

DTV Front-end LSI for Automotive/ Portable TV MN885411

■ Overview

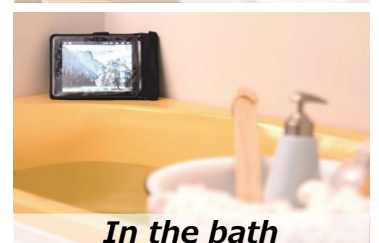
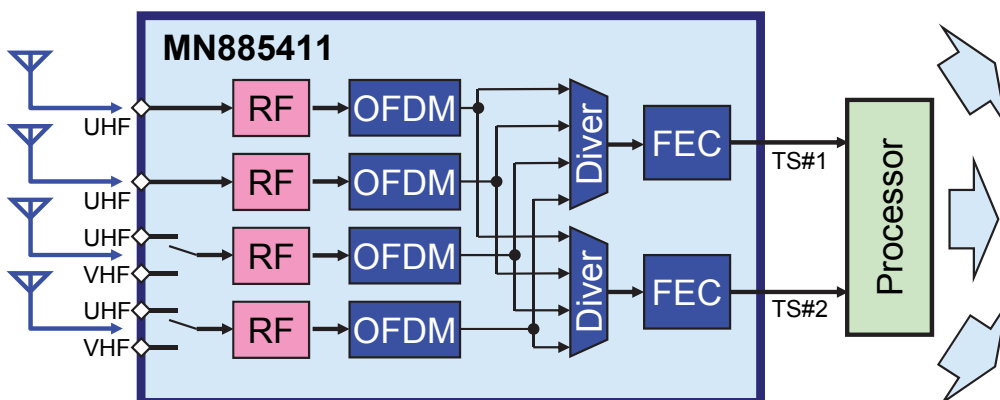
MN885411 is tuner and demodulator LSI for terrestrial broadcasts. It supports ISDB-T, ISDB-Tsb, ISDB-Tmm, and DVB-T specifications, performing channel tune of RF (Radio Frequency) signal and demodulation and error correction and outputting transport streams (TS). It supports diversity reception and is well suited for use in mobile reception applications.

■ Features

- 4-branch tuner and OFDM (Orthogonal Frequency Division Multiplexing) demodulation circuits
- Support for 2/3/4 diversity reception (3/4 diversity is for UHF)
- 2-FEC (Forward Error Correction) circuits with support for dual TS output
- 2-branch input with support for VHF reception
- I²C bus-compliant CPU interface
- Support for AC emergency alert

■ Applications

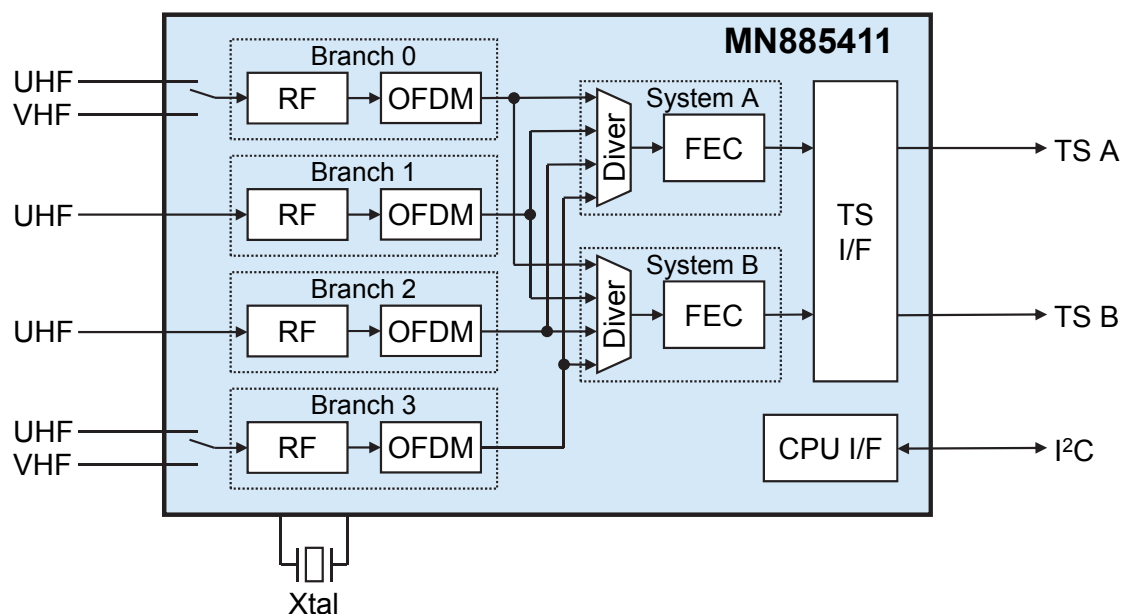
(Digital terrestrial reception system in Japan)



■ Specifications

Function		Specifications
Package		FBGA 13 mm × 13 mm, 0.8 mm ball pitch
Supply Voltage	For external	3.3V
	For Internal	1.1V
	For analog	1.8V or 3.3V
RF frequency		90 MHz to 108 MHz, 170 MHz to 230 MHz (VHF), 470 MHz to 870 MHz (UHF)
TS output		Serial / Parallel
CPU interface		I ² C bus
ISDB-T	Bandwidth	6, 7, 8 MHz
	FFT size	2K(Mode1), 4K(Mode2), 8K(Mode3)
	Guard interval length	1/32, 1/16, 1/8, 1/4
	Carrier modulation scheme	QPSK, 16QAM, 64QAM, DQPSK
	Convolutional-coding rate	1/2, 2/3, 3/4, 5/6, 7/8
DVB-T	Bandwidth	6, 7, 8 MHz
	FFT size	2K, 8K
	Guard interval length	1/32, 1/16, 1/8, 1/4
	Carrier modulation scheme	QPSK, 16QAM, 64QAM
	Convolutional-coding rate	1/2, 2/3, 3/4, 5/6, 7/8

■ Block Diagram



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