

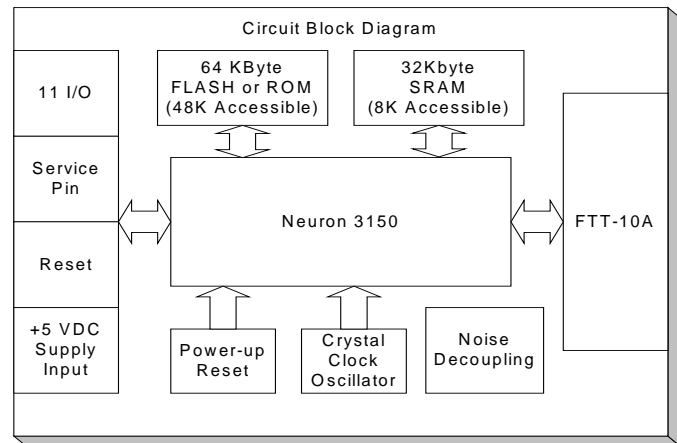
FTC-10E

FTT CONTROL MODULE

Data Sheet

FEATURES

- NEURON[®] 3150[®] Chip
- Echelon[®] 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[®] 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 64 KB FLASH or ROM
(Memory Chip not provide)	(48K of FLASH or ROM is accessible)
	8 KB Static RAM
Manufacturers of FLASH memory	Atmel, AT29C512-90JI
(Read Access Speed: min. 90 nanosecond)	SST, SST29EE512-70-4I-NHE
Temperature Operating Range	-40°C to 85°C
Typical Supply Current	10 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

sales@smartcontrols.com

CONNECTORS

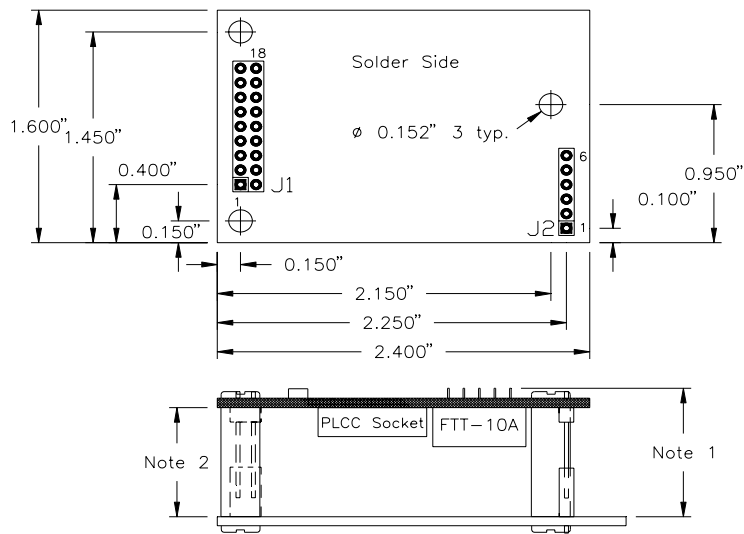
J1 I/O Connector

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

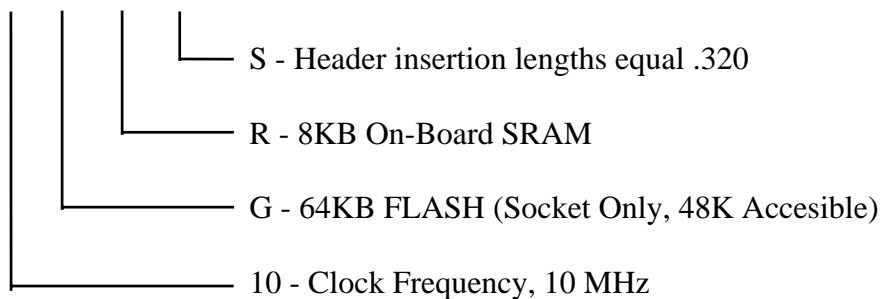


Notes:

1. 0.738" for MKT-01, 0.925" for MKT-02
2. 0.5625" for MKT-01, 0.750" for MKT-02

SELECTION GUIDE

FTC-10E- - - - -



1. Echelon, LONWORKS, 3150, and NEURON are registered trademarks of Echelon Corporation.
 2. Smart Controls, LLC reserves the right to make changes without further notice to this product for improvements in design or reliability. Smart Controls, LLC does not assume any liability arising out of the application or use of this product; neither does it convey any license under its patent rights of others.