

# PRODUCT PROFILE

## OEM COMPONENT PRODUCTS

### BENEFITS

**Cost Effective:** Off-the-shelf components allow you to buy just what you need.

**Efficient:** Built-in communications link low-cost distributed I/O to your machine's master controller for speed and efficiency.

**Reduced Time:** Advanced diagnostics, along with removable I/O connectors allow you to reduce start-up time and downtime.

**Low Profile:** Unpackaged, printed circuit boards for minimal space requirements.

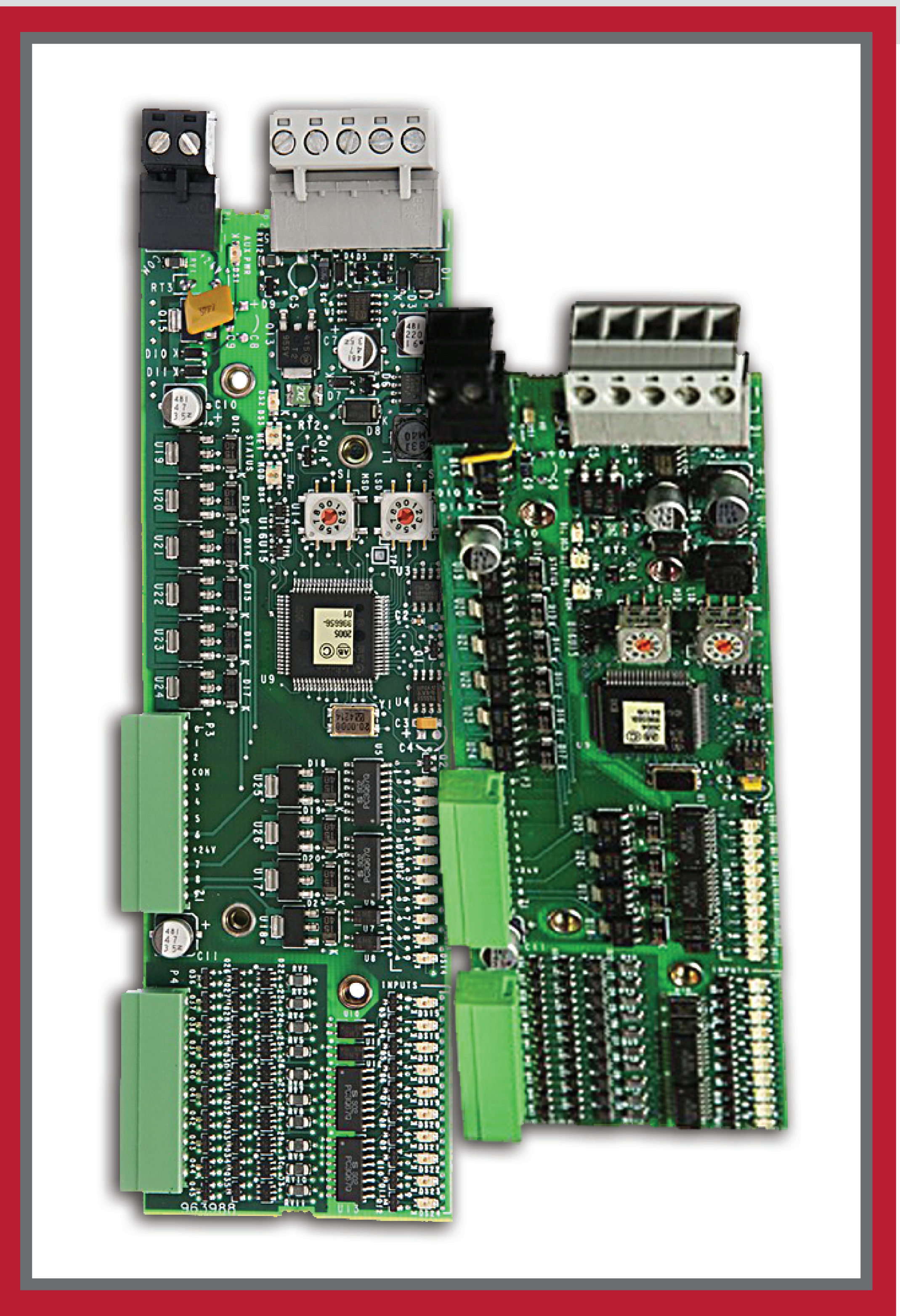
**Local Control:** DeviceLogix™ Smart Component Technology allows local control of all module functions for high speed, distributed control applications. Both digital and analog products available.

**Enhanced Communications:** Zone Interlocking Parameters (ZIP) allow one card to consume data directly from up to 4 other ZIP-enabled devices without going through a master controller.

**Application Diversity:** 1799 On-Machine™ Embedded I/O modules are ideal for conveyor and sortation automation, robotics I/O, operator interface panels, packaging machines, highly distributed lift applications, semiconductor material handling, and warehouse automation applications.

**Standard Off-the-Shelf or fully customized:** Choose from a wide selection of popular off-the-shelf I/O configurations or ask us to quote a fully customized solution meeting your unique requirements.

## 1799 ON-MACHINE EMBEDDED I/O MODULES



1799 Embedded I/O printed circuit boards is an ideal, off-the-shelf solution for your machine embedded or on conveyor applications. These board-level products allow you to buy just what you need to optimize your machines I/O system. For OEMs who have traditionally used internal engineering resources for customized I/O development, these components provide a cost-effective alternative. Space saving 1799 Embedded I/O modules can be quickly incorporated into your machine's mechanical design cycle saving you valuable engineering and manufacturing time.

1799 Embedded I/O modules provide you with a low-cost interface to input devices and machine actuators. You can leverage proven Rockwell Automation design technology and reliability without the added cost of a fully-enclosed, packaged I/O component. Off-the-shelf 1799 Embedded I/O modules from Rockwell Automation will save you both space and money - a critical concern for every OEM today.

As an alternative, 1799 On-Machine Embedded I/O modules, completely customized to your design specifications, are also possible based on minimum order quantities. Contact your local Rockwell Automation sales representative for complete details.

## 1799 ON-MACHINE EMBEDDED I/O MODULES AND ACCESSORIES

Features	Benefits
Removable Terminal Block Connectors	Quick installation and repair
10 to 30 VDC Operation	Meets broad application needs including interface with sensors, valves, etc.
Input delay times	Assures proper contact closure
Output overload/over-temp and short circuit protection	Eliminates failures due to wiring mistakes or damaged loads and thus maximizes system run time
Output over-voltage protection	Same as above
Isolation between I/O and DeviceNet	Maintains network power quality and reduces network power requirements
Watchdog circuit de-energizes outputs if hardware faults	Adds protection for reliable operations
Autobaud detection provides automatic network synchronization	Eliminates start-up/replacement network baud rate conflicts and hence reduces maintenance/replacement time
HW or SW settable node address	Reduces installation costs with node address flexibility
DeviceLogix Technology	Provides high speed "smart I/O" local control functions
10x10 Card Dimensions	162.56 mm x 50.8 mm x 32 mm
16x16 Card Dimensions	187.96 mm x 77.85 mm x 25 mm

### I/O Module

### Description

1799-D10U10B	24V DC, 10 Universal Input/10 Sourcing Output Module
1799-D10U10BL	24V DC, 10 Universal Input/10Sourcing Output Module with DeviceLogix
1799-D10U10V	24V DC, 10 Universal Input/10 Sinking Output Module
1799-D10U10VL	24V DC, 10 Universal Input/10Sinking Output Module with DeviceLogix
1799-D16U16B	24V DC, 16 Universal Input/16 Sourcing Output Module
1799-D16U16BL	24V DC, 16 Universal Input/16 Sourcing Output Module with DeviceLogix
1799-D16U16V	24V DC, 16 Universal Input/16 Sinking Output Module
1799-D16U16VL	24V DC, 16 Universal Input/16 Sinking Output Module with DeviceLogix
1799-D12G12G	24V DC, 12 TTL Input/12 TTL Output Module with DeviceLogix
1799-CDD16B20BK	24V DC, 16 Universal Inputs/20 Sourcing Outputs (4 outputs @ 2 amps)
1799-D16V16BAGL	24V DC, 16 Universal Inputs/16 Sourcing Outputs/2 Analog Inputs/2 Analog Output Module with DeviceLogix
1799-D16V16VAGL	24V DC, 16 Universal Inputs/16 Sinking Outputs/2 Analog Inputs/2 Analog Output Module with DeviceLogix

### Special Modules

### Description

Zone Control I/O cards include Zone Interlocking Parameters (ZIP) and DeviceLogix Smart Component Technology and ship with a DeviceNet connector, auxiliary power connector, and mounting plate.

1799-ZCIOB	1799 Embedded I/O for DeviceNet — 10 Input/10 Sourcing Output ZCIO Card
1799-ZCIOV	1799 Embedded I/O for DeviceNet — 10 Input/10 Sinking Output ZCIO Card
1799-D10U10BZC	1799 Embedded I/O for DeviceNet — 10 Input/10 Sourcing Output ZCIO Card with Relative Node Addressing
1799-D10U10VZC	1799 Embedded I/O for DeviceNet — 10 Input/10 Sinking Output ZCIO Card with Relative Node Addressing
1799-DASCI	1799 ASCII for DeviceNet — Support single RS232 or multiple RS485 communications

### Accessories

### Description

1799-BRKD	DIN rail brackets with screws (2 brackets; 4 screws)
1799-COV20	Clear plastic cover for 20 pt. board; 4 stand-offs/4 screws
1799-COV32	Clear plastic cover for 32 pt. board; 4 stand-offs/4 screws
1799-COVZC	Clear plastic cover for 20 pt. ZC board; 4 stand-offs/4 screws
1799-MP20	Plastic mounting plate/4 screws for 20 pt. board
1799-12SPCON	12-position gold-plated I/O mating connector (2 per package)
1799-DNETCON	DeviceNet 5-pin connector without mounting screws
1799-DNETSCON	DeviceNet 5-pin connector with mounting screws
1799-DNETSCN2R	DeviceNet 5-pin/2 row with mounting screws
1799-DNC5MMS	DeviceNet 5-pin to M12 connector with mounting screws
1799-AUXCON	2-position plug for auxiliary power

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Publication 1799-PP002B-EN-P – March 2008

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