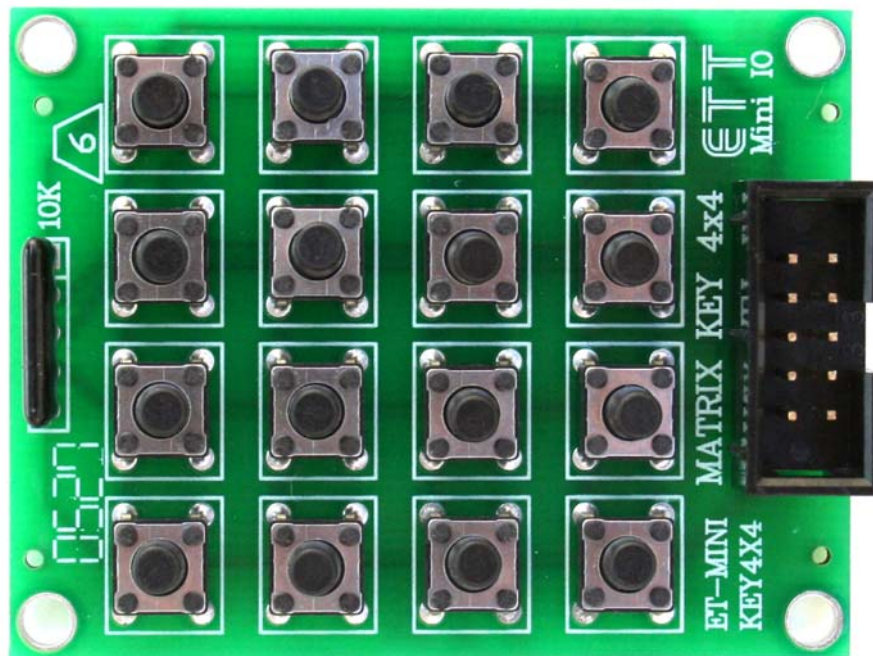


**MR-MINI-4x4KEY™ Mini 4x4 Matrix Keyboard BOARD
User Manual**

GRAVITECH.US



uResearch
GRAVITECH GROUP

Copyright © 2007 MicroResearch
GRAVITECH GROUP WWW.GRAVITECH.US

MR-MINI-4x4KEY™ Mini 4x4 Matrix Keyboard BOARD User Manual

Description

The MR-MINI-4x4KEY is a 4x4 matrix keyboard module. It is 10-PIN MRconnect® ready. It has 8 pins to interface with MCU (microcontroller). PIN1-PIN4 (COLUMN) is INPUT for MCU to reads the status of key pressing. PIN5-PIN8 (ROW) is OUTPUT for MCU to send logic LOW to scan key press on each row. MCU operation is sending logic LOW into each key's ROW (PIN5-PIN8). The MCU is then reading the status of key press from PIN1-PIN4. If any key is pressed, the status read logic LOW, otherwise the logic is HIGH. PCB size is 2.20" x 1.70"

Specifications:

- 10-PIN MRconnect® ready
- +3.0V to +5VDC supply voltage
- On-board pulled-up resistors
- Small and compact in size
- Four mounting holes on each corner



Pin out:

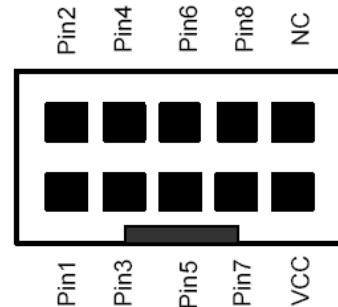


FIG 1: Top view pin out

Name	Type	Description
Pin1-Pin4	Output	Key press output status
Pin5-Pin8	Input	Scan key press input
+VCC	PWR	Supply voltage (3-5VDC)
NC	NC	No connect

Accessories

All of the accessories are available for purchase via our website. If you don't see the item you need, please contract our sales department at sales@gravitech.us

- **MR-10RC-FF**
10-PIN 12" ribbon cable.



Copyright © 2007 MicroResearch
GRAVITECH GROUP WWW.GRAVITECH.US

MR-MINI-4x4KEY™ Mini 4x4 Matrix Keyboard BOARD User Manual

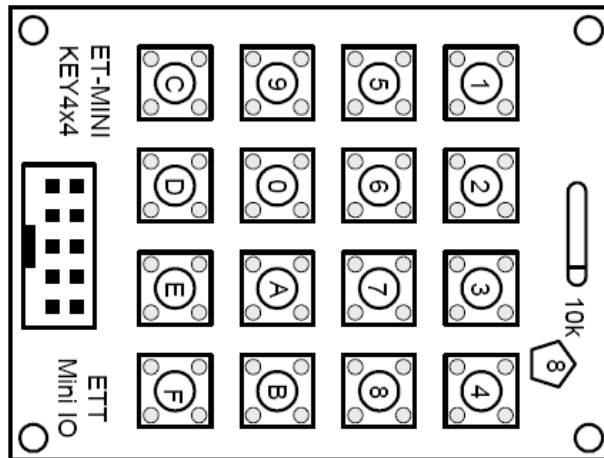


FIG 2: MR-MINI-4x4KEY Board Layout

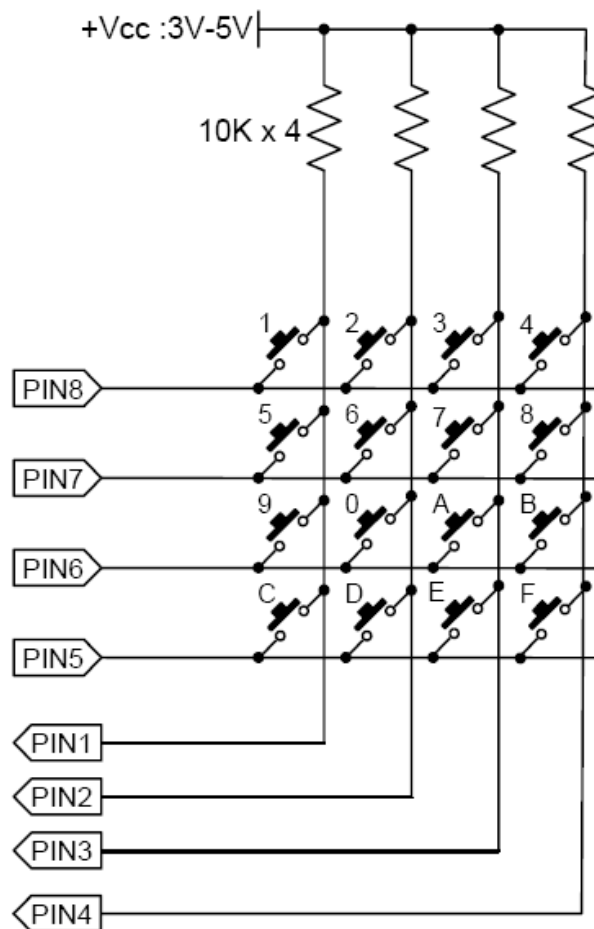


FIG 3: MR-MINI-4x4KEY Schematic

Copyright © 2007 MicroResearch
GRAVITECH GROUP WWW.GRAVITECH.US

MR-MINI-4x4KEY™ Mini 4x4 Matrix Keyboard BOARD User Manual

Notes

Contact Us

We maintain a website where you can get information on our products, obtain literature and download support files. Visit us online at:

WWW.GRAVITECH.US

Use our online Forum or e-mail your technical support questions to support@gravitech.us. We try to respond to your questions the same day.

For sales questions or to place and order, direct your e-mails to sales@gravitech.us. Refer to our website for product pricing, shipping rates, payment instructions, and for other info we need to complete your order.

Disclaimer: MicroResearch reserves the right to modify its products or literature, or to discontinue any product at any time without prior notice. The customer is responsible for determining the suitability of any device for any application developed using MicroResearch components.

Copyright © 2007 MicroResearch
GRAVITECH GROUP WWW.GRAVITECH.US