

Maui-II PCI PVR

Internal (PCI) MPEG2 Encoder and Capture device for the PC with TV Tuner

Microsoft Windows XP Media Center Edition compliant

About Emuzed

Emuzed is a leading provider of multimedia solutions to PC OEMs. Founded in 1999, the company is headed by a management team with a successful track record and significant multimedia experience. We offer complete solutions for PC multimedia capture and management including hardware, software, as well as industrial designs. Emuzed products are robust and of the highest quality, and we provide a flexible business model that allows OEMs to buy finished products or license designs for manufacturing.

Product Overview

Maui-II PCI PVR is a very high quality, low cost PCI card with an MPEG-2 encoder, an integrated on-board TV tuner and optional FM tuner. Maui is approved for use with the Microsoft Windows XP Media Center Edition. The unit fits into the PC in a standard PCI card slot. This product consists of PCI card and a software application. The application allows the user to capture full motion D-1 quality video clips in MPEG-2 format on the PC.

Maui-II PCI PVR comes in two flavors – Maui-II PCV PVR-S with S-Video input connector in back panel and Maui-II PCI PVR-C with Composite video input connector in back panel.

General Feature Set

- MPEG-2 capture from TV tuner or an external video source
- SVCD, DVD –compatible recording
- Full D-1 capture in NTSC & PAL
- On-board TV tuner
- BTSC and SAP stereo decoding for NTSC version
- NICAM and Dual Carrier decoding for PAL version



Emuzed Maui-II PCI PVR



NOTE: These specifications are subject to change without notice.

Features

Video

The device has 2 sets of video inputs. Under SW control, the user can select either:

- Composite Video for Maui-II PCI PVR-C and S-Video Input for Maui-II PCI PVR-S in back panel
- RF TV Input in back panel
- S-Video Input (via 10-pin connector)
- Composite Video Input (via 10-pin connector)

MPEG encoder supports the following features:

- MPEG-2 format
- CBR or VBR from 0.25 to 15 Mbps
- NTSC or PAL video formats
- Pixels per Line: 720, 704, 640, 544, 480, 352, 320, 160
- Lines per Frame: 112, 240, 480, 144, 288, 576
- MPEG video elementary and audio PCM stream output
- SVCD & DVD-compatible streams

Audio

The device has 1 set of stereo audio inputs. The audio A/D converter allows the user to select one of 3 different sampling rates; 32, 44.1 and 48kHz. The audio processor supports BTSC and SAP stereo standard. The software audio encoder supports the following options:

- MPEG-1
- Selectable bit rates: 32, 48, 56, 64, 80, 96, 112, 128, 160, 192, 224, 256, 320, 384

I/O

The following I/O connectors are supported on the unit:

Back Panel

- RF Video Input
- Optional RF FM input
- 1 Composite Video Input for Maui-II PCI PVR-C and 1 S-Video input for Maui-II PCI PVR-S
- 2 Stereo Audio Input (dual RCA)

10-Pin Connector

- 1 Composite Video Input
- 1 S-Video Input
- 2 Stereo Audio Input

Bus Interface

Maui-II PCI PVR supports PCI version 2.1.

Thermal

Storage Temperature: -20 to 50 degrees C [10-90 % humidity].

Power

The board uses +5V and +12V from the PCI bus. The special I/O power pins on the PCI bus are to be connected only to the I/O power pins on the DVXplore processor. The board may be used in 5V or 3V PCI signaling environments.

- 12V: 300mA max
- 5V 1.5A max
- V I/O connected only to DVXplore I/O power pins
- 3.3V no connection

Software



Maui-II PCI PVR is provided with Windows XP Media Center Edition compatible driver and a capture application (MovieMill TV). The Movie Mill application supports Media Center Edition compatible driver interface. The key features are outlined below.

Capture

- Preview in a window or full screen. Preview is implemented by means of a real time software decoder included in the bundle. Audio is rendered through sound card and proper audio/video synchronization is ensured
- Capture to a file. Manual stop or timed capture
- Video and audio input selection and color controls
- SVCD and DVD templates
- Color controls (Brightness, Saturation, Tint, Sharpness, Contrast)
- TV tuner control including:
 - Antenna/Cable selection
 - Channel selection
 - Favorite channels setup
 - Scanning for available channels
 - Fine tune



Playback

- MPEG1 and MPEG2 files playback
- Video in a window and Full screen
- Browse to a file for file selection
- Position slider with a thumb for instant position change
- Play/Pause/1 Frame Step back/1 Frame Step forward/Begin/End buttons
- Volume control

The capture and playback control features of this application are described in a separate document.

Driver

The DVXplore μ Codes are downloaded over the PCI so that the unit can be completely field upgradeable. The driver works under Windows 98SE, Windows ME, Windows 2000 and Windows XP.

The drivers are WDM compliant and can be integrated with a variety of 3rd party applications with minimal engineering effort.

Customization

Emuzed will customize the driver, installation and MovieMill application to reflect OEM's company name, logo, and product name. MovieMill user interface is localization-ready and can support multiple languages using OEM customization kit.

PC

The requirements for the PC will be set by the SW application(s) more than by the hardware. The driver requires:

- Pentium III 500 MHz or equivalent AMD
- 128 MB RAM
- Graphics board with DirectX 8 support
- Sound board with DirectX 8 support
- CD-ROM drive
- IDE Hard drive with master mode support
- Free full height PCI slot

For Windows XP Media Center Edition requirements, please refer to Microsoft documentation.

3rd Party Software

Varieties of 3rd party applications support this product including DVD/PVR application with time shift recording, electronic programming guide and scheduler. Please contact Emuzed for more information.