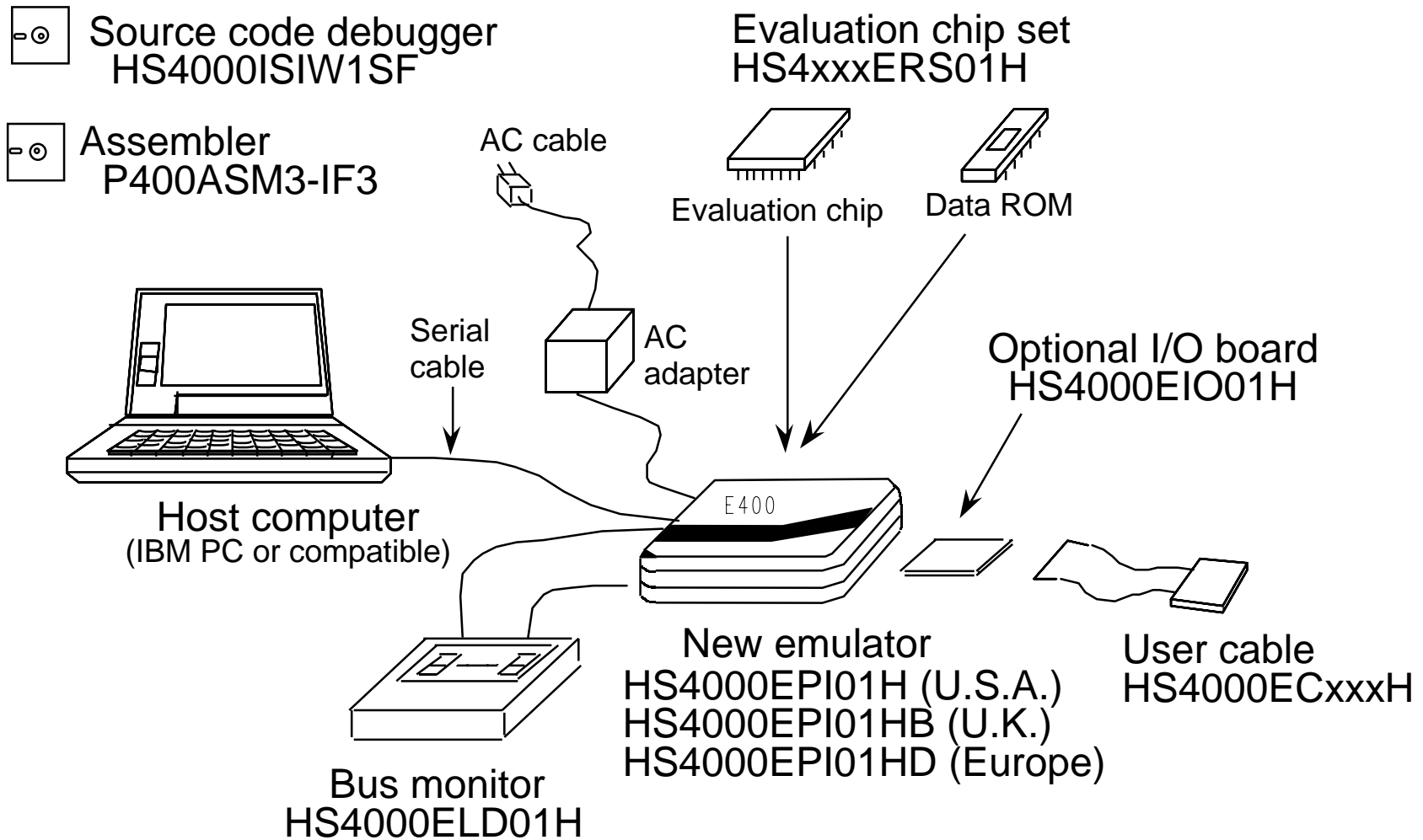


Development Environment Of Programs For the HMCS400 Series Microcomputer

New Emulator Configuration



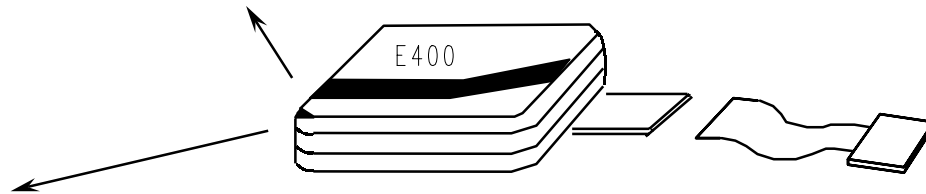
Features of the Development Environment

- 4-bit Microcomputer -

- High speed
 - 8.5 MHz 0.47 μ s per instruction
- Low voltage operation
 - 1.8 V operation
- Compact
 - 220 x 160 x 42 mm
- Compatibility with current products
 - Same functions as current products
 - Evaluation chip set to be installed in general target probe
 - User cable can be connected
- External RAM bus monitor
 - RAM contents display during program execution (4 points)

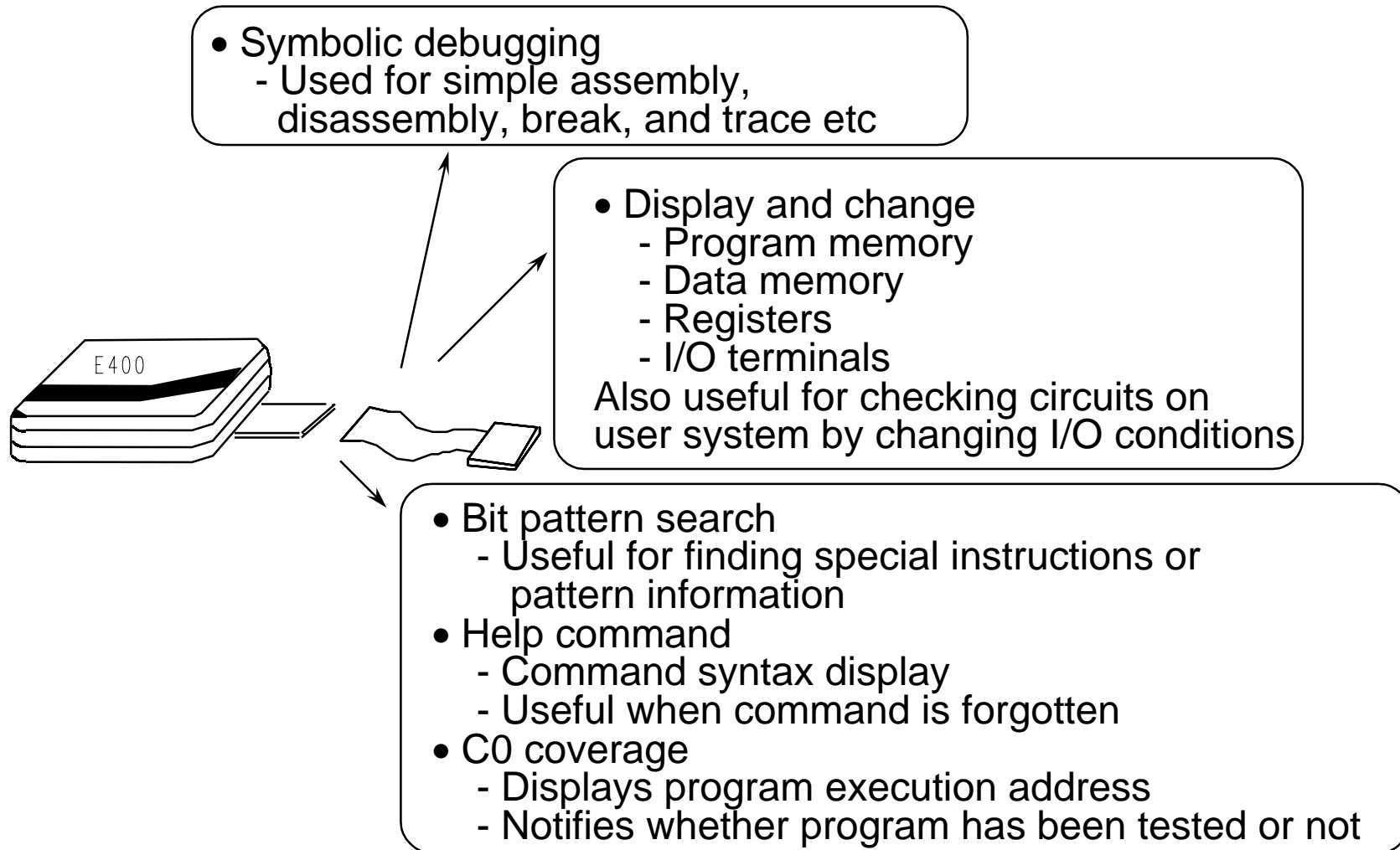
Emulator Functions (1)

- PC break covers all areas
 - Any point and any range
- 4 combination breaks
 - 4 signal combinations of bus, external probe condition, interrupt, stack level, read/write, and so on
- Break generation delay, specifying number of times to judge conditions



- Realtime trace
 - Mnemonic display or, bus cycle display can be selected
 - Trace stop mode allows confirmation of execution result without stopping the program
 - 2047 cycle tracing
- Single-step trace
 - Useful in following changes in registers, I/O, and RAM contents
 - Timer stop mode prevents timer interrupt at every step

Emulator Functions (2)



Windows® Based Source Code Debugger

- HS4000ISIW1SF -

- Debugging can be done corresponding with the source program
- Visual operation with pull-down menus
- Manual-less operation mode possible with on-line help or guide-line messages

Operation environment

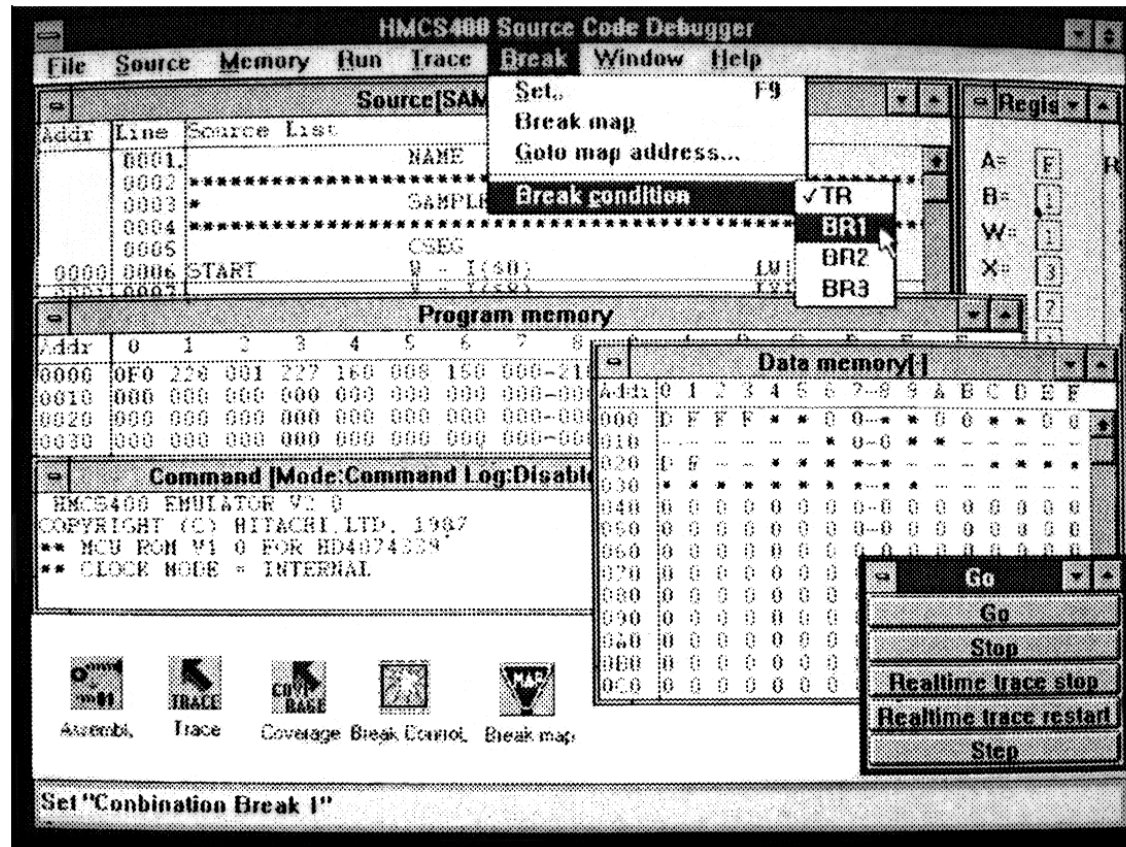
Host machine: IBM PC (CPU: 80386 or above; RAM: 4 MB or more)

OS: Windows® Ver. 3. 1

Emulator: E400 (HS4000EPI01H/HS4000EPI01HB/HS4000EPI01HD)

Assembler: P400ASM3-IF3 Ver. 3.1 or later

Display Example



Features of the Bus Monitor Board

- HS4000ELD01H -

- Display on the LEDs in realtime the content of the RAM address set by the user without stopping the user program
- Setting of RAM address is possible up to 4 points
- Usable after connecting to E400 with the attached flat cable

