TC-581 68HC11 PROCESSOR BOARD
FUNCTIONAL DESCRIPTION

REV 1.00 10/06/93 TWR

The Triad TC-581 processor board is a stand alone computer based on the Motorola 68HC11F1 microcontroller chip. The TC-581 was designed as a "problem solver" for use in embedded control applications needing local intelligence.

The TC-581 contains a ROM socket that supports a 32Kx8 EPROM or battery backed RAM. There is no dedicated RAM socket on this board but the processor contains 1Kx8 static RAM and 512 bytes of EEROM. Program operation and development "on board" is possible using battery backed RAM but is not recommended for permanent applications.

The processor SCI serial port is buffered up to RS232 levels and brought out to a Triad standard 6 pin Molex that may be used for communication or programming.

Twelve digital I/O lines and two analog inputs are brought to a 20 pin header connector for interfacing with other devices.

SPECIFICATIONS/FEATURES

68HC11F1FN	Embedded 8 bit Micro-Processor/Controller @ 4.0 Mhz buss speed
27C256	Firmware/Control and default parameter EPROM
Comm Port	RS-232 6 pin Molex for programming or configuration
Digital I/O	12 bits on 20 pin header, more available on 68HC11
Analog In	2 analog inputs appear on 20p header, 6 more available
Interface	+5V, GND and other I/O via 20 pin header, RS232 via 6 pin Molex
Reset Control	Processor reset via 20p header.
Power Required	+5VDC @ 50 MA (+/- 12 VDC for RS-232C generated on-board)
Form Factor	2.5" x 3.0" printed circuit board.

I/O PORTS

P1: I/O Connector

VCC	1	2	VCC
Analog 1 In	3	4	Analog 2 In
Digital PG0	5	6	Digital PG3
Digital PG1	7	8	Digital PG4
Digital PG2	9	10	Reset
Digital PA0	11	12	Digital PA4
Digital PA1	13	14	Digital PA5
Digital PA2	15	16	Digital PA6
Digital PA3	17	18	Digital PA7
GND	19	20	GND

P2: RS232 Connector
Pin 1. RXD
Pin 2. TXD
Pin 3. RESET-
Pin 4. VCC
Pin 5. NC
Pin 6. GND

J1: ROM Configuration
Pins 1 and 2 for Normal Operation

J2: ROM Configuration
Pins 2 and 3 for Normal Operation