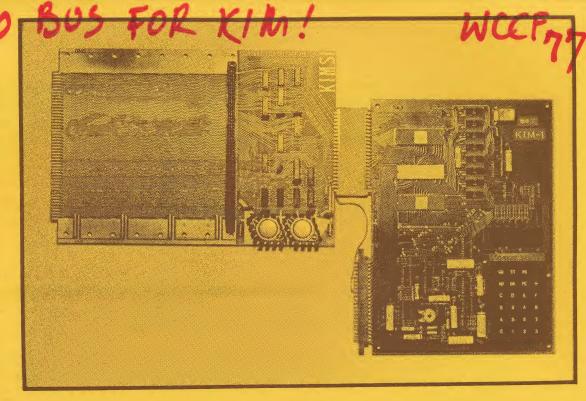
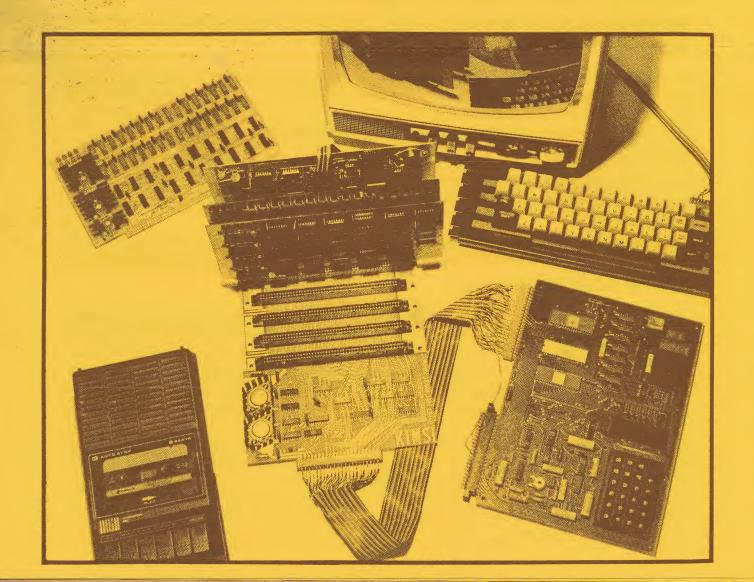
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# KIM has a friend!



Has your KIM computer been longing for some memory? Looking for a video board? Or hoping for some I/O ports to keep the house under control? It's no wonder KIM's a little jealous of its 8080 friends; there are over 100 different boards that plug into the Altair/Imsai bus. NOW PLUG THEM INTO KIM!

AND RUP FOR KIND

# KIMSI\* INTERFACE/MOTHERBOARD

\* MITTING

Forethought Products announces Kimsi, the bridge between low cost Altair/Imsai type boards and 6502 Power!

The Kimsi board connects to any unmodified KIM-1 computer and converts all its signals to the S-100 (Altair/Imsai) bus format. On a single board Kimsi contains both the interface logic and a fully buffered motherboard with eight 100 pin slots.

Kimsi makes Altair/Imsai type boards *plug-in compatible* with KIM, but doesn't alter the operation of KIM in any way. All instructions are executed in the normal manner, at full speed. There are no extra instructions or software modifications needed.

Kimsi facilitates many functions from the S-100 bus including control of the 6502, reading slow PROM boards, and even high speed DMA. Complete "board-enable" decoding is provided so that KIM's on-board memory remains in use, and Kimsi also features on-board regulation of +5 and +12 volts to power KIM.

For a little more elbow room, Kimsi's 100 pin motherboard slots are 30% further apart than those of its 8080 friends.

If you don't like to get wound up in cables you'll appreciate Kimsi's "mirror-image" edge connector pattern which allows direct connection to KIM thru a pair of back-to-back dual 22 pin connectors, no cable needed. Of course if you don't prefer a rigid connection to KIM, our ribbon cable connector assembly will give you plenty of flexibility.

At the other end of the board you'll find something else handy — BUSTAP\*. If you like to tinker with hardware now and then, you'll appreciate having all 100 bus lines at your fingertips. Just press a 100 pin connector onto the BUSTAP and solder, wrap, or clip to any line you wish.

## KIT OR ASSEMBLED

If you've never put a kit together before, relax — the Kimsi board is arranged for easy assembly and soldering, and our instructions are written for everyone, not just engineers. If you still lack confidence, have some of ours! We'll be waiting at the other end of your phone line. If everything isn't going together easily, or just isn't as clear as it could be, give us a call. We'll be there to help. Taking the time to assemble your Kimsi gives you both the savings of a kit and the satisfaction of knowing your system from the inside out.

If you don't have time for a kit and you'd like to see Kimsi up and running right out of the box, we'll be glad to send you a Kimsi completely assembled and tested. We include complete operating information and a four month warranty.

<sup>\*</sup> Trademark Forethought Products

### KIMSI-PLUS\* POWER SUPPLY

After putting together our first Kimsi system, we noticed that there was something missing . . . . a power supply.

When it comes to power supplies most computer owners have two choices: hunting forever to find the proper parts, or paying an exorbitant price for a commercial supply. We offer another choice — a no frills, low cost supply with quality parts and enough power for KIM, Kimsi, and a *full load of eight S-100 type boards*.

It supplies the normal bus voltages of +8, +16, and -16 which allows easy regulation to +5, +12, -12, -9 and other voltages that are often needed.

The supply includes transformer, capacitors, rectifiers, power switch, AC line cord, fuse, and LED "power-on" indicator.

The Kimsi-Plus is an economy supply, but economy doesn't mean low quality. It means that all these fine parts are mounted on an 8 X 12 chunk of wood. The base is predrilled for quick and easy mounting of the components, and we provide all needed hardware, even the handy little rubber feet. You may want to build a cover for it someday, but it will take good care of your system's power needs until then!



### **OUR PRICES**

KIMSI\* KIT — Circuit board, all components, one 100 pin connector, and complete assembly and operating instructions. #KIMSI-K \$125

KIMSI\* ASSEMBLED AND TESTED — Kimsi board, one 100 pin connector (soldered in place), operating information, and four month warranty. #KIMSI-A \$165

KIMSI-PLUS\* POWER SUPPLY — Input 110VAC, output (unregulated) +8V at 10A, +16V at 1A, -16V at 1A.

"Back-to-Back" rigid connector assembly.

Kit #KPPS-K \$60
Assembled #KPPS-A \$75

Kit #44PB-K \$6.00

Assembled #44PB-A \$8.50

Ribbon cable connector assembly, specify length (LL) in inches.

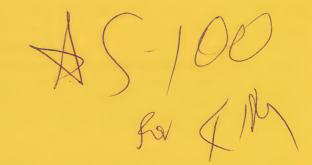
Kit #44PC-K-**LL** \$ 6 + .20/inch Assembled #44PC-A-**LL** \$17 + .20/inch

100 pin motherboard connector #100P \$5.00

100 pin motherboard connector, soldered in place and tested. (order with assembled Kimsi only) #100P-A \$7.50

FORETHOUGHT PRODUCTS
P.O. Box 386-C
Coburg, Oregon 97401

- 4K RAM
- 8K RAM
- Serial I/O
- Parallel I/O
- Video Drivers
- A/D's, D/A's
- Prom Programmer
- Tape I/O
- Disk Controller
- Real-time clock
- Joystick Interface



... over 100 different boards ready for KIM to use!

Dear computer enthusiast;

After reading this flyer you may be thinking, "I'll need a mother-board for my system, but why buy a Kimsi when the KIM-4 mother-board is only \$119?" or "All those S-100 type boards sound great, but how can I afford \$125 just to be able to use them?". Well, even if your plans don't call for a video display, D/A's, I/O ports, or other s-100 bus boards, Kimsi will pay for itself from the savings on memory alone. How about a 4K, low power, static RAM kit (from S.D. Sales) for \$89! Or Bill Godbout's 4K board, assembled and tested, for only \$129.95! You'll save plenty on the cost of memory, and the time spent on assembling a kit is both enjoyable and rewarding. One Kimsi user (who had never assembled a kit before) states "It only took me 3 or 4 hours to assemble it (an S.D. Sales board) and I figure I saved at least \$40." Stacked up against an MOS Technology 4K board for \$178, you save \$48 on an assembled board and \$90 if you have a few hours to spend on a kit. With figures like these you can see that Kimsi literally "pays for itself."

In the highly competitive S-100 market prices are falling every month. If you've been thinking about an MOS Technology 8K board for \$289, take another look. We just learned that JK Electronics (Box 352; Davis, CA 95616) is now selling low power, 8K static RAM kits for  $\frac{$169}{}$ !

We've also been asked why it wouldn't be better to buy a low cost S-100 bus system like SOL rather then purchase both a KIM and a Kimsi. Without going into all the reasons for preferring a 6502 processor to an 8080, we can usually make our point by noting that a KIM, Kimsi, Kimsi-Plus power supply, VDM-1 video board, and Ace KB-6 keyboard will give you everything in a SOL-20 kit, plus a CPU board that's already assembled (KIM), two more motherboard slots, and a price tag that's \$323 lower.

If you'ld like to be S-100 bus compatible but you own a JOLT, OSI, SWTPC or a 6502/6800 homebrew, drop us a note. Kimsi can be connected to other 6502 and 6800 systems and we'll be happy to help you with your particular setup. Those of you who are wondering what to do with your new MOS Technology 4 or 8K RAM board will be interested in our application note which details interconnection of Kimsi and a KIM-2 or 3 board. You can even run Kimsi and a KIM-4 motherboard on the same system!

We tried to put a lot of information into the flyer, but there's always something that just won't fit. If you have any questions please feel free to write. If you include a return envelope with your letter we can usually get a reply back in the mail within one day.

Happy computing, Forethought Products; P.O.Box 386-C; Coburg, OR 97401

P.S. For some great software and hardware tips, ideas, etc., contact: KIM-1/6502 User Notes; 425 Meadow Ln.; Seven Hills, OH 04131. Published every 5-8 weeks, 6 issue subscriptions are \$5.