



J8 J13 J12 J11 J9 J10 J1

J9 J10 J1 is AMP Mini-Fit series connector
http://www.inovamicro.com/support/172168_1.pdf
 J4 J5 J15 is AMP Micro-matenlock series connector
<http://www.inovamicro.com/support/micromatenlock.pdf>

| Technical Specification | |
|---------------------------|---|
| Item | Specification |
| Input Voltage | 8-28VDC |
| Power Consumption | 1W |
| Maximum Driving Current | 10A(continuous)/30A(pulse) |
| Microprocessor | 16-bit Digital Signal Processor |
| Motor Control | PWM, Open Loop, PID Closed Loop |
| Motor Channel | 2 DC / 1 BLDC / 1 stepper |
| Incremental Encoder Input | 2 channel |
| Digital/analog IO | 2 Inputs, 1 output, 2 analog inputs |
| Communication Support | RS-485/422/232 Modbus RTU |
| Wireless Communication | Zigbee, TinyMesh, Wireless MBUS |
| Protection | Over Current, Over Temperature, Reverse |
| Dimension | 105mm x 124mm x 56.5mm (W x L x H) |
| Weight | 0.83kg |

| Pin Assignment of Connectors | | | | | | | | | | |
|------------------------------|---------|---------|----------|---------|--------|---------|----------|--------|-------|--------|
| Connector | Pin 1 | Pin 2 | Pin 3 | Pin 4 | Pin 5 | Pin 6 | Pin 7 | Pin 8 | Pin 9 | Pin 10 |
| J1 | PWR- | PWR- | PWR+ | PWR+ | | | | | | |
| J10 | MO+/MU | M0-/MV | M1- | M1+/MW | Shield | | | | | |
| J9 | M1+ | M1- | | Shield | | | | | | |
| J11 | 0V | ENC0-A | Shield | 5V | ENC0-B | ENC0-I | | | | |
| J12 | 0V | ENC1-A | Shield | 5V | ENC1-B | ENC1-I | | | | |
| J13 | 0V | Low SW- | High SW- | Shield | LEN | Low SW+ | High SW+ | 5V | | |
| J8 | 0V | VS | | | | | | | | |
| J14 | RC-Out0 | RC-Out1 | RC-Out2 | RC-Out3 | EX-SUP | EX-SUP | EX-SUP | EX-SUP | 0V | 0V |
| J15 | 0V | LEN0 | SW0- | SW1- | Shield | 3.3V | LEN1 | SW0+ | SW1+ | Error |
| J5 | A | B | 0V | Shield | | | | | | |
| J4 | Y | Z | 0V | Shield | | | | | | |

| Features and Specification of motors control | | | | | | | | | |
|--|----------------|-----------------|----------------|-------------------------|-------------|---------------|--------------|---------------|-------------|
| Motor List | Motor Channel | Encoder Input | Distance Input | Limit Switch | Halt Sensor | Digital Input | Analog Input | Current Limit | Rated Power |
| DC Motor | x 1 (J10) | x 1 (J11) | x 1 (J13) | High x 1, Low x 1 (J13) | | x 2 (J15) | x 1 (J15) | | |
| Stepper Motor | x 1 (J10) | x 1 (J11) | x 1 (J13) | High x 1, Low x 1 (J13) | | x 2 (J15) | x 1 (J15) | | |
| Brushless Motor | x 1 (J10) | x 1 (J11) | x 1 (J13) | High x 1, Low x 1 (J13) | x 1 (J11) | x 2 (J15) | x 1 (J15) | | |
| Solenoid | x 2 (J9 & J10) | | | | | x 2 (J15) | x 1 (J15) | | |
| Linear Actuator | x 1 (J10) | x 1 (J11) | x 1 (J13) | High x 1, Low x 1 (J13) | | x 2 (J15) | x 1 (J15) | | |
| Pump Driving | x 1 (J10) | | x 1 (J13) | High x 1, Low x 1 (J13) | x 1 (J11) | x 2 (J15) | x 1 (J15) | | |
| Differential Drive Robot | x 2 (J9 & J10) | x 1 (J11 & J12) | | | | x 2 (J15) | x 2 (J15) | | |

| Order Information | | | | |
|-------------------|--|--------------|--|-------------------|
| Model No | | | | - Customized Code |
| iMOTO-1 | | | | |
| iMOTO-1-B | | No enclosure | | |

Please find the ordering options from the Part No in the parameter tables above.
 For customizations, please contact sales@inovamicro.com