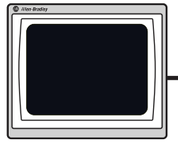
CompactLogix 5370 L1 Overview	L16ER-BB1B	L18ER-BB1B	L18ERM-BB1B	1769-L19-ER-BB1B
Memory	384KB	512KB	512KB	1 MB
Embedded I/O Points (24VDC)	32 (16I/16O)	32 (16I/16O)	32 (16I/16O)	32 (16I/16O)
Local Expansion Modules	6	8	8	8
Max Expansion I/O Points (Avg 8 per Module)	48	64	64	64
Max Total I/O Points	80	96	96	96
EtherNet/IP I/O Nodes	4	8	8	8
Integrated Motion on EtherNet/IP	No	No	1-2 Axis CIP Motion	No

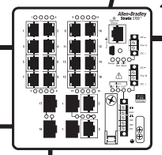
Stratix Switches Configuration
- Either a managed or unmanaged switch can be used, depending on your application requirements. See "About The Products Stratix Switches" on back for more information.
- Scale your switch selection to your application with these Rockwell Automation switches:
  - Stratix 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.

Plant Network

PanelView Plus 7

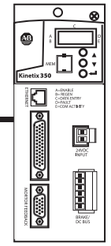


PowerFlex 527



Stratix Switch

Kinetix 350
(L18ERM-BB1B ONLY)



Kinetix 350 Capacity
- Optimized for Lower Axis Applications
- 120/230V single phase or 230/460V 3-phase
- 400W - 3kW
- Embedded EtherNet/IP

Kinetix 350 Configuration
- Full integrated motion support for Kinetix350, 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 350 Performance
- High speed registration input on Kinetix drive can trigger a motion task in Studio 5000 Logix Designer for faster event task performance

PanelView Plus 7 Capacity
- 25 Displays
- 200 Alarm Messages

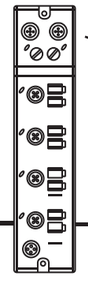
PanelView Plus 7 Configuration
- Premier Integration with Logix Controllers
- Logix Tag Reuse,Global Objects,Faceplates and AOIs
- Single Development Environment

PanelView Plus 7 Performance
- 3.5, 5.5, and 10.4 inch Display Sizes
- Grayscale or Color Option
- Keypad/Touch Screen Options

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

EtherNet/IP

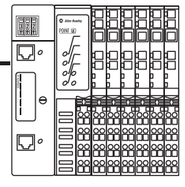
ArmorBlock



ArmorBlock I/O Module Capacity
- Built-in EtherNet/IP™ Dual Port adapter and power supply
- 8 or 16 points per block
- Rated for IP69K and NEMA 4X (when marked) for use without an enclosure
- Self-configuring blocks contain both input and output functionality

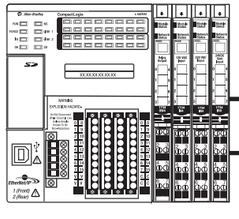
PowerFlex 527

POINT I/O



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

CompactLogix



CompactLogix 5370 L1 Capacity
- Low cost/Scalable to a wide range of applications (See Table)
- Uses 1734 Point Expansion I/O
- With L18ERM, support for Integrated Motion on EtherNet/IP provides a cost effective solution for from 1-2 axis of motion

CompactLogix 5370 L1 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 L1 Performance
- 2-3 drives/msec (L18ERM)
- Built-in energy storage eliminates the need for lithium batteries

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

Publication IASIMP-QR025F-EN-E - September 2017
Supersedes IASIMP-QR025E-EN-E - July 2015

Note: Performance is what we tested, not the max capacity

Rockwell Automation

CompactLogix 5370 L1 Star/Linear

Bill of Material

Qty	Catalog #	Description
		System: Controller Hardware
1	1769 L18ERM-BB1B	COMPACTLOGIX L18ERM PROCESSOR, 512 KB MEMORY
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
		System: Communication Hardware
1	1783-BMS10CGP	STRATIX 5700 MANAGED SWITCH WITH DLR
		HMI Hardware
1	2711P-B7C22A9P	PANELVIEW PLUS 7 5.5" TFT COLOR, TOUCH TERMINAL
		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

Qty	Catalog #	Description
		Distributed I/O Hardware - ArmorBlock I/O
1	1732E-8CFGM8R	ETHERNET/IP DUAL PORT, INPUT/OUTPUT MODULE, 8 CONFIGURABLE DIGITAL I/O
		Drive Hardware
2	25C-D2P3N104	POWERFLEX 527 DRIVE, 1 HP 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.*

Qty	Catalog #	Description
		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, Full, or Pro.*

Qty	Catalog #	Description
1	9701-VWSTENE	FACTORYTALK VIEW STUDIO FOR FACTORYTALK VIEW
		Motion Hardware
1	2097-V34PR5-LM	KINETIX 350,4A (L18ERM-BB1B ONLY)
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 this Configuration

This CompactLogix 5370 L1 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.

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 3401L 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.

- www.ab.com (Product Directory, Publication Library, Technical Support).

Rockwell Automation

CompactLogix 5370 L1 Overview	L16ER-BB1B	L18ER-BB1B	L18ERM-BB1B	1769-L19-ER-BB1B
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Max Total I/O Points	80	96	96	96
EtherNet/IP I/O Nodes	4	8	8	8
Integrated Motion on EtherNet/IP	No	No	1-2 Axis CIP Motion	No

Stratix Switches Configuration
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- 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 L1 Performance
- 2-3 drives/msec (L18ERM)
- Built-in energy storage eliminates the need for lithium batteries

CompactLogix 5370 L1 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 L1 Capacity
- Scalable to a wide range of applications (See Table)
- Use 1734 Point Expansion I/O
- With L18ERM, support for Integrated Motion on EtherNet/IP provides a cost effective solution for from 1-2 axis of motion

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

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 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

PanelView Plus 7

Plant Network

Stratix 5700 with DLR

CompactLogix

ArmorBlock

ArmorBlock I/O Module Capacity
- Built-in EtherNet/IP™ Dual Port adapter and power supply
- 8 or 16 points per block
- Rated for IP69K and NEMA 4X (when marked) for use without an enclosure
- Self-configuring blocks contain both input and output functionality

PanelView Plus 7 Capacity
- 25 Displays
- 200 Alarm Messages

PanelView Plus 7 Configuration
- Premier Integration with Logix Controllers
- Logix Tag Reuse,Global Objects,Faceplates and AOIs
- Single Development Environment

PanPanelView Plus 7 Performance
- 3.5, 5.5, and 10.4 inch Display Sizes
- Grayscale or Color Option
- Keypad/Touch Screen Options

POINT I/O

PowerFlex 525

Kinetix 5500
(L18ERM-BB1B ONLY)

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

EtherNet/IP

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 L1 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.

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 525 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 525 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 525 Performance
- Ideal complement to machines already using Kinetix servo drives
- Designed for applications requiring speed control for induction motors

Publication IASIMP-QR025F-EN-E - September 2017
Supersedes IASIMP-QR025E-EN-E - July 2015

Note: Performance is what we tested, not the max capacity

Rockwell Automation

CompactLogix 5370 L1 Star/Ring

Bill of Material

Qty	Catalog #	Description
		System: Controller Hardware
1	1769 L18ERM-BB1B	COMPACTLOGIX L18ERM PROCESSOR, 512 KB MEMORY
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
		System: Communication Hardware
1	1783-BMS10CGP	STRATIX 5700 MANAGED SWITCH WITH DLR
		HMI Hardware
1	2711P-B7C22A9P	PANELVIEW PLUS 7 5.5" TFT COLOR, TOUCH TERMINAL
		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 - ArmorBlock I/O
1	1732E-8CFGM8R	ETHERNET/IP DUAL PORT, INPUT/OUTPUT MODULE, 8 CONFIGURABLE DIGITAL I/O
		Drive Hardware
1	25B-D2P3N114	POWERFLEX 525 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, Full, or Pro.*

1	9701-VWSTENE	FACTORYTALK VIEW STUDIO FOR FACTORYTALK VIEW
		Motion Hardware
1	2097-V34PR5-LM	KINETIX 350,4A (L18ERM-BB1B ONLY)
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.*

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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

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- 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
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Rockwell Automation