



PATENT  
PENDING

## Microplex CAN I/O Controller

**12 Pin Micro 280 Controller for use with BRIC®**

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

<b>Housing:</b>	ABS Plastic
<b>Footprint:</b>	Side-by-Side 2x Micro 280 Relay Form Factor
<b>Dimensions:</b>	1.2 x 0.925 x 1.02"
<b>Weight:</b>	Approx. 2 oz.
<b>Operating Temp:</b>	-40°C - 85°C
<b>Ingress Protection:</b>	IP67 when used with BRIC
<b>Input Voltage Range:</b>	9V-30V
<b>Current Consumption:</b>	IGN off: 0.14 mA, IGN on: 6 mA
<b>Protection:</b>	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.

Let Chief Enterprises do more for your business.

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# 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

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

## Processor Specifications

<b>Manufacturer:</b>	NXP
<b>Part Number:</b>	9S08DZ60 (8-bit Micro Controller with Flash Technology)
<b>Clock Frequency:</b>	40 MHz
<b>Flash:</b>	60 K
<b>RAM:</b>	4 K
<b>EEPROM:</b>	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.

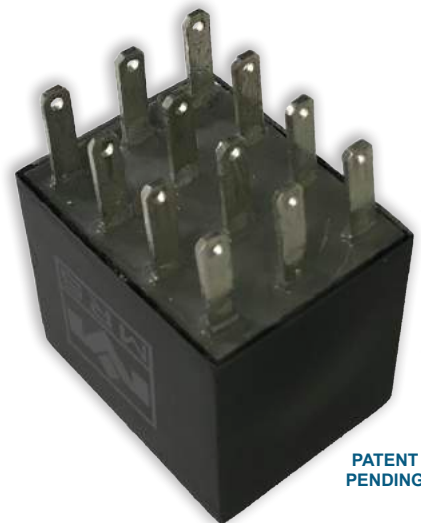
### Seven I/O can be configured as specific inputs:

- 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.