



### Faster than realtime high definition H.264 encoding engine

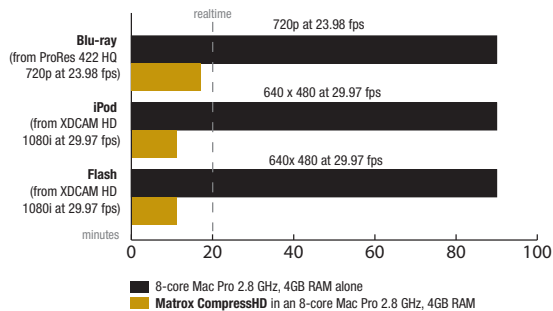
Matrox MAX is a unique technology that implements faster than realtime H.264 encoding for resolutions ranging from iPod to HD. It uses a dedicated hardware processor to accelerate the creation of H.264 files for Blu-ray, the web, and mobile devices. By using specialized hardware acceleration, jobs are finished with amazing speed and system resources are liberated for other tasks. Quality and flexibility are ensured through direct integration with professional applications such as Apple Compressor on the Mac and Adobe Media Encoder on the PC. As an added benefit, the Matrox MAX technology allows direct export to higher-quality H.264 Blu-ray compliant files from Compressor.

#### Key Features

- Faster than realtime creation of H.264 files, for resolutions ranging from iPod to HD, at bitrates up to 50 Mbps
- A specialized, dedicated hardware processor liberates system resources for other tasks
- Accelerated encoding for Blu-ray, PS3, Apple TV, YouTube, Flash, web formats, and mobile devices including iPhone and iPod from various video sources including 2K files
- Direct integration with Apple Compressor on the Mac and Adobe Media Encoder on the PC to simplify workflow
- Creation of Blu-ray H.264 files that can be authored in Adobe Encore CS4 and Roxio Toast 10 then burned without re-encoding
- Support for Apple Qmaster to take advantage of multiple systems with a Matrox MAX processing engine for distributed encoding across a network

### Faster than realtime creation of H.264 files

Matrox MAX technology saves you time. You'll spend less time rendering and more time being creative and productive. The following table shows typical encoding times for a 20-minute H.264 deliverable.



### Specialized, dedicated hardware processing

Matrox MAX offloads CPU intensive encoding tasks to a dedicated hardware engine to crunch out your deliverables in record time for Blu-ray, the web, and mobile devices, without sacrificing quality. The Matrox MAX hardware engine offers sophisticated encoding capabilities such as:

- Baseline and main profile encoding algorithms
- CABAC entropy encoding for high quality
- CAVLC entropy encoding for mobile devices
- High quality scaling with de-interlacing
- Color space conversions
  - HD to SD
  - SD to HD
  - RGB to YUV
- GOP structure controls
- Bitrate controls from 100 Kbps to 50 Mbps

### Direct integration with professional encoding applications

Matrox MAX technology taps into Apple Compressor on the Mac and Adobe Media Encoder on the PC to let you quickly and easily create H.264 files for Blu-ray, PS3, Apple TV, YouTube, Flash, web formats, and mobile devices including iPhone, and iPod. You can take advantage of all the familiar settings in your favorite application, use the Matrox MAX presets or customize your own. As an added benefit, the Matrox MAX technology lets you directly export to higher-quality H.264 Blu-ray compliant files from Compressor.

A growing list of presets are available including:

- HD 1080i, 1080p, 720p
- NTSC, PAL
- Apple TV
- iPod
- iPhone
- YouTube

[www.matrox.com/video](http://www.matrox.com/video)

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Customizable settings can be easily created to meet special needs as outlined in the table below.

#### Customizable Encoding Formats

Typical uses	Resolutions	Frame rates	Bitrate range
Blu-ray PS3 HD web video Archiving	720 x 480 720 x 576 1280 x 720 1920 x 1080i 1920 x 1080	29.97, 59.97 25, 50 23.98, 25, 29.97, 50, 59.97 25, 29.97 23.98, 25, 29.97	512 Kbps-3 Mbps 1-50 Mbps
Apple TV YouTube HD Podcasts Webcasts	640 x 480 (4:3) 640 x 360 (16:9) 640 x 272 (2.35:1) 720 x 480 (4:3) 960 x 540 (16:9) 1280 x 960 (4:3) 1280 x 720 (16:9) 1280 x 544 (2.35:1)	15, 23.98, 25, 29.97 15, 23.98, 25, 29.97	512 Kbps-3 Mbps 1-20 Mbps
iPod iPhone Flash YouTube Portable devices	640 x 480 (4:3) 640 x 360 (16:9) 640 x 272 (2.35:1) 320 x 240 (4:3) 320 x 180 (16:9) 320 x 136 (2.35:1)	15, 23.98, 25, 29.97 15, 23.98, 25, 29.97	512 Kbps-3 Mbps 100 Kbps-1 Mbps

On the Mac, Matrox MAX technology is also accessible to all applications that support the QuickTime codec component such as Final Cut Pro and QuickTime. You get delivery of H.264 files, at resolutions for iPod to HD, directly from the application.

### Efficient Blu-ray disc creation

Matrox MAX technology lets you create Blu-ray H.264 video files, directly from Compressor on the Mac or Adobe Media Encoder on the PC, that can be authored in Adobe Encore CS4 or Roxio Toast 10 and burned without re-encoding.

To create a Blu-ray disc without Matrox MAX technology, you typically rely on your authoring application and your system CPU to re-encode your project into a Blu-ray compliant file. On an 8-core Mac Pro, this process takes about 90 minutes for a 20-minute project.

With Matrox MAX, you can create a H.264 Blu-ray compliant file directly from Compressor or Adobe Media Encoder at faster than realtime speed. That file can then be used by your authoring software without the extra re-encoding step. On an 8-core Mac Pro equipped with Matrox MAX technology, this process takes less than 18 minutes for the same 20-minute project.

### Support for Apple Qmaster

You can take advantage of multiple systems with a Matrox MAX processing engine for distributed encoding across a network using Apple Qmaster on the Mac.

