

With today's data-storage gadgets, you can have your computer to go

As stocking stuffers go, one of the all-time greats is Silly Putty.

Which is actually synthetic rubber that the military tried using as caulk during World War II, repackaged as a children's plaything.

This year marks the coming of age of a new red-hot stocking stuffer: the USB flash drive.

Or whatever you might call these little data-storage gadgets, each the size of a Matchbox car. Oddly, the industry can't seem to settle on a name.

People call them pen drives, jump drives, key drives, thumb drives, memory sticks. I once heard Gordon Eubanks, CEO of Oblix and a former officer on a nuclear submarine, call one of these gadgets a dingle.

Anyway, like Silly Putty, these handy drives are the unintended consequence of an innovation intended for something else. Unlike Silly Putty, they are getting better and more valuable all the time. While flash drives at first seem about as sexy as a Cheeto, they are on their way toward becoming essentially a computer on a key chain.

Flash drives exist because of a previous invention — the Universal Serial Bus port (USB) — that wasn't designed with flash drives in mind.

A decade ago, printers, external disk drives and other peripherals were always plugged into those multiholed parallel or serial ports

on the backs of PCs. Those ports tended to transfer data slowly. They'd have gagged on something as big as a music file.

So in 1996, the industry agreed on USB as a new port design — smaller, easier to plug into and much faster. This was before the widespread adoption of broadband, MP3s or digital cameras. USB was primarily for backing up files on external floppy drives and Zip drives.

Into this scene came M-Systems, an obscure Israeli company founded 15 years ago to make storage chips based on flash technology.

Flash has a lot of advantages. It has no moving parts; it doesn't require power to keep its data stored; and it can be assaulted and probably won't break — perfect, for instance, for Nintendo video game cartridges that your kids might throw across the room.

The disadvantage: Flash, until recently, was expensive for not a lot of capacity.

In 1999, M-Systems saw the popularity of USB. And it had the idea of enclosing a flash storage chip in a pocket-size piece of plastic that could be plugged right into a USB port. The company called its invention DiskOnKey. In the first year, M-Systems sold hardly any.

But like a lot of things in technology, the drives kept getting cheaper



By Fabian Bimmer, AP

Portable present: Need a creative gift idea for the techie on your list? You can now find a Swiss Army Knife with a flash drive that folds out.

and better. As prices dropped, flash drives caught on because they are easier to use and more portable than any other external storage option. Flash beats floppy disks, Zip drives, data CDs — all of which are becoming extinct.

A year ago, Cisco Systems handed out 64 megabyte flash drives as tchotchkes at an analyst conference. This fall, Gartner Group did the same. But this time, the drives were 128 megabytes and held every PowerPoint presentation given at the conference.

"They are fashionable, stylish and practical," says Gartner analyst Joe Unsworth.

This holiday season, flash drives are a hot gift. You can now find a Swiss Army Knife with a flash drive that folds out. In Japan, stores are selling flash drives branded with Disney characters, apparently marketing to those number-crunching Japanese preschoolers.

This fall, you can get a 256-megabyte flash drive for \$50. By spring, that same \$50 will get you 512 megabytes, Unsworth predicts. Spend \$200 and you can get a 2-gigabyte dingle that could hold every file and program on your PC.

Competition is intense. More than a dozen companies have jumped into flash drives, including

SanDisk, Iomega, Samsung and, still, M-Systems.

Sales over the past couple of years have been rocketing, but Unsworth figures this year flash drives are truly penetrating the consumer space. Gartner figures 54.5 million will be sold in 2004.

Now that these things are cheap and everywhere, the real fun is starting. Some makers are adding a headphone jack and a few buttons. Plug in the flash drive, load it with all the Harry Nilsson music you have on your PC's hard drive, pull out the device, plug in the headphones and walk away listening to "Put da lime in da coconut ..."

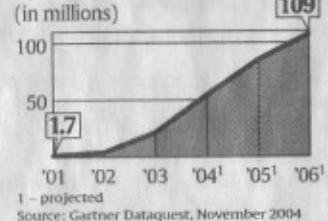
Another product, called Migo, is a flash drive with software that can "make any computer your computer," as Migo's slogan says. Plug the Migo into your PC, and it can grab everything that's important to you — your desktop, screensaver, all your e-mail, the last 30 files you've touched, your favorites and so on.

Unplug Migo, fly halfway around the world, walk into an Internet café, slide Migo into a PC's USB port, and suddenly that PC can look just like the PC you left back home. Do work, answer e-mail, store it all back in Migo, unplug the device and no trace of you or your work is left on that PC.

The trend will continue — more software and applications packaged into high-capacity flash drives, analysts say. The drives can't do any actual computing themselves. They don't have a microprocessor.

Hot sales

The market for USB flash drives has taken off the past two years, and is particularly hot this holiday season. USB flash drives sold:



By Alejandro González, USA TODAY

They'd probably always have to be plugged into a PC — or maybe a handheld computer or cellphone.

But flash drives eventually might even change the idea of computing. Instead of carrying around a computer, you carry the essence of your computer. Then you plug into a drone whenever you need to do something. It's a model that some in technology, such as Sun Microsystems CEO Scott McNealy, have been predicting for a long time.

Clearly, flash drives are on the verge of becoming a true pop culture phenomenon. They just need a clever marketing gimmick.

Hey, maybe package them in a plastic egg ...

E-mail kmaney@usatoday.com

Find links to more of Kevin Maney's Technology columns at money.usatoday.com