

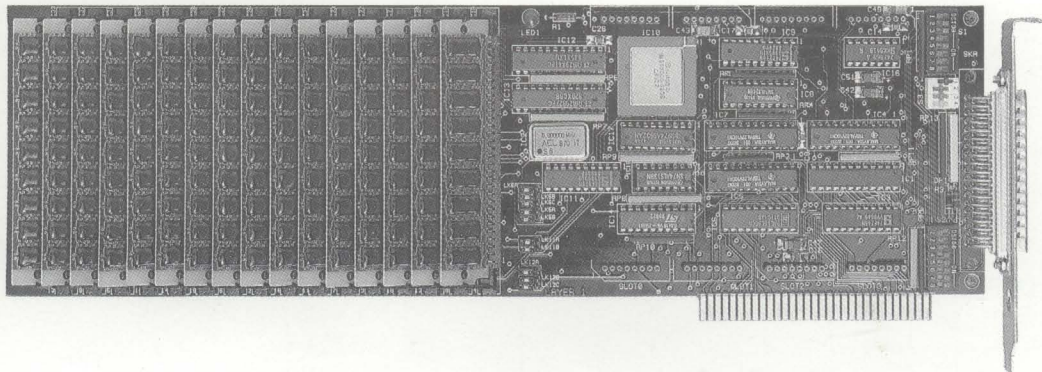
**TMB**

# Transtech TMB04

**TMB**

AN EXPANDABLE TRANSPUTER BOARD FOR THE IBM PC

- Features
- ◆ IMST800, IMST425 or IMST414 transputer options
  - ◆ 1 to 16 MBytes of dynamic RAM with zero wait state option
  - ◆ 20, 25 or 30 MHz transputer speed options
  - ◆ Four standard TRAM slots
  - ◆ DMA/IRQ capability for fast MS.DOS I/O transfer
  - ◆ Plugs directly into IBM PC AT or XT and compatibles
  - ◆ Supports Occam TDS development and 3L's scientific languages
  - ◆ Compatible with the Transtech range of TRAMs
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**Introduction** The Transtech TMB04 is part of a compatible family of transputer development boards. The TMB04 will fit any IBM PC AT or XT (and compatibles) expansion slot, providing the interface between the PC running a file server under MS.DOS and the processing power of transputer systems.

**Flexibility** The TMB04 has been developed with Transtech's unrivalled experience of transputer boards to provide the most flexible single transputer board available.

Capable of supporting any speed variant of the IMST800, IMST425 and IMST414 transputers, the TMB04 also has options for 1,2,4,8 or 16 MBytes of DRAM, which can be accessed in 3,4,5 or 6 cycles depending on the speed of processor and memory. The four links of the transputer can be accessed via a standard 37-way D-type edge connector compatible with a wide range of other transputer boards. These links can be set to run at 10 or 20 Mbits/sec.

**IBM PC Bus Interface** An interface to the PC bus is provided via an IMSC012 link adaptor for communication between the host machine and a transputer network. The interface supports software polling of the link adaptor, used in many earlier transputer boards and also a DMA mechanism allowing transfer rates of between 200 and 300 KBytes/sec to be achieved. The TMB04 also has the ability to interrupt the host PC on a number of user defined events.

**Expandable** More flexibility is provided by the addition of four TRAM (TRANsputer Module) slots, which allow up to four standard TRAMs to be added to the board. The TMB04 accepts the whole range of TRAMs from Transtech and is compatible with those of other manufacturers, giving customers the freedom to choose many different processor and memory combinations or application specific TRAMs. Eight links from the four TRAM slots are also taken to the 37-way D-type edge connector, allowing them to be connected to external devices as well as to the master transputer on the TMB04. Further information on the Transtech range of TRAMs is available from Transtech or your local distributor, while details on the TRAM standard and TRAM motherboard architecture are published by Prentice Hall in 'Transputer Technical Notes' ISBN 0-130929126-1.

**System Control** The reset, error and analyse system control of the transputer is user definable, by selecting one of a variety of reset configurations. The master transputer can be reset either from the external world via the edge connector, or from the PC, while the remaining TRAM slots can be reset from either the same source as the master transputer or from a sub-system generated by the TMB04. The generation of the sub-system enables the TMB04 to control a large system of transputers while still running the TDS.

**Software** The TMB04 can be programmed with software development packages to run Occam, C, FORTRAN, Pascal and other transputer language compilers as well as the Helios, TransIDRIS, Express and other transputer operating systems. It can also be used as the processing hardware for a number of application specific software packages that are available for the transputer. The board is also supplied with a diagnostic test program.

### Ordering Information

TMB04 -	PROCESSOR OPTION	MEMORY OPTION
	A=IMST414-20 B=IMST425-20 C=IMST425-25 D=IMST425-30 E=IMST800-20 F=IMST800-25 G=IMST800-30	1=1 MBYTE 2=2 MBYTES 4=4 MBYTES 8=8 MBYTES 16=16 MBYTES

FAST 3 CYCLE RAM IS AVAILABLE FOR ALL 20 MHz PROCESSOR OPTIONS AND SHOULD BE SPECIFIED BY ADDING "F" TO THE PART NUMBER e.g. TMB04-E-2F HAS AN IMST800-20 WITH 2 MBYTES OF FAST 3 CYCLE DRAM



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