400,000 vec/sec. 16M colors
Realtime Interaction

We at SEILLAC are totally committed to the development of display stations that will satisfy the demands of any CAD/CAM system and application requirements. As evidence of our dedication, we present one of the most intelligent 3-D display stations, SEILLAC-7.

HIGH-QUALITY DISPLAY IMAGE
SEILLAC-7 features a flicker-free 60 Hz non-interlaced capability in 19" and 24" monitor sizes with an ultrahigh resolution of 1400 (x axis) x 1024 (y axis) pixels.

COLOR DISPLAY
The number of colors may be increased from 64 to 16.7 million, and all available colors are simultaneously displayable. This incredible color display function is a plus for the display of solid models requiring a broad range of natural color representation.

PIPELINE PROCESSING STRUCTURE FOR HIGH-SPEED 3-D COORDINATE TRANSFORMATION
By busing powerful processors in a pipeline structure, we have obtained the fastest speed 3-D coordinate transformations that are indispensable for CAD/CAM system or realtime interactive operations. The hardware included is; a 32-bit bit slice processor, two
petition In 3-D

16-bit bit slice processors, two 16-bit microprocessors, a 4 x 4 matrix multiplier, a clipping, perspective circuits, and the 8 powerful types of SEILLAC's own VLSI's. It goes without saying that we have increased the speed of a variety of transformations—modeling, viewing, multi viewport, and perspective — up to 400,000 vectors/sec.

LINE SMOOTHING WITH BRIGHTNESS MODULATION

Our line smoothing hardware technology has succeeded in generating high-quality lines comparable with those of random-stroke displays. By this, the concept "staircasing effect" inherent to raster-scan displays has been eliminated.

VECTOR-TO-RASTER CONVERTER & FRAME BUFFER

With the SEILLAC's display stations, the dynamic display of image has become possible for the first time. The SEILLAC-7 possesses the fastest vector-to raster converter at a typical speed of 36 ns/pixel, and a dual set of frame buffers. It also breaks through the drawbacks inherent to the selective-erase operation, such as disappearance of overlapping portions of images.

COLOR SHADING

The z-axis DDA for color shading may be incorporated with the SEILLAC-7 at your option. The z-axis information regulates the continuous distribution of colors, providing depth cueing for wire-frame models and smooth shading for surface and solid models.

BIT MAPPING FUNCTION

The optional bit mapping function allows pixels to be directly written into or read from either of the frame buffers. With this function, you can meet your application requirements ranging from CAD/CAM system to computer animation, color spectrum analysis, and image processing.

DISPLAY FILES

The SEILLAC's display files provide your CAD/CAM system with more power and effectiveness. Entities and attributes of image are hierarchically defined. The individual units, referred to as class, segment, element, and ID, are so structured as to gain flexibility in the composition or revision of images.

INTERACTIVE FUNCTIONS

SEILLAC offers a Tablet, Dial Controls Unit, Function Switches Unit, Track Ball, and Light Pen as a physical input device. In actual applications, these devices are used as Pick, Stroke, Locator, and Valuator logical device to perform picking, dragging, positioning, inking, and rubber banding operations in conjunction with such three-dimensional coordinate transformations as scaling, rotation, and translation.

GSP: CITRUS

CITRUS is a FORTRAN callable subroutine package for 3-D graphic display use, and consists of the following four levels:

Level 1. Basic Subroutine Package
Level 2. General Polygon Filling Package
Level 3. Geometric Modeling Package
Level 4. Graphing Package

Other SEILLAC products

* SEILLAC 3: 2D/3D Display Station
  * Hardcopier
  * On-line/Off-line Plotter

Optional I/O Devices

* Tablet
  * Function Switches Unit
  * Dial Controls Unit
  * Light Pen

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