

Melody 1200



Hardware

- usage of high performance **20 bit HiFi Codec**
- high samplerates of 44.1kHz and 48kHz
- does not disable the use of modern CPUs
- may be used together with RS232/V24 board for the same connector
- Playback and recording at the same time (Full-Duplex)
- Usefull for A1200 and -Tower
- three inputs offering variable gain, one of them is located internal and intended for connecting a CD-Rom-Drive
- Pass-Thru and Monitoring
- very small outlines caused by the use of modern technologie
- modular, extendable concepts
- Multilayer PCB (Printed Circuit Board)
- expandable with Digital I/O Board
- optional with a board for Zorro 2
- works with BVision
- PPC compatible

Melody 1200base

No special features. Simple Chip-upgrade to Melody 1200pro with all its features is possible.

Melody 1200pro

High Quality Playback of MPEG2.5-Sound (Layer 2+3) via specialized **DSP** forcing really low load at the main CPU.

Software

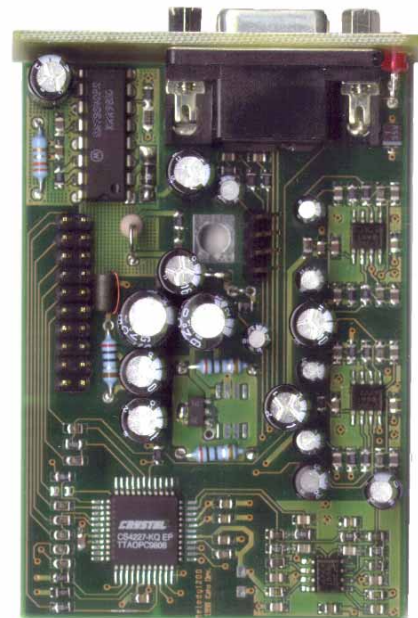
- AMPlifier
- Melody Control
- Audio Evolution (Demo)
- OctaMED Soundstudio 1
- OctaMED Soundstudio 2 (Demo)
- Ncode (Audio MPEG coder)
- Genetic Species
- and much more...

Drivers

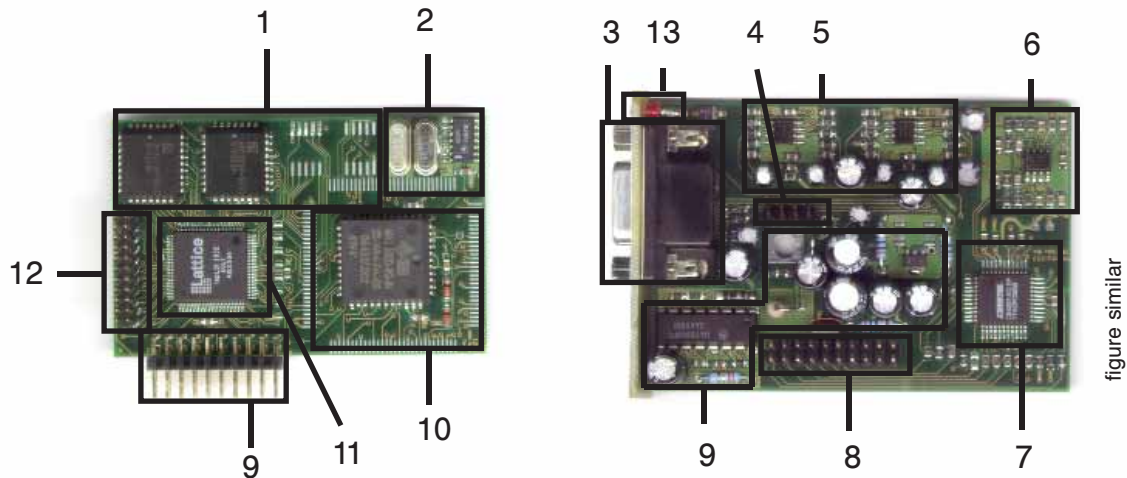
- Xaudio.device
- mpeg.device
- AHI
- Toccata Emulation

Technical Description

20 Bit AD/DA-Converter. This high performance chip is usually used for Dolby^(R) Pro-logic^(TM), THX^(R), Dolby Digital AC-3^(TM) and better DSP-based applications. Its Signal to Noise Ratio of 108 dB is much better than known from 16 Bit Converters offering about 80 dB (each 3 dB step means doubling the ratio).



Technical Description



- 1 Hardwarebuffer (2 * 2 kByte) to prevent accidentally stopping Playback and Recording
- 2 X-tal driven clockgenerator for different samplingrates
- 3 Connector for two stereo inputs and one stereo output
As a replacement for the used cover, a bracket may get used or the board may get mounted directly to the backside of your Tower.
- 4 Internal connector for CD-Rom-Drive as an example
- 5 Active analogous input filters
They remove HF-noise which has no place in audiosignals.
- 6 Active 2-stage filters for clean output (4..22kHz)
- 7 20 Bit AD/DA-Converter
This high performance chip is usually used for Dolby^(R) Pro-logic^(TM), THX^(R), Dolby Digital AC-3^(TM) and better DSP-based stuff. Its Signal to Noise Ratio of 108 dB is much better than known from cheap "16 Bit Multimedia Audio" CODECs offering about 80 dB (each 3 dB step means doubling the ratio)
- 8 Connector for serial control- and audiodatabus between analog and digital part of Melody 1200.
Via the audiobus data is transeived using a professional standart (TTL-Digital-IO). Only by using exactly this design it's possible to get the seperation to the **agressive** digital lines and **emmission** of the computer. Another important advantage to poor designs, which need to transport analog lines through the machine is the possibility for nice extensions. A separated design like this is very intensive in development power and needed electronic parts needed. This kind of design isn't cheap but it's performance is great.
- 9 Strong filtering of the supply to get really clean voltage routed to the analog circuits
- 10 Space for upgrading the base version with a DSP to be a Melody 1200 pro (Melody 1200 pro is shown at this example)
- 11 The EPLD, a programmable logic chip.
This is the heart of Melody 1200. The complexive control of the board is located in here. The programm loaded into it is different for the variants of Melody 1200 and is the goal for upgrading easily from Melody 1200 base to pro. The basic functionality includes f.e. access to the CODEC and generation of signals needed to support a RS232-Modul and even includes the logic needed to connect a Digital-IO expansion. At Melody 1200 with DSP (pro) its even responsible for controlling it. Also it controls the buffering and various serialparallel conversations needed.
- 12 Main connector which plugs to the Clock-Port of the Amiga 1200
The port is routed through the board (with some modified signals) to make it possible to use another expansion on top of it. Boards done by Kato Development will work without any trouble on this interface.
- 13 Error or Peak-LED
The LED shows misbehaviour of the board and things like overloading the inputs (clipping).