



**MC-EX-FD4 Expansion Module**

**Fast Input**

**Startup Guide**

## Startup Guide

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### Introduction

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SensOper MC-EX-FD4 expansion module is most primary module can be use with CPU module.

Four Digital Inputs are optically isolated internally for protection of the device.

This module internal operation power is 5V DC / 30mA.

The 40 pin board to board connectors were included for make connection between CPU module or other expansion modules.



## Startup Guide

### 1. Connecting with Power & Input Terminals

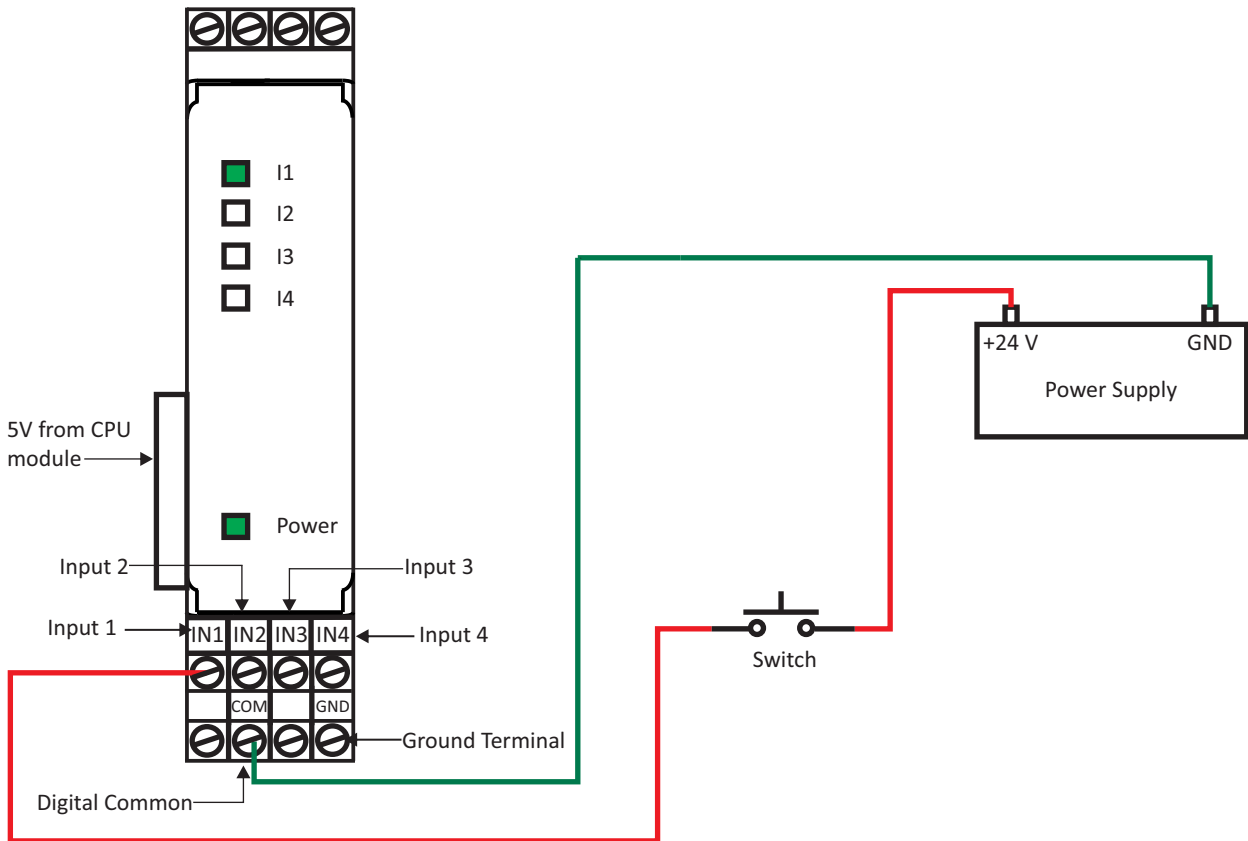


Figure 1(a): Fast Input Expansion module power up and Input wiring (Source Configuration).

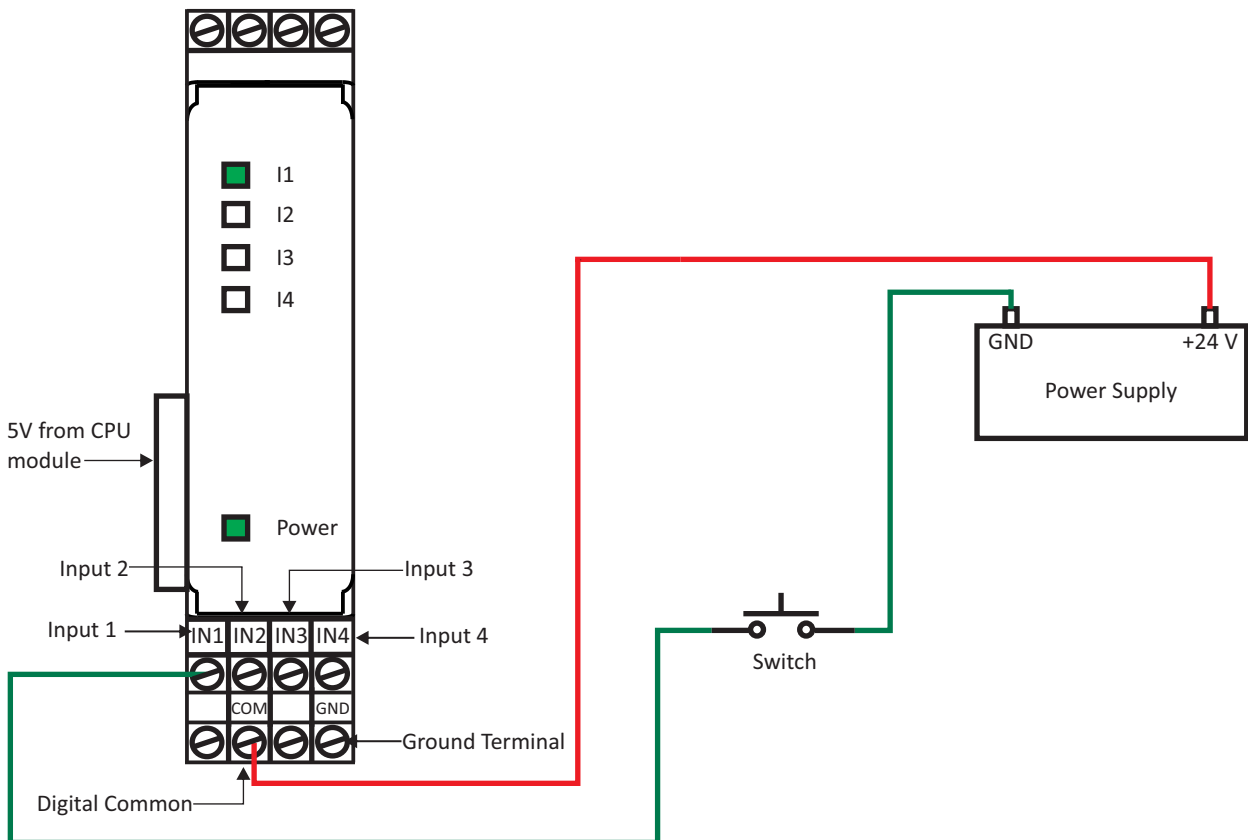


Figure 1(b): Fast Input Expansion module power up and Input wiring (Sink Configuration).

## Startup Guide

### CPU Module and Expansion Module GPIO Connection Diagram

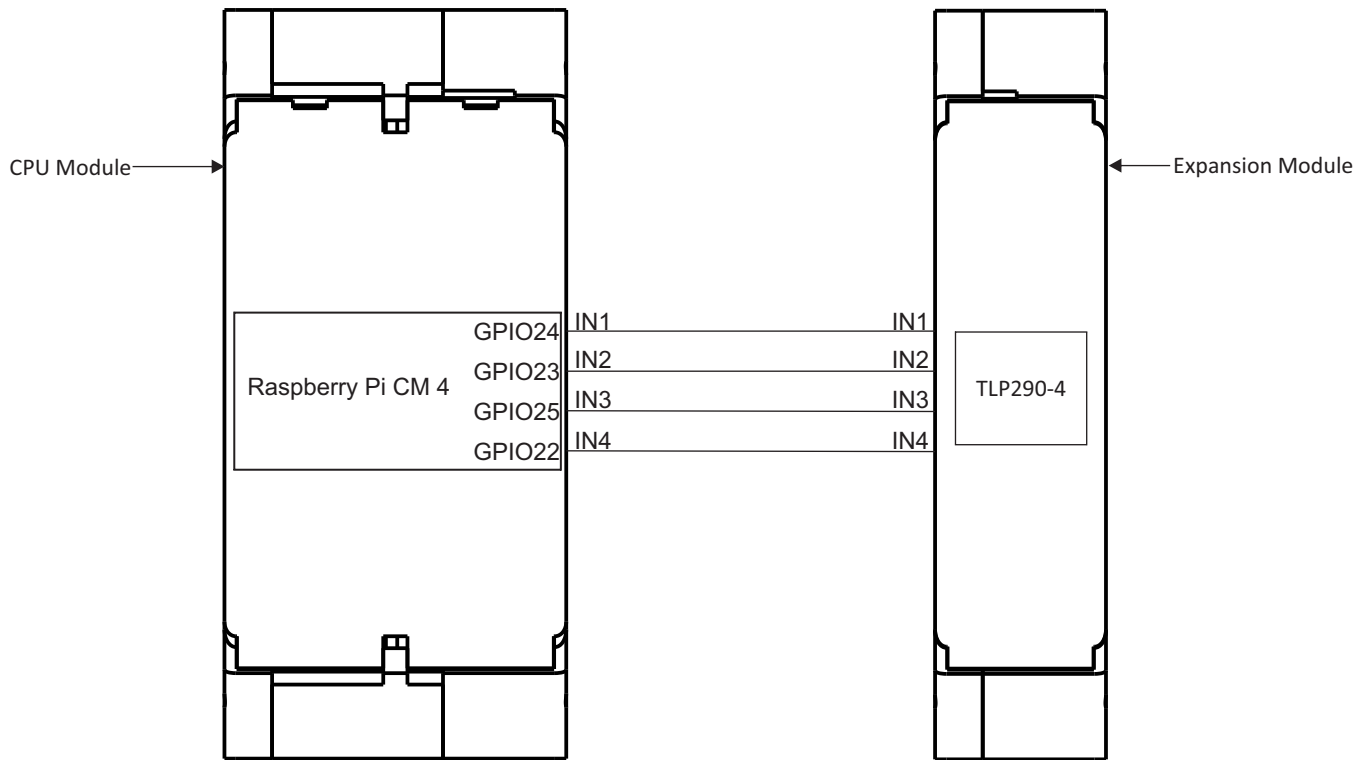


Figure 1(c): The GPIO connection with CPU module and Expansion Module.

Table 1: GPIO vs INPUT map.

INPUT	GPIO
IN1	24
IN2	23
IN3	25
IN4	22

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### 2. Run Example Program

1. After following Figure 1(a), (b), (c) diagram instructions in previous sections 1 . Connect a Fast Transistor Output Expansion module in to the 40 pin board to board connector in CPU Module (Explained in MC-CPU-CM4-Gx datasheet).
2. Follow the **File Manager > Pi > Rpi\_Moduler\_test** path, then open **Rpi\_Moduler\_test** folder.
3. In **Rpi\_Moduler\_test** folder include example program for every expansion module.
4. Select the **MC\_EX\_FIN.py** example program that matches with the Fast Input expansion module shown in Figure 2.

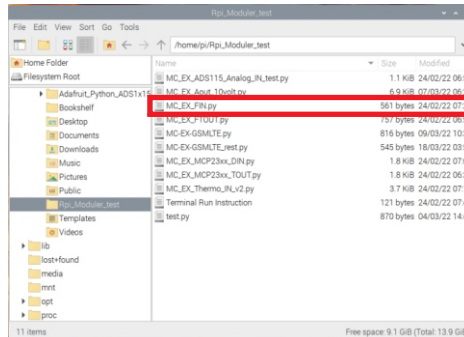


Figure 2: The example programs for expansion modules.

5. The python program will open on default Thonny Python IDE. Click RUN for start the program shown in Figure 3.

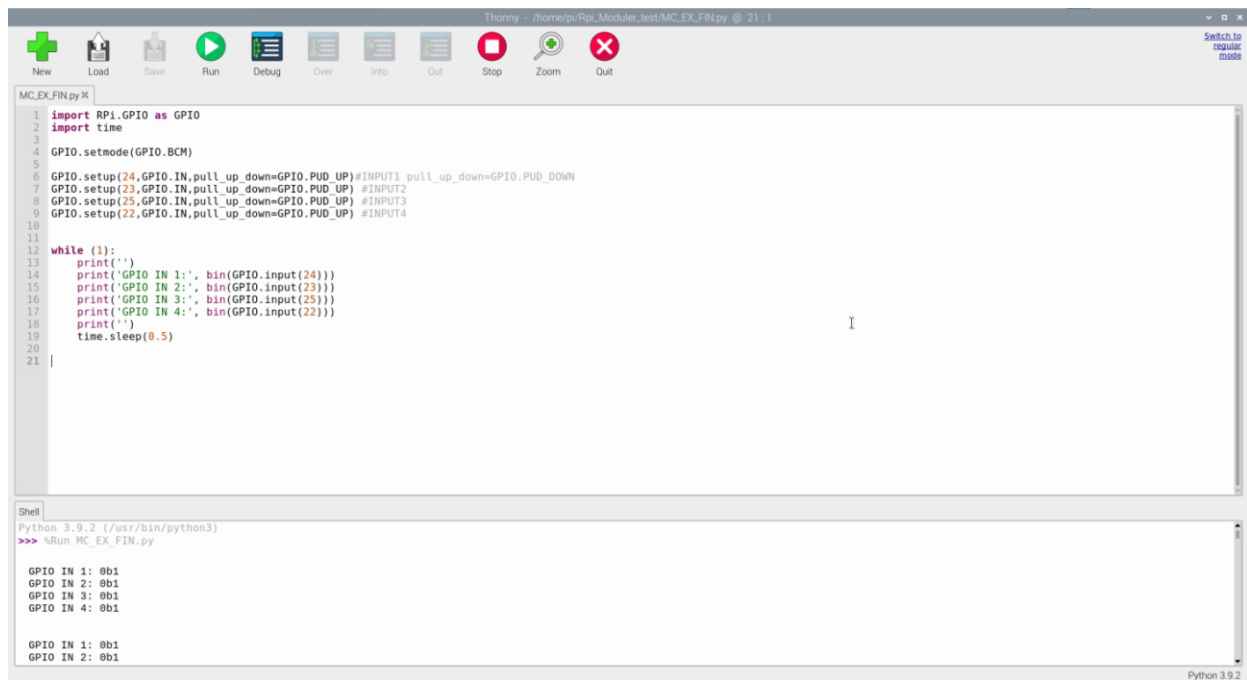


Figure 3: Fast Input example code run on Thonny Python IDE.

## Startup Guide

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### 3. Revision History .

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The table shown below include the revision history of this document.

Revision Number	Date	Substantial Changes
0	18/3/2022	First Edition of Startup guide
1	-	-

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