

# Programmable Automation Microcontrollers, Features/Price Comparison Chart.

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Criteria: Programmable Controller with Ethernet Interface for integration/data acquisition

Of: **8 Digital Inputs, 8 Digital Outputs, 8 Analog Inputs**(Voltage/Current/Thermo or Universal), **4-6 Analog Outputs** (Voltage/Current/OC)

Area of Application: Building Automation, Process Automation, Energy Control/Monitoring

Emphasis: Open Architecture/Source, SaaS Ready (TCP Sockets, HTTP). Prepared by Peter Tiagunov [www.leanmes.net](http://www.leanmes.net)

\* - Prices provided for new unopened/surplus products. Sources: [www.plchardware.com](http://www.plchardware.com), [www.plccenter.com](http://www.plccenter.com), [www.automationdirect.com](http://www.automationdirect.com), [www.controlstop.com](http://www.controlstop.com), [www.opto22.com](http://www.opto22.com)

N – not supported  
Y – supported  
P – programmable  
? – no data

| Nr              | Name                | CPU   | Open Architecture   | RAM      | RS-232 port   | Ethernet port | Continuous Tasks | Backplane/Base | TCP/IP Sockets | SMTP Client | Ethernet/IP | DF-1 | Modbus | FTP | HTTP POST | Part Number              | Price*<br>Hi to Lo | Description   |                     |          |   |   |
|-----------------|---------------------|---|---------------------|----------|---|---------------|------------------|----------------|----------------|-------------|-------------|------|--------|-----|-----------|--------------------------|--------------------|---|---------------------|----------|---|---|
| 1               | <b>FlexLogic</b>    | Proprietary   | N                   | 64K      | 2   | n/a<br>1      | 1                | N              | N              | N           | Y           | Y    | P      | N   | N         | 1794-L33/A               | \$1,160.00         | Flex Logix Processor, 64KB User Memory, Series A                                    |                     |          |   |   |
|                 |                     |   |                     |          |   |               |                  |                |                |             |             |      |        |     |           | 1788-ENBT/A              | \$470.00           | EtherNet/IP Module for FlexLogic or DriveLogix Controller, Series A                 |                     |          |   |   |
|                 |                     |   |                     |          |   |               |                  |                |                |             |             |      |        |     |           | 1.1 Point/I/O Option     |                    |   | 1734-AENT/A         | \$421.00 | Point I/O EtherNet/IP TP Media I/O Adapter 24V DC, Series A               |   |
|                 |                     |   |                     |          |   |               |                  |                |                |             |             |      |        |     |           |                          |                    |   | 1734-IB8/C          | \$72.00  | Point I/O Digital DC Input Module 24V DC 8Ch Sink, Series C               |   |
|                 |                     |   |                     |          |   |               |                  |                |                |             |             |      |        |     |           |                          |                    |   | 1734-OB8E/C         | \$95.00  | Point I/O 24V DC 8 Channel Source Output Module, Electronically Protected |   |
|                 |                     |   |                     |          |   |               |                  |                |                |             |             |      |        |     |           |                          |                    |   | 1734-IE8C           | \$890.00 | Point I/O 24V DC 8 Channel High Density Analog Current Input Module       |   |
|                 |                     |   |                     |          |   |               |                  |                |                |             |             |      |        |     |           |                          |                    |   | 1734-OE4C           | \$485.00 | Point I/O 24V Dc 4 Points Analog Current Output Module                    |   |
|                 |                     |   |                     |          |   |               |                  |                |                |             |             |      |        |     |           |                          |                    |   | I/O Option 2 Total: |          | \$3,593.00  |   |
|                 |                     |   |                     |          |   |               |                  |                |                |             |             |      |        |     |           | 1.2 FlexLogic I/O Option |                    |   | 1794-IB8            | \$80.00  | Flex I/O Input Module, 24V DC, 8 Sink Inputs                              |   |
|                 |                     |   |                     |          |   |               |                  |                |                |             |             |      |        |     |           |                          |                    |   | 1794-OW8/A          | \$227.00 | Flex I/O Output Module 8 Isolated N.O. Relay Contacts, A                  |   |
|                 |                     |   | 1794-PS13/B         | \$130.00 | Flex I/O Power Supply 85-264V AC to 24V DC 1.3A, Ser. B                                 |               |                  |                |                |             |             |      |        |     |           |                          |                    |   |                     |          |   |   |
|                 |                     |   | 1794-IE8XOE4/A      | \$857.00 | Flex I/O Analog Combination Module, 8 Inputs / 4 Single-Ended Outputs, 16-Bit, Series A |               |                  |                |                |             |             |      |        |     |           |                          |                    |   |                     |          |   |   |
|                 |                     |   | I/O Option 1 Total: |          | \$2,924.00  |               |                  |                |                |             |             |      |        |     |           |                          |                    |   |                     |          |   |   |
| 2               | <b>CompactLogix</b> | Proprietary   | N                   | 512K     | 1   | 1             | 1                | N              | N              | N           | Y           | Y    | P      | N   | N         | 1769-L23E-QBFC1B         | \$1,981.00         | CompactLogix Packaged Ethernet Controller, 512KB, 16DI, 16DO, 4AI, 2AO, 4HSC, 24VDC |                     |          |   |   |
|                 |                     |   |                     |          |   |               |                  |                |                |             |             |      |        |     |           | 16-Pt Digital Input      | Integrated         | 10 to 30V DC  |                     |          |   |   |
|                 |                     |   |                     |          |   |               |                  |                |                |             |             |      |        |     |           | 16-Pt Digital Output     | Integrated         | 20.4V DC to 26.4V DC 2A   |                     |          |   |   |
|                 |                     |   |                     |          |   |               |                  |                |                |             |             |      |        |     |           | 4-Ch Analog Input        | Integrated         | 0 to 10V DC/ 0-20 mA  |                     |          |   |   |
|                 |                     |   |                     |          |   |               |                  |                |                |             |             |      |        |     |           | 2-Ch Analog Output       | Integrated         | 0 to 10V DC/ 0-20 mA  |                     |          |   |   |
|                 |                     |   |                     |          |   |               |                  |                |                |             |             |      |        |     |           | 1769-IF4/B               | \$324.00           | CompactLogix 4-Ch Analog Current/Voltage Input Module, B                            |                     |          |   |   |
|                 |                     |   |                     |          |   |               |                  |                |                |             |             |      |        |     |           | 1769-OF2                 | \$409.00           | CompactLogix 2-Ch Analog Current/Voltage Output Module, B                           |                     |          |   |   |
|                 |                     |   |                     |          |   |               |                  |                |                |             |             |      |        |     |           | Power Supply             | Integrated         |   |                     |          |   |   |
|                 |                     |   |                     |          |   |               |                  |                |                |             |             |      |        |     |           | Total:                   |                    | \$2,714.00  |                     |          |   |   |
|                 |                     |   |                     |          |   |               |                  |                |                |             |             |      |        |     |           | 3                        | <b>OPTO22</b>      | 32-bit RISC ColdFire  | Y                   | 16MB     | 1   | 2 |
| SNAP-PAC-RCK8   | \$145.00            | SNAP PAC 8-Module Mounting Rack                                       |                     |          |   |               |                  |                |                |             |             |      |        |     |           |                          |                    |   |                     |          |   |   |
| SNAP-IDC5 x 2   | \$84.00             | 2 x SNAP 4-Ch 10-32 VAC/VDC Digital Input Module                      |                     |          |   |               |                  |                |                |             |             |      |        |     |           |                          |                    |   |                     |          |   |   |
| SNAP-ODC5R x 2  | \$90.00             | 2 x SNAP 4-Ch Reed Relay Digital Output Module, Normally Open         |                     |          |   |               |                  |                |                |             |             |      |        |     |           |                          |                    |   |                     |          |   |   |
| SNAP-AITM-8     | \$495.00            | SNAP 8-Ch Type Thermocouple or +/-75, +/-50, or +/-25 mV Analog Input |                     |          |   |               |                  |                |                |             |             |      |        |     |           |                          |                    |   |                     |          |   |   |
| SNAP-AOV-27 x 2 | \$364.00            | 2 x SNAP 2-Ch -10 to +10VDC Bipolar Analog Voltage Output             |                     |          |   |               |                  |                |                |             |             |      |        |     |           |                          |                    |   |                     |          |   |   |
| SNAP-PS5        | \$200.00            | SNAP Power Supply, 110 VAC to 5 VDC                                   |                     |          |   |               |                  |                |                |             |             |      |        |     |           |                          |                    |   |                     |          |   |   |
| Total:          |                     | \$2,243.00  |                     |          |   |               |                  |                |                |             |             |      |        |     |           |                          |                    |   |                     |          |   |   |

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| Nr                       | Name                       | CPU                         | Open Architecture | RAM  | RS-232 port | Ethernet port | Continuous Tasks | Backplane/Base | TCP/IP Sockets | SMTP Client | Ethernet/IP | DF-1 | Modbus | FTP | HTTP POST | Part Number  | Price*<br>Hi to Lo   | Description  |
|--------------------------|----------------------------|-----------------------------|-------------------|------|-------------|---------------|------------------|----------------|----------------|-------------|-------------|------|--------|-----|-----------|--|--|--|
| 4                        | <b>Productivity 3000</b>   | 32-bit RISC                 | N                 | 50MB | 1           | 1             | 1                | Y              | N              | Y           | N           | N    | Y      | N   | N         | P3-550<br>P3-05B<br>P3-08ND3S<br>P3-08TD1S<br>P3-08AD<br>P3-04DA<br>P3-01AC  | \$599.00<br>\$179.00<br>\$68.00<br>\$82.00<br>\$332.00<br>\$356.00<br>\$190.00 | 266 MHz CPU WITH 4x10 LCD, PRODUCTIVITY3000 CPU<br>5-slot local / expansion / remote base<br>8-pt Digital Input, 12-24 VDC sinking or sourcing input module<br>8-pt ISOLATED SINKING OUTPUT, 6-27VDC<br>8-ch Analog Input 16 bit ± 10 VDC, ± 5 VDC, 0 to 5 VDC, 0 to 10 VDC, and 0 to 20mA<br>4-ch Analog Output 16-bit +/-10 VDC and 4-20 mA<br>POWER SUPPLY, 100 TO 240 VAC                |
| Total: <b>\$1,806.00</b> |                            |                             |                   |      |             |               |                  |                |                |             |             |      |        |     |           |  |  |  |
| 5                        | <b>ADAM</b>                | 16-bit 80188                | ?                 | 768K | 4           | Y             |                  | Y              | ?              | P           | N           | N    | Y      | N   | ?         | ADAM-5510KW/TCP<br>ADAM-5052<br>ADAM-5068<br>ADAM-5017<br>ADAM-5024<br>PWR-242-AE                                    | \$495.00<br>\$85.00<br>\$101.00<br>\$205.00<br>\$285.00<br>\$125.00            | 4-slot SoftLogic Controller with Ethernet<br>8-ch Isolated Digital Input Module 0-30VDC<br>8-ch Relay Output Module<br>8-ch Analog Input Module<br>4-ch Analog Output Module<br>DIN-rail Power Supply  |
| Total: <b>\$1,296.00</b> |                            |                             |                   |      |             |               |                  |                |                |             |             |      |        |     |           |  |  |  |
| 6                        | <b>DirectLogic 05 Koyo</b> | ?                           | N                 | 6K   | 2           | n/a<br>1      | 1                | N              | N              | Y           | N           | N    | Y      | N   | N         | D0-05DR-D<br>H0-ECOM100<br>8-Pt Digital Input<br>6-Pt Digital Output<br>F0-08ADH-2<br>F0-08DAH-2                     | \$119.00<br>\$175.00<br>Integrated<br>Integrated<br>\$139.00<br>\$179.00       | 8 DC IN / 6 RELAY OUT MICRO PLC DC POWERSUPPLY<br>100Mbps Ethernet Communications Module for DL05<br>Sink/Source 12-24 VDC<br>Open Contact AC/DC 2A<br>8 CH ANALOG INPUT 0-5V / 0-10V 16 BIT DL05/06 OPTION MODULE<br>8 CH ANALOG OUTPUT 0-10V 16 BIT RES DL05/06 OPTION MODULE  |
| Total: <b>\$612.00</b>   |                            |                             |                   |      |             |               |                  |                |                |             |             |      |        |     |           |  |  |  |
| 7                        | <b>EasyIO 30P</b>          | 16/32-bit RISC<br>MCS Logic | Y                 | 8MB  | 1           | 1             |                  | N              | P              | Y           | P           | P    | Y      | N   | P         | EasyIO 30P<br>8-Pt Digital Input<br>8-Pt Digital Output<br>8-Ch Analog Input<br>4-Ch Analog Output<br>2-Ch OC Output | \$351.35<br>Integrated<br>Integrated<br>Integrated<br>Integrated<br>Integrated | Rugged, Network Centric, High Performance Multi-Protocols I/O. Supports SEDONA<br>Voltage Free, Limit: +5V at 500Ohm Resistance maximum<br>Relay Contacts, SPSTNO, 48VA at 24VAC, Pilot Duty<br>0-10V, 0-5V/4-20mA, 0-20mA/0-30K, 0-10K, 0-1.5K/10K, 10K Shunt, 1K Balco, 1K Platinum<br>0 - 20mA, 4 - 20mA (up to 800 Ohm load)/0 - 10V<br>Open Collector Output, Isolation 3.75KV, 1A, 60V |
| Total: <b>\$351.35</b>   |                            |                             |                   |      |             |               |                  |                |                |             |             |      |        |     |           |  |  |  |