

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.

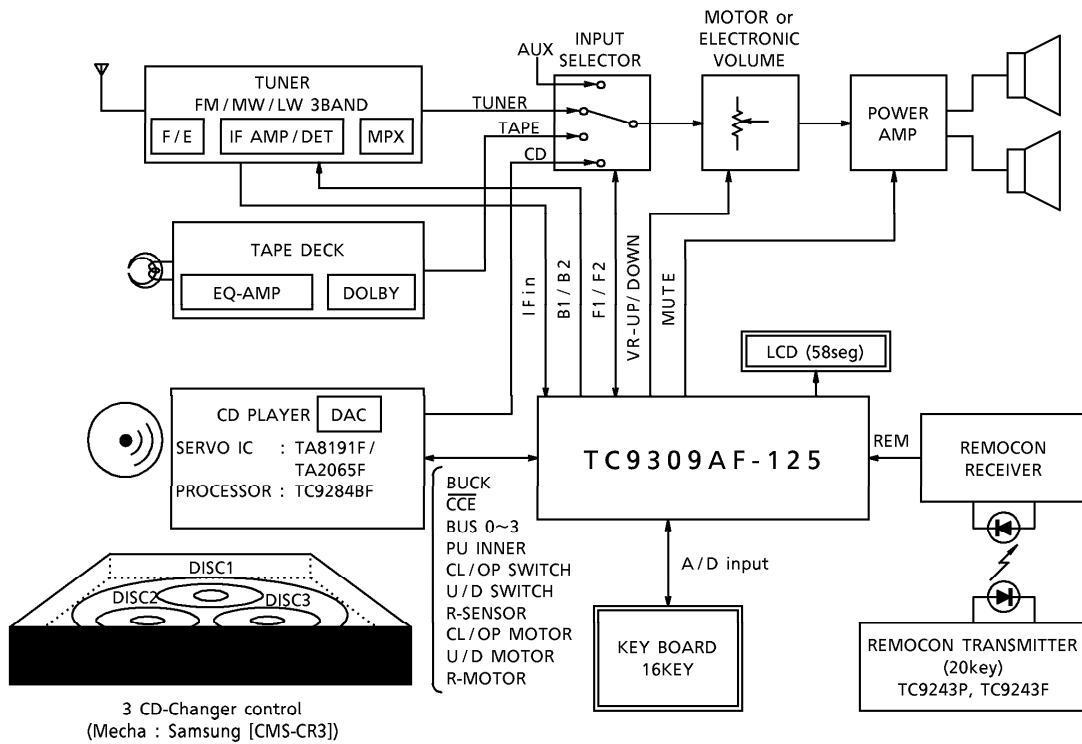
FEATURES

- Receiving band and preset memory

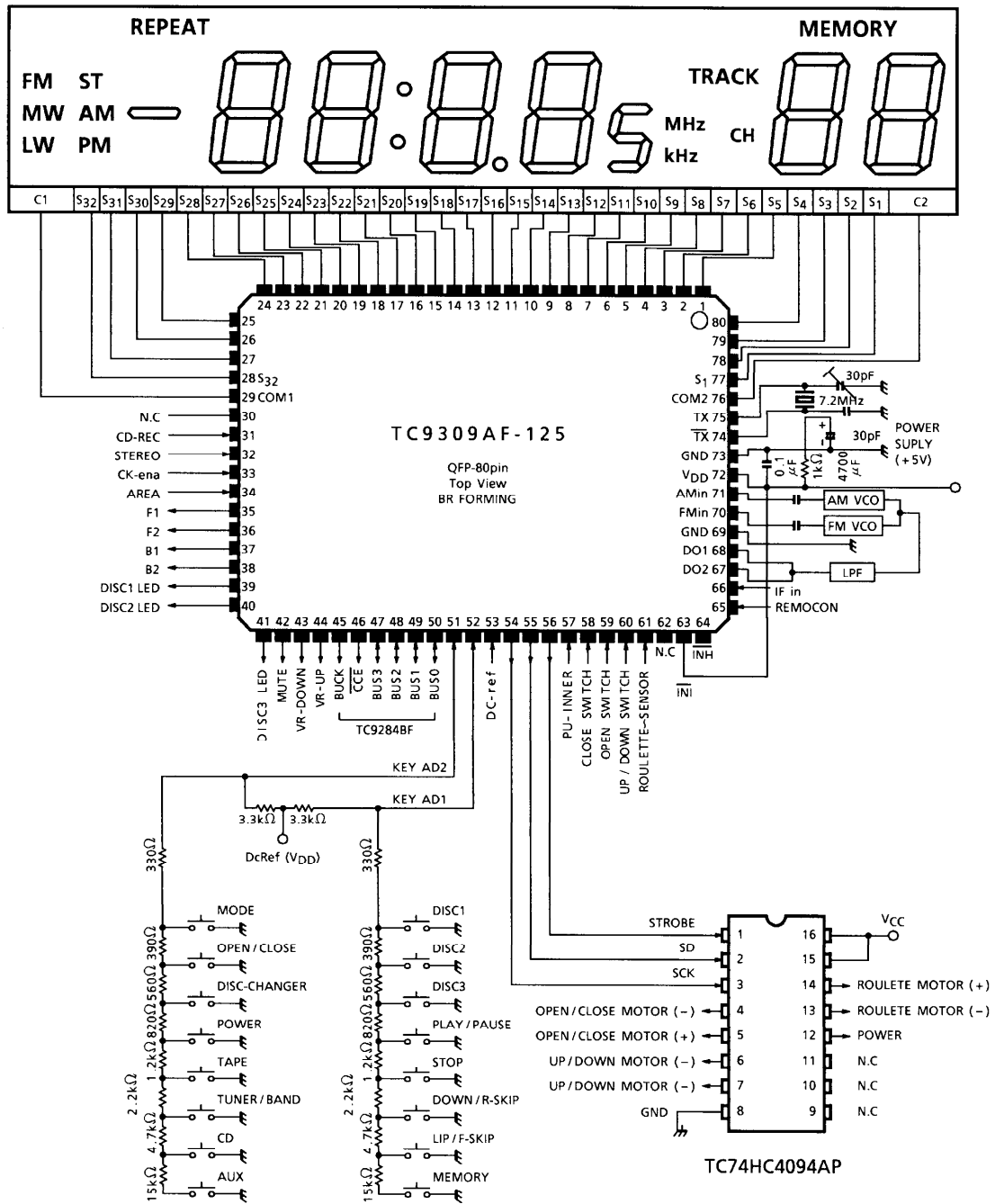
AREA	CODE	BAND	RECEIVING FREQUENCY [Hz]	STEP [Hz]	REFERENCE FREQUENCY [Hz]	INTERMEDIATE FREQUENCY [Hz]
	AREA					
EUROPE	0	FM	87.50~108.00M	50k	50k	+ 10.70M
		MW	522~ 1620k	9k	9k	+ 450k
		LW	150~ 285k	1k	1k	
USA	1	FM	87.5~ 108.0M	100k	50k	+ 10.7M
		AM	520~ 1710k	10k	10k	+ 450k

- Tuning functions and preset memory
 - manual up/down tuning
 - seek up/down tuning
 - scan up tuning
 - IF count (FM = 10.7MHz, MW (AM), LW = 450kHz)
 - 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
 - 24H clock (EUROPE area)
 - 12H 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



RESTRICTIONS ON PRODUCT USE

000707EBA

- TOSHIBA is continually working to improve the quality and reliability of its products. Nevertheless, semiconductor devices in general can malfunction or fail due to their inherent electrical sensitivity and vulnerability to physical stress. It is the responsibility of the buyer, when utilizing TOSHIBA products, to comply with the standards of safety in making a safe design for the entire system, and to avoid situations in which a malfunction or failure of such TOSHIBA products could cause loss of human life, bodily injury or damage to property. In developing your designs, please ensure that TOSHIBA products are used within specified operating ranges as set forth in the most recent TOSHIBA products specifications. Also, please keep in mind the precautions and conditions set forth in the "Handling Guide for Semiconductor Devices," or "TOSHIBA Semiconductor Reliability Handbook" etc..
- The TOSHIBA products listed in this document are intended for usage in general electronics applications (computer, personal equipment, office equipment, measuring equipment, industrial robotics, domestic appliances, etc.). These TOSHIBA products are neither intended nor warranted for usage in equipment that requires extraordinarily high quality and/or reliability or a malfunction or failure of which may cause loss of human life or bodily injury ("Unintended Usage"). Unintended Usage include atomic energy control instruments, airplane or spaceship instruments, transportation instruments, traffic signal instruments, combustion control instruments, medical instruments, all types of safety devices, etc.. Unintended Usage of TOSHIBA products listed in this document shall be made at the customer's own risk.
- The products described in this document are subject to the foreign exchange and foreign trade laws.
- The information contained herein is presented only as a guide for the applications of our products. No responsibility is assumed by TOSHIBA CORPORATION for any infringements of intellectual property or other rights of the third parties which may result from its use. No license is granted by implication or otherwise under any intellectual property or other rights of TOSHIBA CORPORATION or others.
- The information contained herein is subject to change without notice.