Fairview Microwave
an INFINITᵉ brand

Ethernet Microcontroller, TTL Programmable Interface, RJ-45 Ethernet Interface with Autosensing, 18 BITS, +5V, D-Sub Connector

The FMAT7001 is an Ethernet microcontroller module which gives Designers the capabilty to more effectivly manage and streamline the BIT command control functions to a programmable RF module by using a PC computer program, or from a remote location via the Internet. The module communicates serially with a controlloing PC computer using GUI downloadable software and acts as a TTL programble interface that sends up to 18 command control BITS. This microcontroller is desirable for use with automated test and measurement and system level applications, and remote sites. The microcontroller uses a standard D-Sub 9 pin male connector for +5V DC bias voltage and ground. A D-Sub 9 pin female mating connector is included. An LED light indicates when Voltage is turned on. Addtional connection ports inlcude an RJ-45 socket (Ethernet cable not included) and the TTL output port uses a standard D-Sub 25 pin female socket connector. A D-Sub 25 pin male mating connector is inlcuded. The Ethernet circuit features autosensing and comes with a pre-set IP address. A downloadable operating manual is also included. The FMAT7001 provides a TTL programmable interface that works with any device that requries a TTL signal to function. This includes Fairview Microwave's lines of RF Swtiches, Attenuators, Phase Shifters, and Bi-Phase Modulators. The rugged Mil-Grade package assembly has an operating temperature range from -40°C to +70°C and can withstand noncondensing humidity up to 95%.

Features:

- Ethernet Microcontroller Module
- TTL Programmable Interface
- 18 Comand Control Bits
- Downloadable GUI Software
- +5Vdc Bias Voltage
- D-Sub Interface Connectors for Voltage and TTL Output
- D-Sub Connector Mates Included
- RJ-45 Ethernet Socket
- Downloadable Operating Manual
- -40°C to +70°C Operating Temperature
- Up to 95% Relative Humidity
- Rugged Mil Grade Package Design

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
DC Voltage		5		V
DC Current		150		mA
Ethernet Speed	10		100	Mb

Applications:

- Automated Test & Measurment
- System Level Applications
- Remote Sites
- Research & Development
- Military & Commercial Communication Systems
- Radar
- Microwave Radio
- Basestation Infrastructure

Mechanical Specifications

Size

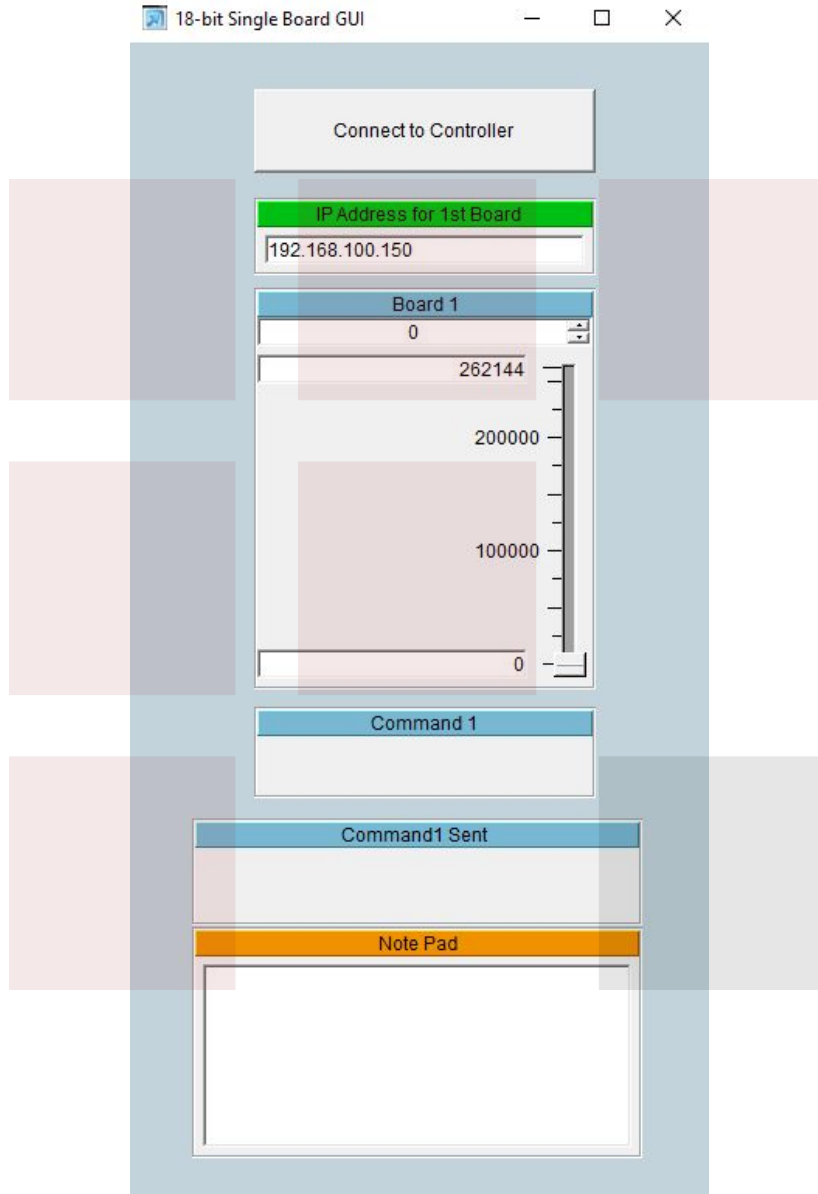|	
Length	4.5 in [114.3 mm]
Width	3 in [76.2 mm]
Height	1.5 in [38.1 mm]
Connector 1	D-9 Sub Male

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| Connector 2 | D-25 Sub Female |

Plotted and Other Data

Performance Data

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Ethernet Microcontroller, TTL Programmable Interface, RJ-45 Ethernet Interface with Autosensing, 18 BITS, +5V, D-Sub Connector from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.
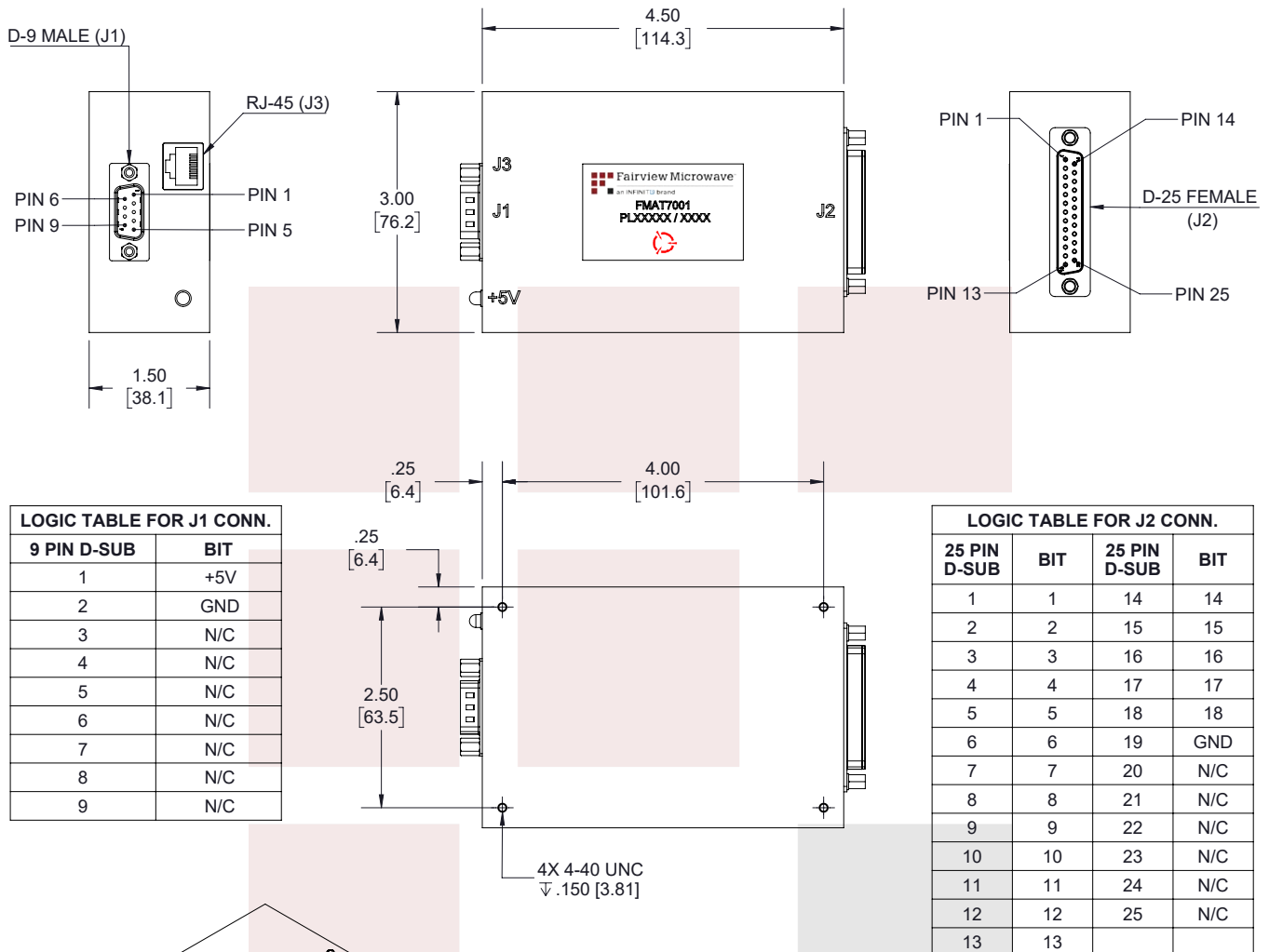
For additional information on this product, please click the following link: Ethernet Microcontroller, TTL Programmable Interface, RJ-45 Ethernet Interface with Autosensing, 18 BITS, +5V, D-Sub Connector FMAT7001

URL: https://www.fairviewmicrowave.com/fmat7001-p.aspx

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	8/4/2020	T.GALLA

D-9 MALE (J1)

RJ-45 (J3)

PIN 6 — PIN 1
PIN 9 — PIN 5

1.50 [38.1]

4.50 [114.3]

J3
J1
J2

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FMAT7001
PLXXXXX / XXXX

+5V

3.00 [76.2]

PIN 1 — PIN 14

D-25 FEMALE (J2)

PIN 13 — PIN 25

.25 [6.4]
4.00 [101.6]

.25 [6.4]

2.50 [63.5]

4X 4-40 UNC
.150 [3.81]

J2
J3 J1 +5V

FMAT7001
PLXXXXX/XXXX

LOGIC TABLE FOR J1 CONN.	
9 PIN D-SUB	BIT
1	+5V
2	GND
3	N/C
4	N/C
5	N/C
6	N/C
7	N/C
8	N/C
9	N/C

LOGIC TABLE FOR J2 CONN.			
25 PIN D-SUB	BIT	25 PIN D-SUB	BIT
1	1	14	14
2	2	15	15
3	3	16	16
4	4	17	17
5	5	18	18
6	6	19	GND
7	7	20	N/C
8	8	21	N/C
9	9	22	N/C
10	10	23	N/C
11	11	24	N/C
12	12	25	N/C
13	13		

Fairview Microwave™
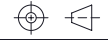### an INFINITe brand

TITLE

Ethernet Microcontroller, TTL Programmable Interface, RJ-45 Ethernet Interface with Autosensing, 18 BITS, +5V, D-Sub Connector

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:

.X = ±.2 [5.08]
.XX = ±.02 [.51]
.XXX = ±.005 [.13]

FRACTIONS ± 1/32
ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] = +1 [25] / -0
12 [305] < L ≤ 60 [1524] = +2 [51] / -0
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
300 [7620] < L = +5%L / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

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SHEET	OF
1	1

SCALE: N/A

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	3FKR5	K.DANG	FMAT7001	A

T-Rev.D