



# MCCC News



Fort Worth

August 2016

Dallas

## Image Processing Software

I'm still hoping to get my hands on a Vampire 2 board, and by extension the most powerful Amiga 600 in creation, but I still haven't heard back from any of my queries. I understand Kipper2K, who handles board building and sales, is presumably swamped with orders, but it's no less frustrating to someone who'd just like to hear back on some ordering questions. According to Kipper's website updates, the Altera FPGA chip at the heart of the board has more than doubled in price after the company was acquired by Intel, which will affect the price and/or availability of future Vampire boards. I suppose I'll have to start asking around regarding the board to see if my questions are being "lost in the mail," or ignored because I haven't followed some unwritten or at least un-obvious rule.

On a separate note. I am still working on my '31st anniversary' (now) Amiga animation project. I'm finishing up the last of the drawn animation (good thing too, as I'm running out of punched paper) and I'm on track to finish up this project a mere year later than my original hoped-for date of completion (which was admittedly far too ambitious for a single person). I'll be sure to let everyone know when it's done and where to find it once it is.

Last month I did a rundown of paint software I've had experience with in my long Amiga career. Now I'll list off examples of software I've used in the category known as "image processing." For the uninitiated, the primary focus of image processing is converting image files between different formats, sizes/resolutions, and color depths, along with applying color or graphic effects, often over the entire image. As I mentioned in last month's article, software from this category may share features with other categories such as paint programs, and vice-versa, and 'image processing' is a term with a rather vague and fluid definition to start with.

One of the the first programs in the category I experienced was called "Butcher", by Eagle Tree Software. Its primary purpose was to reduce the resolution or number of colors in a given image file, with minimal loss of quality (hence the name). Its utility was rather limited, and later became redundant as other graphic software gained more features, and Butcher's function could be handled in nearly any paint program.

An early big step in Amiga image processing software was "The Art Department" by ASDG software, also know by its acronym TAD. Putting up an interface full of buttons on a blue low-res screen, TAD allowed you to load graphics in a variety of formats, convert their size, resolution, or number of colors (matching palettes with other images if needed), and save them out in

whatever Amiga mode you like. What made TAD special at the time is the image data was held in memory at full 24-bit depth, which allowed the best possible quality when converting down to HAM or 32 or 16 color images with pixel dithering to obfuscate the palette limits. Not surprisingly, this approach used a lot of memory (2 megabytes or more were strongly recommended), and TAD used an annoying Apple-like scheme where the program allocated all the RAM it could use (user-selected) at loading, regardless of how much it actually needed at the moment. It also didn't let you see the image you were working on unless you rendered it out to an Amiga display. Still, especially at the time, it was an extremely powerful tool which yielded strong results. Later, ASDG would release Art Department Professional, or ADPro, which added many features which were separately-sold plugins for TAD, and more besides, adding more color and image modifiers, the ability to composite two images together, and the options to save in most of the same file formats it could load. The interface was also swapped from blue to gray. The last version of ADPro was version 2.5, which overhauled the interface from its clunky lowres buttons to a standard Amiga style screen of windows listing formats and image operators, which worked nicely with 24bit video cards. While it still held on to some of the quirks of its roots, like requiring a render operation to see the image you are working with, it's still a powerful

image tool, if a bit archaic in certain ways.

Another in the 'big three' of Amiga image processing was Imagemaster from Black Belt systems. I had relatively little direct experience with this program myself. There were versions of the program that worked specifically with video hardware like HAM-E and the Opalvision board. I recall Imagemaster's interface being sort of a hybrid between the paint/processing mix of ImageFX and the button boxes of early ADPro, with an intention to out-feature them both. If any other image processor had an image operator or other feature, you could be assured Imagemaster would have it in some form, though you might be hard-pressed to find exactly what you want through the labyrinth of buttons. While it was undoubtedly powerful, I didn't find Imagemaster particularly enjoyable to use.

The third of the OG image processor trio was ImageFX by Nova Design. Early versions of the program ran on an Amiga screen, and let you preview your image on the screen (usually HAM mode) as you worked on it, and later versions could do the same in 24 bit on systems with video cards. Where ADPro was geared toward conducting operations over an entire image, ImageFX could do so over a partial selected area of the image as well. Rudimentary paint program fea-

tures were included as well as the image conversions, effects, transformations, warps, titling, color changes, and what have you. ImageFX was one of the longest-lived Amiga image processing programs, and was able to make use of the speed boost of PowerPC accelerator cards on processor-intensive operations. The last version was 4.5 'Studio,' but development rights to ImageFX were picked up by AEON in 2015, so there may be future life in the old software yet. It's worth noting that both ADPro and ImageFX (and presumably Imagemaster too) had an interface for the AREXX script language, and included extra interfaces to facilitate creating scripts for batch processing or complex and repetitive operations, to cut down on repeated button-pushing for the user.

I had covered these in last month's paint programs segment, but Photogenics and FXPaint double as image processors, having nearly as many effects and operations as a dedicated processor, and the added benefit of being able to apply these effects to a 'paint layer' (taking cues from PC and Mac software like Photoshop) in a very versatile way. Cloanto's Personal Paint has a handful of image processing operations as well, albeit limited to a maximum of 256 colors. If your image processing needs are limited to simple conversions or scaling, you could do so using an image viewer such as Showgirls, which offers basic con-

versions and batch processing, which can save a little time compared to firing up a full software package for a simple task. There are several other programs in the image processing category I neglected to mention, as I had no personal experience with them. I'm sure they're all great too. I'll catch you next time, with a new rundown on 2D animation software. Stay tuned!

...by Eric Schwartz  
from the AmiTech Gazette  
July 2016

## Hard Drive Writes Information One Atom At a Time

Researchers working in the Netherlands have developed an atomic scale rewritable data-storage device capable of packing 500 terabits onto a single square inch. Incredibly, that's enough to store every book written by humans on a surface the size of a postage stamp. Holy shit.

For the full article:  
<http://gizmodo.com/record-setting-hard-drive-writes-information-one-atom-a-1783740015>

## August Calendar

August 1 — MCCC Chapter Meeting  
7:00 PM — Grand Prairie Airport  
3116 S. Great Southwest Parkway, Grand Prairie

August 1 — Board of Director's Meeting  
Approximately 9:00 PM — Location TBD

August 29 — Newsletter Deadline — 8:00 AM

MCCC 2507 Tamaron Cove Cedar Hill, Texas 75104  
<http://www.amigamccc.org>