



DESTINY

Destiny Technology Corporation

Introducing the two newest members of Destiny's Edge Enhancement Technology (EET™) family.

- **D9011-Xi (28Pin SOP)**
- **D9011-MXi (64Pin QFP)**

Their capabilities include:

- Edge smoothing
- Resolution conversion
- Grayscale imaging
- Toner reduction

The single most visible facet in today's competitive world of laser imaging products is the print quality. Print quality is the first thing a customer sees. Print quality will be the first thing that drives a customer away from a product if expectations are not met.

For over a decade Destiny's name has been synonymous with print quality technology. In our research labs in Taipei, Taiwan and Beijing, China, Destiny's engineering teams have developed world-class print quality enhancement products. Emphasis has been placed on packaging the technology into low cost ASICs, for ease of integration into OEM's configurations. The D9011-Xi and D9011-MXi are Destiny's new generation of Edge Enhancement Technology (EET™) ASICs. Their capabilities include an edge smoothing mode, a toner reduction mode and grayscale imaging. These features add value to plain paper fax machines, copiers, printers and MFP machines. These new members of Destiny's EET ASIC family have compatible registers and existing features with Destiny's existing D9001 series. The D9011-Xi and D9011-MXi offer increased video data rates, more sub dots per pixel, and a larger internal FIFO memory. This makes EET™ technology available to a faster class of laser printer engine.

Destiny's Edge Enhancement Technology detects and smoothens jagged edges of raster images using its well proven and US patented EET™ process. Our Toner Saver mode, TonrSavr™, enables the user to select the required balance between toner cartridge life extension and darkness of print. Both edge smoothing and toner reduction modes are frequently considered check-list items by many purchasing organizations.

Destiny's resolution conversion is used to produce optimal print quality, when the resolutions of the original data source and the final imaging engine are dissimilar. An example of such an application is converting data from a fax scanner to image on a laser printer.

The gray scale printing mode supports up to 8 bits per pixel (256 levels of grayscale). Four downloadable grayscale palettes are available to enable easy customization of the LBP output transfer curve.

For monochrome printing the D9011-Xi supports a 2 beam laser engine and D9011-MXi supports a 4 beam laser engine. Both fully support tandem and four pass color engines.

The D9011-Xi and D9011-MXi provide a flexible interface between the controller and the LBP engine.

The D9011-Xi and D9011-MXi feature an energy saving mode and are CPU independent, making them easy to integrate into any controller design.

Like all Destiny products, they come with the technical support expected from a world wide company.

Features

- Edge Enhancement Technology (EET™, U.S. Patented) with the capability of grayscale imaging for plain paper fax, laser printer and multifunction peripherals.
- Detect and smooth jagged edges of rasterized images by Edge Enhancement Technology (EET™, U.S. Patented)
- Supports 2/3/4/5/6/7/8 bit grayscale video up to 256 Gray levels
- Print documents on 600/1200 dpi laser beam printers
- Up to 4 Beam laser engines supported.
 - D9011Xi , up to 2 beam
 - D9011MXi, up to 4 beam
- Accepts two types of video input : serial video (1/2/4/8 bit serial capability); Or parallel video (1/2/4/8 bit parallel capability)
- Supports Adaptive Resolution conversion modes(300dpi to 600dpi, 600dpi to 1200 dpi, 1200dpi to 600dpi)
- Supports FAX-resolution images on 300/400/600/1200 dpi laser beam printers in both monochrome and grayscale modes
- Supports True FAX resolution (203.2 x 97.8 dpi ,.etc)
- Prints Odd/Even line monochrome simultaneously with “Edge Enhancement Technology “(depends on laser beam engine).
- Accepts parallel input 2, 4, or 8 dots of same scan line at one time.
- Supports Toner Save mode (TonrSavR™) for longer toner life (darkness is programmable)
- Three borders available around the Toner Save Area
- Three patterns available to fill in the Toner Save Area
- Resolution down scaling (ResSlim™) while maintaining same output quality
- Supports Multi-level Halftone with error diffusion method; 8bit-per-pixel image directly print to 16 level capability gray engine
- Very Low power consumption in sleep mode.
- Works independently of laser printer controller board
- Independent of laser printer controller emulation software
- No external memory requirement
- Functionally compatible with Destiny Technology D9001SJ4+/LF/MFH
- Supports printing on A3 plus size paper (1200 dpi)
- Programmable Modulation Registers (allowing engine customization)
- Built-in Phase Lock Loop, requires only low frequency oscillator (1/N * dot clock) providing a highly flexible clock scheme
- 28-pin SOP (D9011Xi), 64-pin QFP (D9011MXi) package
- TTL compatible and 5 volt tolerant I/O pins
- 3.3V power supply
- Operation frequencies up to:
 - Max. dot clock (external) up to 80 MHz
 - Max. internal Video clock up to 200 MHz

For more information about the D9011 series contact:

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