ADAGE 2045
The Workstation for Power Users

The Adage 2045 Workstation is the *most compact, highest performance,* mainframe attached graphics workstation available for the IBM® 5080 marketplace. *PERIOD.*

FAST. With the use of a custom VLSI Bit Slice Graphics Processor, the Adage 2045 processes image data *significantly* faster than *any* IBM 5080 or compatible on the market. *You increase user productivity.*

COMPACT. Using the most advanced VLSI technology available, the 2045's compact electronics module shares the same footprint as the monitor itself. This design allows the 2045 to be placed on any desktop surface and eliminates the need for the bulky, floor standing electronics tower that is common to most other vendors' equipment. *You save valuable space.*

MODULAR. The Adage 2045 has been developed around the future growth path of an open and flexible architecture. Based on this open architecture, future products, upgrades and enhancements can be made available with standard, off-the-shelf products. *You protect your investment with a cost-effective upgrade path.*

SUPERCHECK.™ With SUPER-CHECK, users of the Adage 2045 can effortlessly detect and isolate duplicate or overlapping geometry for checking purposes, removal, or modification. This feature helps eliminate unwanted data that all too often consumes valuable disk space and is double plotted. *You gain improved design quality.*

5-BUTTON CURSOR PUCK. The 2045 is configured with a *unique* 5-button cursor puck as standard equipment. The puck can be defined to work in a 4-, 5-, or 8-button/function mode. The 5-button cursor puck improves user productivity by allowing the user total on-screen concentration. *You place greater functionality in the hand of the user.*

RELIABLE. With the use of VLSI and CMOS technology, Adage has significantly improved overall quality and reliability. *You improve uptime and reduce maintenance costs.*

SOFTWARE COMPATIBLE. The Adage 2045 supports CADAM® CATIA® CGS® NCAD® CAEDS® CBDS2® GFIS/GPG® PATRAN II® and other IBM 5080-based mainframe packages. *You use one workstation to run many applications.*

WORLDWIDE CUSTOMER SERVICE SUPPORT. Adage products are serviced by a dedicated team of experienced professionals at over 140 strategic locations worldwide. A variety of maintenance programs is available to meet customer requirements. *Quality service for Adage products is never far away.*

ADAGE

ADAGE 2045 Technical Specifications

Display Processor

Desktop Mounted: Yes

Terminal Emulation:
- IBM 5080 M2A graphics compatible
- 3250 graphics compatible
- 3270 alphanumeric (multiple screen sizes)

Architecture:
- Motorola MC68010
- Custom VLSI bit slice processor
- Open bus architecture

Performance Characteristics:
- Pixel write time (any direction): $37.5\,\mu$sec
- Pixel write time (horizontal): $8.5\,\mu$sec
- Vectors drawing rate: up to 1 million vectors/sec

System Memory:
- 2 Mbytes of display list memory
- Hardware expandable to 8 Mbytes

On-Screen Cursor:
- 6 pre-defined, 7 user-programmable hardware cursors, non-destructible
- 64 selectable cursor colors
- 30 Hz update rate

Transformations:
- 2D and 3D rotation, scaling, and translations performed locally

Clipping:
- X, Y, & Z clipping of data performed locally

Multiple Terminal Settings:
- Seven, user-definable, stored with system
- Password protection available for security

Dimensions:
- Height: 6″ (15.24 cm)
- Width: 15.62″ (39.67 cm)
- Depth: 18.75″ (24.95 cm)

Weight:
- 55 lbs. (24.95 Kg)

Operating Voltage Range:
- 90-132 VAC, 50-60 Hz
- 180-264 VAC, 50-60 Hz

Power Consumption:
- 3.5 amps with monitor and peripherals
- 2.0 amps with peripherals, no monitor

Environmental:
- Operating temperature range: 60-90°F (15-32°C)
- Humidity: 10-90%, non-condensing
- Heat Output: 1350 BTU/Hr

Noise Level:
- 40-45 db

Display Features

Screen Sizes:
- 16″ or 19″, diagonal

Technology:
- High contrast, raster scan, single in-line gun

Resolution:
- 1024 x 1024

Refresh Rate:
- 60 Hz, non-interlaced

Colors:
- Full access to 256 colors

Color Palette:
- 16.8 million colors

Weight:
- 16″: ~60 lbs (27.2 Kg)
- 19″: ~80 lbs (36.3 Kg)

Interactive Devices

Alphanumeric Keyboard:
- 101-key enhanced AT style keyboard with IBM PC AT interface
- 16 programmable function keys
- Numeric keypad
- 2 levels of tilt
- Tactile response for positive feedback

Data Tablets:
- 6″ x 9″ data tablet (standard) and 12″ x 12″ (optional) active areas
- 400 lines/inch resolution

Program Function Keyboard:
- 32 lighted program function keys with five levels of tilt

Unique 5-Button Cursor Puck:
- Provides up to eight functions

Variable Dials:
- Eight optically-encoded, continuous turn dials with no "dead zones"
- Five levels of tilt

Communications

Supported Hosts:
- IBM 93XX, 43XX, 30XX mainframe and plug-compatibles

Transmission Media:
- Coaxial, fiber optics, microwave, Digital Data Service

Remote Communications Standards:
- Bell System T1, V.35, RS-232

Transmission Speeds:
- From 300 baud to 1.67 Mbaud
- Cable length: up to 2 miles

Communications Adapters:
- TA2001 (T1)
- VRA2001 (V.35 or RS-232)

Serial Link Enhancement:
- Improves channel command processing by a factor of 2-1/2