



MP3/WMA Decoder and MP3 Encoder IC

PT8405

DESCRIPTION

The PT8405 is a single chip MPEG audio encoder/decoder capable of decoding all layers compressed elementary streams, as specified in MPEG 1 and MPEG 2 ISO standards, including the so called MP3. Enhance with time-stretch and pitch-shift functions, this chip is suitable for language learning application. Another decoding function that PT8405 support is the Window Media Audio or WMA by Microsoft.

With external AD converter interface or build-in S/PDIF interface, it can also compress incoming digital signal into MPEG1/2 layer 3 format, so called MP3.

FEATURES

- Decoder supports all layer and all the sampling frequency of MPEG1 (32/44.1/48KHz), MPEG2 (16/22.05/24KHz) and MPEG 2.5.
- Support Microsoft Window Media Audio V2/V7/V8/V9 format for decoding.
- Support MPEG layer 3 all sampling frequency for encoding.
- Time-stretch and pitch-shift functions for various applications, including language learning
- Serial/parallel bit stream input interface
- Parallel bit stream output interface
- Build-in S/PDIF for MP3 encoding input
- DAC master clock ($256 \times f_s^1$ / $384 \times f_s$ for 16 / 24 bit DAC) is supported
- Spectrum analyzer output register for spectrum graphic display
- Build-in volume and digital equalizer control
- Low operating voltage, 2.5V.
- 44-pin plastic LQFP

APPLICATIONS

- Portable MP3/WMA player
- Language learning machine
- PDA, Electronic dictionary
- All other MP3/WMA applications

¹ f_s : sampling frequency.



PIN CONFIGURATION

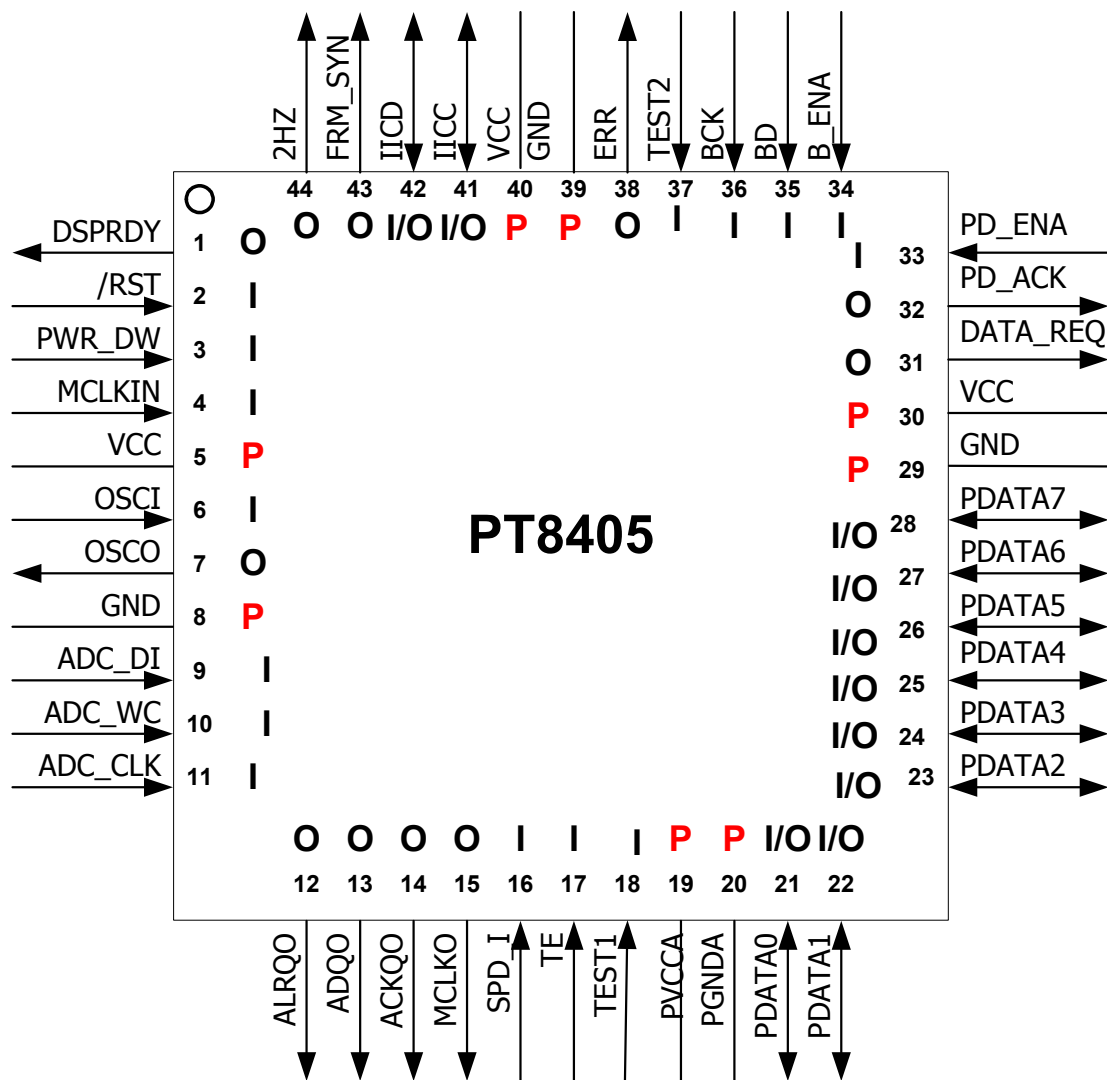


Figure 1. Pin Assignment (P: Power pins, I/O: IO pins)



ORDER INFORMATION

Valid Part Number	Package Type	Top Code
PT8405-LQ	44 pins, LQFP	PT8405-LQ