Bali PCI
Internal (PCI) MPEG-1/2 Encoder and Capture device for the PC
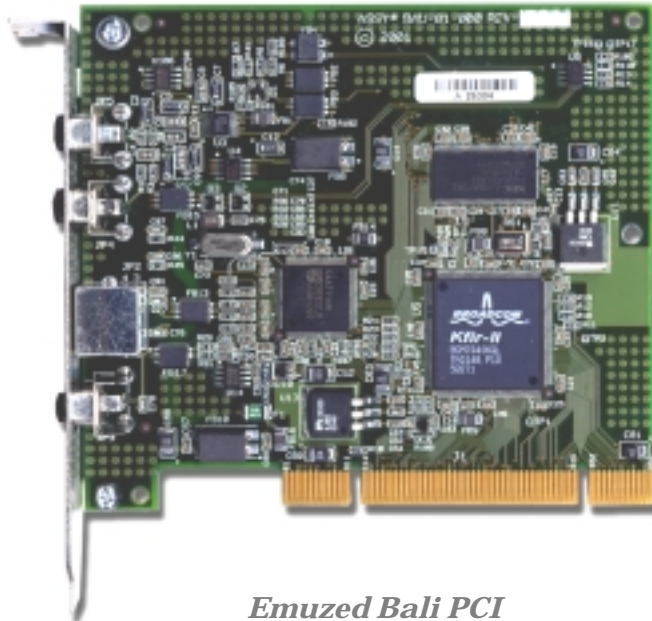
About Emuzed

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.

Bali PCI Product Overview

Bali PCI is a very high quality, low cost, internal MPEG-1 / MPEG-2 encoder for the PC. The unit installs in the PC in a standard half size PCI card slot. This product consists of an internal card and a software application. The application allows the user to capture full motion D-1 quality video clips in MPEG-1 or MPEG-2 format on the PC.

General Feature Set

- MPEG-1, MPEG-2 capture
- VCD, SVCD, DVD formatted recording
- Full D-1 capture in NTSC & PAL

Emuzed Bali PCI

NOTE: These specifications are subject to change without notice.

Features

Video

The device has 1 set of video inputs. Under SW control, the user can select either:
- Composite Video Input
- S-Video Input

The MPEG encoder supports the following features:
- MPEG-1 or MPEG-2 format
- VBR from 0.25 to 15 Mbps
- NTSC or PAL video formats
- Pixels per Line: 720, 704, 640, 544, 480, 360, 320, 160
- Lines per Frame: 112, 240, 480, 144, 288, 576
- Programmable 2-D filter
- Auto 3:2 pull down detection
- VBI extraction
- VCD, SVCD & DVD formats

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 encoder supports the following options:

- MPEG-1, Layer 2 encoding
- 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:

- One Composite Video Input (RCA)
- One S-Video Input (7-pin DIN connector with I_2C, +5V)
- One Stereo Audio Input (dual RCA)
- 5V Power input (Power Jack) Fused (1.1A max)
- PCI bus

PCI Interface

The Bali board supports a 32-bit, 33MHz PCI interface (v2.2).

Form factor

The PCI card is a half slot sized board measuring 4.75" x 4.1".

Power

The board uses 12V and 5V from the PCI bus. During encoding, the current requirements are:
- 12V: 27mA
- 5V: 680mA

Software

The Bali PCI unit ships with PCI drivers and capture application (MovieMill). 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
- VCD, SVCD and DVD templates
- Color controls (Brightness, Saturation, Tint, Sharpness, Contrast)

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

Driver

The KFIR uCodes 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, half width PCI slot

3rd Party Software

Varieties of 3rd party applications support this product for including capture, edit and author features. Please contact Emuzed for more information.