

Digital TV Demodulator for ATSC

MN88436



■ Overview

MN88436 is demodulator LSI for terrestrial and cable broadcasts. It supports the broadcast specifications of North America, performing demodulation and error correction and outputting a transport stream (TS).

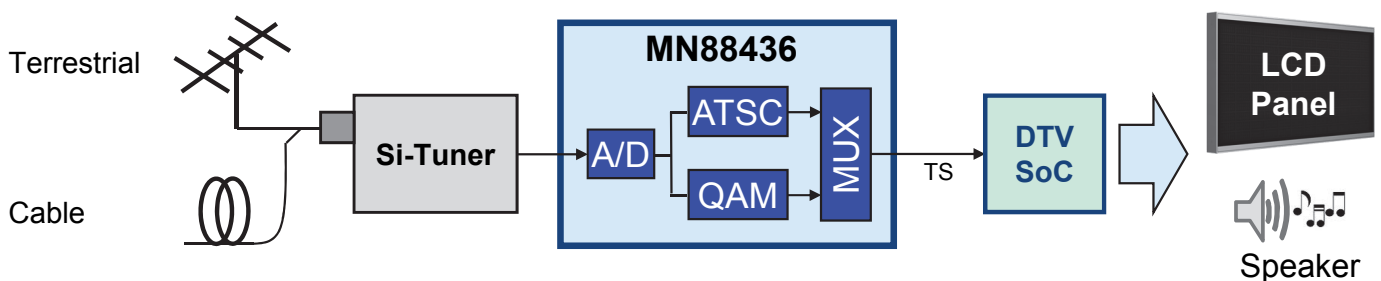
Digital terrestrial broadcasts is compliant with ATSC (Advanced Television Systems Committee) specifications, and digital cable broadcasts is compliant with open cable specifications.

■ Features

- Reception of selected digital terrestrial (ATSC)
- Built-in ADC (A/D converter)
- Built-in I²C bus-compliant CPU interface circuit and tuner control circuit

■ Applications

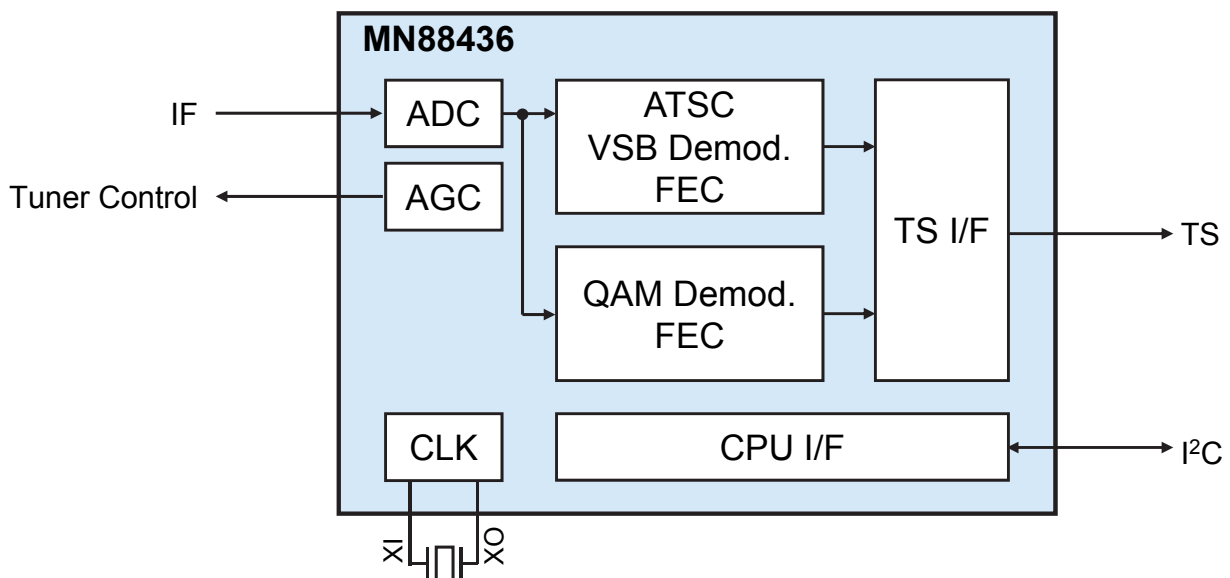
(Digital terrestrial and digital cable reception system in North America)



■ Specifications

Function		Specifications
Package		HQFP 48-pin Size: 7 mm x 7 mm Lead pitch: 0.5 mm
Supply Voltage	For external	3.3V
	For Internal	1.2V
Input		Low-IF / High-IF
Output		TS Serial / Parallel
CPU interface		I ² C bus
ATSC	Modulation scheme	8VSB
	Data rate	19.39 Mbps (8VSB)
	Roll off rate	11.5 %
	Forward error correction	Trellis decoding, Reed-Solomon decoding, De-interleaving, De-randomizer
QAM	Modulation scheme	256QAM, 64QAM
	Data rate	38.81 Mbps / 26.97 Mbps (256QAM / 64QAM)
	Roll off rate	12 % / 18 % (256QAM / 64QAM)
	Forward error correction	Trellis decoding, Sink trailer, De-randomizer, De-interleaving, Reed-Solomon decoding, MPEG framing (ITU-T J.83 Annex B)

■ Block Diagram



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