

Short Information

MAS 3587F**MPEG 1/2 Layer 3 Encoder/Decoder** (PLQFP64 or LFBGA81 Package)

The MAS 3587F is a single-chip MPEG layer 3 audio encoder/decoder designed for use in portable memory-based recording/playback applications. The MAS 3587F contains the DSP engine with embedded RAM and ROM. It provides flexible digital interfaces for serial and SP/DIF audio data input and output. The MAS 3587F integrates power management functions and two DC/DC converters for single cell power supply. A high-quality stereo digital-to-analog converter and a stereo analog-to-digital converter on chip provide the analog functions required in an advanced portable audio recorder.

Features:

- Single-chip MPEG 1/2 Layer 3 audio encoder/decoder
- MPEG 1/2 Layer 3 encoding at various sample frequencies
- Encoding with adaptive bit rates (variable bit-rate)
- ISO compliant MPEG 1/2 Layer 2/3 decoder
- Integrated high-quality D/A converters
- Integrated A/D converters
- Microphone amplifier
- Flexible interfaces: S/PDIF, serial, parallel, I²C
- All clocks generated on-chip
- Audio features: volume, mute, bass, treble, automatic gain control
- Power management functions, built-in DC/DC converters, low power consumption
- Status, ancillary information accessible via I²C

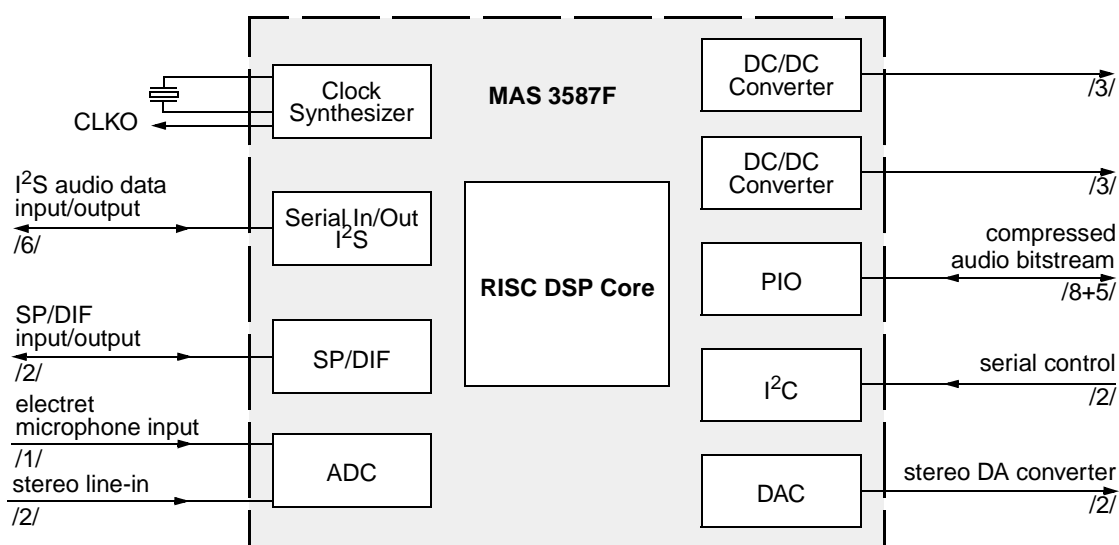


Fig. 1: Block diagram of the MAS 3587F