Task-centric Taligent OS challenges current applications-centric OSs

By *Jonah McLeod*
Cupertino, Calif.

Last Monday *(21 March)*, at the PC Forum in New York City, **Taligent Inc.** of Cupertino unveiled its version of the operating system of the future.

With the Taligent OS, computing is task-centered, rather than application-centered as most OSs are today. **The company says the task-centered approach resembles the way people work better than current OSs.**

Taligent replaces the traditional system of using monolithic applications, such as spreadsheet, word processing and database software, with a system using discrete software components (company forms and templates); software tools (text editors, spelling checkers and dictionaries); and appliances (printers, phones and fax machines) to enable a user to complete a task.

Further, Taligent replaces today's desktop graphical user interface, which features folders and documents, with a corporate enterprise GUI, showing people (associates, customers and suppliers); places (meeting rooms, offices or departments); and appliances.

Also, because Taligent is an object-oriented system, the company says developing new software and integrating different vendors' software will be easier and take less time.

Taligent is compatible with a variety of hardware platforms. ▨

Intel attacks VESA bus in local bus battle

By *Jonah McLeod*
Folsom, Calif.

Up to now, the local bus battle lines were clearly drawn. The San Jose, Calif.-based **Video Electronics Standards Association's** VESA local (VL) bus controlled 486 PCs, and the Peripheral Component Interface (PCI) controlled Pentium PCs.

Now, the Folsom, Calif.-based **Intel Corp. has invaded VESA's stronghold by introducing its 82420ZX and 82420EX PCI chip sets for 486 PCs.** The three-chip 82420ZX set, which operates with the 100-MHz 486DX4, comprises cache controller, data path unit and system input/output (I/O) unit. **Intel claims a 5% to 20% performance advantage over VL.**

VESA, an ad hoc industry group, originally created the VL bus to accelerate a PC's graphics subsystem. Adding additional devices, however, loads down the VL bus, said Intel Marketing Manager Eric Mentzer. Also, the VL bus works well at 33 MHz, but requires additional hardware at 66 MHz.

While the 82420ZX aims at high-end 486-based systems, the two-chip 82420EX enables cost-effective mid-range and low-end 486-based systems. The set contains a memory controller, cache controller and PCI integrated device electronics (IDE) hard drive connection. ▨

Japan's foreign chip share tops 20%

By *Robert Patton*
Tokyo

For the second year in a row, the foreign share of the Japanese domestic semiconductor market topped 20%, rallied by a strong showing in Q4.

The **Electronic Industries Association of Japan (EIAJ)** in Tokyo said 1993 foreign semiconductor sales set a new record, US$4.5 billion, up nearly 50% from 1992. The EIAJ added that nearly 90% of foreign sales come from the U.S.

U.S. Trade Representative Mickey Kantor said, "We are pleased to see an increase in foreign market share for Q4."

The Japan and U.S. governments announced that the foreign share was 20.7%

under Formula One, and 22.1% under Formula Two.

While the overall foreign market share was declining through the first three quarters of 1994, Korean semiconductor sales

KOREAN SEMICONDUCTOR EXPORTS TO JAPAN
in millions of U.S. dollars
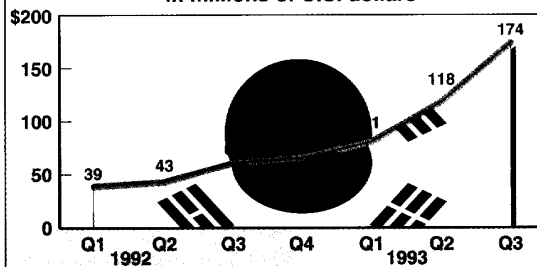
in Japan rose dramatically. This is particularly significant since relations between Japan and Korea have rarely been cordial. ▨

30-CM OPTICAL DISK STORES 23 GBYTES

By *Robert Patton*, Tokyo

NEC Corp. of Tokyo has demonstrated an optical disk recording technique that allows up to 23 Gbytes of multimedia data to be written to a single 30-cm disk. Although a prototype recorder was used for last Tuesday's *(22 March)* demonstration, **the company plans to offer a commercial version for the broadcast industry in the fall.** The recorder also achieved **a data transfer rate of 12 Mbytes/s.**

The company said 32 minutes of NTSC composite digital signals can be recorded without compression. **Using MPEG 2 compression at 8 Mbits/s, up to five hours of full-motion video can be recorded on a disk.**

A new method for high-density magneto-optical disk recording called the constant-minimum wavelength-constant angular velocity (CWL-CAV) makes such high-density digital storage possible.