

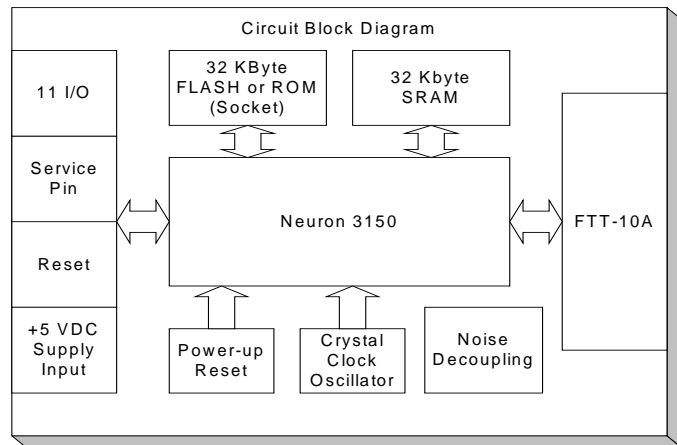
# FTC-10E

## FTT CONTROL MODULE

*Data Sheet*

### FEATURES

- NEURON<sup>®</sup> 3150<sup>®</sup> Chip
- Echelon<sup>®</sup> FTT-10A Transceiver
- Echelon Form Factor
- Direct Interface to User's Application
- Low Cost
- 8 KByte on board SRAM
- PLCC FLASH or ROM Memory Socket
- 10 MHz Clock
- Reset and Noise Decoupling Circuitry



### DESCRIPTION

The FTC-10E is a control module combining a NEURON 3150 chip and Echelon FTT-10A Free Topology Twisted Pair Transceiver. This control module provides a simple cost-effective way to add nodes to a new or existing LONWORKS<sup>®</sup> Free Topology Network. The I/O, reset, and service pin functions of the NEURON 3150 chip are accessible to the user. Clock, reset and noise decoupling circuitry are incorporated on the FTC-10E to provide the basic peripheral circuit operations. The FTC-10E has the capability for either FLASH or ROM memory for user application code, and an additional 8 KByte of SRAM on-board for additional memory. Use of FLASH memory allows application programs to be loaded directly over a LONWORKS network. The FTC-10E has a standard clock speed of 10 MHz. Development time and money can be saved by directly connecting the FTC-10E to prototype circuitry eliminating the need for wiring to expensive sockets. OEM's can directly place the FTC-10E on a standard through-hole board eliminating the need for surface mount assembly of the NEURON 3150 chip. FLASH and ROM chips are not included with control module.

### SPECIFICATIONS

Microprocessor	NEURON 3150 Chip
Transceiver	Echelon FTT-10A Twisted Pair
Crystal Oscillator Clock	10 MHz
Supply Voltage	5V $\pm$ 5%
I/O Connector	2 x 9, 18-Pin on 0.1" (2.54 mm) Centers
Network Connector	1 x 6, 6-Pin on 0.1" (2.54 mm) Centers
Memory	32 Pin PLCC Socket for 32 KB FLASH or ROM 32 KB Static RAM
Temperature Operating Range	-40°C to 85°C
Typical Supply Current	5 MHz 28 mA(receive mode) 43 mA(transmit mode)



**SMART CONTROLS**

10000 St. Clair Ave., Fairview Heights, IL 62208

Ph: +1 618.394.0300

Fax: +1 618.394.1575

[www.smartcontrols.com](http://www.smartcontrols.com)

[sales@smartcontrols.com](mailto:sales@smartcontrols.com)

# CONNECTORS

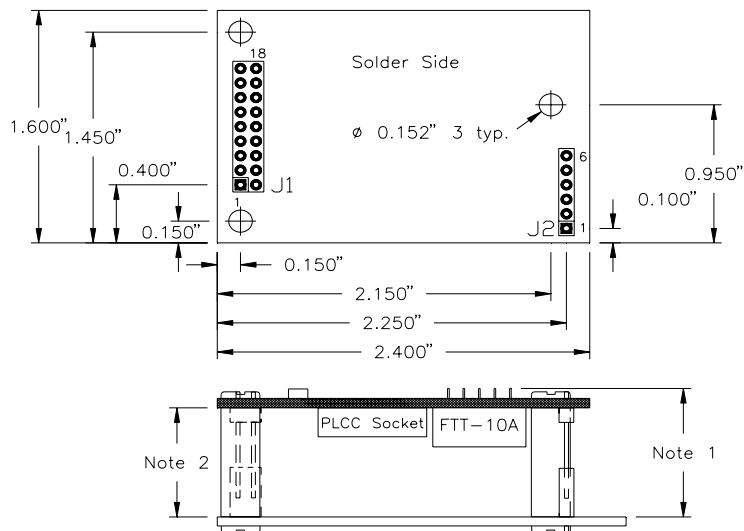
## J1 I/O Connector

PIN NUMBER	FUNCTION
1	NC
2	I/O 0
3	GND
4	I/O 1
5	GND
6	I/O 2
7	GND
8	I/O 3
9	~RESET
10	I/O 4
11	I/O 5
12	+5V
13	I/O 6

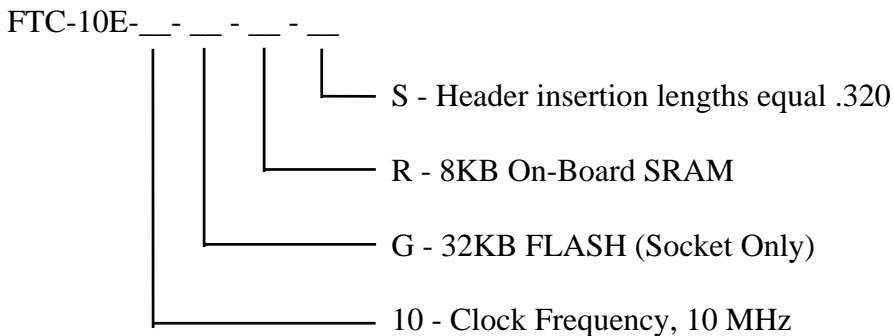
PIN NUMBER	FUNCTION
14	I/O 9
15	I/O 7
16	I/O 10
17	I/O 8
18	~SERVICE

## J2 Network Connector

1	NC
2	NC
3	DATA A
4	DATA B
5	NC
6	NC



# SELECTION GUIDE



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