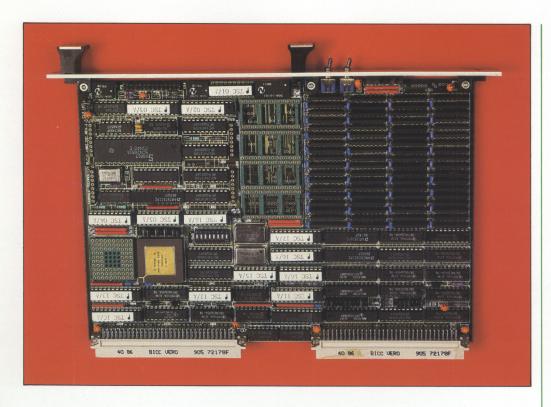
TP-TSC Transputer System Controller



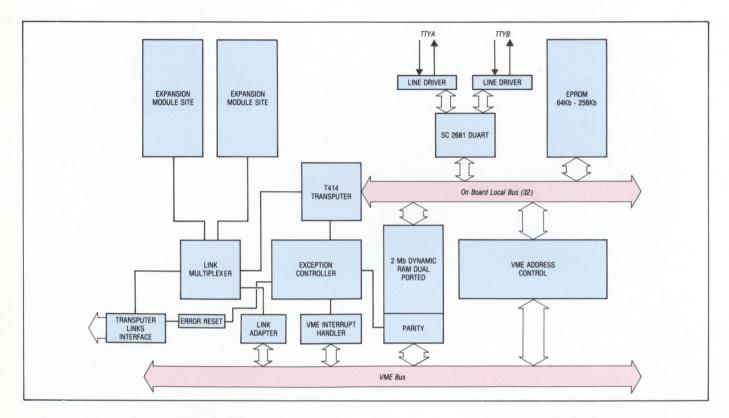
The TP-TSC is a high-performance parallel processing board designed to be integrated into VME based systems. Based on the INMOS T414 32-bit Transputer, the TP-TSC is suitable for use as a main system processor or as a specialised accelerator within existing systems. It may also be used as a Transputer development environment running in conjunction with the UNIX Operating System.

Developed in co-operation with INMOS, the TP-TSC is compatible with the INMOS range of Transputer products as well as with Tadpole's other board level products. The user may add an optional number of Transputers to the TP-TSC using expansion modules. In this way, the TP-TSC provides a bridge between a large Transputer array and facilities readily available on main system buses, including hard disc storage or industrial controllers.

The TP-TSC supports the OCCAM development environment with an interface to UNIX System V.2.2. Tadpole also provides software with the board which enables the compilation and execution of OCCAM software running in parallel with the UNIX Operating System. This includes UNIX file server facilities.

Features

- T414 32-bit Transputer
 - 2 x Transputer expansion module sites
- Compatible with INMOS BOO Series evaluation boards
- Full VME Interface
 Bus Master
 System Master
 Interrupt Handler
- 2Mb dual-ported dynamic DRAM with parity protection
- VME ported LINK adaptor for Transputer communication
- 2 x RS232 ports
- OCCAM development environment
- UNIX System V interface



Processor T414 Transputer DRAM 2Mb

Cycle Time 250nS Access Time 120nS

Dual ported to VME bus Parity Error Generates Event input

EPROM 64-256Kb

Transputer Four links to P2 Interface Expansion compatible with INMOS BOO

evaluation card

Links Four links to each of two module expansion sites

User configurable on Patch area

Software configurable with Link Multiplexer (1987)

RS232 Ports

Handshaking RTS, CTS

Bus

Interface VME Revision C

Compliance System Master PRI Arbiter

> BTO (14000) **Bus Timer** Requester R (0-3) (STAT)

ROR/RWD

DTB Master A32/24/16:D32/16/8

DTB Slave (UAT/RMW) A32/24:32/16/8

Interrupt handler I (1 - 7) (STAT)

Dimensions 160 x 233mm single slot Operating Temperature: 0 - 55° C Environmental

Operating Humidity: to 90% (non-condensing)

Software Transputer Development System Software

> Transputer Environment Editor, OCCAM Compiler, Fortran, C, Pascal

UNIX File System Server

Transputer Development Software

- Transputer Environment
- Folding editor
- **OCCAM** Environment
- Fortran, C, Pascal Support
- File System server for **UNIX Operating System** V.2.2

INMOS and OCCAM are trademarks of the INMOS group of companies UNIX is a trademark of AT&T

Tadpole reserves the right to change specifications without prior notice



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