

TOSHIBA CMOS DIGITAL INTEGRATED SILICON MONOLITHIC

**TC9309AF-119****SINGLE CHIP DIGITAL TUNING SYSTEM FOR CD RADIO CASSETTE**

TC9309AF-119 is a CMOS LSI designed for a PLL frequency synthesizer radio system corresponded to the requirement of the whole world.

Since TC9309AF-119 can be used for TC9284BF the CD processor and receive remote control signal, a low cost compact CD radio system can be constructed.

**FEATURES**

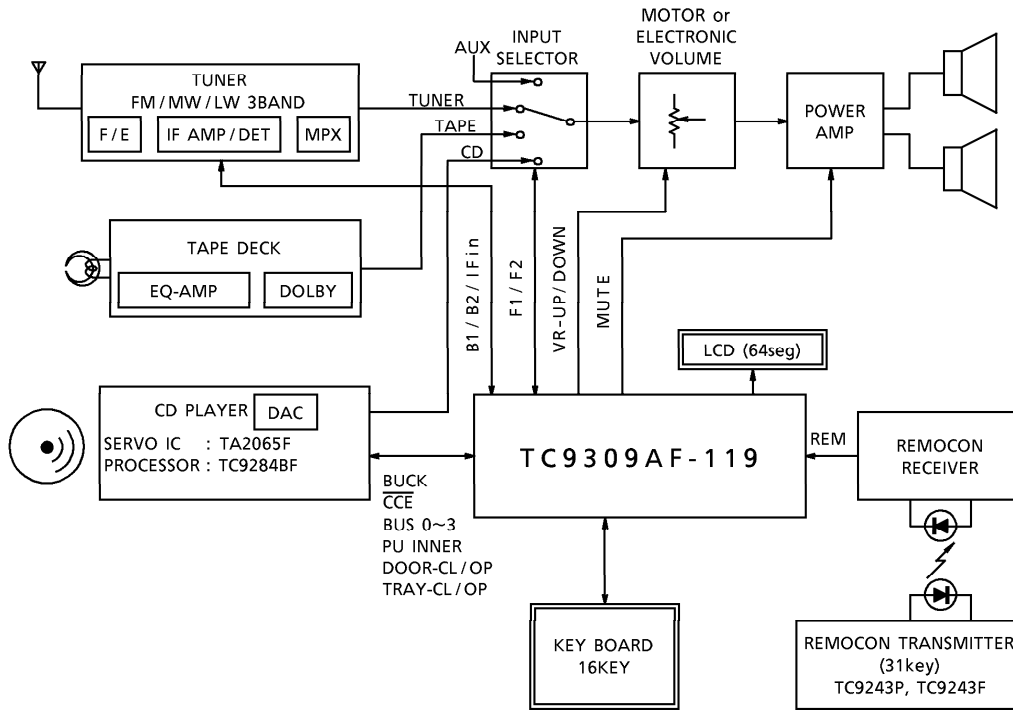
- Receiving band and preset memory

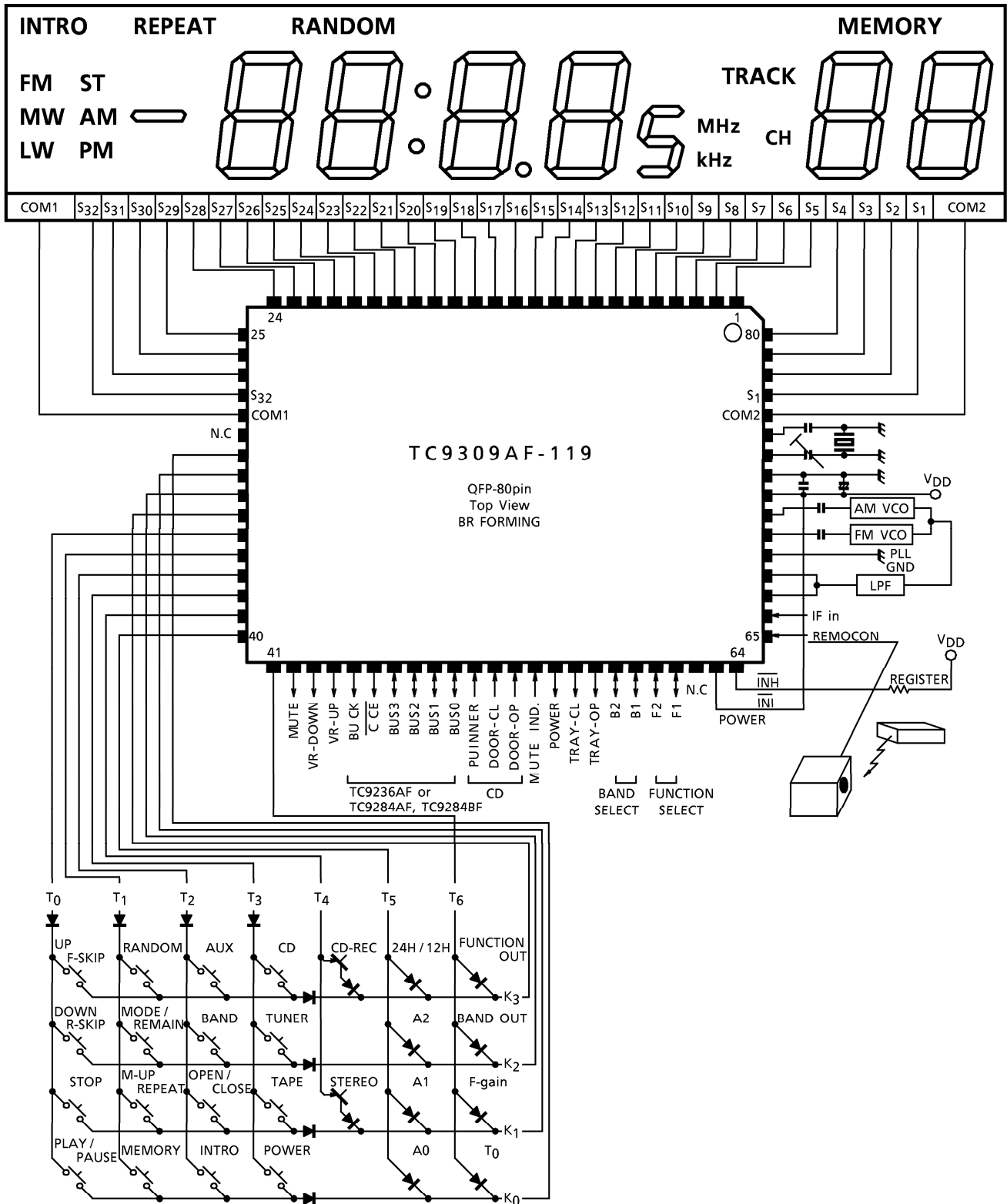
AREA	CODE			BAND	FREQUENCY RANGE [Hz]	STEP [Hz]	FREF [Hz]	IF [Hz]	NOTE
	A2	A1	A0						
EUROPE	0	0	0	FM	87.50~108.00M	50k	50k	+ 10.70M	(*) Except the case that A <sub>0</sub> , A <sub>1</sub> , A <sub>2</sub> = 000, B <sub>2</sub> INPORT must fixed to "L"
				MW	522~ 1620k	9k	9k	+ 450k	
				LW	150~ 285k	1k	1k		
	0	0	1	FM	87.50~108.00M	50k	50k	+ 10.70M	
USA1	0	1	0	AM	522~ 1620k	9k	9k	+ 450k	
				FM	87.5~ 107.9M	200k	50k	+ 10.7M	
USA2	0	1	1	AM	520~ 1710k	10k	10k	+ 450k	
				FM	87.5~ 108.0M	100k	50k	+ 10.7M	
LATIN AMERICA	1	0	0	AM	520~ 1620k	5k	5k	+ 450k	
				FM	87.5~ 108.0M	100k	50k	+ 10.7M	
AUSTRALIA MIDDLE AND NEAR EAST	1	0	1	AM	531~ 1602k	9k	9k	+ 450k	
				FM	87.5~ 108.0M	100k	50k	+ 10.7M	
SOUTH AFRICA	1	1	1	AM	531~ 1602k	9k	9k	+ 450k	
				FM	87.50~108.00M	50k	50k	- 10.7M	

## ○ Outline of functions

- Tuning functions and preset memory
  - manual up/down tuning
  - seek up/down tuning
  - scan up tuning
  - IF count (FM =  $\pm 10.7\text{MHz}$ , MW (AM) = 450kHz)
  - FM : 10 stations, MW (AM) : 10 stations, LW : 5 stations
- Clock functions
  - 12H/24H clock
- CD functions
  - random play
  - intro play
  - repeat play or track repeat play
  - memory play (max 20 preset)
  - CD FF/REW
  - synchronous recording mode
  - tray open/close control
  - indication of CD remain time
  - CD graphic
- Remote control functions
  - mute on/off
  - volume up/down
  - direct selecting of preset memory and track number
- Other functions
  - function change (CD/TUNER/TAPE/AUX)
  - indication of STEREO mark
  - power on/off key
  - mute indicator

**BLOCK DIAGRAM**





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