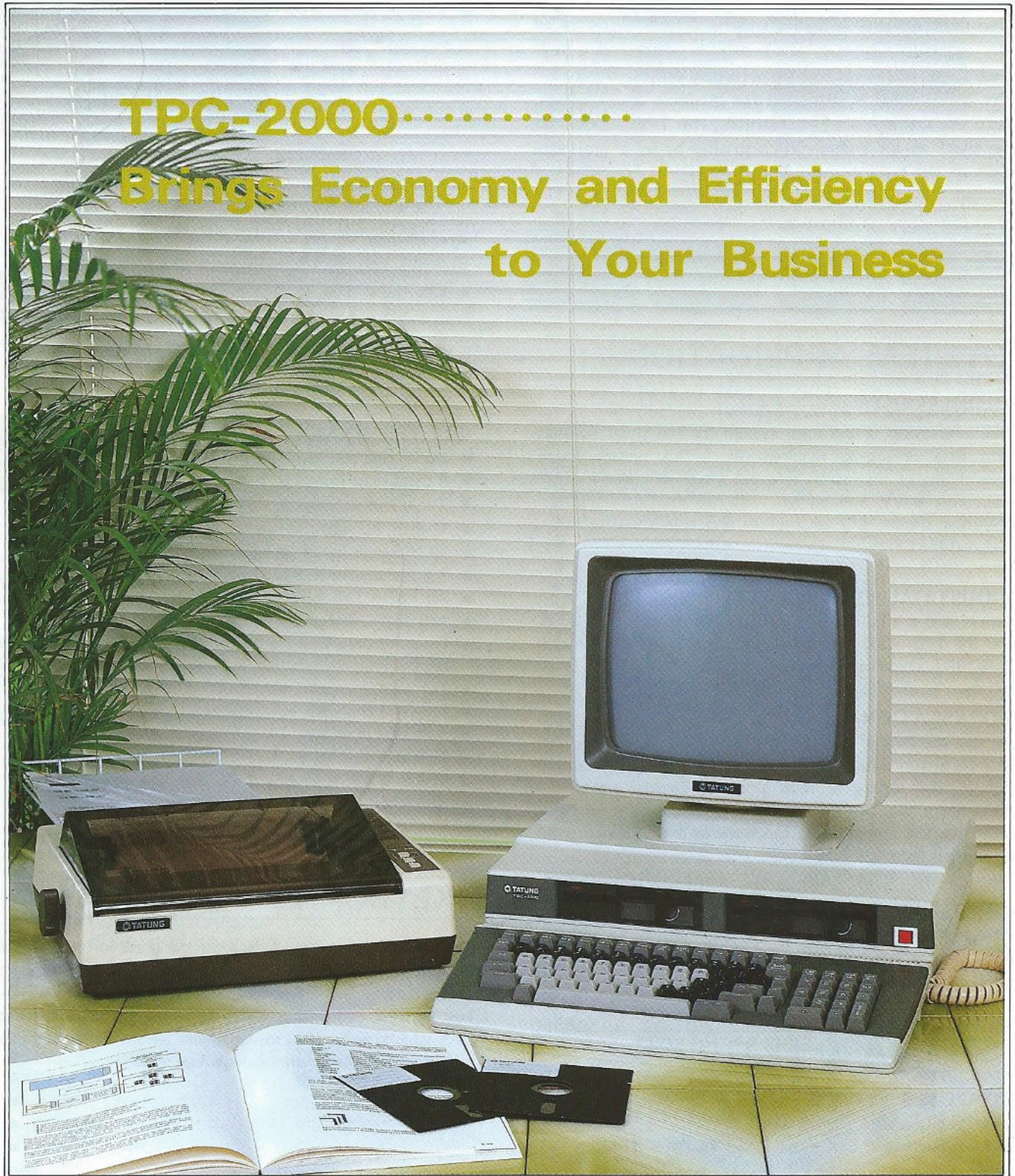**TATUNG**

PRESENTS THE DESKTOP SMALL BUSINESS COMPUTER

TPC-2000···············
Brings Economy and Efficiency
to Your Business

INTRODUCING THE FULLY INTEGRATED DESKTOP SMALL BUSINESS COMPUTER SYSTEM TPC-2000

The TATUNG TPC—2000 Integrated desktop microcomputer system is an easy to use, low cost single user system. It is a compact and very attractive desktop unit. The standard system consists of the computer system, CRT display, detachable keyboard and dual slim line mini-floppy drives. Basically, the TPC—2000 is designed for business applications. Add on the optional accessories, the TPC—2000 can be used as an industrial controller or as a workstation of the host computer.

| BUSINESS USES | INDUSTRIAL CONTROLLER | WORKSTATION | CRT TERMINAL |

SYSTEM APPLICATIONS

BUSINESS USES :

The TPC—2000 is the ideal system for the small business with data processing requirements. This system allows streamlining of time consuming tasks, such as inventory control, order entry, and billing. It run the CP/M™ V2.2 operating system and all utilities and application softwares designed for CP/M.

INDUSTRIAL CONTROLLER:

Simply add a TTL INPUT/OUTPUT board onto TPC—2000, and the TPC—2000 becomes an industrial controller for such as ROBOT, chemical PH control .... etc.

WORKSTATION :

As the computing requirements grow, the TPC—2000 can become a workstation of the host computer, with its built-in floppy drive serving as local storage. Because the TPC—2000 has a function which allows it to accept down-loads from the host computer, it can work as a workstation with or without its disk drive(s).

CRT TERMINAL :

When the TPC—2000 functions as a terminal of a host computer, it can simulate other types of terminals by sending terminal control code tables from the host computer.

STANDARD FEATURES

COMPUTER SYSTEM :

- Microprocessor : Z-80A, 4MHz
- Main memory : 64K bytes RAM, 4K bytes ROM

  Display memory : 4K bytes RAM, 2K bytes ROM

- Auxiliary memory :
  2 slim line 5¼" mini-floppy diskette drives.

A) single side, 96 TPI — 500K bytes of storage per drive
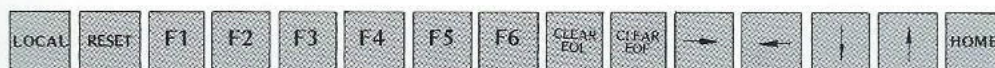B) double side, 96 TPI — 1M bytes of storage per drive

- I/O port : 1 serial RS—232C interface port for printer; baud rate of 110, 300, 600, 1200, 2400, 4800, 9600 or 19200 bps can be seleted through software or by hardware switch; 1 Centronics type interface for parallel printer.
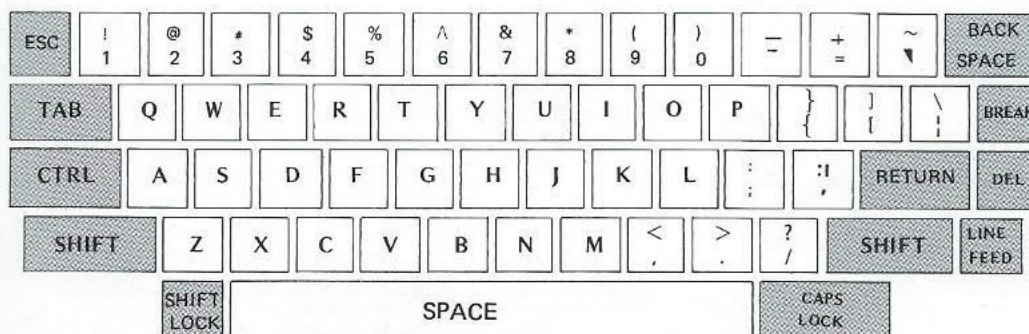
CRT TERMINAL :

- Upper case and lower case
- 8 baud rates from 110 to 19200 bps selectable.
- Tilted and swiveled monitor
- 12-inch, non-glare screen
- 80 character by 24 line display format
- 7 x 9 character in 9 x 12 resolution
- All 128 ASCII characters
- 128 displayable characters
- Programmable visual attributes (16 sets: normal, reverse, blink, underline and half intensity)
- Full editing capabilities
- Line and character insert/delete
- Addressable cursor
- Tabbing
- Standard ASCII keyboard
- Numeric pad
- Special function keys

KEYBOARD

The detachable keyboard has been designed for easy of use and operating comfort. It has 93 sculptured keys arranged in standard typewriter format, and includes alpha lock, 18—key numeric pad with decimal and programmable function keys which can be used to implement automatically complex repetitive operations with a single key stroke.

LOCAL | RESET | F1 | F2 | F3 | F4 | F5 | F6 | CLEAR EOL | CLEAR EOP | ← | ← | ↑ | ↓ | HOME

PROG ○ SHIFT ○ CAP ○

ESC | ! 1 | @ 2 | # 3 | $ 4 | % 5 | ^ 6 | & 7 | * 8 | (9 |) 0 | _ - | + = | ~ ` | BACK SPACE
LINE INS | LINE DEL | CHAR INS | CHAR DEL

TAB | Q | W | E | R | T | Y | U | I | O | P | } { |] [| \ | BREAK
7 | 8 | 9 | TAB

CTRL | A | S | D | F | G | H | J | K | L | : ; | :' | RETURN | DEL
4 | 5 | 6 | INS OFF

SHIFT | Z | X | C | V | B | N | M | < , | > . | ? / | SHIFT | LINE FEED
1 | 2 | 3 | ENTER

SHIFT LOCK | SPACE | CAPS LOCK
0 | .

MONITOR

The TPC—2000 monitor is a TATUNG DM—1219D. It allows the user to communicate with the computer for immediate data processing information. To minimize eye strain, TPC—2000 has a 12-inch non-glare green screen. Each character can be defined as normal, reverse, blink, and underline.

SPECIFICATIONS :

- CRT : 12", 90°, 20ϕ
- Phosphor : P39
- Video input : separate positive TTL
- Horizontal drive : positive TTL
- Vertical drive : positive TTL
- Display area (HxV) : 210mm x 160mm
- Resolution : 1000 lines at center
  800 lines at corner
- Scanning frequency : 19.2 KHz ± 0.5 KHz
- Band width (—3dB) : 22 MHz

CRT CONTROL FUNCTIONS

A. CURSOR CONTROL

- CURSOR HOME   ESC ∧ R
- CURSOR UP   ESC ∧ L
- CURSOR DOWN   ESC ∧ K
- CURSOR LEFT   ESC ∧ H
- CURSOR RIGHT   ESC ∧ P
- LINE FEED   ∧ J
- CARRIAGE RETURN   ∧ M
- DIRECT CURSOR ADDRESS   ESC ∧ Q
- SEND CURSOR ADDRESS   ESC ∧ E
- SEND CURSOR CHARACTER   ESC ∧ !

B. EDITING CONTROL

- CLEAR SCREEN   ESC ∧ \
- CLEAR TO END OF SCREEN   ESC ∧ X
- CLEAR TO END OF LINE   ESC ∧ O
- INSERT LINE   ESC ∧ Z
- DELETE LINE   ESC ∧ S
- INSERT CHARACTER   ESC ∧ B
- DELETE CHARACTER   ESC ∧ V
- INSERT OFF   ESC ∧ A

C. FORMAT CONTROL

- SET BACKGROUND   ESC ∧ Y
- SET FOREGROUND   ESC ∧ —
- COLUMN TAB   ∧ I
- COLUMN BACK TAB   ESC ∧ ◀
- SET ATTRIBUTE FUNCTION (ESC ∧ SPACE
  any of following characters   )

j	h	C	A	f	d	B	@	k	i	c	l	g	e	b	H	
								●	●	●	●	●	●	●	●	HALF BRIGHT
●	●	●	●					●	●	●	●					INVERSE VIDEO
●	●			●	●			●	●			●	●			UNDER LINE
●		●		●		●		●		●		●		●		BLINKING

D. SPECIAL FUNCTION CONTROL

- SOUND ALARM   ∧ G
- KEYBOARD UNLOCK   ESC ∧ F
- KEYBOARD LOCK   ESC ∧ U
- LOAD FROM HOST   ESC ∧ C
- RECEIVE FROM HOST   ESC ∧ D
- GOTO SPECIFIC ADDRESS   ESC ∧ G
- SIX SPECIAL FUNCTION KEY

ESC ∧ @ 1	any of 1 to 16 characters	ESC
ESC ∧ @ 2	"	"
ESC ∧ @ 3	"	"
ESC ∧ @ 4	"	"
ESC ∧ @ 5	"	"
ESC ∧ @ 6	"	"

SOFTWARE SUPPORT

Two operating systems are available for the integrated TPC—2000 system; the CP/M V2.2 for single users and the CP/NET™ for local networks. Both operating systems support a wide range of application languages.

OPERATING SYSTEM : CP/M V2.2, CP/NET
UTILITIES: KSAM, DATA STAR, SUPER SORT, WORD STAR, SUPER CALC, VEDIT, BISYNC, L80, LIB80
LANGUAGES : ASM, M80, MAC, FORTRAN, CBASIC™ MBASIC, PASCAL/M™ , COBOL

- Serial interface board
  1. 14 RS–232C serial ports available per board
  2. TPC–2000 can add up to 2 boards
- TTL input/output board
  1. 64 input/output points per board
  2. TPC–2000 can add on up to 2 input/output board.

- Virtual disk :
  1. 256KB capacity
  2. up to 8 virtual disk boards
  3. 256 KB/sec for access time
- Hard disk :
  TPC–2000 can add on up to 4 sets of 5¼" Winchester hard disk drives.
  There are 6.6 MB/drive, 13.3 MB/drive, and 27 MB/drive options for 5¼" Winchester hard disks.

OPERATING CONDITIONS

Power requirement : 110V or 220V ± 10%, 50 or 60Hz
Power consumption : less than 100VA
Operating Temperature : 10°C — 40°C
Humidity :   20%—80% Noncondensing
Weight :   12Kg
Dimensions (mm) :   450(W) x 428(H) x 620(D)

* CP/M, CP/NET are trademarks of Digital Research Inc.
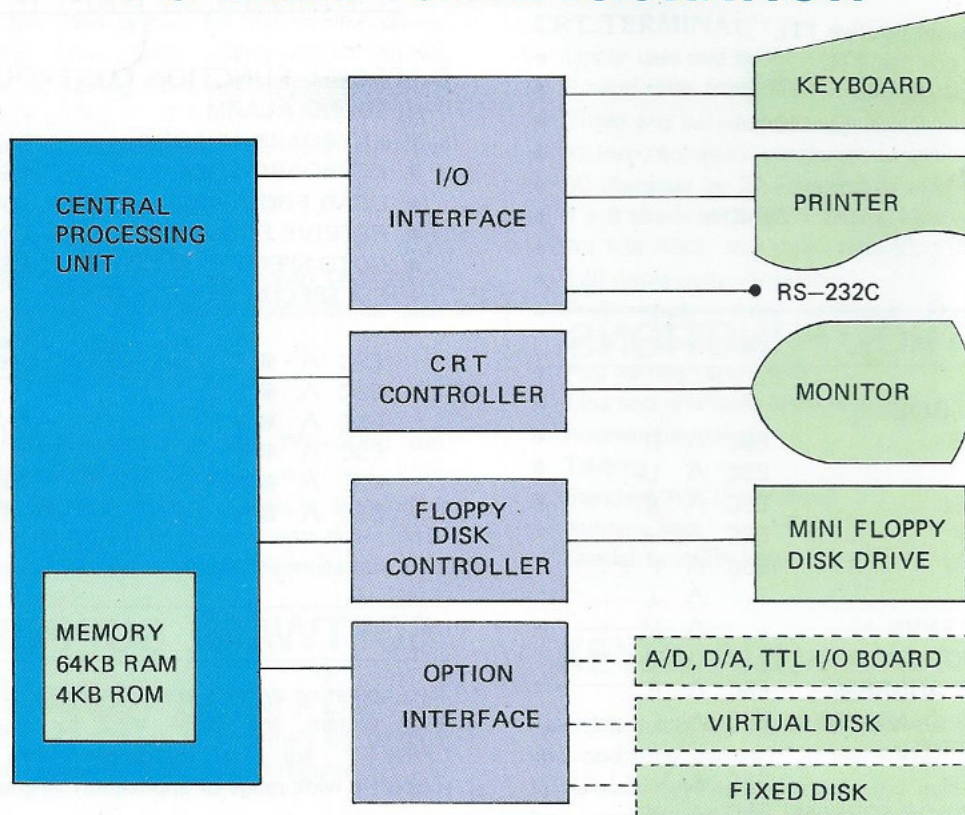* CBASIC is a trademark of Compiler System, Inc.
* PASCAL/M is a trademark of Sorcim

TPC-2000 CONFIGURATION

* Specifications are subject to change without notice.