PRODUCTS NEWSLETTER

MONOLITHIC MEMORIES GOES TO CMOS FOR ITS PALs

The siren call of 75% power-consumption savings from using CMOS technology has ended Monolithic Memories Inc.'s policy of using only bipolar and emitter-coupled logic in its programmable-array-logic parts. The Santa Clara, Calif., inventor of PALs is going to CMOS with three erasable PAL families. The 24-pin PALC20R8Z zero-standby-power ZPAL family is a pin-compatible version of MMI's bipolar parts but offers a standby supply current of less than 10 μA typical and 100 μA maximum. Active power is only 3 mA/MHz up to 25 MHz. Available now in 35-ns and 45-ns versions, it costs $9.85 each in 100-unit quantities. The 20-pin PALC16R8Q family is equivalent to MMI's other 25-ns bipolar parts, but at 40 mA, dissipates 75% less power. It costs $5.50. MMI's PALC22V10H is the CMOS equivalent of a bipolar PAL device from Texas Instruments Inc. that has 10 input/output macrocells. It consumes 90 mA active—50% of the bipolar drain—and costs $11.60 each. □

STEREOGRAPHICS GIVES ANY MONITOR DISPLAY A TRUE 3-D LOOK

Liquid-crystal-shutter technology, polarized eyeglasses, and an advanced display controller combine to give a real three-dimensional appearance to monitor displays outfitted with StereoGraphics Corp.'s ZScreen. Although not the first to use the technology [*Electronics*, March 19, 1987, p. 107], the San Raphael, Calif., company's product has the advantage of working with any graphics monitor. Images are created by a controller that presents alternative left and right viewpoints to the monitor. Simultaneously, a liquid-crystal shutter called the LC modulator fitted over the screen circularly polarizes the two separate images in alternate directions, which means each polarized eyeglass lens "sees" only the left or right view. Available 60 days after order in 14- to 19-in. diagonal screen sizes, its prices start at $5,900. □

PAINT 13 MILLION PIXELS/S WITH METHEUS' $2,500 BOARD...

Two proprietary CMOS chips developed for high-end graphics controllers by Metheus Corp. have now been incorporated into standard VMEbus-format boards that draw random vectors at a rate of 13 million pixels/s. That's five times faster than Intel Corp.'s 82786 graphics processor, a popular benchmark product. The chips combine a 4-million-instruction/s general-purpose processor optimized for graphics with a control unit that handles raster memory and carries out low-level graphics tasks such as vector drawing, polygon filling, and pixel-block transfers. They are implemented in 8,000-gate CMOS gate arrays from Fujitsu Ltd. The Hillsboro, Ore., company's 1000VM-Series offers two resolutions—1,024 by 768 pixels, and 1,280 by 1,024 pixels. Each can have a pixel depth of 4 or 8 bits. Prices range from $2,495 for the 1,024-by-768-pixel system with 4 bits/pixel to $3,995 for the high-end 1,280-by-1,024-pixel system with 8 bits/pixel. All are available now. □

...OR GET 2 MILLION PIXELS/S FOR $1,500 FROM CONTROL SYSTEMS

A monochrome graphics controller board for IBM Corp. Personal Computers XT and AT provides switchable 1,660-by-1,280 or 1,280-by-1,660 resolution and drawing speeds 10 times faster than comparable boards, claims Control Systems Inc., St. Paul, Minn. Key to the Artist Publisher's speed is Texas Instruments Inc.'s TMS34010 graphics processor running at 50 MHz, which lets the board paint 2 million pixels/s. Other features include on-board support for Direct Graphics Interface Specification, an emerging hardware standard that saves users the trouble of writing software drivers for popular electronic-publishing packages. The board will be available in September for about $1,500 in 100-unit quantities. □