D8905 Page Printer Coprocessor

- Optimized For Intel i960® Processor Family (40960Sx, 80960Kx, 80960Cx)
- Programmable Wait States For Various Memory and I/O Devices
- Supports Interleave Memory Access For Code ROM
- Peripheral Controller For Versatile I/O Options
- Three General Purpose I/O DMA Channels For High Speed Data Transmission
- Hardware X2 Image Scaling and Smoothing
- Built-in 16-Bit x 16-Bit Bitmap Matrix Rotator
- High Speed Printing Controller
- Built-in Two Channels UART
- Built-in On Interrupt Controller and System Timer

The D8905 is an advanced page printer graphics processor, supporting PCL* 5E, Color PostScript*, and Roman/Kanji.

Destiny's innovative low-cost coprocessor is available in a 208-pin PQFP package. The ASIC not only contains the core hardware functions for an i960 processor-based high performance page printer controller, but also incorporates a hardwired BitBLT engine with complete logical operations.

The enhanced coprocessor design boosts system performance, reduces page frame memory requirements, and simplifies implementation of a banding page frame architecture.

The flexible decoder minimized controller component count and supports any combination of DRAM modules inserted. The internal video data FIFO will queue five 32-bit words when it is requested to fetch the next 128-bit data in burst mode.

Destiny's microcontroller has a built-in data packing unit to pack 8-/16-bit I/O data for 16-bit or 32-bit processors improving system performance. The packing unit also provides big-endian/reverse



byte order format translation which further increases performance.

The D8905 printing controller interfaces to monochrome, grayscale, or color marking engines for single or duplex printing.

PROCESSORS SUPPORTED: i960 Processor Family

CONTACT:
Destiny Technology Corp.
8th Fl No. 56
Tun-hua North Rd.
Tapei, Taiwan

Phone: 886-2-778-8177 FAX: 886-2-781-0051

