In partnership with MRS Electronic Inc., Chief now offers the smallest automotive CAN I/O controller for complete configurability of the BRIC® or BRIC® Fusion. With a standard footprint of two Micro 280 relays, the Microplex transforms your BRIC into a smart module at the lowest possible cost.

**Specifications**

- Housing: ABS Plastic
- Footprint: Side-by-Side 2x Micro 280 Relay Form Factor
- Dimensions: 1.2 x 0.925 x 1.02”
- Weight: Approx. 2 oz.
- Operating Temp: -40˚C - 85˚C
- Ingress Protection: IP67 when used with BRIC
- Input Voltage Range: 9V-30V
- Current Consumption: IGN off: 0.14 mA, IGN on: 6 mA
- Protection: Short Circuit, Battery Reverse Polarity, Load Dump, High Side Driver current limited to 10A total (2.5A/output)

**Competitive Advantages**

- Cost Effective
- Fuse Status Monitoring
- Completely Configurable
- Extremely Small Footprint
- Wide Range of Applications
- IP67 Water & Dust Protected
- Complex Application Coding
- Intelligent Power Management
- Special Application & Programming Support
- Easy Modification via MRS Developers Studio Tool

»See reverse side to view more specifications and features or contact us today for assistance from a Chief engineer.
Microplex 12 Pin CAN I/O Controller

Count on Chief Enterprises for customized components engineered to your specifications. We can deliver pre-assembled parts ready for you to install.

Interface Specifications

<table>
<thead>
<tr>
<th>Part Number:</th>
<th>CAN-Bus TJA1043</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO 11898-5:</td>
<td>High Speed</td>
</tr>
<tr>
<td>CAN 2.0A:</td>
<td>11 Bit Standard Address Identifier</td>
</tr>
<tr>
<td>CAN 2.0B:</td>
<td>29 Bit Extended Address Identifier</td>
</tr>
<tr>
<td>Baud Rate:</td>
<td>10 kBit/s - 5,000 kBit/s, Standard 125 KBit/s</td>
</tr>
<tr>
<td>Protocol:</td>
<td>J1939 or CAN Open</td>
</tr>
</tbody>
</table>

Processor Specifications

| Manufacturer: | NXP |
| Part Number:  | 9S08DZ60 (8-bit Micro Controller with Flash Technology) |
| Clock Frequency: | 40 MHz |
| Flash: | 60 K |
| RAM: | 4 K |
| EEPROM: | 2 K |

Connection Information

With seven configurable Input/Outputs (I/O), one CAN interface, and one ignition input, the possibilities of the MRS Microplex 12 pin CAN I/O controller are endless.

Seven I/O can be configured as specific inputs:

- Analog Inputs
- Digital Inputs
- A Frequency Counter
- A Thermistor Input
- Fuse Monitoring Diagnostics

Four I/O can be configured as specific outputs:

- High Side Drive Units:
  - To Drive Loads Directly (Up to 2.5A each)
  - To Drive One or More Relays For Higher Load Currents
- PWM Outputs (Up to 2.5A each)

1. GND
2. Analog or Digital Input 1 or Frequency Counter Input
3. BATT
4. CAN L
5. CAN H
6. IGN
7. Analog or Digital Input 2 or Thermistor Input
8. Analog or Digital Input 3
9. Analog or Digital Input 4 or High Side Driver / PWM Output 1
10. Analog or Digital Input 5 or High Side Driver / PWM Output 2
11. Analog or Digital Input 6 or High Side Driver / PWM Output 3
12. Analog or Digital Input 7 or High Side Driver / PWM Output 4

The BRIC® is a family of IP67 sealed power distribution modules designed and tested to withstand the harshest environments. With the ability to support both low and high amp components, the patent pending BRIC®, is equipped with industry-demanded features such as an optional hydrophobic vent, small footprint, and sleek body design. For more information about the BRIC® and how the Microplex 12 Pin CAN I/O controller can complete your power distribution system, contact us today.

Contact Us Today | bric.chiefent.com | bric@chiefent.com | 630-530-1224