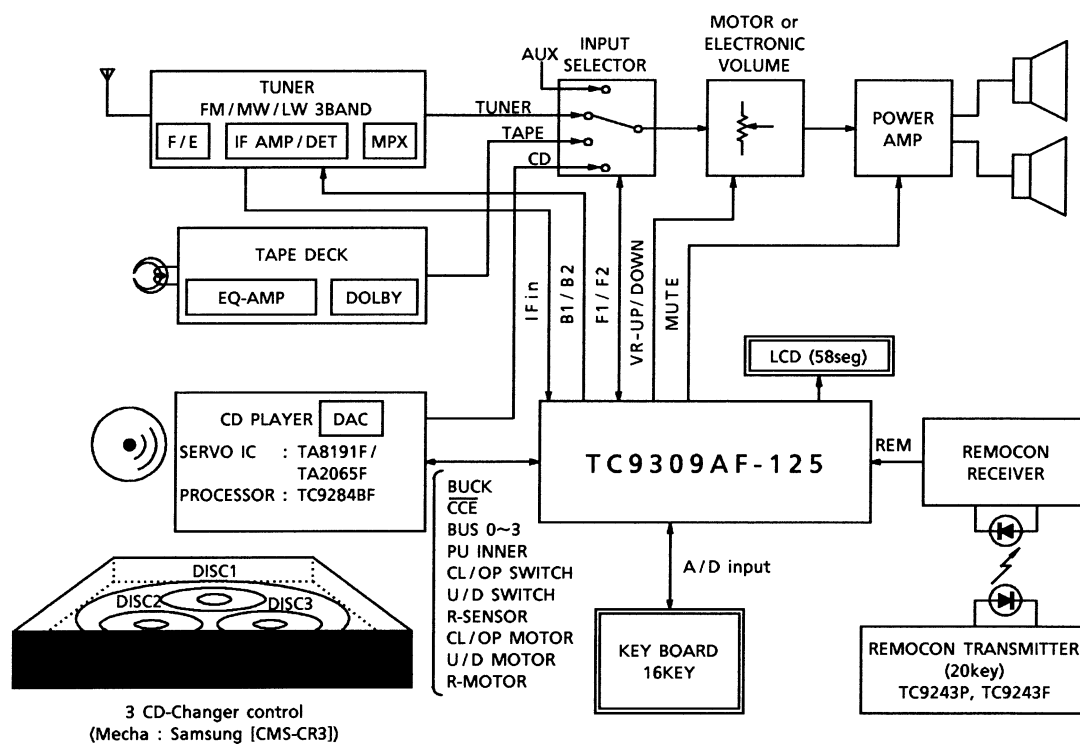
**Remote Control Functions**

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

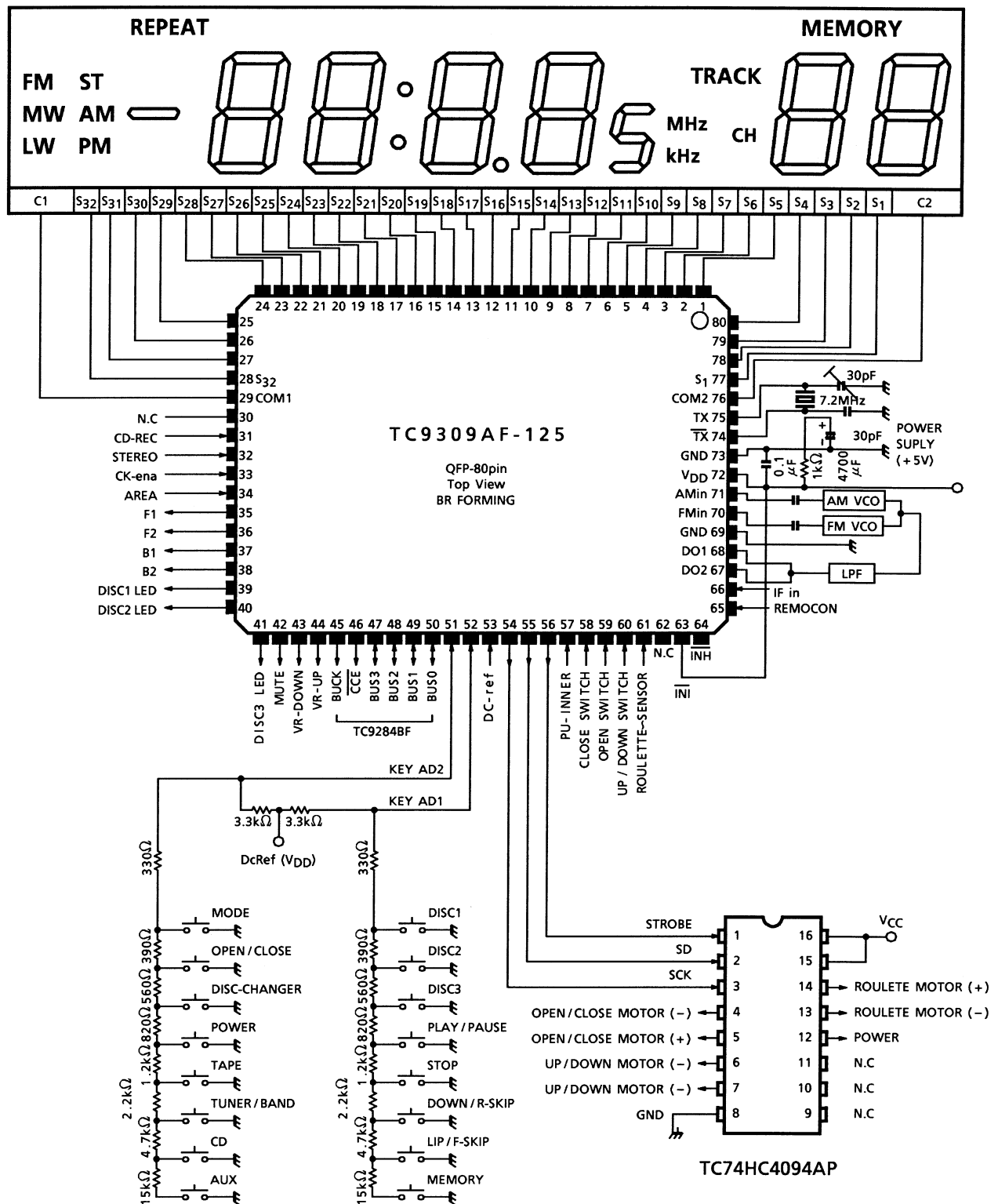
**Other Functions**

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

## Block Diagram



## Layout



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