

ICL Series 39

PRODUCT DESCRIPTION

ICL has introduced four new Series 39 systems at the lower end of the range—Levels 15, 25, 35, and 35D, which all have the features of ICL's larger mainframes in the Series 39. ICL has scheduled first deliveries for July 1987. The Level 359D, a dyadic system and the largest of the four models, will debut at the end of the year.

The Level 15, capable of supporting up to 120 users, takes over as the entry level model in the Series 39 range while the Levels 25 and 35 supersede the existing Levels 20 and 30. The Levels 25 and 35 offer a 40 percent improvement in price performance over the previous Levels 20 and 30. ICL attributes performance improvements to the use of new CMOS 8000 gate array chips, designed by ICL and produced by Fujitsu. ICL has also made design modifications to the processors to attain improved performance. The Level 25 can support up to 160 users, and the Level 35, 220 users. The Level 39/35D can support up to 400 users.

Representing the first dyadic system in the range, the Level 35D has virtually twice the processing power of the Level 35. ICL has achieved this processing power in the Level 35D by placing two Level 35 processors, each with its own dedicated store, in one cabinet and running them under the control of one VME operating system.

The Relative Performance Index (RPI) for the four new systems is 40 (Level 15), 52 (Level 25), 70 (Level 35), and 128 (Level 35D). All processors feature basic storage sizes of 8MB, expandable in increments of 4MB to 16MB.

With the introduction of these new systems, ICL is discontinuing the production of Levels 20 and 30. Both those models can be field upgraded to the new systems.

All four new models incorporate ICL's unique and award-winning CAFS-ISP Information Search Processor for high-speed data retrieval. CAFS-ISP is an acronym for Content Addressable File Store-Information Search Processor. ICL considers CAFS-ISP a "search engine" that uses special-purpose hardware to perform high-speed searches of data stored on disk. It exploits the technique of content addressing in which relevant records are located by the value of their contents instead of by physical location or the value of a key.

After conducting field trials last year on the CME★ operating system, ICL has achieved improvements. Fifty organizations are currently using CME★. This operating system enables programs written for ME29 under its native TME operating system to run unchanged on Series 39 processors while a major part of the machine can be used simultaneously for development and running new applications under VME.

RELATIONSHIP TO CURRENT PRODUCT LINE:
Since the introduction of the Series 39 mainframes in April

PRODUCT ANNOUNCED: ICL has introduced four new Series 39 systems at the lower end of the range, all of which have the features of ICL's Series 39 mainframes. Along with this release, ICL announced the discontinuation of Levels 20 and 30 of the Series 39.

COMPETITION: Digital Equipment Corporation 8000 Series, IBM System/38 and 9370.

DATE ANNOUNCED: June 17, 1987.

SCHEDULED DELIVERY: July 1987—Levels 15, 25, 35; year's end—Level 35D.

BASIC SPECIFICATIONS

MANUFACTURER: International Computers Limited (ICL), Bridge House, Putney Bridge, Fulham, London SW6 3JX, England. Telephone (01) 788 7272. Telex 22971.

MODELS: Levels 15, 25, 35, and 35D.

GENERAL: The Level 15, rated at 0.9 MIPS, now serves as the new entry level machine to the Series 39. The Level 25, rated at 1.1 MIPS, replaces the Level 20, and the Level 35, rated at 1.5 MIPS, replaces the Level 30. Both the Level 25 and Level 35 are field upgradable from the previous models. According to ICL, the Levels 25 and 35 offer a 40 percent improvement in price/performance over the previous Levels 20 and 30. ICL attributes this enhanced performance to the use of new CMOS gate array chips, designed by ICL and manufactured by Fujitsu, and to design modifications implemented in the processors.

The Level 35D, a dyadic system, achieves virtually twice the processing power of the Level 35 through placing two Level 35 processors, each with its own dedicated store, in one cabinet and running them under the control of the VME operating system.

All four new models incorporate ICL's CAFS-ISP information search processor for high-speed data retrieval. They use 50 Mbit/sec fibre optic cables for rapid data transmission between processors and disk files.

MAIN MEMORY: All processors feature a basic storage size of 8MB, expandable in increments of 4MB to 16MB.

COMMUNICATIONS: All four models conform to Open Systems Interconnect standards. The new systems offer distributed processing facilities and can use ICL's X.25 and OSLAN communications links to connect to larger central mainframes in the Series 39 range or to equipment from other manufacturers. This facility enables users in large organizations to distribute mainframe computing power where needed and to replicate centrally developed applications at remote locations.

SOFTWARE: ICL has concentrated on developing software that simplifies the use of the Series 39 processors and assists in the conversion of ME29-based programs to run under VME.

The Systems Administrator Menu Prompter (SAMP) furnishes the user with selected access to VME features in menu format without restricting the operating system's full range of capabilities. ICL also supplies an entry level version of the QuickBuild fourth-generation software tools, known as QuickBuild S, for use in application development by customers new to VME.

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Table 1. System Characteristics

| MODEL | CPU | MIPS | MEMORY (MB) | CYCLE (NS) |
|--------|-----|------|-------------|------------|
| 39/15 | 1 | 0.9 | 8 to 16 | 190 |
| 39/25 | 1 | 1.1 | 8 to 16 | 190 |
| 39/35 | 1 | 1.5 | 8 to 16 | 190 |
| 39/35D | 2 | 2.7 | 16 to 32 | 190 |

➤ 1985, ICL has added the Level 20, filled out the middle of the range with Levels 50 and 60, and extended at the top with the two-node Level 80. At this point, the Levels 25 and 35 effectively replace the Levels 20 and 30, and the Level 35D serves as ICL's starting point for dyadic processing in the Series 39.

The new models in Series 39 provide cost-effective and easy upgrade paths for users of ICL's ME29 Models 37, 45, and 54 who want to make use of the increased facilities and processing power of Series 39 processors running under VME. Through these new products, ICL is guiding ME29 users into the Series 39 fold.

ICL has charted an evolutionary course for the Series 39. Under the code name Essex, ICL is developing a new-generation of ultra-high powered processors to satisfy the demand of the largest users for additional mainframe power. ICL estimates this demand for more power to be growing at approximately 40 percent per year. ICL plans to introduce these processors, which will run the VME operating system and use chip technology developed in collaboration with Fujitsu, as extensions to the current Series 39 range in 1990. The processors developed under the Essex project will be four to five times more powerful than the current top-of-the-line models of the Series 39.

COMPETITIVE POSITION: ICL has indicated that the release of the four new systems in Series 39 conforms to its projected five-year strategy of gaining market share and increasing revenue generated from sales of mainframes. To achieve this goal, ICL has targeted information technology markets in Europe and intends to expand the existing Series 39 customer base in the U.K. ICL also hopes to entice users of its ME29 systems to migrate to the Series 39 range.

To satisfy needs for increased power in the interim, ICL plans to introduce three and four node versions of the two

node Series 39 Level 80 system, which has achieved success in transaction processing operations.

Currently, ICL has a healthy balance sheet, having increased operating profits in 1986 by 46 percent to £90.2 million on a turnover of £1,189 million, which represents a gain of more than £100 million over 1985. Riding this wave, ICL will need all its resources to face the strong competition from IBM System 38, which has a loyal following, as well as IBM's 9370. ICL's new models will also confront Digital Equipment's 8000 Series. □

➤ In addition, ICL has improved the performance of the CME★ operating system since the inception of field trials last years, resulting in its use by more than 50 organizations. CME★ enables programs written for ME 29 under its native TME operating system to run unaltered on Series 39 processors, while a significant part of the machine functions simultaneously for development and running of new applications under VME.

OPERATING REQUIREMENTS: All models function in normal office environments.

PRICING IN THE U.K.: ICL offers an Exchange Hire Scheme that features term rental contracts of 3, 4, and 5 years with nominated breakpoints at which users can change processors and peripheral equipment to take advantage of the latest technology.

Under this scheme, the quarterly hire charge for a Series 39 Level 15 processor with 8MB memory, 600MB disk storage, magnetic tape unit, and printer starts at £4,600. The equivalent outright sale price is approximately £91,000. The cost to an existing ME29 user who retains magnetic tape units and printers to run on the Series 39 Level 15 starts at £2,850 per quarter, or an outright sale purchase of approximately £70,000.

PRICING IN FRANCE: The Level 15 sells for approximately 1.4 MF. The base price for the Level 20 is 2 MF and for the Level 30, 3 MF. The base price for the Level 39 is 4 MF. ■