

Stratix Switches Configuration

- Either a managed or unmanaged switch can be used, depending on your application requirements. See "About The Products Stratix Switches" on back for more information.
- Scale your switch selection to your application with these Rockwell Automation switches:
 - Stratix 8300, 8000, 5700 and 5400 Managed Switches
 - Stratix 2000 Unmanaged Switches
- When connecting machines to a high level plant network, IT networking best practices need to be considered.
- The 1783-ETAP can be used to connect devices that do not currently have the 2 port embedded linear/ring technology.

CompactLogix 5370 L2 Overview	L24ER-QB1B	L24ER-QBFC1B	L27ERM-QBFC1B
Memory	750KB	750KB	1MB
Embedded Discrete I/O (24VDC)	16 I/16 O	16 I/16 O	16 I/16 O
Embedded Analog I/O	0	4 I/2 O	4 I/ 2 O
Local 1769 I/O Expansion Modules	4	4	4
EtherNet/IP I/O Nodes	8	8	16
Integrated CIP Motion	NO	NO	1 - 4 AXIS

CompactLogix 5370 L2 Performance

- 2 drives/msec (L27ERM)
- Built-in energy storage eliminates the need for lithium batteries

CompactLogix 5370 L2 Configuration

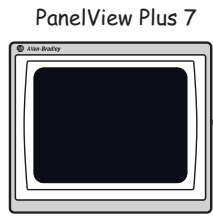
- Common development environment for all control disciplines across the entire Logix Family.
- USB Port provides easy access to module and networks for configuration, and troubleshooting

CompactLogix 5370 L2 Capacity

- Scalable to a wide range of applications (See Table)
- With L27ERM, support for Integrated Motion on EtherNet/IP provides a cost effective solution for from 1-4 axis of motion

EtherNet/IP Network Capacity

- EtherNet/IP utilizes standard Ethernet TCP/IP technology to allow you to easily mix and match high speed Motion control, I/O control, drive control, and HMI on a single network



PanelView Plus 7 Capacity

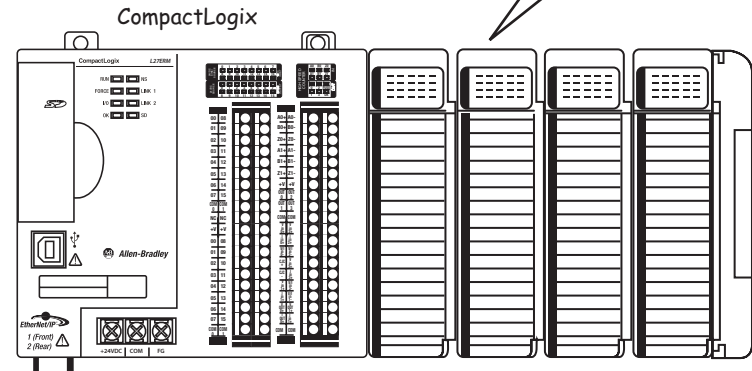
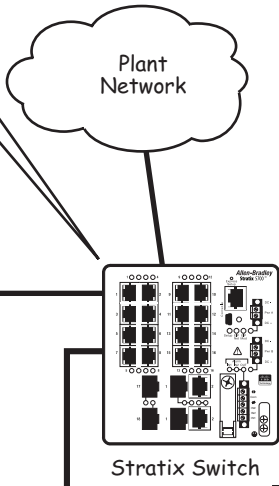
- 512 MB Memory
- Hot Swappable Secure Digital (SD) card slot
- 3 USB ports for external devices, programming
- Windows CE 6.0 operating system

PanelView Plus 7 Configuration

- Premier Integration with Logix Controllers
- Logix Tag Reuse, Global Objects, Faceplates and AOIs
- Single Development Environment

PanelView Plus 7 Performance

- 1.0 GHz x86 CPU
- 6.5, 10.4, 12.1 and 15 inch Display Sizes
- Color Keypad/Touch Screen Options



Slim ArmorBlock SOE I/O Module Capacity

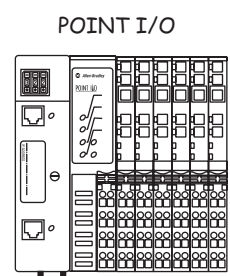
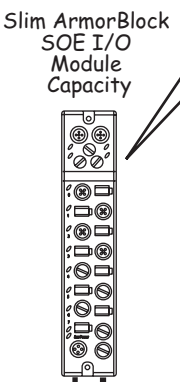
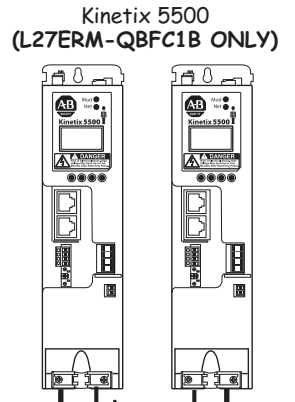
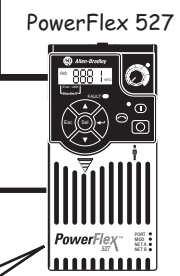
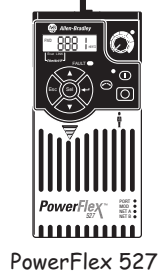
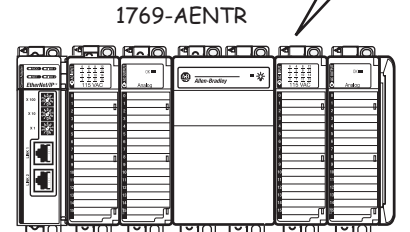
- Sequence of Events (SOE) module
- Time stamp data can be used for motion soft registration support
- Includes 100us transition time stamp

1769 I/O Capacity

- Supports up to 30 1769 I/O Modules (in 3 banks, via extended rack)
- 1769-AENTR EtherNet/IP adapter utilizes embedded switch technology to support linear or ring topologies

POINT I/O Capacity

- The maximum is 63 POINT I/O modules per adapter
- 1734-AENTR EtherNet/IP adapter utilizes embedded switch technology to support linear or ring topologies



PowerFlex 527 Capacity

- 5 to 30 HP, 4 to 22KW
- 100 to 600V single or 3-phase
- 24vDC digital I/O
- Analog I/O
- Embedded 2 Port EtherNet/IP supports Linear/Ring topologies

PowerFlex 527 Configuration

- Studio 5000 Logix Designer common integrated motion programming, configuration, commissioning and drive diagnostic & maintenance tools.
- Integrated Safe Torque Off (SIL3/PLe) hardwired and networked

PowerFlex 527 Performance

- Ideal complement to machines already using Kinetix servo drives
- Designed for applications requiring speed control for induction motors

Kinetix 5500 Capacity

- Scalable Single/Multi Axis Design
- 195-528V single phase or 3-phase
- 600W - 14.6kW
- Embedded 2 Port EtherNet/IP supports Linear/Ring topologies

Kinetix 5500 Configuration

- Full integrated motion support for Kinetix350, Kinetix 5500, Kinetix 6500, and PowerFlex 755 using EtherNet/IP
- Studio 5000 Logix Designer common integrated motion programming, configuration, commissioning, and drive diagnostic & maintenance tools.
- Integrated Safe Torque Off SIL2, PLd (ISO 13849)

Kinetix 5500 Performance

- High speed registration input on Kinetix drive can trigger a motion task in Studio 5000 Logix Designer for faster event task performance

Bill of Material

Qty	Catalog #	Description
System: Controller Hardware		
1	1769-L27ERM-QBFC1B	COMPACTLOGIX L27ERM PROCESSOR, 1MB MEMORY
System: Communication Hardware		
1	1783-BMS06TL	STRATIX 5700 MANAGED SWITCH - 6 FAST ETHERNET COPPER PORTS
HMI Hardware		
1	2711P-B7C22A9P	PANELVIEW PLUS 7 COLOR, TOUCH TERMINAL, ETHERNET.
Distributed I/O Hardware - POINT I/O		
1	1734-AENTR	1734 DUAL PORT ETHERNET/IP ADAPTER
1	1734-IB4	24V DC 4 CHANNEL SINK INPUT MODULE
1	1734-OB4E	24V DC 4 CHANNEL SOURCE OUTPUT MODULE, ELECTRONICALLY PROTECTED
1	1734-IE2V	2 CHANNEL ANALOG VOLTAGE INOUT
3	1734-TBS	MODULE BASES W/ REMOVABLE IEC SPRING TERMINALS
1	1606-XLE80E	POWER SUPPLY, 24-28V DC, 80 W, 120/240V AC INPUT
Distributed I/O Hardware - 1769 I/O		
1	1769-AENTR	ETHERNET IP ADAPTER
1	1769-PA2	POWER SUPPLY 120/240 VAC INPUT 2 AMP @ 5 VDC OUTPUT
1	1769-IQ16	16 POINT 24 VDC SINKING/SOURCING INPUT MODULE
1	1769-OB16	16 POINT 24 VDC SOURCING OUTPUT MODULE
1	1769-IF4XOF2	8 BIT RESOLUTION, HIGH SPEED 4 IN/2 OUT ANALOG COMB
1	1769-ECR	RIGHT END CAP/TERMINATOR

Distributed I/O Hardware - ArmorBlock I/O

1 1732E-IB8M8SOER SLIM ARMORBLOCK SOE MODULE

Drive Hardware

1 25C-D2P3N104 POWERFLEX 527 DRIVE, 1 HP FRAME A

1 25C-D2P3N114 POWERFLEX 527 AC DRIVE WITH EMBEDDED DUAL PORT ETHERNET/IP AND INTEGRATED SAFETY, 1HP, FRAME A

Note: PowerFlex drives come in many variations - before ordering, you will need to identify voltage rating, horsepower, enclosure type. Please refer to the PowerFlex Selection Guide (PFLEX-SG002-EN-P) for additional details on selecting the right drive for you application.

Recommended Software

1 9324-RLD200INTL STUDIO 5000 LOGIX DESIGNER MINI INTERNATIONAL

Note: ControlLogix Controllers can also be programmed when using Studio 5000 Logix Designer Standard Standard, Full, or Pro.

1 9701-VWSTENE FACTORYTALK VIEW STUDIO FOR FACTORYTALK VIEW

Motion Hardware

2 2198-H003-ERS KINETIX 5500 2.5Amps (RMS)

2 VPL-A1002A-CJ12AS KINETIX VP LOW INERTIA MOTOR, IEC 100mm FRAME SIZE, 1500 RPM RATED SPEED

Single-Cable Technology - One cable between VPL Motor and Kinetix 5500 drive yields simplification and reduces costs. One cable for feedback, motor brake, and motor power.

1 1585J-M8CBJM-1 SHIELDED ETHERNET CABLE FOR CIP DRIVES, 1 METER

1 1585J-M8CBJM-0M3 SHIELDED ETHERNET CABLES FOR CIP DRIVES, .3 METERS

Note: Catalog numbers consist of characters, each of which identifies a specific version or option for that component. Reference Publication GMC-SG001-EN-E Kinetix Motion Control Selection Guide for additional information

About the Products

Logix Controllers

- A common set of controls, networks, and programming software available in multiple hardware platforms
- Multiple control disciplines in a single controller - sequential / motion / drives / process
- Multiple Program Languages available in all controllers - Ladder Diagram, Function Block, Structured Text, and Sequential Function Chart
- Tag-based architecture instead of addresses native in the controller
- AMCI 3402 module for Stepper Motion

PanelView Plus 7

- Includes sizes from 4...15 with wide screen options
- Uses Windows CE 6.0 standard features
- Offers Ethernet communications for integration from the machine to the enterprise
- Includes increased memory of 512 MB flash memory/512 MB RAM which provides greater flexibility in applications
- Monitors applications from a remote location with VNC connectivity

PowerFlex Drives

- Serves applications ranging from 0.2 kW (0.25 hp) to 6,770 kW (9,000 hp).
- Common set of networks, operator interface and programming for all PowerFlex drives
- Communication Options - Ethernet/IP, ControlNet, DeviceNet, DH Plus, RIO, 3rd party networks
- Hundreds of pieces of status and diagnostic information are shared with Logix controllers directly

Kinetix Servos

- Scalable solution for applications from 100W to 112KW
- Integrated platform to simplify machine design and commissioning
- Smart Motor Technology to provide automatic identification of correct motor-to-drive connectivity
- Kinematics Integrated Motion Solution for Robot Control utilizes standard Logix/Kinetix integrated motion technology

POINT I/O

- Available in IP-20 or IP-67 styles
- Densities from 2-8 points per module
- Removable screw or spring terminals without rewiring
- Mounts horizontally or vertically with no derating required
- Supports EtherNet/IP, ControlNet, DeviceNet and 3rd party networks

Stratix Switches and Network Infrastructure

- Stratix 5400, 5700, 8000 and 8300 Managed switches offer Loop Prevention, Security Services, Diagnostic Information, Segmentation Services(VLANs), Prioritization Services(QoS), and Multicast Management Services.
- Stratix 2000 Unmanaged Switches offer no layer 2 or layer 3 management functionality, but offer lower cost.
- Consider Network Address Translation (NAT), available with the 1783-NATR device and the Stratix 5400/5700 with NAT option, depending on your application requirements.

For More Information and Help

For more information contact your local distributor or Rockwell Automation sales representative.
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About this Configuration

This CompactLogix 5370 L2 based low cost system demonstrates the power and scalability of the Integrated Architecture on an EtherNet/IP based network. This system utilizes standard EtherNet technology to allow you to easily mix and match high speed Motion control, I/O control, drive control, and HMI on a single EtherNet/IP network.

A key advantage of this architecture is the ability to use Studio 5000 Logix Designer common integrated motion programming, configuration, commissioning, and motion tools for the Kinetix 5500, PowerFlex 527 and PowerFlex 755 family of products.

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CompactLogix 5370 L2 Performance

- 2 drives/msec (L27ERM)
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- USB Port provides easy access to module and networks for configuration, and troubleshooting

Kinetix 5500 Capacity

- Scalable Single/Multi Axis Design
- 195-528V single phase or 3-phase
- 600W - 14.6kW
- Embedded 2 Port EtherNet/IP supports Linear/Ring topologies

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- Full integrated motion support for Kinetix350, Kinetix 5500, Kinetix 6500, and PowerFlex 755 using EtherNet/IP
- Studio 5000 Logix Designer common integrated motion programming, configuration, commissioning, and drive diagnostic & maintenance tools.
- Integrated Safe Torque Off SIL2, PLd (ISO 13849)

Kinetix 5500 Performance

- High speed registration input on Kinetix drive can trigger a motion task in Studio 5000 Logix Designer for faster event task performance

EtherNet/IP Device Level Ring (DLR) Capacity

- Single fault tolerant network provides resiliency
- ODVA standard supports multivendor solutions.

EtherNet/IP Device Level Ring (DLR) Configuration

- One node is configured to be the Ring Supervisor
- Typically this is the L2 processor, can also be a 1783-ETAP

EtherNet/IP Device Level Ring (DLR) Performance

- High performance network recovery - validated at 3msec or less for up to 50 nodes.

PanelView Plus 7 Capacity

- 512 MB Memory
- Hot Swappable Secure Digital (SD) card slot
- 3 USB ports for external devices, programming
- Windows CE 6.0 operating system

PanelView Plus 7 Configuration

- Premier Integration with Logix Controllers
- Logix Tag Reuse, Global Objects, Faceplates and AOIs
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PanelView Plus 7 Performance

- 1.0 GHz x86 CPU
- 6.5, 10.4, 12.1 and 15 inch Display Sizes
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POINT I/O Capacity

- The maximum is 63 POINT I/O modules per adapter
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- 5 to 30 HP, 4 to 22KW
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- 24vDC digital I/O
- Analog I/O
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