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Digital Film Cards

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As digital becomes an important part of photography, terminology takes on some new meanings. For example "film"—a flexible medium that supports several emulsion layers containing silver, color dyes, filters, and a variety of other coatings required for traditional silver-based emulsions. If you add the word "digital" in front of the word film, it's a whole new ball game. Digital film is not really film at all, but rather a microprocessor built into a container smaller than a matchbook.

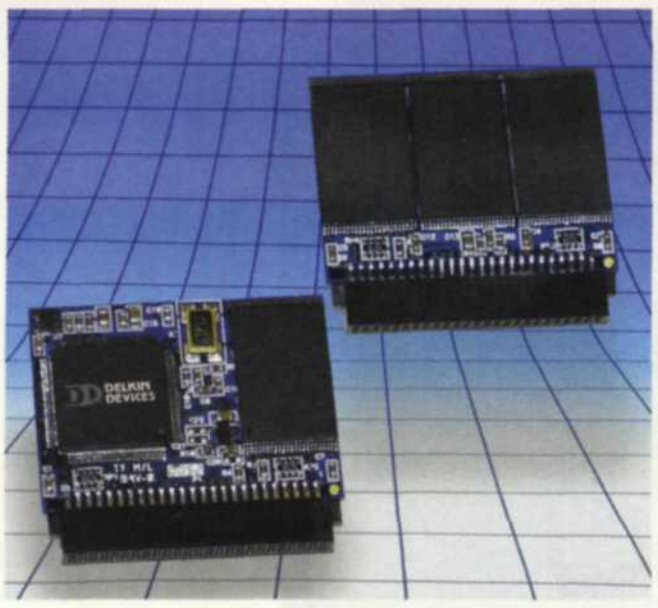
MEMORY STORAGE devices are the crux of digital cameras. They contain tiny computer chips with no moving parts and don't require internal power to maintain the stored data. Digital film cards come in several formats, but two of the most popular types are SmartMedia and CompactFlash.

The amount of storage is rated in megabytes and can range from 8 megabytes to over 1 gigabyte in memory storage. Many of the devices also have a processor speed rating. A transfer rate of 150 kilobytes of data per second is represented by 1X, so a 10X would be able to transfer 1.5 megabytes per second. The speed rating is critical to photographers who need to capture images quickly and demand the fastest data transfer rate. Of course, the faster the chip processor, the higher the price.

Another type of digital film device is a micro drive. These incredibly small drives are very similar to PCIA or CompactFlash cards and can store large amounts of data. These storage devices are more fragile than the solid state digital film cards because they do contain moving parts. Their advantage is that they can store data at a much smaller cost per megabyte.

All digital film cards use an interface called a card reader to transfer the contained data to the computer. Some card readers take only one type of digital film, while others have multiple slots to take them all, including micro drives. There are even readers that take a standard PCIA card which will hold a wide variety of digital film cards. Card readers are compact in size and generally cost less than $100.

The USB port is the most popular con-



nection, but some of these devices do work through the serial port, parallel port, Firewire, or PCIA card ports. Once you insert the digital film into the card reader, you simply copy the files to your hard disk for additional processing. You can transfer just about any type of data back and forth on these cards, and even use them to transport data from one location to another. You will even find some of these cards used in other devices like audio recorders, instead of the standard cassette tape.

For the photographers working on location without computer access, there is a portable hard disk device that downloads images to temporary storage. The Digital Wallet from Minds At Work can store up to 6 gigabytes of data.

This unique device fits in the palm of your hand, is battery operated, and accepts just about every digital film device made. When you interface this portable drive with your computer via a USB port, a removable drive appears in your list of computer data drives. Simply drag the files from the Digital Wallet onto the hard disk, and save them for future digital enhance-

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ment and printing.

Unfortunately, the digital film market is still having growing pains. New versions of cards are coming out weekly, and new card manufacturers appear just as quickly. Adding to this complex problem, there are even new types of cards being introduced that are trying to challenge CompactFlash and SmartMedia. Most of these are in the category called MultiMedia and Secure Digital media cards. Even Sony devised its own Memory Stick that is only compatible with Sony products.

It may get a bit frustrating trying to keep up with all the different types of storage devices. Just when you think you have seen them all, a customer will surprise you with a new contender. In order to satisfy your customer base, you will need to purchase a card reader that will accommodate a wide spectrum of storage devices.

As more and more of your customers buy digital cameras, your lab will have to learn to accurately communicate with them. Each member of your lab should have a good understanding of the different digital film devices available, and how to interface them with your computer system for output.

You should also have one staff member who is dedicated to becoming the company expert on what's new in the digital industry. They can keep current with the latest and greatest innovations by reading article such as this one, and diligently searching the Web for new announcements. Staying ahead of your customers is a tough job, but they look to your lab as a source of knowledge and expertise. Don't disappoint them.

You can start your bookmark list with the Web pages listed below left. ●

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