TOSHIBA CMOS DIGITAL INTEGRATED CIRCUIT SILICON MONOLITHIC

TC9316F-001

DTS MICRO CONTROLLER (DTS-11)

The TC9316F-001 is a digital tuning system optimum for portable sets such as pocket radios, headphone stereo sets, etc··· By combining TC9316F-001 with prescalar TD7101F or TD6134AF, 4-band of FM / MW / LW (TV) / SW are provided compatibly with worldwide destinations.

FEATURES

○ Receiving band

AREA	CODE E0	CODE E1	MW STEP	FM STEP	BAND	RECEIVING FREQUENCY [Hz]	STEP [Hz]	FREF [Hz]	IF [Hz]
U.S.A.	0	0	—	—	TV	2～13ch	1ch	3.125k	10.7M
				0 / 1	FM	(*1) 87.5～108.0M	100 / 200k	12.5k	
			0	—	MW	520～ 1710k	10k	5k	450k
			1	—		522～ 1620k	9k	3k	
East Eur.	0	1	—	0 / 1	FM	65.0～ 74.0M 87.5～108.0M	50 / 100k	12.5k	10.7M
			0	—	MW	522～ 1620k	9k	3k	450k
			1	—		520～ 1620k	10k	5k	
			—	—	LW	144～ 281k	1 / 9k (*3)	1k	
General	1	0	—	0 / 1	FM	87.5～108.0M	50 / 100k	12.5k	10.7M
			0	—	MW	522～ 1620k	9k	3k	450k
			1	—		520～ 1620k	10k	5k	
			—	—	LW	144～ 281k	1 / 9k (*3)	1k	
China	1	1	—	0 / 1	FM	87.0～108.0M	50 / 100k	12.5k	10.7M
			0	—	MW	522～ 1611k	9k	3k	450k
			1	—		531～ 1602k			
—	SW_0	SW_1	—	—	—	—	—	—	—
(*2) SW	0	0	—	—	—	—	—	—	—
	0	1	—	—	SW	3.8～ 12.5M	5k	5k	450k
	1	0	—	—		5.95～ 15.6M			
	1	1	—	—		2.3～ 6.2M 7.1～21.85M			

(*1) If step in 200kHz, receiving frequency range is 87.5～108.1MHz.
(*2) It's able to combination with any area in SW band.
(*3) There's only Auto tuning function with 9kHz step.

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○ Tuning function

- Manual tuning
- Auto-tuning

○ Memory function

	Fixed	Random
FM / AM	10 / 10	15 stations
FM / AM / LW (TV)	10 / 10 / 5	15 stations
FM / AM / SW-A or B	10 / 5 / 5	15 stations
FM / AM / SW_1 / SW_2	5 / 5 / 5 / 5	10 stations
FM / AM / LW / SW-A or B	5 / 5 / 5 / 5	10 stations

○ 12 / 24 Hour Clock indication.

○ Sleep / Alarm / Snooze function.

TC9316F-001 Layout (With prescaler : TD6134AF)

