M P E G **MovieMaker**™

M P E G – 1   E n c o d i n g   B o a r d s

MPEG MovieMaker is a family of powerful, single board MPEG-1 encoders with features that fit all your **digital video** needs. MPEG MovieMaker encoders are ideal for **networking,** archiving and **content creation** applications. Encoded video and audio can be distributed over LAN, T1/E1, ISDN, and other communication media. This is ideal for **numerous applications,** such as surveillance, video-monitoring facilities, multimedia presentations, computer-based training and Internet or Intranet video publishing.

MPEG MovieMaker is available in two versions:

1 MPEG MovieMaker Plus

MPEG MovieMaker Plus is a top-of-the-line
MPEG-1 encoding platform with maximum encoding rates of 5 Mbit/s. MPEG MovieMaker Plus has outstanding features which set this encoding board apart. It encodes System, Program and Transport streams which allow developers to integrate digital video into transmission applications. Multi-board support saves installation and administration overhead by letting you install several MPEG-1 encoding boards in a single computer. These features make MPEG MovieMaker Plus the preferred choice for IP and ATM-based video transmission applications where stability, quality and synchronization are crucial.

MPEG MovieMaker XPress

MPEG MovieMaker XPress is an entry-level
MPEG-1 encoding platform for system integrators and application developers. It produces MPEG-1 streams with top bit rates of 3 Mbit/s and is designed for multi-point to center video transmission applications such as video monitoring, tele-medicine and surveillance.

2 Features

- ▶ MPEG-1 video in QSIF and SIF resolutions

- ▶ MPEG-1 audio

- ▶ Multiplexed System, Program and Transport streams (available only with MPEG MovieMaker Plus)

- ▶ Multi-board support (available only with MPEG MovieMaker Plus)

- ▶ SmartMux™ (Patent Pending) technology: from 5 fps frame sampling in a standard MPEG file

- ▶ EverSync™ (Patent Pending) technology: 24 hours, 7 days a week audio and video synchronization

❚❚ ▶▶   MPEG MovieMaker™

MPEG MovieMaker encoding boards benefit from Optibase's extensive experience in MPEG technology. They are equipped with unique SmartMux technology that allows the creation of MPEG-1 QSIF streams from bit rates as low as 64 Kbit/s. SmartMux encoding creates smooth audio and video streams by overcoming the jerky motion of low bit rate frame sampling. Improved quality at low bit rates lets you optimize transmission by using bandwidth more efficiently.

Optional Software Packages

Optibase's Customer First approach to digital video creation allows you to combine MPEG MovieMaker boards with several software packages, according to your application requirements. Whether setting up a content creation facility, business television application or remote surveillance monitoring system, one of Optibase's software packages gives you the tools you need.

For Video Publishers and Content Creators:
MPEG Composer™ Plus

MPEG MovieMaker Plus, together with the award-winning MPEG Composer Plus encoding management application, is a powerful video publishing solution that allows users to distribute video titles on Video CD and CD-ROM discs. MPEG Composer Plus supports VTR device control for frame accurate encoding. It also includes MPEG Organizer™, a comprehensive batch-encoding tool that lets users encode multiple files easily and efficiently.

For Application Developers and System Integrators:
Progression™

Developers who want to develop digital video-based applications can subscribe to Progression, Optibase's developers support program, and benefit from specially developed software tools and software development kits. The developers' tools provide complete control over MPEG and streaming properties through a C/C++ interface or DirectShow filter architecture.

For Networking System Integrators:
MPEG ComMotion™ UDP

When controlled by MPEG ComMotion UDP, MPEG MovieMaker becomes a sophisticated networking package that supports the DVB (Digital Video Broadcasting) protocol and enables the transmission of video over digital networks, from IP multicasting over LAN and Intranets to ATM and satellite networks. MPEG ComMotion UDP tools include a transmission and receiver application as well as ActiveX development tools that jump-start the development needed to set up transmission applications.

Discover the power of digital video with Optibase, a world leader in MPEG technology.

Technical Specifications

Standard Compliance	ISO/IEC 11172 (MPEG-1)

Input/Output Signal

Video Input	NTSC & PAL Composite Video (BNC) S-Video (Mini-DIN) Digital Prefiltering (noise reduction, improved encoding)
Audio Input	Unbalanced Analog Stereo Line Input (Mini-Jack) Input Impedance: 600 Ω Frequency Response: 20 Hz - 20 KHz Sampling Frequency: 32, 44.1, 48 KHz at 16 bits per sample
Video Preview Output	Composite Video (BNC)
Audio Preview Output	Unbalanced Analog Stereo (Mini-Jack)

Output Streams

	Standard	Resolution	FPS	Encoding Range
NTSC Video	SIF	352 x 240	5,10,15,18,24,30	90 Kbit/s - 5.0 Mbit/s*
	QSIF	176 x 112	5,10,15,18,24,30	25 Kbit/s - 3.0 Mbit/s
PAL Video	SIF	352 x 288	5, 8, 12, 25	90Kbit/s - 5.0 Mbit/s*
	QSIF	176 x 144	5, 8, 12, 25	25 Kbit/s - 3.0 Mbit/s

*Max. encoding bit rates for MPEG MovieMaker XPress are 3 Mbit/s

Audio Bit Rates	32 - 384 Kbit/s
File Format	Audio Elementary, Video Elementary, Audio & Video, System, Program, Transport, Video CD (MPEG MovieMaker XPress does not support Program and Transport streams)
Audio Mode	Mono, Dual Mono, Stereo, Intensity Stereo

Hardware

Board Name	MPEG MovieMaker Plus, MPEG MovieMaker XPress
Function	Single Board MPEG-1 Video and Audio Encoder
Bus Standard	PCI 2.01 or higher
Video Encoding Engine	2 C-Cube VideoRISC Processor CL4020-P208 (VRP3), Micro Code CLM4111 (QSIF), CLM4120 (SIF)
Audio Encoding Engine	Motorola DSP 56002 66 MHz
Power Consumption	10.5 W (2.1 A) @ + 5 VDC, 1.3 W (0.11 A) @ +/- 12 VDC
Physical Size	Full PCI Slot, 312mm x 106.7mm, 12.28" x 4.2"
Certifications	FCC Class A, CE Mark Class B
Installation	Plug and Play

Software Included

MPEG Composer Starter

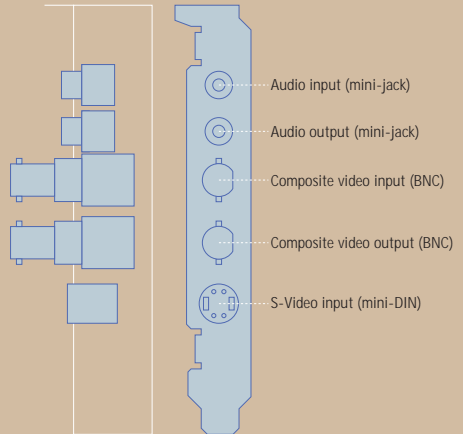## Minimum System Requirements

Pentium 90 MHz

Free hard disk space 21 MB

16 MB RAM

Windows 95 or Windows Workstation NT 4.0

One full size PCI slot
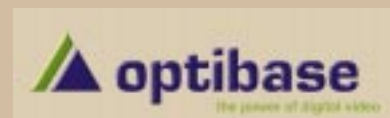
CD-ROM

200 W power supply

- Audio input (mini-jack)
- Audio output (mini-jack)
- Composite video input (BNC)
- Composite video output (BNC)
- S-Video input (mini-DIN)

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