Service and repair.

Those two words have been brought up continuously over the last several months when readers and SuperBrain users have complained to us about problems they've experienced with Intertec in the past.

And it's no secret that customer support has plagued Intertec Data Systems since its inception. Dealers around the country have quoted figures to us as high as 50% when referring to the number of “D.O.A.'s” that arrive in shipments from the factory in Columbia or from distributors.

When you look at what Intertec has offered in the way of warranty plans, the problem becomes even more exasperating. The end-user has to send the entire unit back to Columbia at his expense (in both directions!) for a warranty repair or alignment. For most parts of the country that usually amounts to over a hundred dollars.

And, it's easy to see why few users have bought Intertec's Carterphone deal. The price is ridiculously high for a reasonable service any factory should be offering on its products.

And the “module swap” program is only good if you feel comfortable using tools on your computer. For most people, that's like asking them to operate on themselves.

The only light at the end of the tunnel may be the CARE Program which is small now but promises to resemble a regional service idea in the future.

In the CARE Program, certain dealers and technical reps trained at the factory can offer service to local end-users in their area. The only drawback is that the dealers don’t have to service your machine if they don’t want to. If you didn’t buy it from them, they can close the door in your face. It's a form of corporate discrimination that makes absolutely no sense.

Our suggestion? As Intertec opens its classrooms for service training it should also insure that any SuperBrain owner in the nation or in Europe has the right to get service from a nearby CARE dealer and be charged reasonable prices for the repairs needed -- especially warranty repairs.

We feel this is an important matter, so we'll be watching events closely. And, we've listed the names and addresses of regional Intertec reps across the United States so you can let them know how you feel about Intertec service and repair policies -- what you've experienced in the past, and more importantly, what you'd like to see done in the future.

If you're a subscriber, send us a self-addressed stamped envelope and we'll send you free programs created for SuperBrain owners by Dr. Paul Kelley in Boston. They're fascinating and helpful in understanding how your SuperBrain really works.

As before, we thank you for all of your comments and letters. We'll continue to stay on top of things for you so that you can get more out of your SuperBrain in the months and years to come.

Albert Abrams
EDITOR

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Guest Interview

(Don Baer is President of MEASUREMENT MASTERS in Orange County, California, a Super-Brain OEM retailer.)

Q: How long have you been using the SuperBrain?
A: We've been involved with Intertec for over a year. We were involved with another computer company, but we found what they had was inadequate and so we began a search for a new type of computer that we could use. We looked at everything in its price range and settled on the SuperBrain.

Q: What are the ways you're using it now?
A: Presently, our primary purpose is to sell the SuperBrain in the machine tool market for computer assisted programming for NC (numerical control) machines. We've written our software around lathes and mills to enable the small shop owner to have a computer that could program his automatic machines so he would not have a full-time NC programmer.

Q: How easy to use is your software?
A: Our software is menu-driven and configured in such a manner that the client just answers a series of questions and the software will program the machines for him without him having to learn complex computer languages like COMPACT and others which are common to the machine-tool industry.

Q: Are you happy with the SuperBrain?
A: Yes. We've been very successful using it. For several reasons.

One is that the machines we're programming all follow a standard programming configuration, but the communications protocol requires different Baud rates, different start and stop bits, that sort of thing.

The SuperBrain is ideal in that we can program, into what we call a "closed processor", the protocol we want, depending if it's a Fanuc, a common machine-tool with a dedicated microprocessor, or other special machines. But none of them necessarily has the same communication protocol. But with the SuperBrain we're able to configure a closed processor for any given machine.

So when a customer plugs in his program disk, it is configured for the machine that he is using at that particular time.

Q: How did you decide to become an Intertec dealer?
A: Well it happened out of necessity. We were selling them with our programming to clients and providing service. Our units are completely burned in and tested and we provide continuing technical service. And of course we configure the machines with the business software that's necessary. So even if a person doesn't own a machine shop, he can use it for word-processing or for business finances.

Q: You consider yourself a certified service-center?
A: Yes, we, like other large-volume OEM's participate in the Intertec "CARE" Program. We pay a royalty for a priority service to Intertec. In turn they make us an authorized service center and provide us with factory parts.

Q: So, do people have to have a maintenance agreement with you or can they just go to you for parts?
A: If the machine is out of warranty, we'll just sell them the parts and get them up and running. They can just buy parts or if they want they can let us take a look at it and service it for them.

Q: Are most of your customers in California?
A: As a matter of fact our customer list is growing to the point where we are getting customers from as far away as Chicago.

Q: So any person anywhere who needs a part can call you and you can supply them with the parts they need?
A: Sure. We have the parts on the shelf because Intertec furnishes them to us as an authorized service center. There are numerous distributors who, through the volume of units they're selling can become members of this "CARE" Program. It means they have factory parts on the shelf and they go through a factory warranty situation with Intertec.

Q: What about the Carterphone situation?
A: Carterphone is a national organization to which you pay a fee by the month and they provide on-site service as long as you're within a certain number of miles of one of their offices. They're in all the major cities. L.A., San Diego, San Francisco, New York, Atlanta, Dallas, Houston. The last time I opened the latest manual they supplied a map showing where the Carterphone people were.

Q: But for customers who own the older manuals, they wouldn't know, would they?
A: Intertec will tell you if you call them where your nearest authorized service center is located. There are dealers throughout the country like ourselves who are buying in volume and participating in the "CARE" Program. We bring the units in in quantity, plug them in and test them thoroughly. We don't see how we could supply our customers with a product that isn't tested and running and expect them to have to fight the factory.

Q: What do you think the status is with the S-100 bus connection?
A: To my knowledge I haven't known anyone to use it yet.

Q: So the feature that Intertec plays up in its advertising is basically still unused.
A: Yes.

Q: What do you think people could eventually use it for?
A: You could use it to tie in a hard disk, a Winchester type hard disk, get an adaptor and tie it into the SuperBrain. You could use it for communication to a printer. You could use it for driving special cards with input-output. There are several things you can do with it.

Q: And the reason it's not being used now?
A: Well, Intertec is supplying its own 10 Megabyte hard-disk system which you can

Continued on next page
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plug into the SuperBrain. You have to remember one thing. Intertec is interested in pushing their Model A. Don't get me wrong, it's an especially well-designed product. It's very well thought-out. It uses quite a bit of the latest hardware and it's a universal machine but they're not interested in supplying a machine which can do ninety million different things. They want a universal machine. They're not interested in specials.

Q: Do you sell a number of software packages configured for the SuperBrain?
A: Yes. We sell WordStar among others. We also sell a combined SuperBrain WordStar and updated NEC Spinwriter package that can use the printer at up to 9600 Baud. I use it myself. And it's bi-directional. Most people don't know that the NEC is designed for bi-directional printing. As a matter of fact we also use it for plotting. And it's a very accurate plotter because you can plot about 1500 characters per square inch. And that's without any modification to the machine. It just depends on the software you're using, how you program it. And that's what we do. We can also increase the buffer in the NEC to about 16K to our customers. And, to my knowledge, we offer the only high-resolution graphics package.

Q: What is "Datalex"?
A: Datalex is a Pascal batch-processing system designed to run on the SuperBrain. We sell that too. We found we had some OEM accounts that wanted to do some communication with IBM mainframe computers. They wanted a system that was screen oriented so that they could bill for screen time. We saw that Datalex was in Pascal and that it was fast and easy to configure.

Q: What improvements would you recommend for the SuperBrain?
A: There's probably room for improvement in the way that Intertec deals with the flood of technical questions they must get each month from owners who have technical difficulties.

You might say they have a communications problem. Some customers are known to have waited for up to eight or nine weeks for repairs to their machines. They don't seem geared to handle that kind of volume of service. They're just so busy producing the machines. But that's where we make our money. We prevent that from happening to our customers. They may pay a bit more for our prices compared to buying from mail-order houses, but they're getting insured back-up from us. And we think that's very important.

Q: Any final comments?
A: Well, we've found the SuperBrain to be a very powerful machine. And once they're up and running, we find that most people have very little problems with them. It's important that people do not get discouraged if they buy one and have problems. Once they're fixed and secure, we think they're very reliable.

Rampant Featuritis Strikes 'Brain

An outbreak of SB/E has hit Intertec SuperBrains*. SB/E (for Super Bios and EPROMs) is a feature-filled software/hardware package that has been found on SuperBrains at government agencies, leading universities, and Fortune 500 companies.

Because it is standard CP/M, not one of those "compatible" derivatives, SB/E can be tricky to spot. Experts recommend holding down any key to check for auto repeat or audible key click: looking for greater disk capacity and much faster disk access times; or testing for programmable function keys and a real time clock.

Reliability Affected

It is the automatic spindle motor shut off and the disk speed check, however, that have made identification difficult. These features directly lead to more reliable operation and longer MTBF. This means that SB/E equipped machines are less likely to turn up at repair centers, the usual place to monitor computer performance.

Source Located

Hundreds of SB/E installations have been reported, in America, Canada, Europe, Africa, and Australia. Investigators have traced the source of the outbreak to IE Systems, a group of high tech junkies operating out of a New England mill town.

IE Systems has been forced to publish a free booklet explaining what they've done. And to ease the anguish of people waiting for SB/E to hit their Brain, IE has installed more phone lines. They have also agreed to sell directly to end users at $185, as well as to dealers.

People who need immediate positive confirmation that SB/E is running on their machine should call the junkies and get their fix.

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Calendar

THINGS TO COME:

June 6-9 Atlanta, GA. ATLANTA SMALL COMPUTER SHOW, Atlanta Hilton, Atlanta, GA. Producers of small computers, peripherals, supplies, and services will be exhibiting at this show. For information contact the Atlanta Small Computer Show, 4060 Janice Drive, Suite C-1, East Point, GA 30344, (404) 767-9798.

June 17-19 Denton, TX. NATIONAL COMPUTING CONFERENCE, North Texas State University, Denton, TX. Computer literacy, computer education for teachers, and computers in education are some of the topics to be covered. Contact Dr. Jim Poirot, NECC-81 General Chairman, Computer Sciences Dept., North Texas State University, Denton, TX 76203.

June 23-25 New York, NY. COMDEX/Spring, Madison Square Garden and the New York Statler Hotel, New York, NY. Computer and computer-related manufacturers, systems houses, computer retailers, dealers, distributors, manufacturers’ representatives, commercial OEMs, and other related businesses will be exhibiting. Contact The Interface Group, 160 Speen Street, Framingham, MA 01701, (800) 225-4620; in Mass. (617) 879-4502.


New Products

SOUTHEASTERN SOFTWARE, INC.
5364 Oporto-Madrid Blvd.
Birmingham, AL 35210
(205) 595-7233/(205) 933-2798
Contact: Jeff Lyons

HARDWARE: CompuStar system distributor. Stocks all parts and modules and checks out equipment prior to shipping. Also sells a driver for Cameo Electronics to interface a CDC 10 Meg drive with the SuperBrain (5 Meg fixed and 5 Meg removable cartridge).

SOFTWARE: Sells TARGET, the VisiCalc-like CP/M financial planner; SELECTOR IV; S-Basic; MicroDaSys Accounting Package; and their own Point-of-Sale software for inventory and A/R maintenance. Also can download any software on an 8" soft-sector disk (such as the TRS-80 Model II) to the SuperBrain format.

CJC INTERNATIONAL
11058 Main Street, Suite 125
Bellevue, WA 98004
(206) 493-9777
Contact: Jerry Jones

HARDWARE: Introducing the first combination of a five Meg hard-disk inside the SuperBrain QD using the Seagate ST-506. Called the SuperFive System, it retails for about $6,995. Upgrade kits for existing QD systems are also available. Plans are underway for an internal 10 Meg disk as well.

DIGITAL DELI COMPUTER STORE
80 W. El Camino Real
Mt. View, CA 94040
Contact: Mr. Mel Cruts

SOFTWARE: Sells an enhanced “SuperDOS” for the SuperBrain with 3 versions.

The earliest SuperBrain model is supplied with a new PROM and a diskette. The two later Intertec models need a diskette only. The item provides keyboard type-ahead, programmable numeric keyboard function, faster disk access, expanded serial port buffer, “click” response on the keyboard and expanded disk capacity. $99.95

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SuperBrain

GRAPHICS

512 x 240

• write, erase & reverse with hidden line removal
• character & symbol generator
• subroutines under CPM 1.4 & 2.2

BUSINESS SOFTWARE PACKAGE

General Ledger major printouts:
• Chart of Accounts List
• Transaction Registers
• Trial Balance (Detail Report)
• Balance Sheet
• Comparative Balance Sheet
• Income Statement
• Comparative Income Statement
• Statement of Financial Changes
• Department Income Statement

Accounts Payable major printouts:
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• Transaction Registers
• Aged Accounts Payable
• Cash Requirements
• Vendor Checks
• Check Register
• End of Period Report

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• Transactions Register
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The words “Pascal” and “portability” have all but become synonyms over the past decade. Even before Pascal was implemented on microcomputers in the last half of the ’70s at UCSD (University of California at San Diego) it had already been implemented on over 100 mainframe and minicomputers. Pascal has now found its way to perhaps the most compact hardware package yet: the Intertec SuperBrain. As one sits down to a desk-top computer outfitted with a superset of the Pascal language, full-screen editor, big-machine “segmented” architecture, multitasking, and a whole host of vendor-supplied software, including multi-key indexed files and a formatted CRT language, the very first reaction is to check the back of the unit to see what else it’s cabled into!

The first thing to realize about UCSD Pascal is that it is not a language that runs under CP/M; it is an operating system that replaces CP/M. In fact, it is now called the UCSD p-System (“p” for portable), since it supports more than just Pascal. Fortran ’77, a full-function Basic, and, soon, Cobol are also p-System languages. All of these languages generate portable code which can be moved to a wide variety of machines. Furthermore, they are all interlinkable—program pieces written in one language can invoke program pieces written in any other.

The programs are developed in a powerful, full-screen editor that is dramatically simpler to use than its CP/M counterpart. A linker is used to stitch together separately compiled program segments written in any of the languages or in assembly language (in the rare event that compromises to portability need to be made for speed or machine-specific coding).

Our SuperBrain implementation of the p-System comes on four diskette images packed onto two “floppy” diskettes. These diskettes boot directly to the p-System. In addition to the standard p-System files, we include utilities for replacing the CP/M CONFIGUR and FORMAT programs (thus providing full independence from CP/M), a terminal emulator program, and several other useful programs. The BIOS has been totally rewritten to make use of the considerably wider device control of the p-System (e.g. testing the status of either serial port, reading from the printer, accessing the system clock, etc.). “Hold down” repeat keys have been implemented, with the repeat key time constants (slow or fast repeats) settable by the Configure program. A system clock has been implemented and is available to Pascal. Both the keyboard and the main (modem) port have 64 character “type-ahead” queues. With all of the changes, the BIOS is still several hundred bytes smaller than the CP/M BIOS. In general, the system has a very smooth, fast, and user-friendly feel to it.

Although, from a features standpoint, the p-System stands as a very capable operating system, there is little question that its ultimate benefit is its first: portability. While the SuperBrain will be the answer to many application needs, it can’t be the answer to them all. Software developers need to be able to move their software, developed at great cost, to the widest market available. CP/M addresses portability only within the 8080/Z80 market. The UCSD p-System has been adapted to every major microprocessor available, including the very newest (Z8000, 8086, and Z8000). I’ve personally built and compiled large software packages on the SuperBrain, and then moved them directly to an Apple, TI, and DEC micro without so much as a recompilation. It is this ability for the software designer to freely choose the hardware vehicle that makes the p-System a superior programming tool.

Several other useful programs. The BIOS has been totally rewritten to make use of the considerably wider device control of the p-System (e.g. testing the status of either serial port, reading from the printer, accessing the system clock, etc.). “Hold down” repeat keys have been implemented, with the repeat key time constants (slow or fast repeats) settable by the Configure program. A system clock has been implemented and is available to Pascal. Both the keyboard and the main (modem) port have 64 character “type-ahead” queues. With all of the changes, the BIOS is still several hundred bytes smaller than the CP/M BIOS. In general, the system has a very smooth, fast, and user-friendly feel to it.

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I have interfaced my SuperBrain with a Diablo 1641 but did it almost by trial and error. I get stray ASCII outputs from time to time and cannot make full use of some of the speciality features of the printer from my Magic Wand.

Can someone supply me with the proper pin configuration?

Thanks,
Steve R. Riskin, Ph.D. J.D.
1327 Palms Blvd.
Venice, CA 90291

Continued on page 8
Continued from page 7

Those interested in reviewing the details of the public prospectus may do so by requesting one from Bear, Stearns & Co., 55 Water Street, NY, NY 10041 (212) 952-6683. Contact: Mr. Barry Ridings. The company is required to fulfill requests for the printed prospectus only until July 15, 1981.

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Book Review

The CP/M Handbook with MP/M
By Rodney Zaks
SYBEX, 2344 Sixth Street
Berkeley, CA 94710

Intertec should include a copy of this book with every new SuperBrain sold. Why? Because now, both new computer users and pros have a reliable, thorough handbook that covers almost every detail of CP/M, the most popular operating system for microprocessor-based computers.

It's not easy to take a complex subject like CP/M and make it simple to understand and use -- all in a single volume. But instead of the undecipherable gobbledygook that Digital Research has put into their "manual", Mr. Zak's book has been designed and written in clear, concise language.

For first-timers, the beginning chapters offer an easy-to-use self-teaching process that gets you up and running with every major CP/M function. And to help you understand it better, Mr. Zaks takes you on a journey through the inner workings of CP/M with descriptions of the way it all works.

PIPE, ED, ERA, SAVE, MOV, and all the other important CP/M functions are described with working examples to drive the lessons home. The reference chapters in the back are an excellent tool even for polished professionals to quickly find function descriptions, trouble-shooting hints, error messages and conversion tables.

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EDITOR'S NOTE:

In our April/May interview with Peter Hendrick of IE Systems, Inc., there were several points made that we feel deserve clarification.

1) IE Systems was just one of many companies that recommended to Intertec that they put disc drives on the InterTube.
2) The specially labelled keycaps for Magic Wand and WordStar are an optional extra to the SB/E PROM.
3) The spindle motors, not the SuperBrain disc drives, have a life expectancy of 2,000 hours.
4) The SB/E PROM can be inserted easily without special tools.
5) MDR, the diagnostic package IE sells, is priced at $145, not $100, as mentioned. For four months, if ordered after May 1st with the SB/E, there's a $45 discount.
6) The SB/E manual has interface diagrams for NEC, Okidata, Epson and Centronics printers. They can help customers interface with others.