Compact Machine Solutions for Small and Mid Range Applications. (4/20/10)

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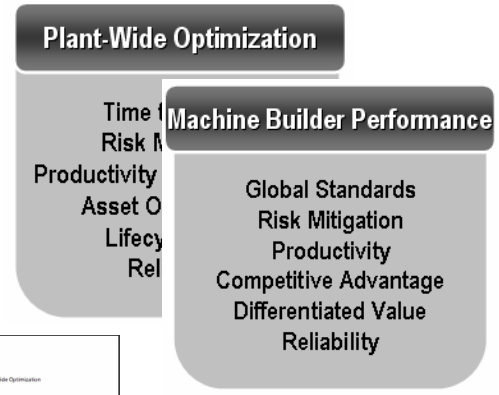
(Confidential – For Internal Use Only)

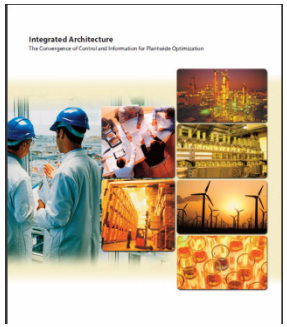
Allen-Bradley • Rockwell Software

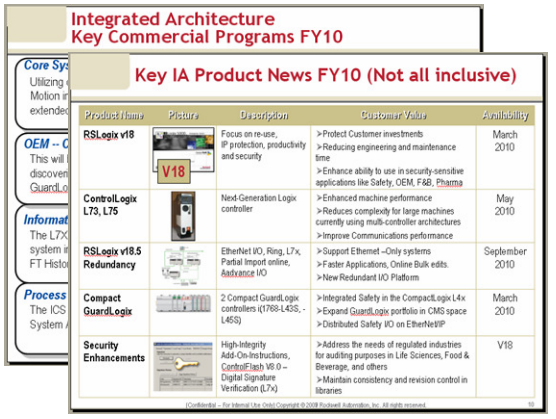
Rockwell Automation

What We Will Cover Today (Agenda)

1. Machine Builder Performance
2. Compact Machine Solutions
3. Optimized Architectures
4. Newly released related products
5. Questions ?

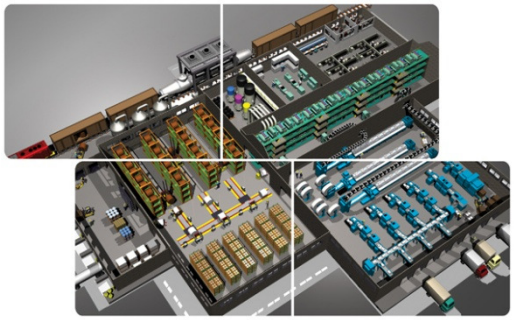






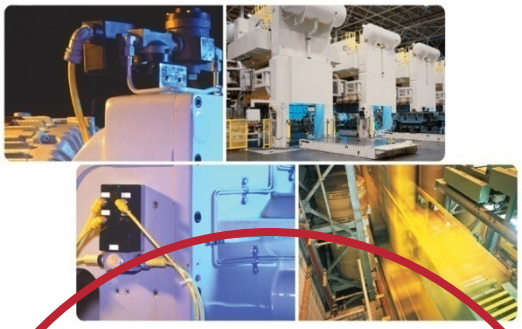
Machine Builder Performance

Continuous improvement is critical for success today. Manufacturers and Machine Builders today must leverage their automation investment to create an architecture for continuous optimization, competitive differentiation and sustainable production.



Plant-Wide Optimization

Time to Market
Risk Mitigation
Productivity & Supply Chain
Asset Optimization
Lifecycle Cost
Reliability



Machine Builder Performance

Global Standards
Risk Mitigation
Productivity
Competitive Advantage
Differentiated Value
Reliability

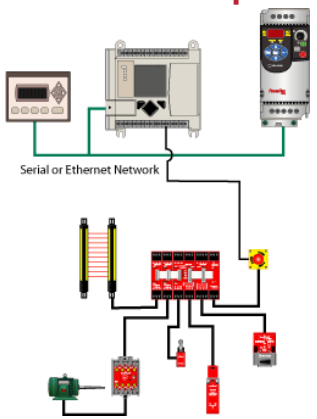
Sustainable Production

Demand Management
Process Optimization
Regulatory Compliance
Resource Utilization
Workers and Environment
Product Integrity

Scalable Machine Control Solutions

Components & Intelligent Motor Control

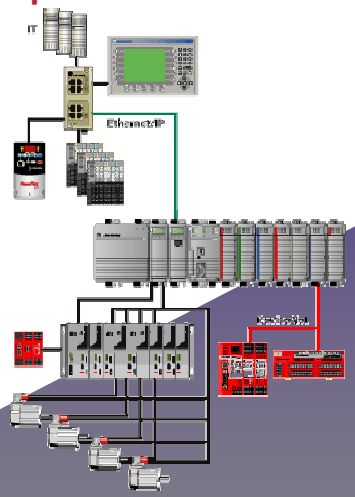
Connected Components



- Simple Connectivity
- Mechanical linked machine
- Stand alone machine
- Low cost
- Just enough control

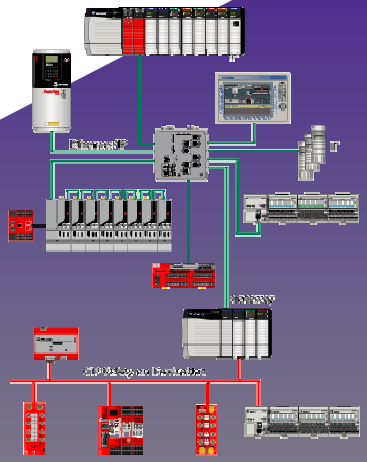
Integrated Architecture

Compact Machine Solutions



- Multi axis motion
- Increased controller capabilities
- Mix of mechanical and electrical controls
- Low engineering costs

Advanced Machine Solutions



- Coordinated Multi axis motion
- Robotic Feeders
- Electronic Line Shafting
- Advanced connectivity
- Advanced information capabilities

Integration Continuum

Low — High

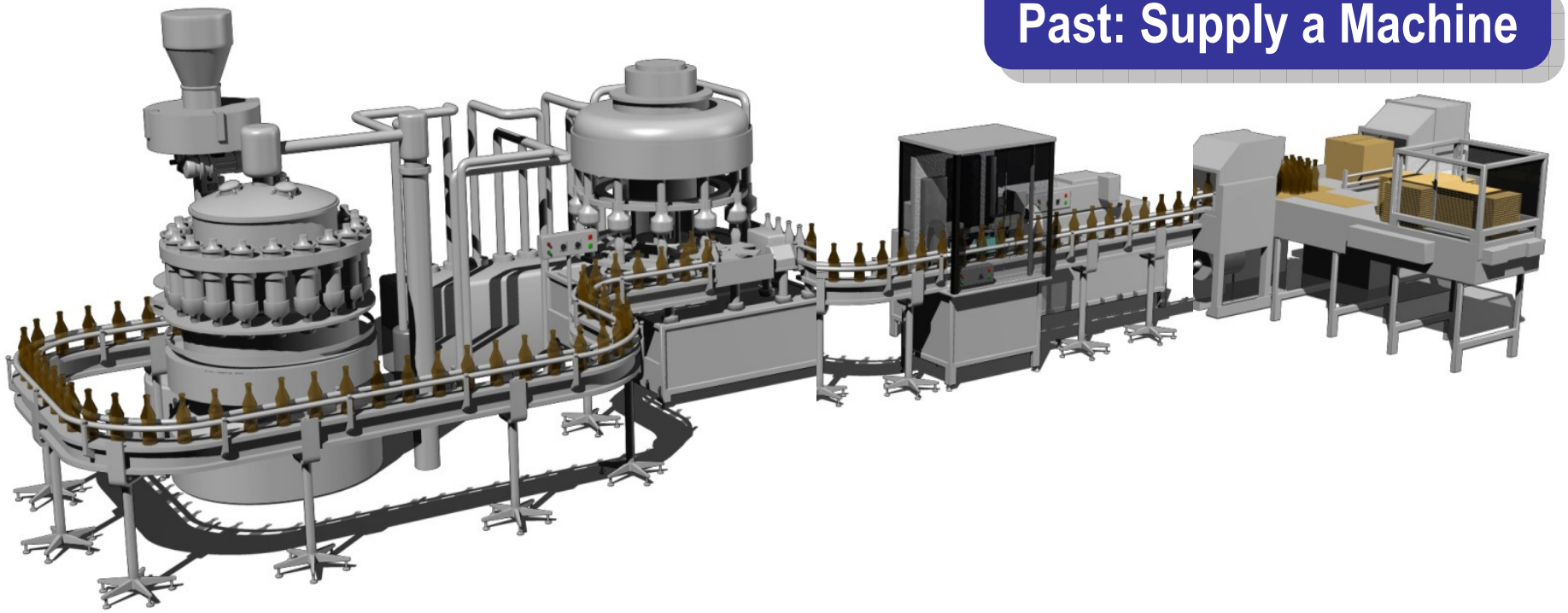
Broadest offering available for Machine Builder (OEM) needs

The Changing Scope of Supply

Future: Provide a Complete Line

Present: Integrate to Other Machines

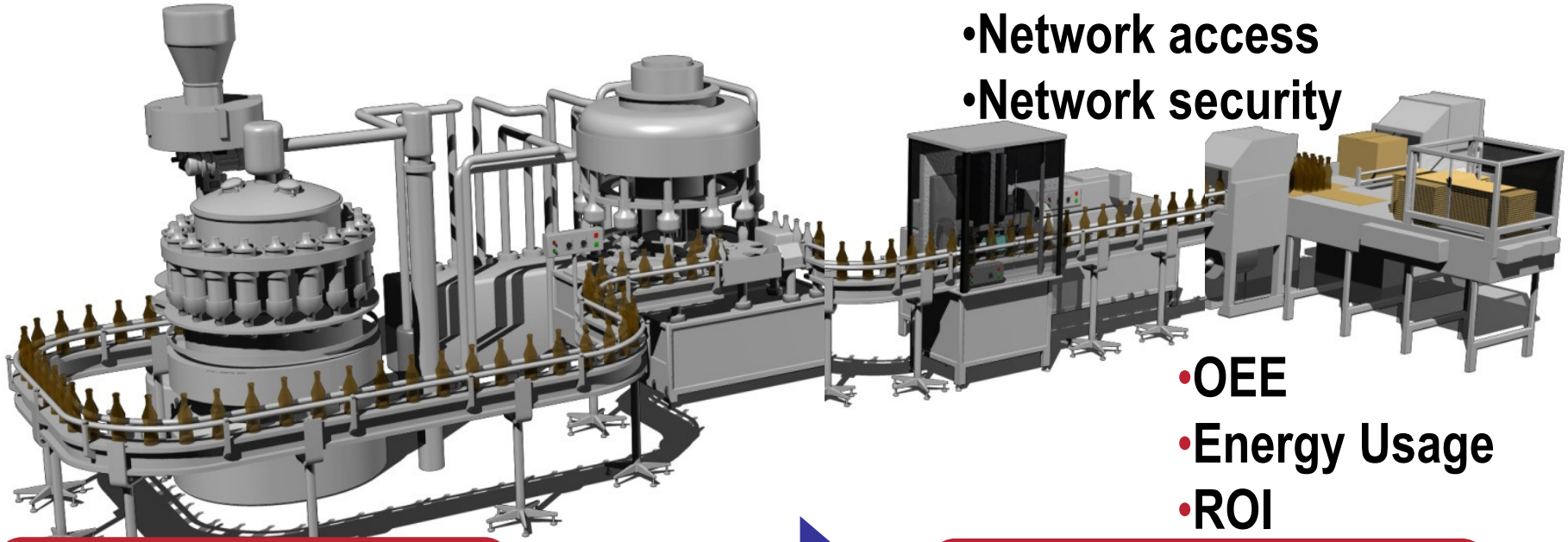
Past: Supply a Machine



The Changing Scope of Supply

Machine Focused → **System Focused**

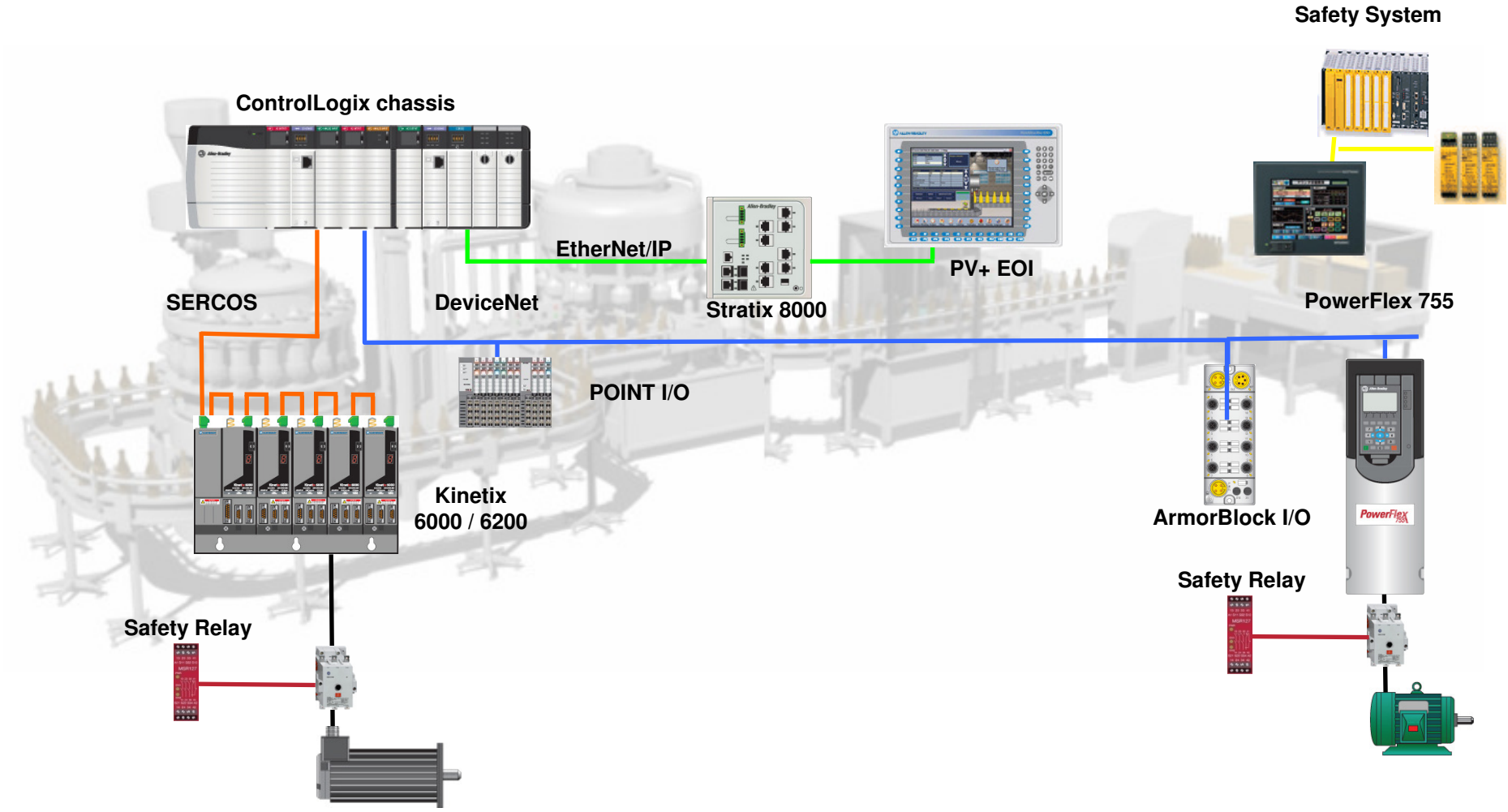
- IT/Control Integration
- Remote system support
- Machine & plant integration
- Network access
- Network security



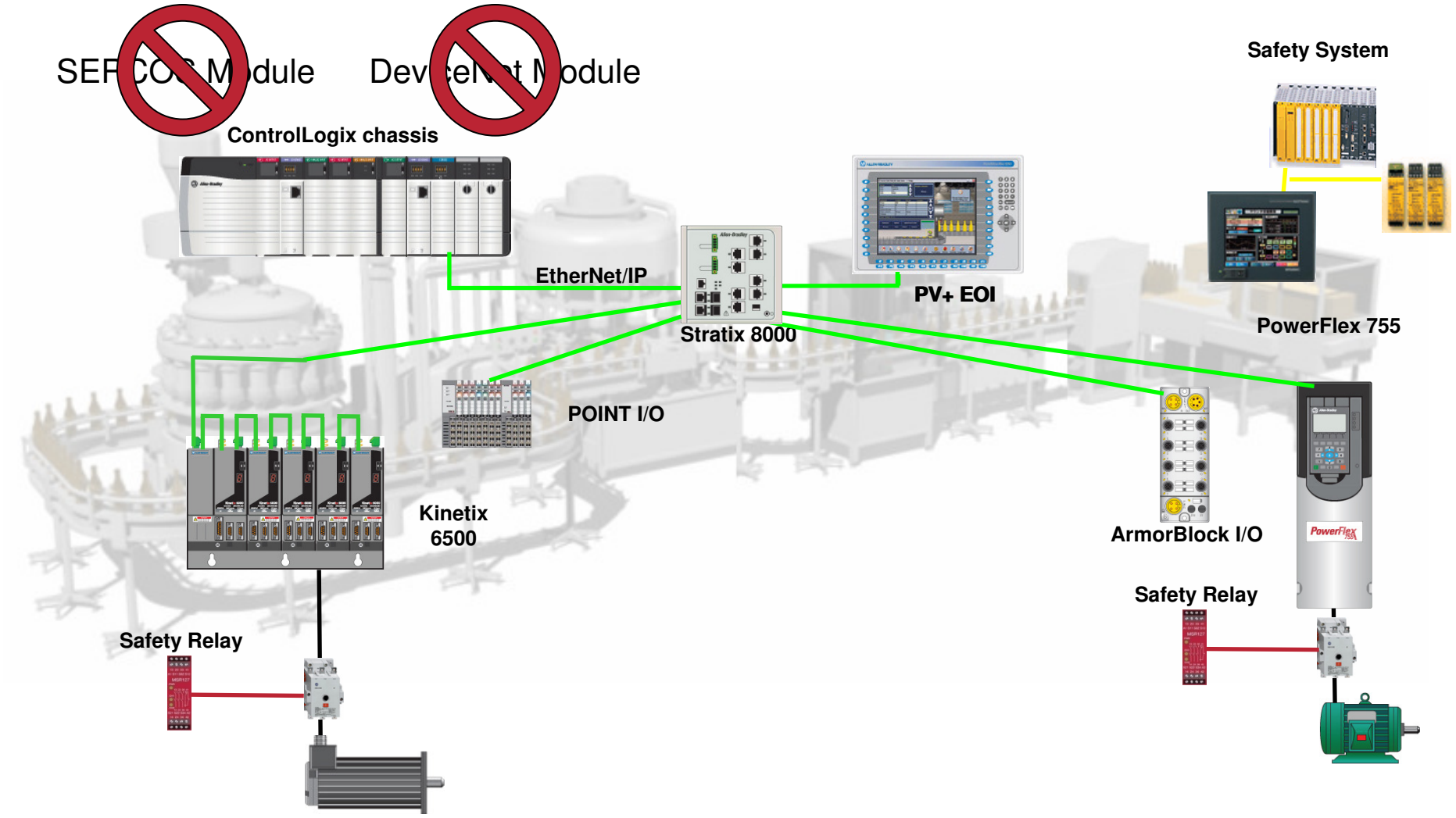
- OEE
- Energy Usage
- ROI

Technically oriented → **Value Oriented**

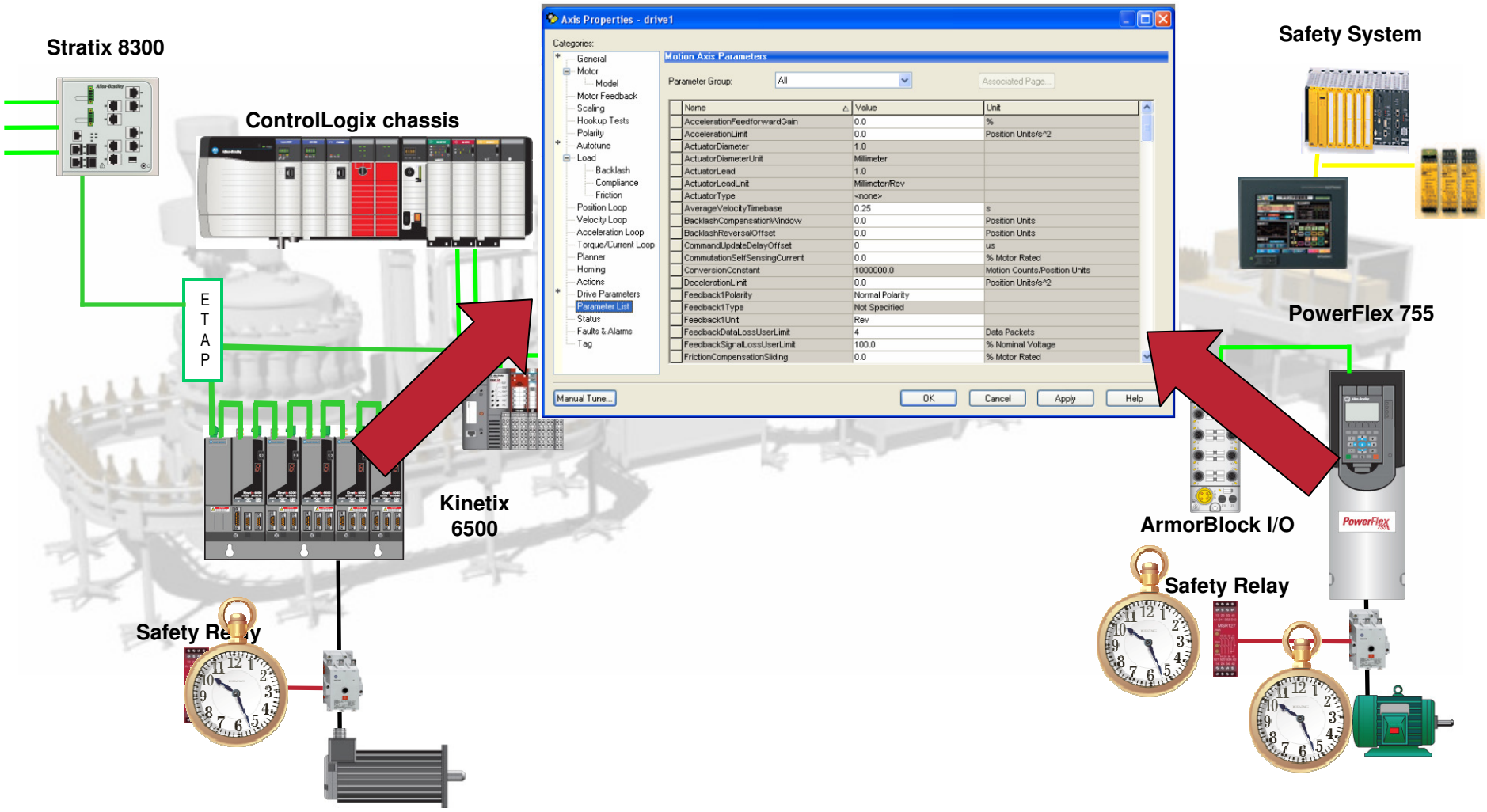
Machine Builder Performance



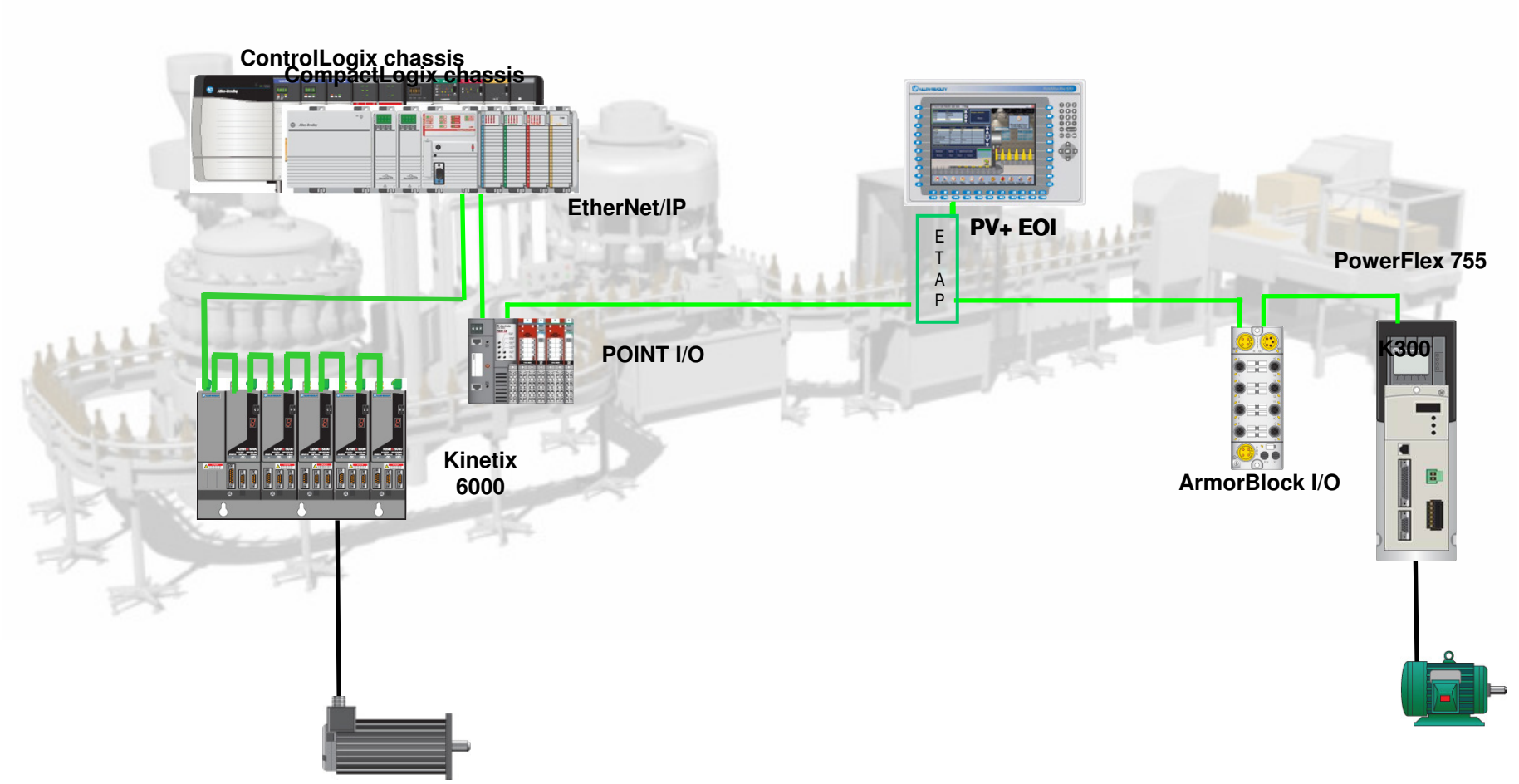
Machine Builder Performance



Machine Builder Performance



Scalability



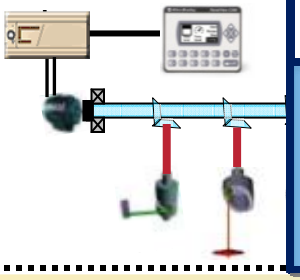
Agenda

1. Machine Builder Performance
2. Compact Machine Solutions
3. Optimized Architectures
4. Newly released related products
5. Questions ?

OEM Market Characteristics
Machine/Equipment Continuum

Technology Adoption

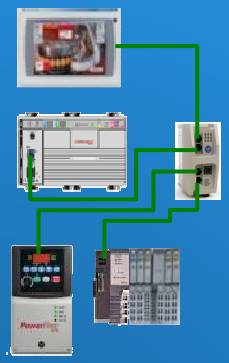
	1 Low	2 Mid	3 High
Upstream (Process/Assembly/Power Centric)	Low end equipment, low end controller, hardwired devices or low level network, low end HMI, simple pneumatics, simple analog instrumentation or gauges, hardwired drives or on/off control	Mid level equipment, Rack based controller with DIO, simple networked field devices, local/mid HMI, analog instrumentation, networked drives	High end equipment, fast/redundant controller with DIO, FF/Hart smart instrumentation, SCADA, information enabled, intelligent motor control, robotics
End of Line (Packaging / CPW / Mat Hand)	**Low (Mechanical)** e.g. Gen 1 – Mechanical motion with single drive shaft using cams, sprockets, gears and pulleys.	**Mid (Hybrid)** e.g. Gen 2 – Retrofit some mechanical axes with servo motors and drives. Typical 2-3 Motion Axis Max., many times with AC Drives instead of Servos	**High (Electrical)** e.g. Gen 3 - All mechanical motion replaced with servo motors and/or synchronized VFDs on each of multiple individual axes using integrated motion and logic control.
Buying Behavior	**Component**	**Basic IA**	**Complex**



Focus for CMS and this session

Integrated Architecture Solutions for Machine Control

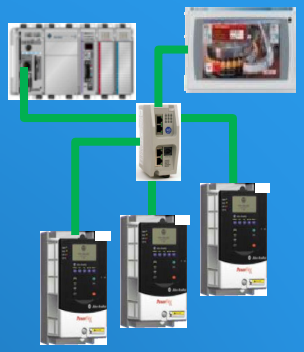
Compact Machine Solutions space



Simple Logix control

Packaged controller

EtherNet/IP

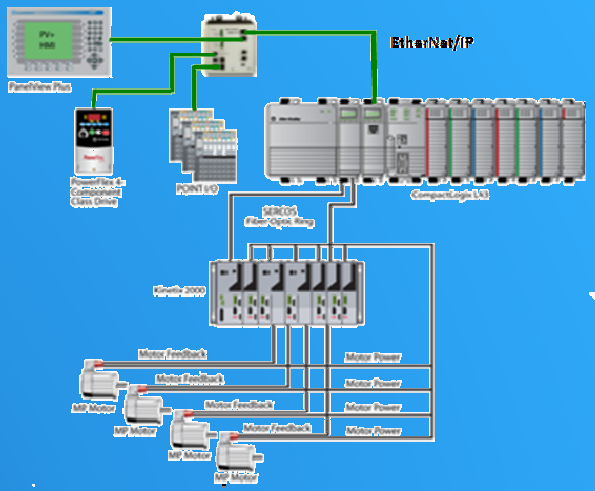


Flexible control

Capable controller

EtherNet/IP

Predominant mechanical control

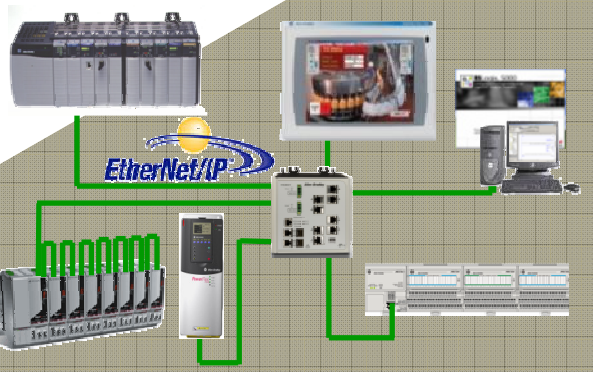


Multi axis motion

Increased controller capabilities

Mix of mechanical and electrical controls

Low engineering costs



Multi axis motion

Robotic Feeders

Electronic Line Shafting

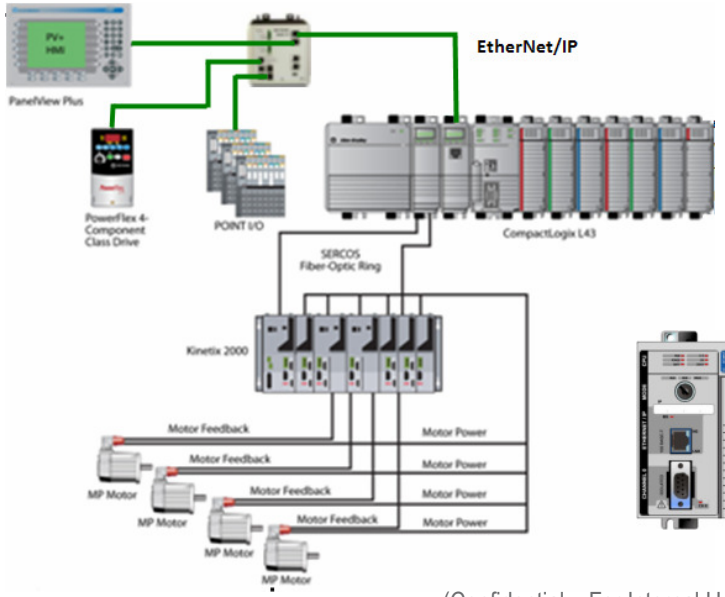
Advanced connectivity

Advanced information capabilities

Low **Integration Continuum** High

Compact Machine Solutions

- Compact Machine Solutions is an initiative focused on providing technical answers to OEM problems
- Compact Machine Solutions is a way to focus on understanding those problems and provide the right set of tools, products and capabilities to address the needs of OEMs evolving from their first generation machines or needing IA class functionality



An Integrated Architecture Class Machine leverages:

- Integrated Motion
  - Highly integrated speed & position solutions
- Advanced programming techniques
  - Modular Programming
  - Libraries
  - Specific Instructions & Faceplates
- ISA S88 / PackML
  - State modeling, Modular control
- Device Premier Integration (i.e. PowerFlex Drives)
  - Reduced development, commissioning and maintenance costs
- Information access over EtherNet/IP
  - Immediate integration with end-user's information system
  - Web, email capabilities, remote diagnostics

What is important for those OEMs ?

COMPETITIVENESS

REDUCE COST

- Lower Total Cost to Design, Develop, and Deliver℠ (TCD)
  - Reduce costs involved in machine production
    - Use standard components (SCALABILITY)
    - Reusable Engineering content (MODULAR PROGRAMMING)
  - Reduce costs after delivery
    - Remote access to devices below the controller for maximum diagnostics capabilities
- Faster Time to Market
  - Shorter design, test and commissioning cycles
  - Provide custom machinery within standard build cycle (FLEXIBILITY)

BETTER MACHINES

- Improved Machine Innovation, Throughput and Performance
  - Increasing competitive machine requirements
  - Differentiate on reliability and OEE effectiveness
  - Information enabled machines
  - Flexible machines
- Intellectual property protection

Agenda

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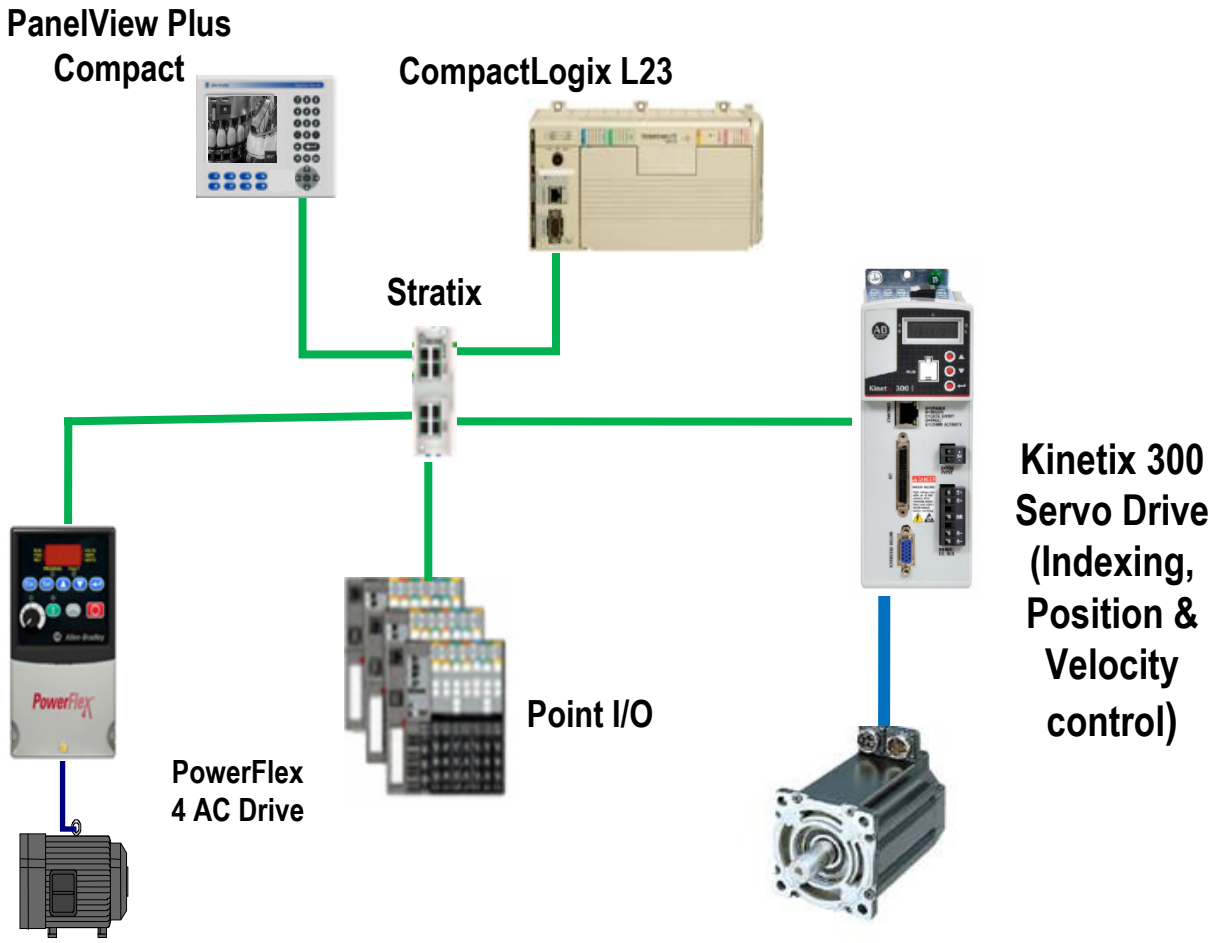
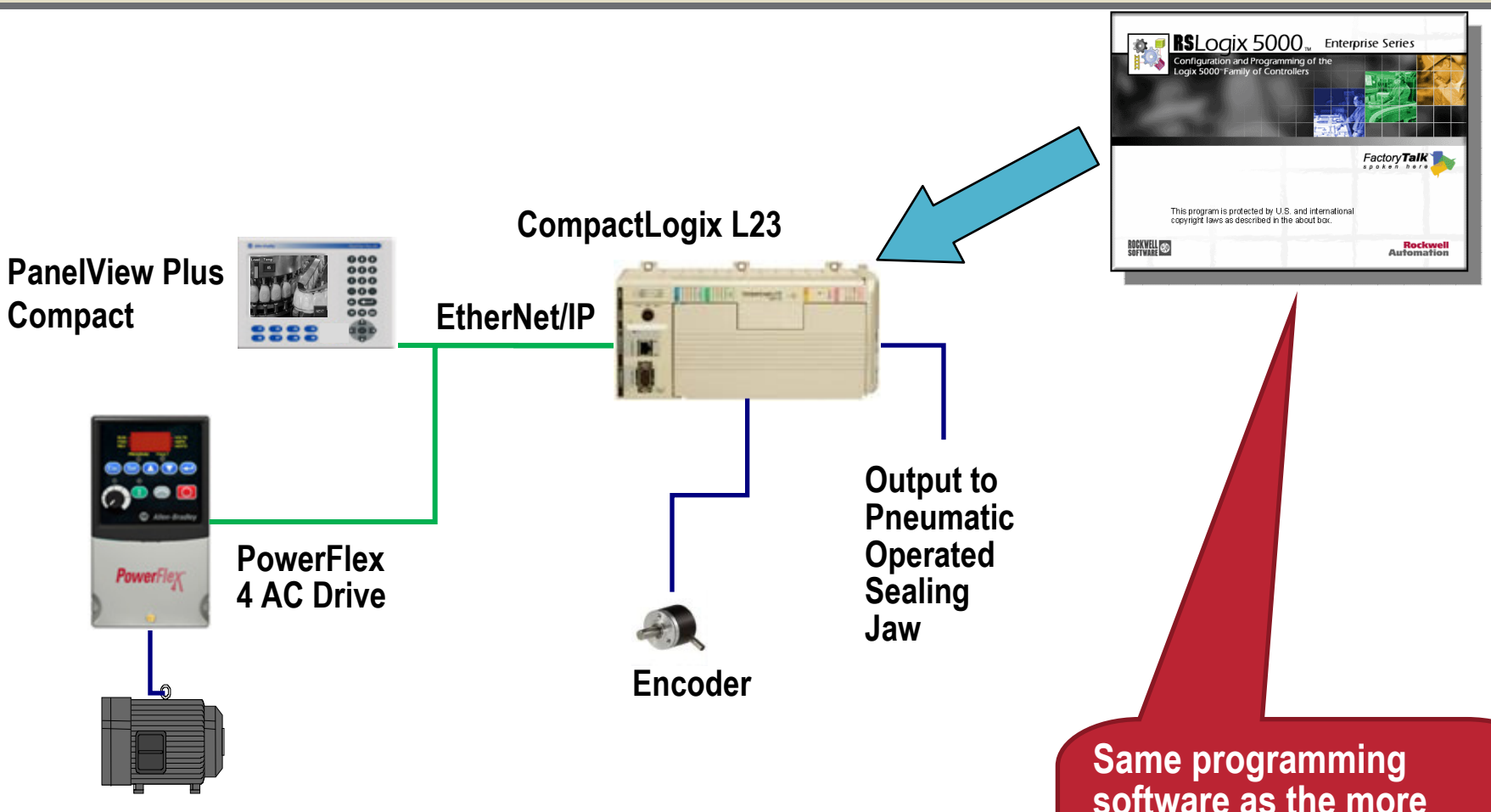
Leveraging EtherNet/IP

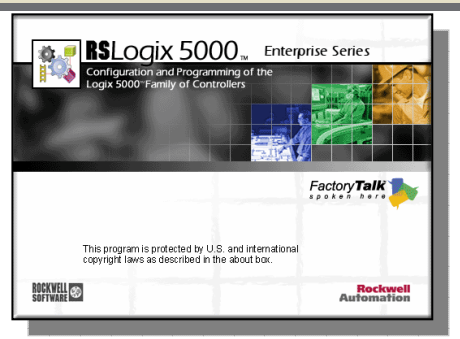
- ***Leverage EtherNet/IP for:***
- Seamless integration of products
- Easily re-use and migrate projects
- Link plant floor to enterprise systems
  - Integrate control and information infrastructures
- Simple diagnostics and monitoring
- Ease of configuration
- Simplify maintenance
- Leverage tools
  - HMI Faceplates
  - Logix Add On Instructions



Smaller, Intermittent Machine - Now w/Drive



Smaller, Intermittent Machine – Now w/Servo

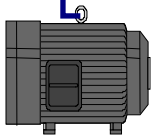


PanelView Plus Compact

CompactLogix L23

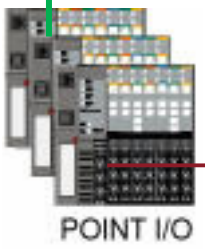
EtherNet/IP

PowerFlex 4 AC Drive



Digital I/O from L2x (for Enable-Ready etc)

Encoder Emulated Pulses From U3K to L2x Embedded High Speed Counter



Analog output (+ -10V) From Point I/O to U3K

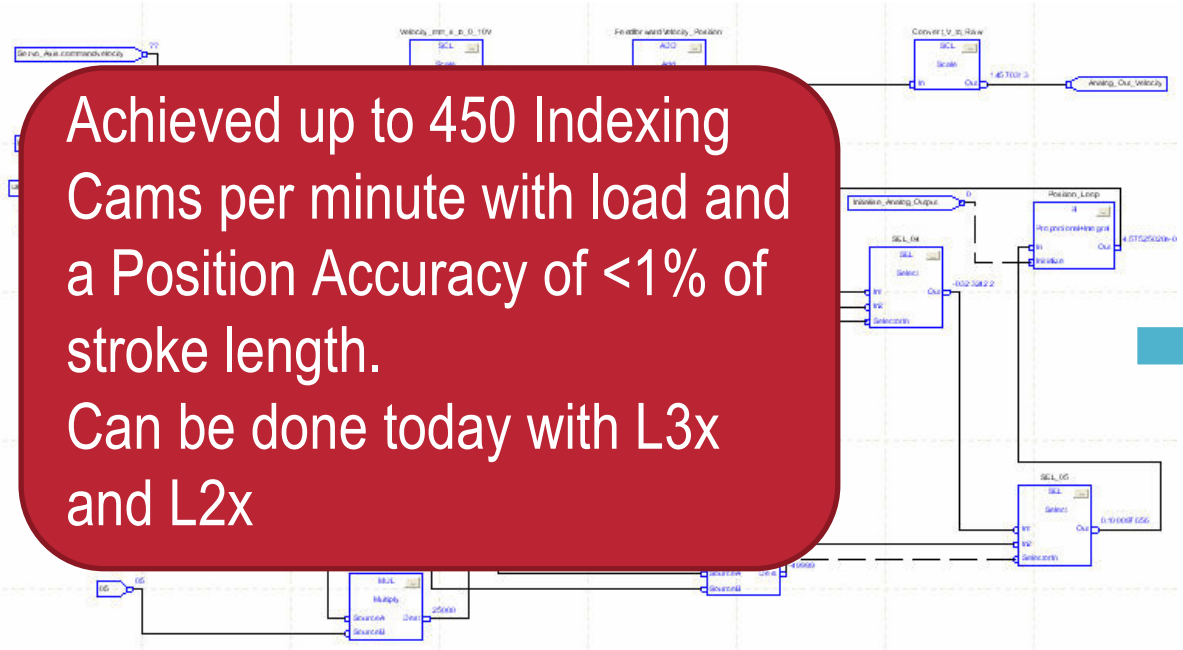
Simple Ultra3000 (Non-Index, Non-SERCOS, Non DeviceNet)

Same programming software as the more demanding systems:

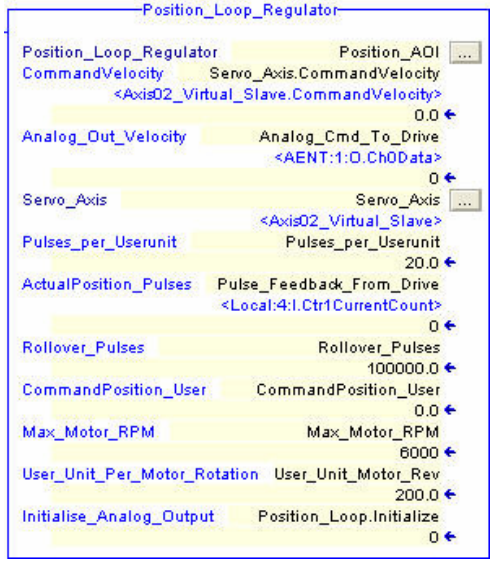
Re-use of same code

We prototyped the configuration in our Application Lab in Singapore

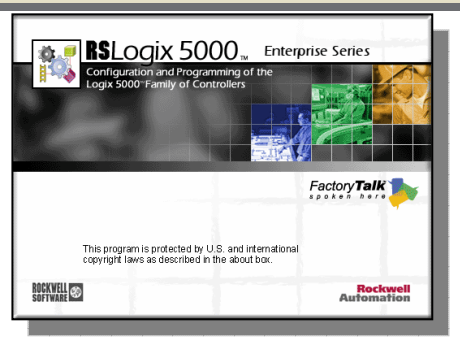
- We developed an AOI to close the Position Loop in the L2X
  - It uses a Virtual Axis and a Velocity Feedforward with a secondary Position Loop
  - It runs in a Motion Planner Synchronous Task
  - It uses the built-in HSC and currently Point IO Analog Out
  - It uses IOT to Analog Out and CST to shift CommandPosition into phase



Achieved up to 450 Indexing Cams per minute with load and a Position Accuracy of <1% of stroke length.
Can be done today with L3x and L2x



Smaller, Intermittent Machine - Now w/Servo



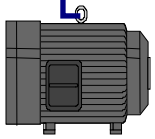
PanelView Plus Compact

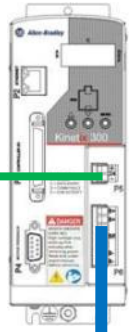
CompactLogix L23

EtherNet/IP

PowerFlex 4
AC Drive

(Velocity)





Kinetix 300
Servo Drive

(Indexing Position & Velocity)

Same programming software as the more demanding systems:

Re-use of same code

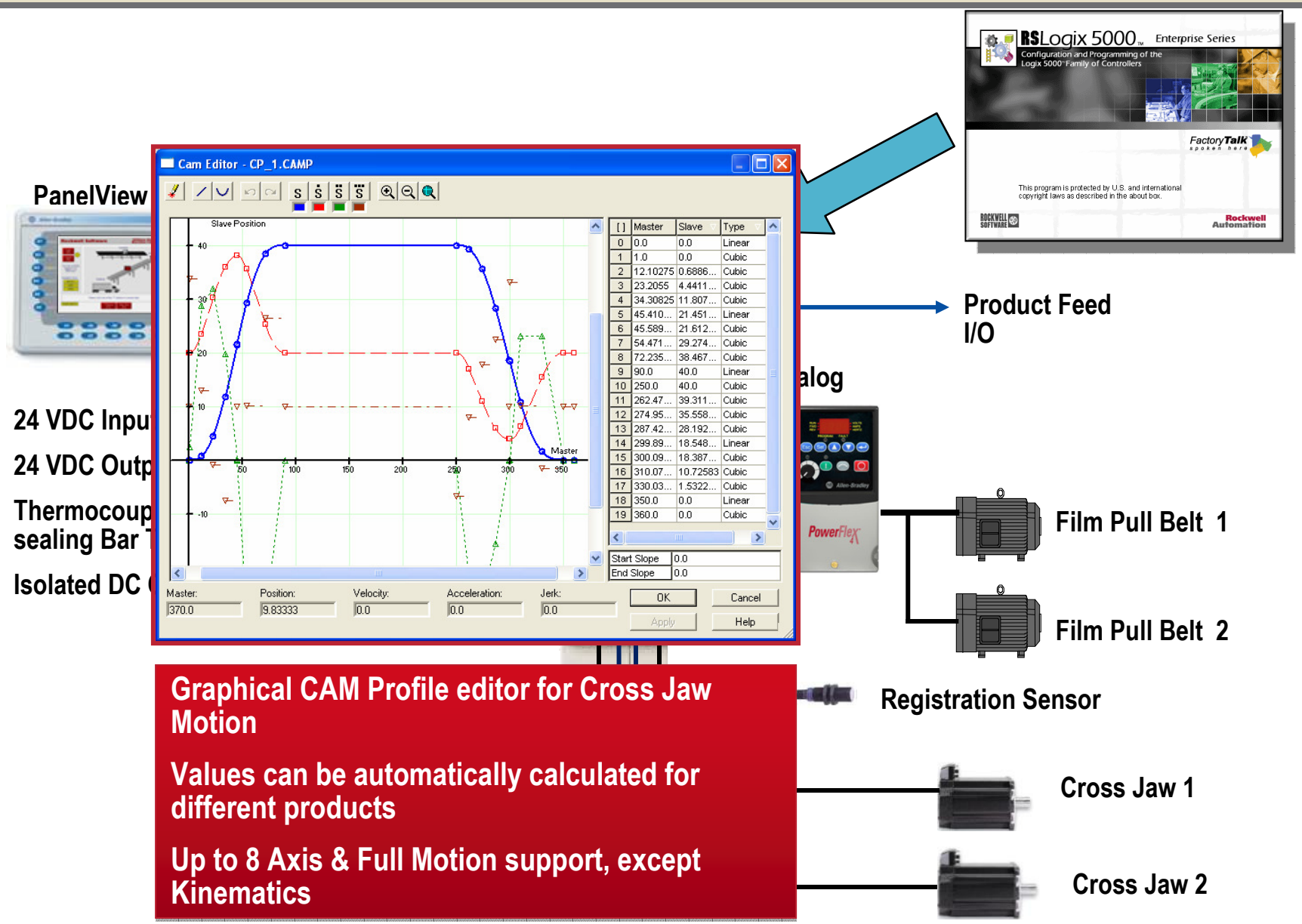
The Market for small apps

- We have won significant traction in Packaging CMS space by selling Integrated Motion on CompactLogix
  - Applications Packaging
    - VFFS > 100 packs / minute
    - HFFS > 150 packs / minute
    - Sleevers > 400 bottles / minute
    - Intermittent Shrinkwrappers / Wraparound
    - Simple Case Packers / Case Erectors > 30 packs /minute

- Machine builders often build market reputations with their “flagship” machines
  - OEM X, for example, developed the 800/min sleever and in the first year after expanded their facility on increased sales of the 450 and 250 systems

- Packaging Machine builders tend to build an “International Version” at around $50K - $120K+ and a “Commodity Version” at between $25 and $40K selling price
  - The proposed solutions fit the $25K - $40K machine selling price range

Medium size continuous machine



Graphical CAM Profile editor for Cross Jaw Motion

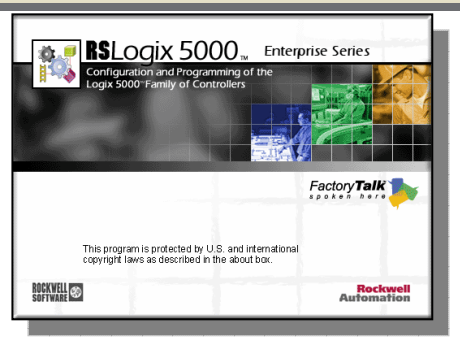
Values can be automatically calculated for different products

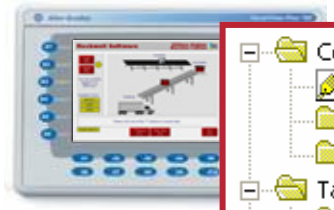
Up to 8 Axis & Full Motion support, except Kinematics

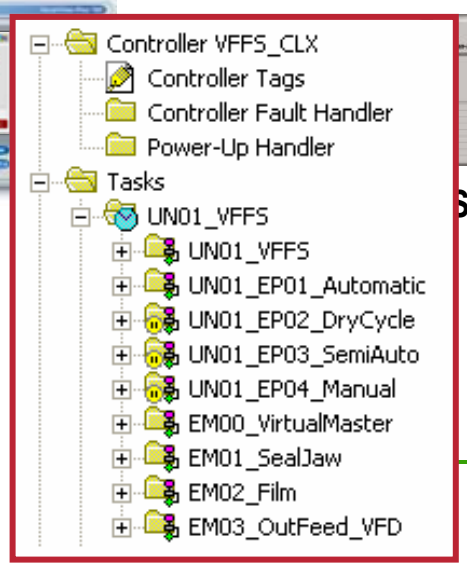
All Servo Intermittent or Continuous Machine

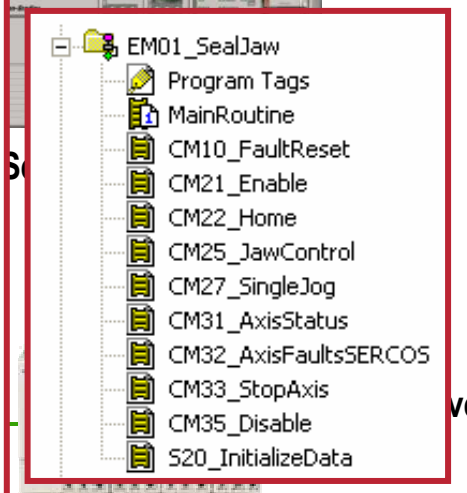
PanelView Plus

CompactLogix L4x









Same programming language as rack-based systems:

Re-use of programming routines

Up to 8 Servo drives

Full Motion support, except Kinematics

24 VDC Inputs

24 VDC Outputs

Thermocouple Inputs for sealing Bar Temp Control

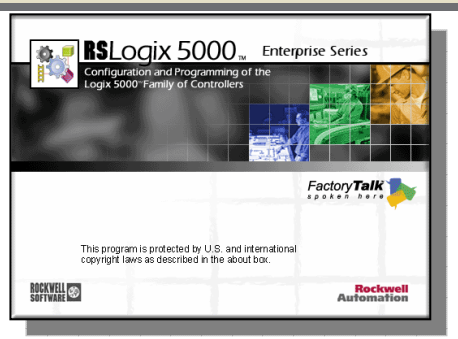
Isolated DC Outputs

Film Pull Belt

Cross Jaw 1

Cross Jaw 2

All Servo System w/ Direct Drive Technology



PanelView Plus

CompactLogix – 4 family

EtherNet/IP

Sercos

Film Registration Sensor

Kinetix® Drives

Replace Cams, Pulleys and Gearboxes with direct drive motors

Reduce mechanics, vibration and power requirements

Up to 8 Servo drives

Full Motion support, except Kinematics

24 VDC Inputs

24 VDC Outputs

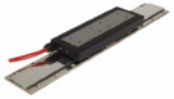
Thermocouple Inputs for sealing Bar Temp Control

Isolated DC Outputs

Product Auger Feed

Film Pull Belt

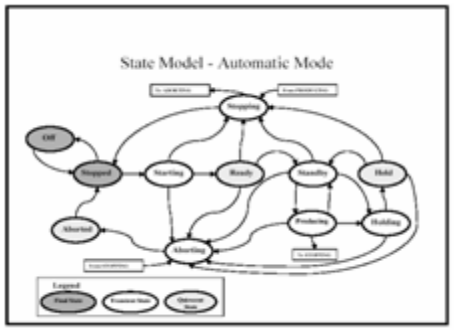
Cross Jaw 1

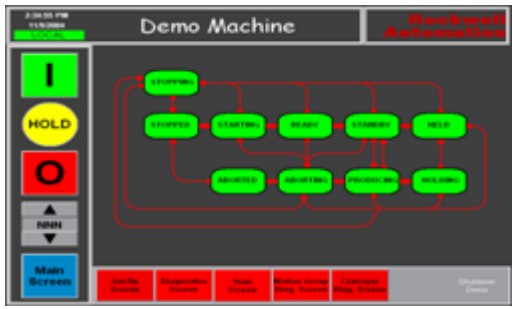


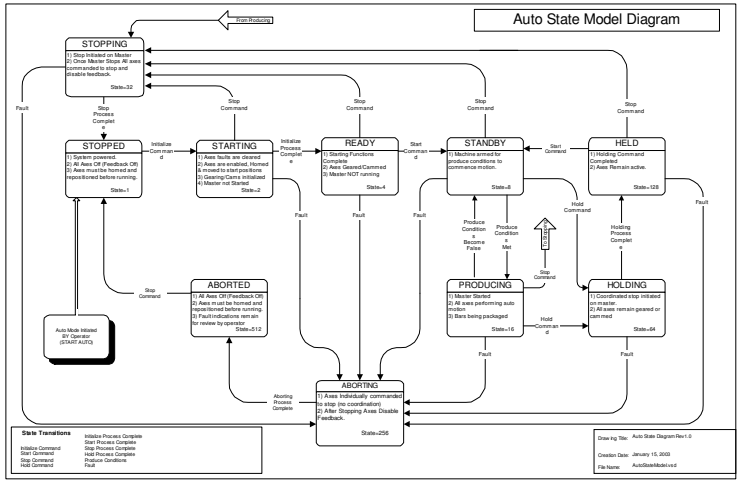
Cross Jaw 2

Power Programming

- Power Programming is the suggested Base Template for Rockwell Automation's Sample Code Library
- The Basic Templates includes
  - A PackML conforming Code Standard using S88 Terminology
  - An Interface for Using and Developing Modular Programs for Machines
  - Hooks to build own Application Notes and use Rockwell's build-up of distributable code
- Power Programming can help your OEM to:
  - Increase design efficiency (up to 50% reduction in design time)
  - Simplify field maintenance and save up to 40% on field maintenance next year
  - Create scalable systems using the same code base.
  - Provide improved access to production and diagnostic information
  - Show how efficiently the machine is running.



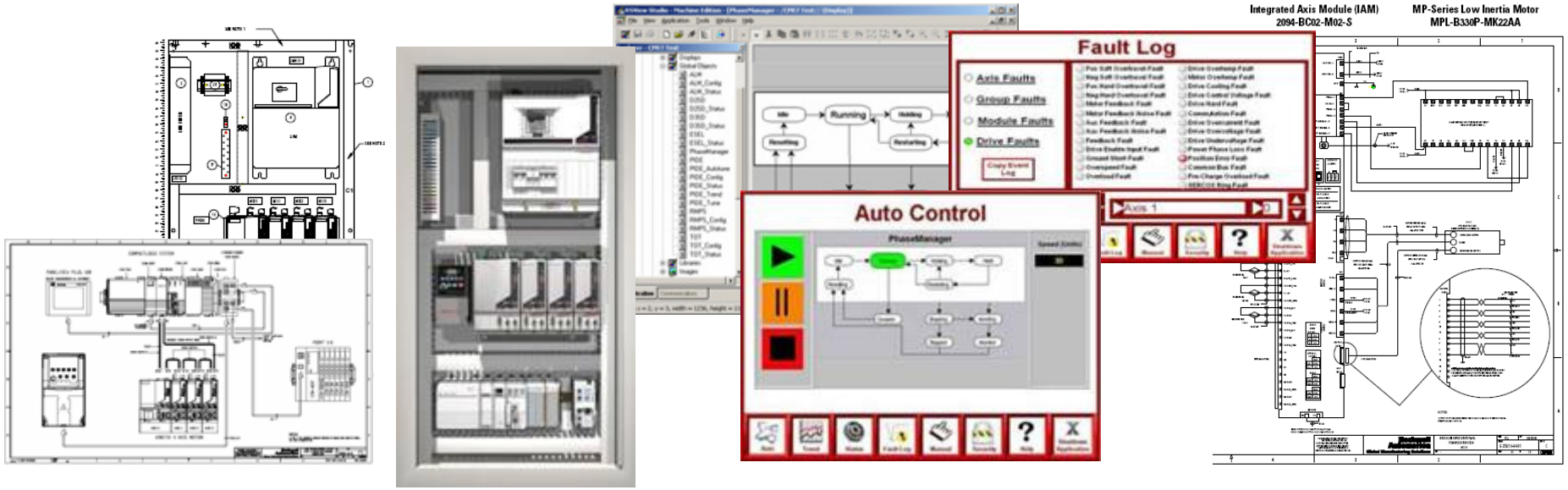




Power Programming package available on the Sample Code Website

Kinetix Accelerator Toolkit

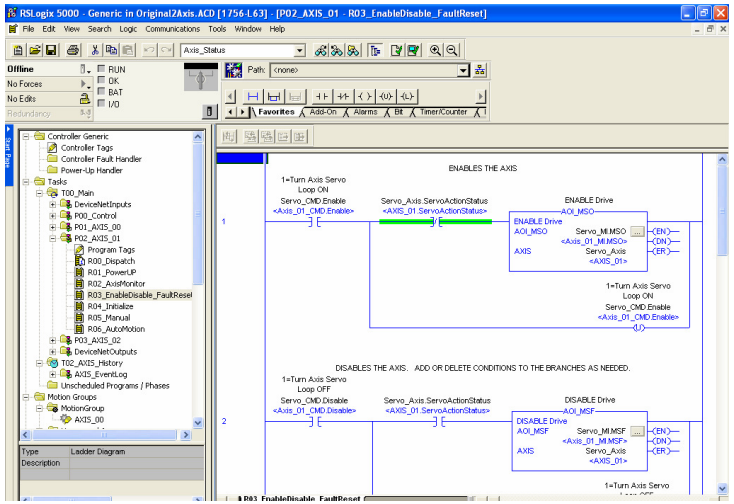
- Simplifies the design, manufacturing, start-up and support of Rockwell Automation motion control systems
  - KAT tools are documented to save up to 54% in design costs
  - Reduces support (by RA) needed to get new machine designs working
- The KAT CD provides the basic panel layout, wiring diagrams, Logix programs, HMI screens, selection tools and Quick Start literature to **speed time to market** of a new machine design.

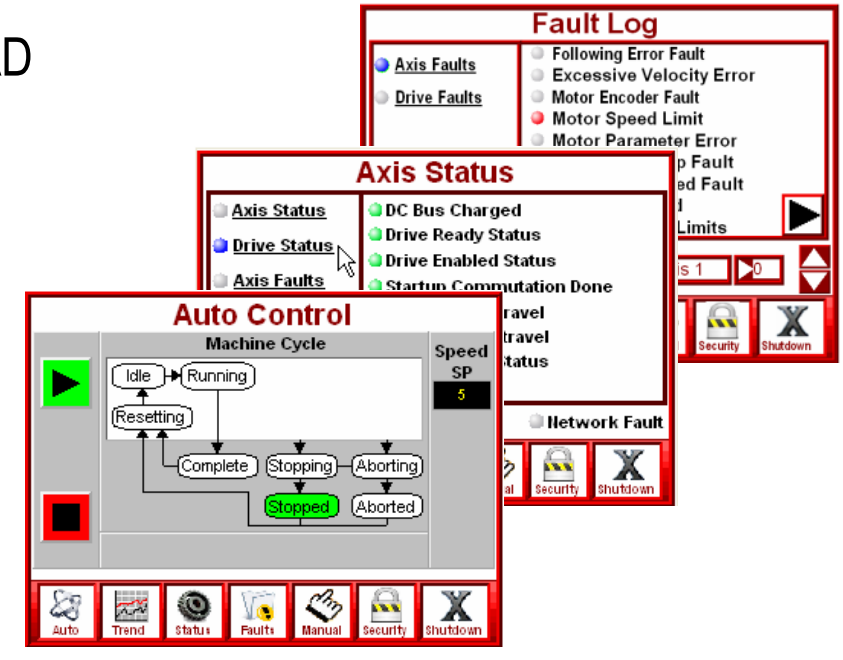


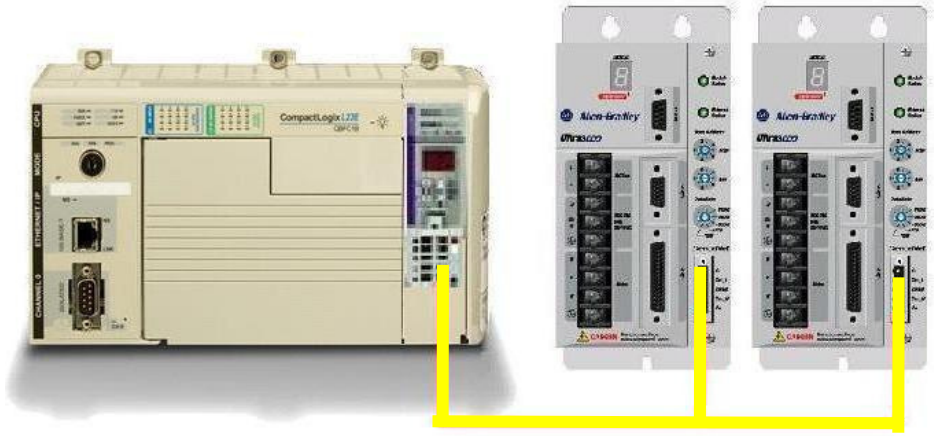
Reduce OEM engineering and integration costs
Enable OEM innovation

What's New with the KAT in Version F?

- The Kinetix Accelerator Toolkit now includes the CompactLogix Indexing Motion Accelerator
  - Support for point-to-point motion systems in L2x and L3x Controllers
  - Ultra3000i Indexing Servo Drives on DeviceNet
  - Includes ladder logic, operator screens, CAD and a Quick Start







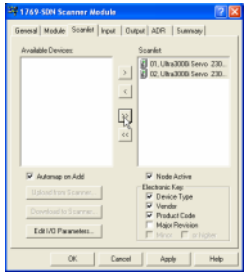
Simple Step-by-Step Setup

1. Drive Setup

Ultraware

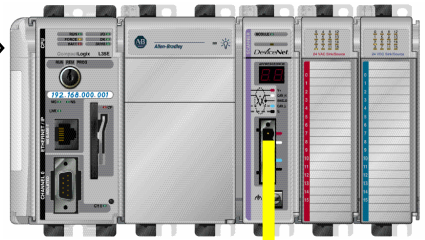
2. Network Setup

RSNetWorx for DeviceNet



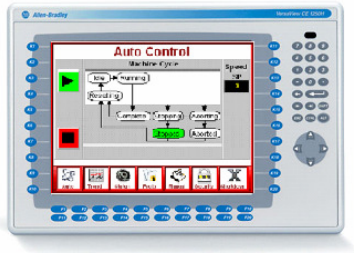
3. Logix Setup

RSLogix 5000



4. FT View ME Setup

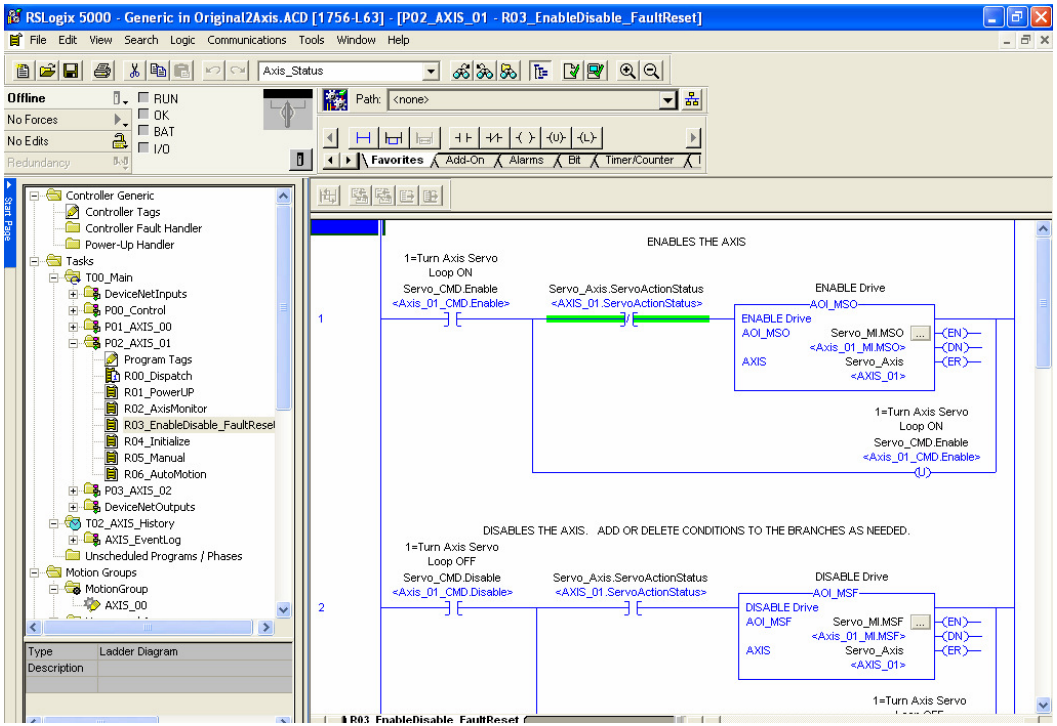
FT View Machine Edition

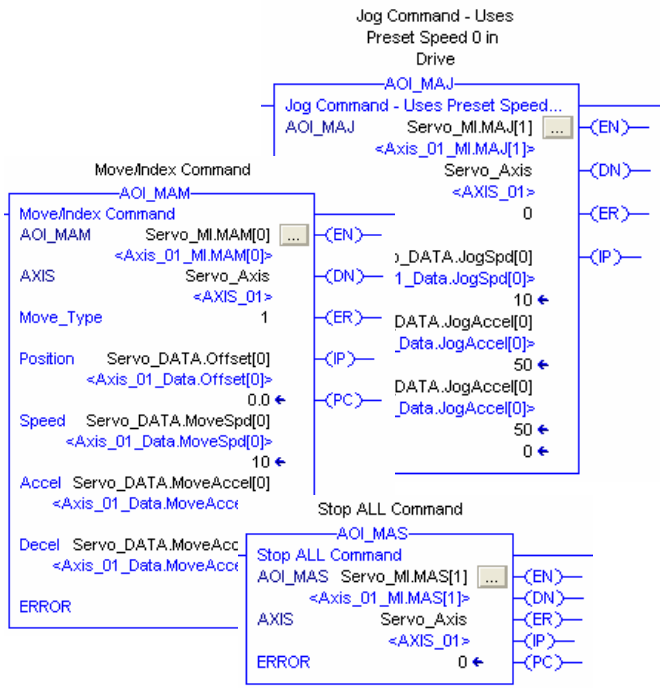


Available on the web:
http://www.rockwellautomation.com/solutions/integratedarchitecture/resources.html

What is Included in the Sample Code?

- The CompactLogix Indexing Motion Sample Code is similar to the Kinetix Sample Code:
  - Manual and Automatic routines are included (without PhaseManager)
  - The Manual routine enables drive, homes and jogs the axis
  - The Automatic routine resets faults, enables drive and runs the axis





Agenda

1. Machine Builder Performance
2. Compact Machine Solutions
3. Optimized Architectures
4. Newly released related products
5. Questions ?

The CompactLogix Family Positioning

$

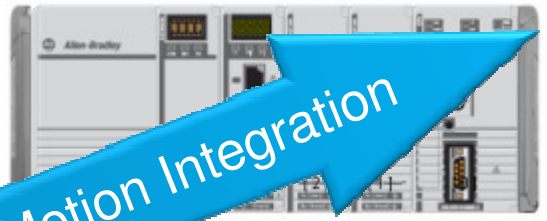
- Models:
  L23E-QB1B (Ethernet + RS232)
  L23E-QBFC1B (Ethernet + RS232)
  L23-QBFC1B (2 RS-232)
- Memory: 512Kb
- Built-in DC I/O: 16in, 16out
- Built-in Analog I/O: 4in / 2out
- Built-in Counter: (4) - 250Khz
- Expansion: (2) 1769 I/O modules or (1) communication module
- Remote I/O: Networked FLEX™ or POINT I/O™
- Comms: EtherNet/IP, DeviceNet or 3rd Party

L2x System

- Models:
  L31 (2 RS232)
  L32C & L35CR (1 ControlNet + 1 RS232)
  L32E & L35E (1 EtherNet/IP + 1 RS232)
- Memory: 512Kb – 1.5Mb
- Local I/O: 16-30 Modules up to 3 banks
- Remote I/O: Networked FLEX or POINT I/O
  Comms: EtherNet/IP, ControlNet, DeviceNet or 3rd Party

L3x System

L4x System



- Models:
  L43 (4-axis motion & 1 RS232)
  L45 (8-axis motion & 1 RS232)
- Memory: 2Mb-3Mb
- Local Exp: (2) 1768 slots available for (2) Motion, (1) Motion & (1) Network or (2) Network
- Local I/O: 16-30 Modules up to 3 banks
- Remote I/O: Networked FLEX or POINT I/O
- Comms: EtherNet/IP, ControlNet, DeviceNet or 3rd Party

Application Size, Performance, Communications, Motion Integration

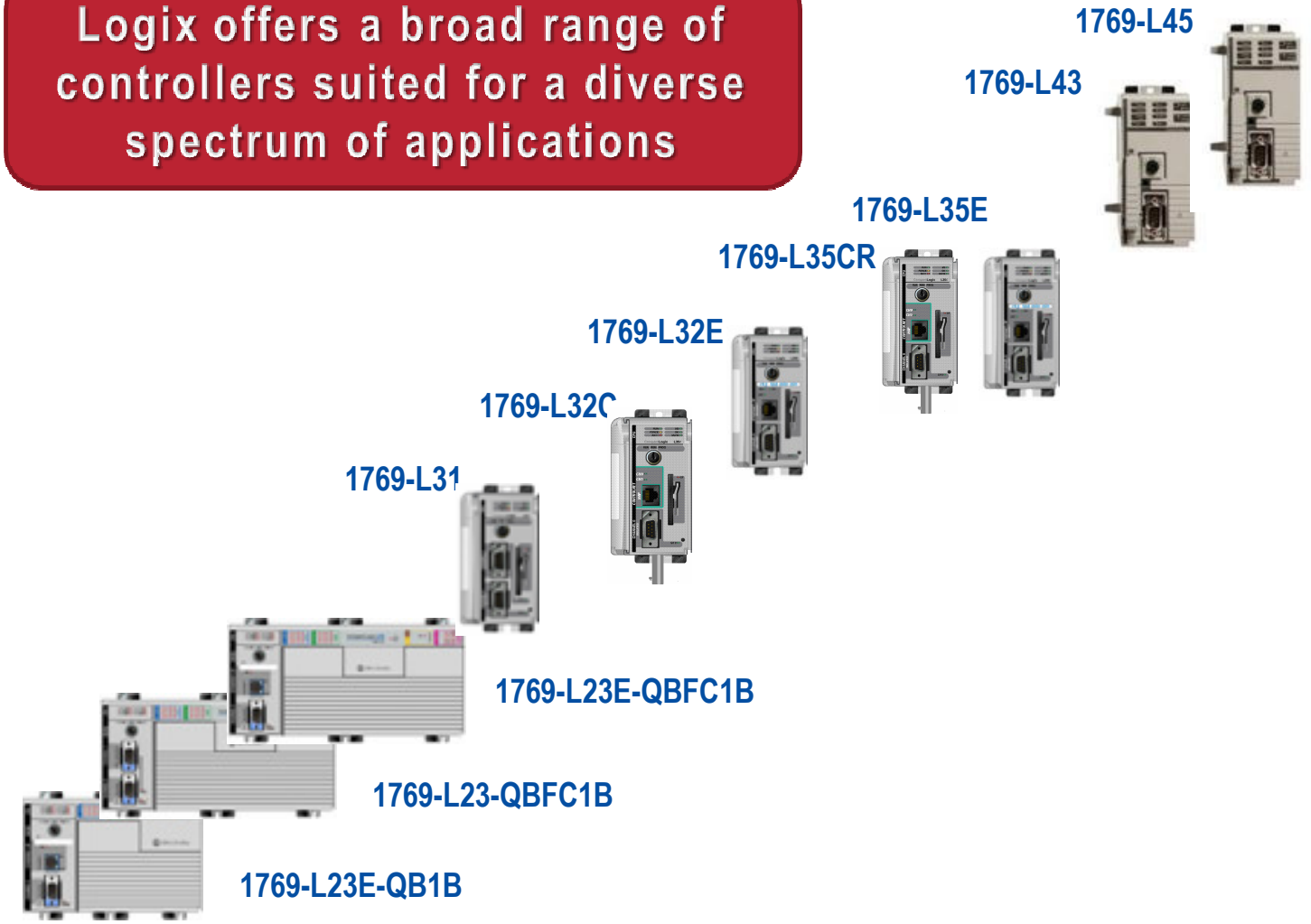
f

Stand-alone and small packaged control	Machine and general purpose control	High performance motion control

A range of controllers for simple stand-alone machines to some of the most demanding applications

Logix Controllers Offering

Logix offers a broad range of controllers suited for a diverse spectrum of applications



Value / Price

Functionality

CompactLogix Controllers

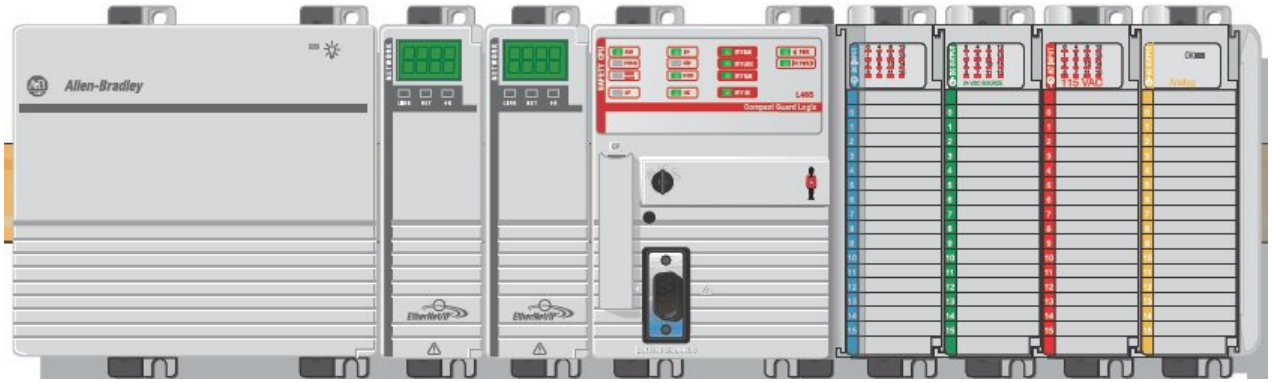
Functionality

Cat. No.	Memory	Comms	Local IO Slots	Availability
1769-L45	3Mb	EtherNet/IP. ControlNet, DeviceNet, Sercos, 3rd P	4 x 1768 & 30 x 1769	Now!
1769-L43	2Mb	EtherNet/IP. ControlNet, DeviceNet, Sercos, 3rd P	2 x 1768 & 16 x 1769	
1769-L35E	1.5Mb	EtherNet/IP, DeviceNet, 3rd P	30	
1769-L35CR	1.5Mb	ControlNet, DeviceNet, 3rd P	30	
1769-L32E	750Kb	EtherNet/IP, DeviceNet, 3rd P	16	
1769-L32C	750Kb	ControlNet, DeviceNet, 3rd P	16	
1769-L31	512Kb	Serial, DeviceNet, 3rd P	16	
1769-L23E-QBFC1B	512Kb	EtherNet/IP, DeviceNet, 3rd P	2	Now!
1769-L23-QBFC1B	512Kb	Serial, DeviceNet, 3rd P	2	Now!
1769-L23E-QB1B	512Kb	EtherNet/IP, DeviceNet, 3rd P	3	Now!

Value / Price

Compact GuardLogix – Introduced with RSLogix 5000 V18

- Integrated Safety in Logix Mid Range control platform
  - Standard functionality identical to L43 and L45 Controllers
    - Full 1oo2 safety implementation, architecturally superior over Siemens
    - Safety partner processor (LSP) is embedded and hidden from the user
    - No imposed restrictions, full language, motion, communications (Siemens can't do this)
  - Safety functionality identical to GuardLogix
    - All the same safety instructions, security, EtherNet Safety I/O, etc
  - 1768 L43S - 2M Standard, ½ M Safety
  - 1768 L45S - 3M Standard, 1M Safety
- Will use CompactBlock Guard I/O and POINT Guard I/O on Ethernet/IP
  - DeviceNet Safety limitations are due to existing 1788-EN/DN linking device
    - Next Gen EN/DN is under development and will support CIP Safety, AFS TBD.



CompactLogix, Compact GuardLogix L4x PACS

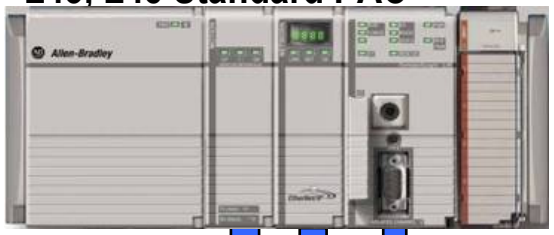
CompactLogix PAC easily handles simple to complex motion, simple to complex safety over multiple networks

- Advanced, high speed motion and communications via 1768 expansion

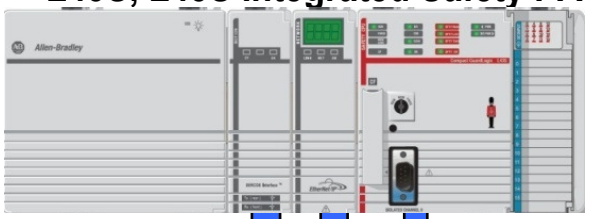
1768 backplane

1769 backplane

L43, L45 Standard PAC



L43S, L45S Integrated Safety PAC



1769 local I/O

- Up to 8 modules on the local bank
- Maximum of 3 banks for a total of 30 modules
- DeviceNet with 1769-SDN scanner

Integrated Serial port

Network modules for EtherNet/IP & ControlNet

SERCOS motion module

Modular design provides the flexibility to select the right modules to fit the application

DeviceNet™

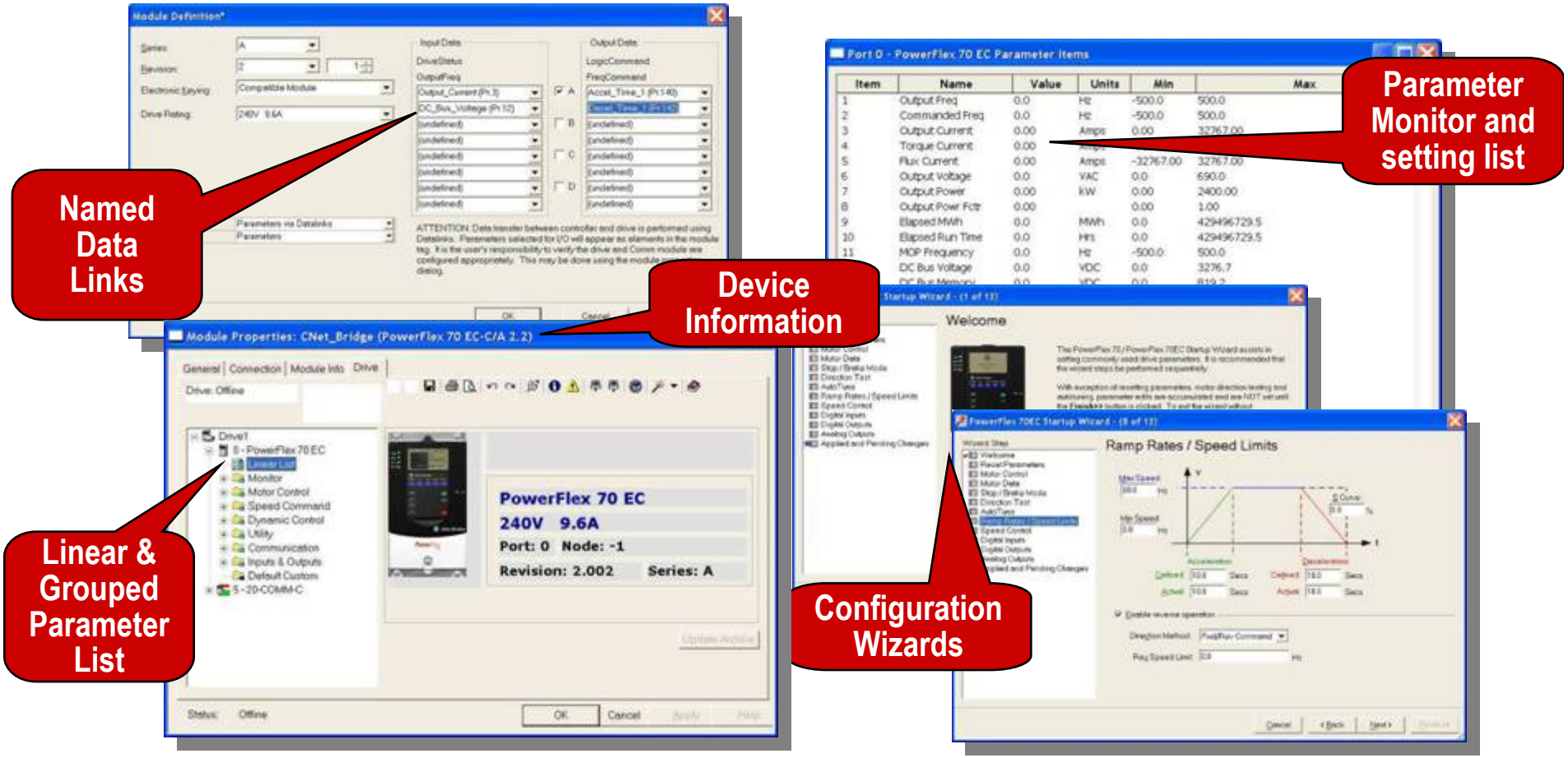
EtherNet/IP™

ControlNet International

SERCOS interface

PowerFlex Drives Premier Integration

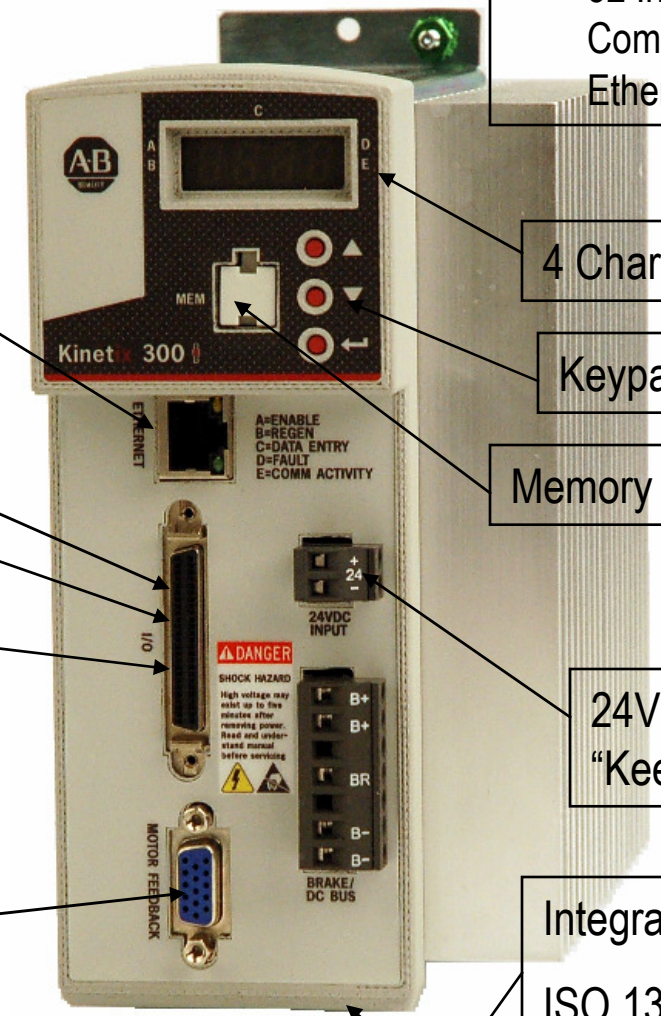
- Fully configure and program PowerFlex® Drives within the RSLogix 5000 Environment
- Drive parameters stored with the RSLogix 5000 project .acd file and controller memory = 1 FILE
- Simplifies I/O Data configuration
- Differentiates the configuration and maintenance of Rockwell Automation Drives with Logix



Kinetix 300

400W – 3kW Power Range
120/230V single phase,
230/460V 3-phase models

32 Indexes w/ S-Curve capability
Commanded Control over
Ethernet/IP



ODVA certified EtherNet/IP support

Analog and Digital I/O

Analog and PTO Control

Electronic Gearing

Absolute and Incremental
Feedback, MP and TLY motors.

Smart Motor Recognition
Technology – Plug and Play

Auto Tuning

4 Character Display

Keypad Input

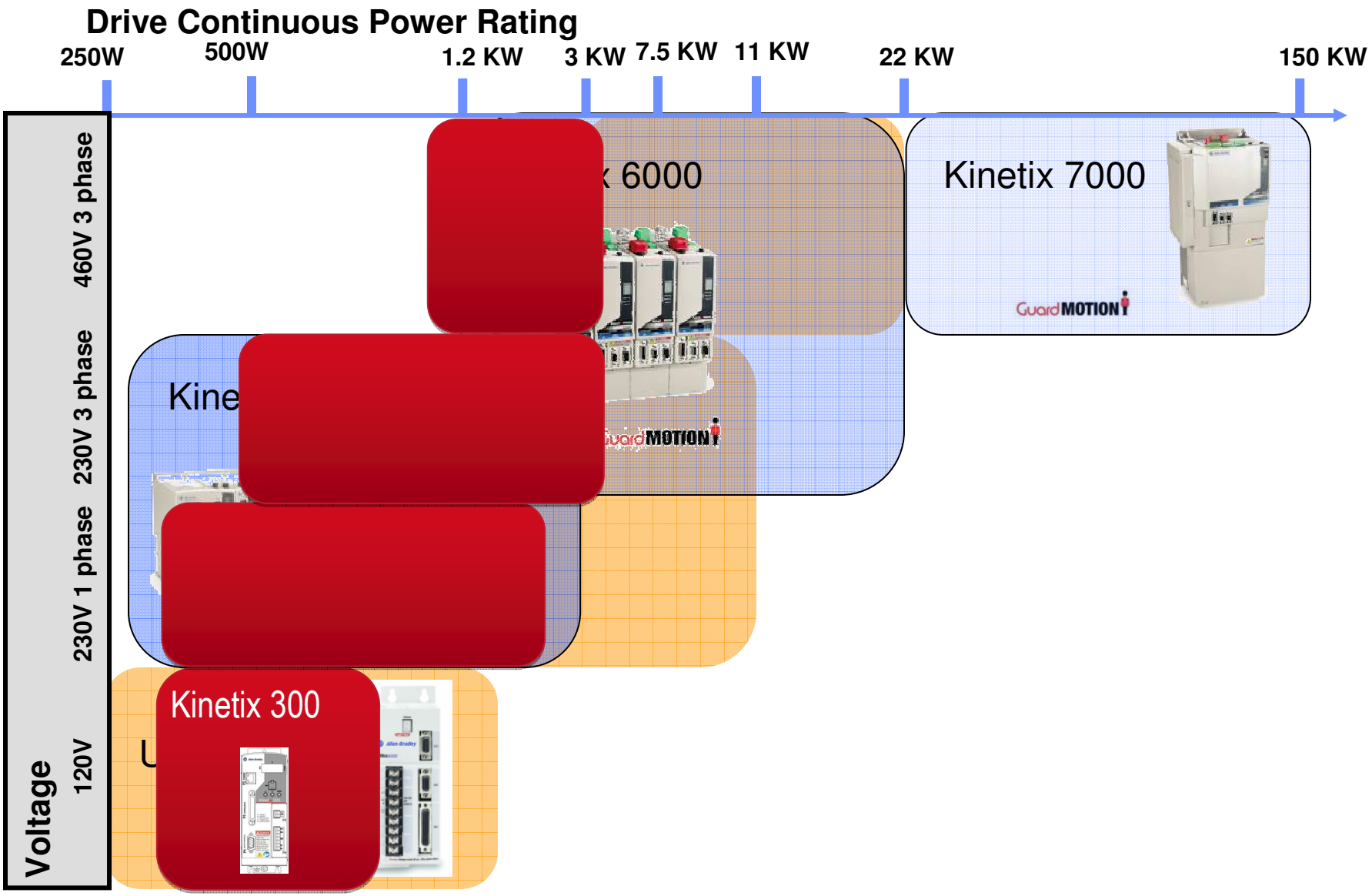
Memory Module for ADR

24V backup power for
“Keep Alive” function

Integrated Safe Torque Off

ISO 13849-1 Safety Category
3 PL d

Kinetix Family of Servo Drives



Kinetix 300 Models and Availability

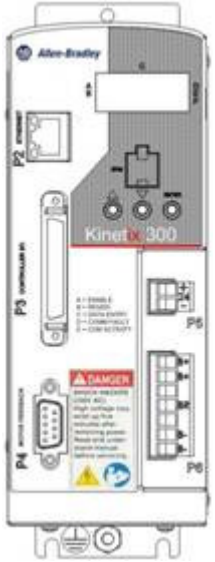
RA Catalog Number	Description	Power [kW]
2097-V31PR0	1Φ, 2A, 120/240V, No Filter (120VAC input can drive 240V motor at full speed)	0.4
2097-V31PR2	1Φ, 4A, 120/240V, No Filter (120VAC input can drive 240V motor at full speed)	0.8
2097-V32PR0	1Φ, 2A, 240V, Integral Filter	0.4
2097-V32PR2	1Φ, 4A, 240V, Integral Filter	0.8
2097-V32PR4	1Φ, 8A, 240V, Integral Filter	1.7
2097-V33PR1	1Φ 3Φ, 2A, 240V, No Filter	0.5
2097-V33PR3	1Φ 3Φ, 4A, 240V, No Filter	1.0
2097-V33PR5	1Φ 3Φ, 8A, 240V, No Filter	2.0
2097-V33PR6	1Φ 3Φ, 12A, 240V, No Filter	3.0
2097-V34PR3	3Φ, 2A, 480V, No Filter	1.0
2097-V34PR5	3Φ, 4A, 480V, No Filter	2.0
2097-V34PR6	3Φ, 6A, 480V, No Filter	3.0

CompactLogix - EtherNet/IP Operating Modes

Commanded Control

Control Connection:

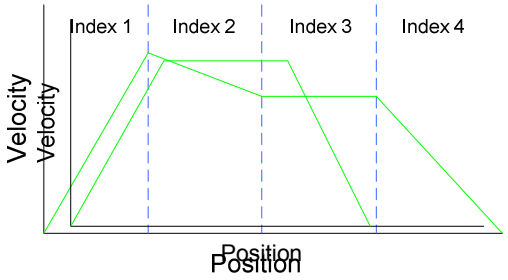
EtherNet/IP

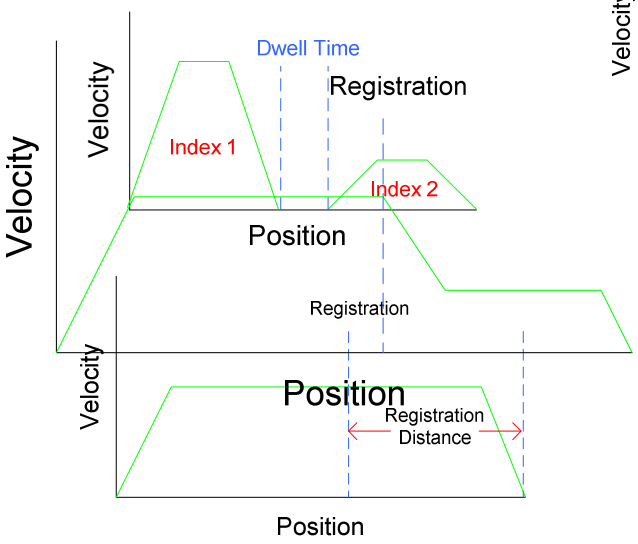


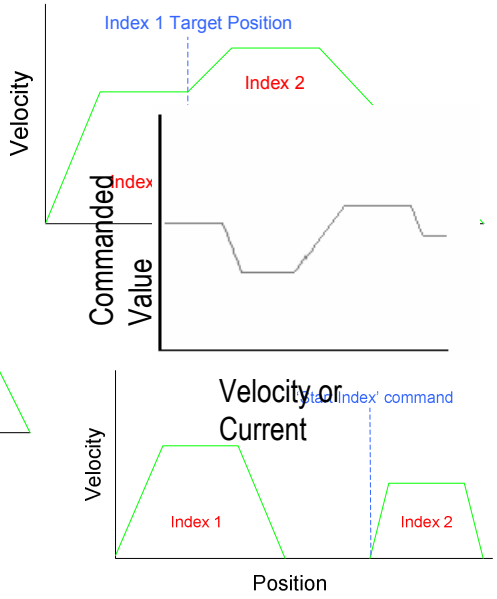
Motor Support

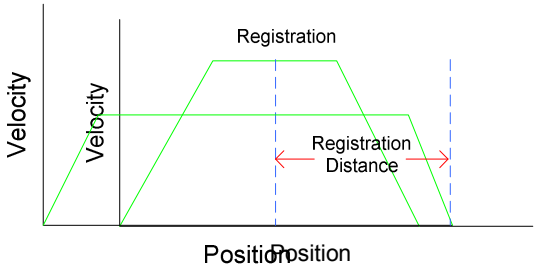
MP and TLY

Absolute and Incremental



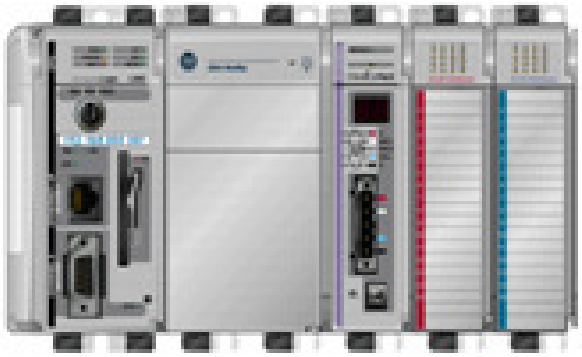


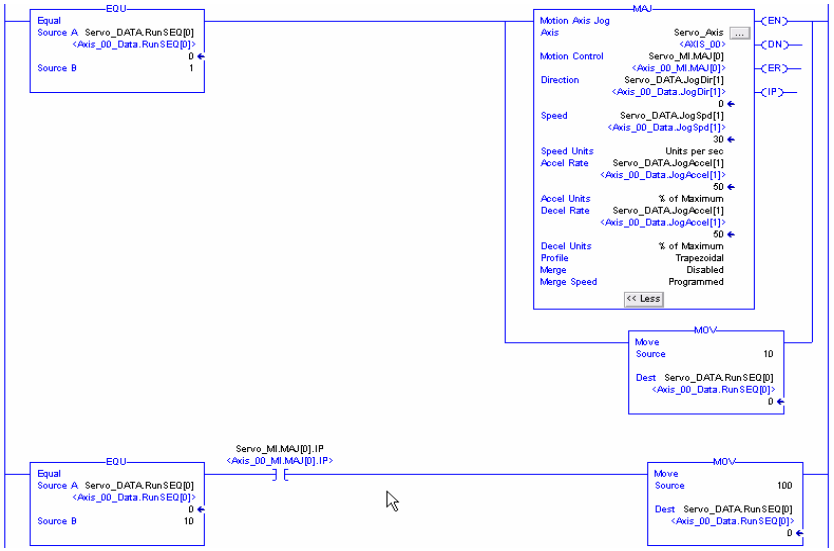




Using Logix AOIs

- For customers who are familiar with Integrated Motion Programming in Logix….
  - Rockwell is developing a set of AOIs that correlate to the existing Integrated Motion using Logix commands, so you can control the drive similar to Kinetix integrated motion servo drives such as the Kinetix 6000 or 6200. Look for these to be posted on the sample code web site sometime in Q1CY2010





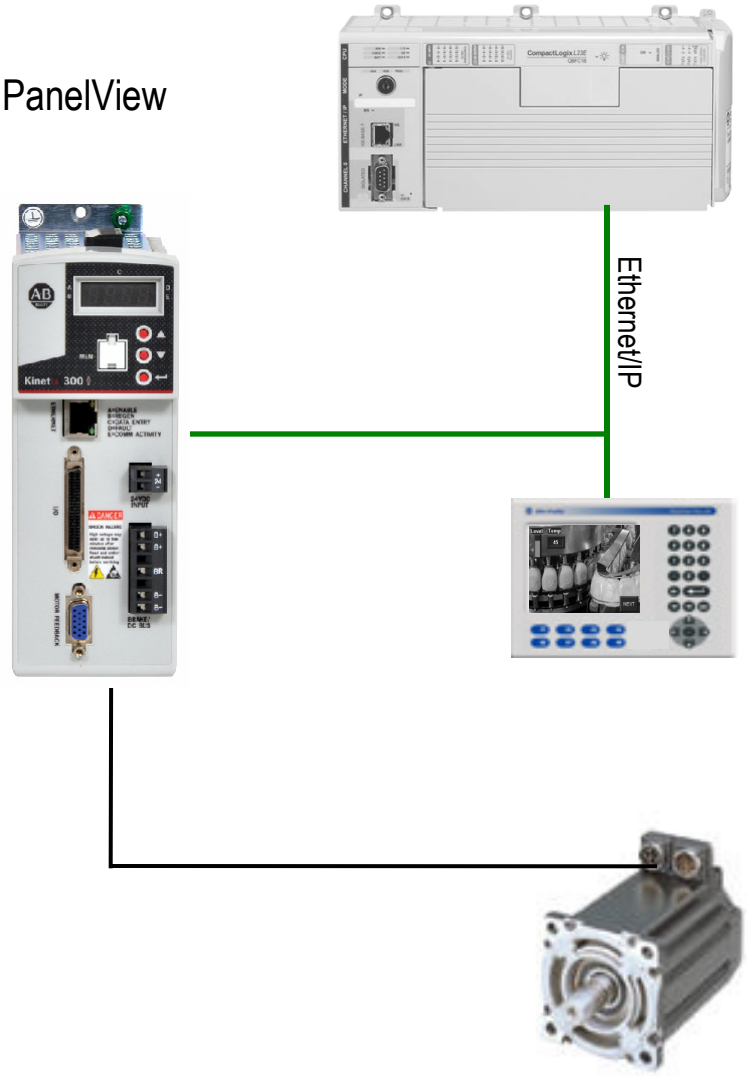
Kinetix 300 Architecture solution

Solution

CompactLogix L2x, Kinetix 300, MP-Series (MPL) motor and PanelView Plus Compact and Stratix switch

Features

- Power – 400W to 3kW
- Voltage – 120/230/460V
- Network – EtherNet/IP Class 1 Messaging
- Control – EtherNet/IP, Indexing
- Safety – Safe Off
- Motor – MP-Series (MPL)
- Feedback – High Resolution
- Configuration
  - RSLogix 5000 with Add-On-Profile
  - Kinetix 300 web browser
- Tuning – Auto tuning



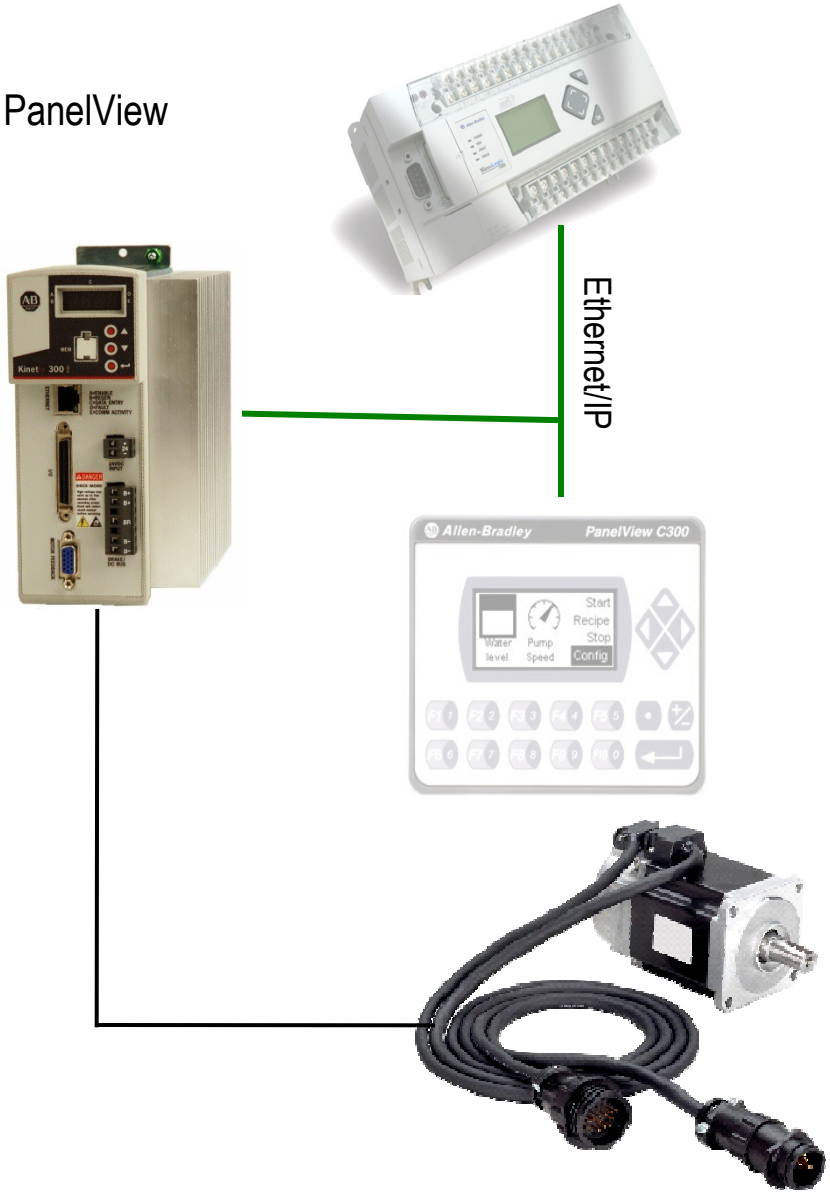
Kinetix 300 component solution

Solution

Micrologix 1400, Kinetix 300, TL-Series (TLY) motor and PanelView Component and Stratix switch

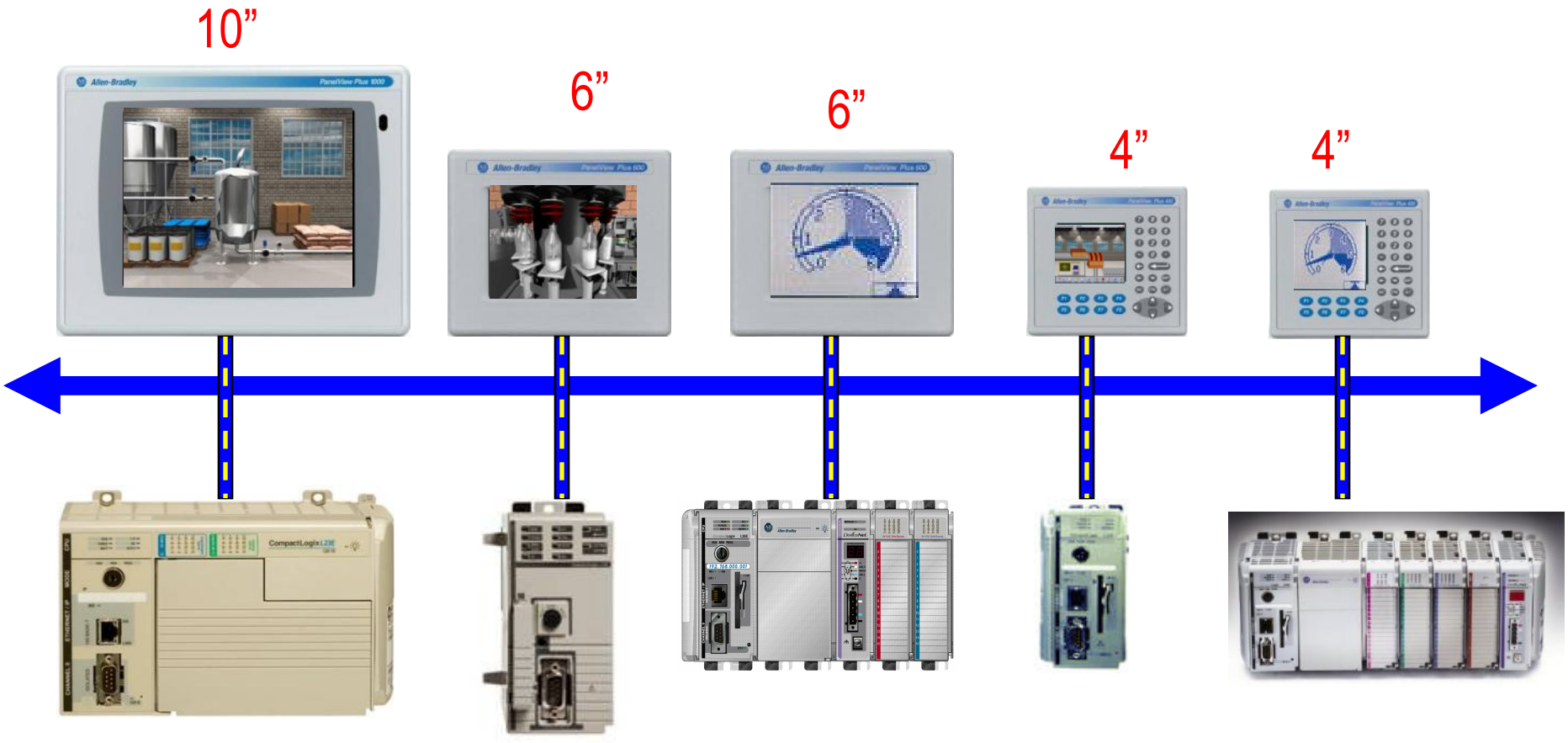
Features

- Power – 400W to 3kW
- Voltage – 120/230/460V
- Network – EtherNet/IP Class 3 Messaging
- Control – PTO, Indexing, Analog, or EtherNet/IP
- Safety – Safe Off
- Motor – TL-Series (TLY) series
- Feedback – 17 bit abs
- Configuration – RSLogix 500, Kinetix 300 web browser
- Tuning – Auto tuning



What is PanelView Plus Compact?

A selective offering of lower priced and feature PanelView Plus terminals optimized for reduced sized applications targeted for L2x and L3x controllers



PanelView Plus Compact

- Connects to a single controller
  - Single port/driver support – Linx Enterprise or KepWare
  - CompactLogix, ControlLogix or MicroLogix
- Serial and Ethernet Connections only
- Limited to 25 displays
- Limited to 200 alarms
- ViewPoint server not supported
- Aligns with FTView ME 5.1 release

Compact Machine Solutions ("CMS") Toolkit Program

The Program …. CMS Toolkit Program

- Compact Machine Solution Focus for OEM Customers
- Available to companies that provide value add services and machine solutions
- Global Program Access

Benefits

- Comprehensive set of software development tools
- eConnect Support Option (Includes software downloads)
- Additional Support Options Available: 7x24, 8-5 priority, 24x7 priority
- Access to Online Productivity Tools
- Access to Knowledge Network Virtual Learning Series

“Compact Machine Solutions” Toolkit Contents

Product	Catalog Number	Activation Key Name
[1]RSLogix 5000 Lite Edition - includes:	9324-RLD250ENE	
RSLogix 5000 Mini Edition,	9324-RLD200ENE	RS5K_200.EXE
RSLogix 5000 Multi-Language Pack (FBD, SFC, & ST)	9324-RLDMLPE	RS5K_MLP.EXE
RSLinx Lite Communications Drivers	N/A	N/A
RSLogix 5000 PhaseManager Option	9324-RLDPME	RS5K_EPH.EXE
RSLogix Micro Developer	9324-RLM0800ENE	RSMICROD.EXE
RSLogix Architect	9326LGXARCHENE	RSARCH.EXE
PicoSoft Pro	1760-PICOSOFTPRO	N/A - On CMSRevs DVD
FactoryTalk View Studio for Machine Edition	9701-VWSTMENE	RSVME.STUDIO
RSNetWorx for ControlNet, DeviceNet, and Ethernet/IP	9357-ANETL3	RSNTWCN3.EXE, RSNTWDN3.EXE, RSNTWEN3.EXE
FactoryTalk VantagePoint EMI Server (with User-Supplied MSSql) - includes FactoryTalk VantagePoint Dashboard Builder (per named user)	9521-VPBEMSRVENE	VPEMISRV.sys, VPNmUser.lmt, VPFctTlk.con, VPInSql.hst, VPOSIPI.hst, VPProf.hst, VPOpcHda.hst, VPOpcDa.rt, VPDb.con, VPOdbc.db, VPMsSql.db, VPOledb.db, VPOracle.db, VPCalc.con, VPInc.con, VPTags.con, VPStore.pgn, VPFlash.pgn, VPReport.pgn, VPTbldr.cln, VPSqlclr.cln, VPStore.inf, VPCalc.inf, VPTags.inf
FactoryTalk VantagePoint 1 Named User Client	9521-VPNL01ENE	VPNmUser.lmt
FactoryTalk VantagePoint 3rd-party Real-time Connector	9521-VPRTCENE	VPLimit.rt
FactoryTalk VantagePoint 3rd-Party Historian Connector	9521-VPHSCENE	VPLimit.hst
FactoryTalk VantagePoint Database Connector	9521-VPEMDBCENE	VPLimit.db
UltraWARE	2098-UWCPRG	N/A - On CMSRevs DVD
[1]Drive Tools SP - includes DriveExecutive & DriveObserver	9303-4DTS01ENE	N/A - On CMSRevs DVD
[1]DriveExplorer	9306-4EXP02ENE	N/A - On CMSRevs DVD
[1]A-B PanelBuilder for STD PV's	2711-ND3	N/A - On CMSRevs DVD
Connected Components Building Blocks	CC-QR001B-MU-C	N/A - On CMSRevs DVD
IntelliCENTER Software	2101A-INTLCNTR	N/A - On CMSRevs DVD
Transim (Web-based engineering tools for drive simulations)	N/A	N/A - On CMSRevs DVD
eConnect Support	9810-ECACOEMA	N/A
*PanelView Component Offline Configuration Utility	* When Available	* When Available

List Price Value is over $8000 per install

CMS Toolkit Pricing

Compact Machine Solutions (CMS) Program						
Number of Installs	RSTechED Training Seats	eConnect & Download	DirectConnect M-F 8am - 5pm	PriorityConnect M-F 8am - 5pm	DirectConnect 24x7x365	PriorityConnect 24x7x365
1	can purchase	$450	$895	$985	$1,175.00	$1,275.00
3	can purchase	$900	$1,340	$1,450	$1,775.35	$1,904.55
5	can purchase	$1,375	$1,490	$1,605	$1,865.07	$2,000.18
10	can purchase	$2,500	$2,400	$2,615	$3,059.72	$3,299.51
15	can purchase	$3,375	$3,175	$3,490	$4,111.37	$4,449.62
20	can purchase	$4,000	$3,920	$4,305	$5,085.37	$5,499.78
25	can purchase	$4,375	$4,550	$4,995	$5,889.74	$6,370.05

All prices are expressed in US dollars unless otherwise indicated. Prices and discount offers refer to the Rockwell Automation Suggested List Price and may not be inclusive of any local taxes or fees.

Program participant should contact the local Rockwell Automation Distributor or Rockwell Automation sales office for actual pricing, discount and availability information.

This information is provided for informational purposes only, and the information herein is subject to change without notice.

½-year and ¾-year price prorations at .60 and .80 - new enrollments only
Note: All Toolkits purchased require the same level of support

Agenda

1. Machine Builder Performance
2. Compact Machine Solutions
3. Optimized Architectures
4. Newly released related products
5. Questions ?

In Summary

- CMS is focused on OEMs moving from basic mechanical machines into next level machines that leverage Logix capabilities
- Information Enabled machines are the next big thing.
- Integrated motion & PowerFlex premier integration offers a unique opportunity to help OEMs understand the value of a unified architecture
- The Integrated Architecture allows for efficient, fast and flexible machines
- Understand the positioning of the different solutions and “rightsize” the offering to your customers
- PROVIDE FEEDBACK… For our continuous improvement

The Integrated Architecture offers a scalable solution that can evolve with your OEM business and machine innovations

Questions ??

Jim Taylor
484.919.0121
jjtaylor@ra.rockwell.com

(Confidential – For Internal Use Only)

Thank you for participating!

Please complete the session survey and hand it in before you leave!

(Confidential – For Internal Use Only)