

Micro 850 Overview	2080-LC50-48xxx
Embedded communication	USB, Serial, Ethernet
Basic I/O size	48 points
Max number of I/O	Up to 132
Max number of Expansion I/O	4
Motion axis (Only available in model with transistor output)	Up to 3 axis
HSC	Up to 6 embedded

Micro850 Configuration

- External Power Supply
- Embedded I/O 28 In, 20 Out, Base Analog I/O channels via plug in or expansion. Maximum Digital I/O :132, Max Expansion I/O Modules:4, 6 High Speed Counters, 3 PTO

Micro850 Performance

- Designed for larger standalone machine applications that require more I/O or higher performance analog I/O
- Number of I/O points embedded in the base 24,48 points (2085 expansion I/O's)

Micro850 Capacity

- LC50-48xxx has 10Ksteps of instructions and 20KB of data memory and supports 5 plug in I/O modules & 4 expansion modules.
- Supports Ladder Programming, Function Block Diagram, Structured Text

Panelview Component Performance

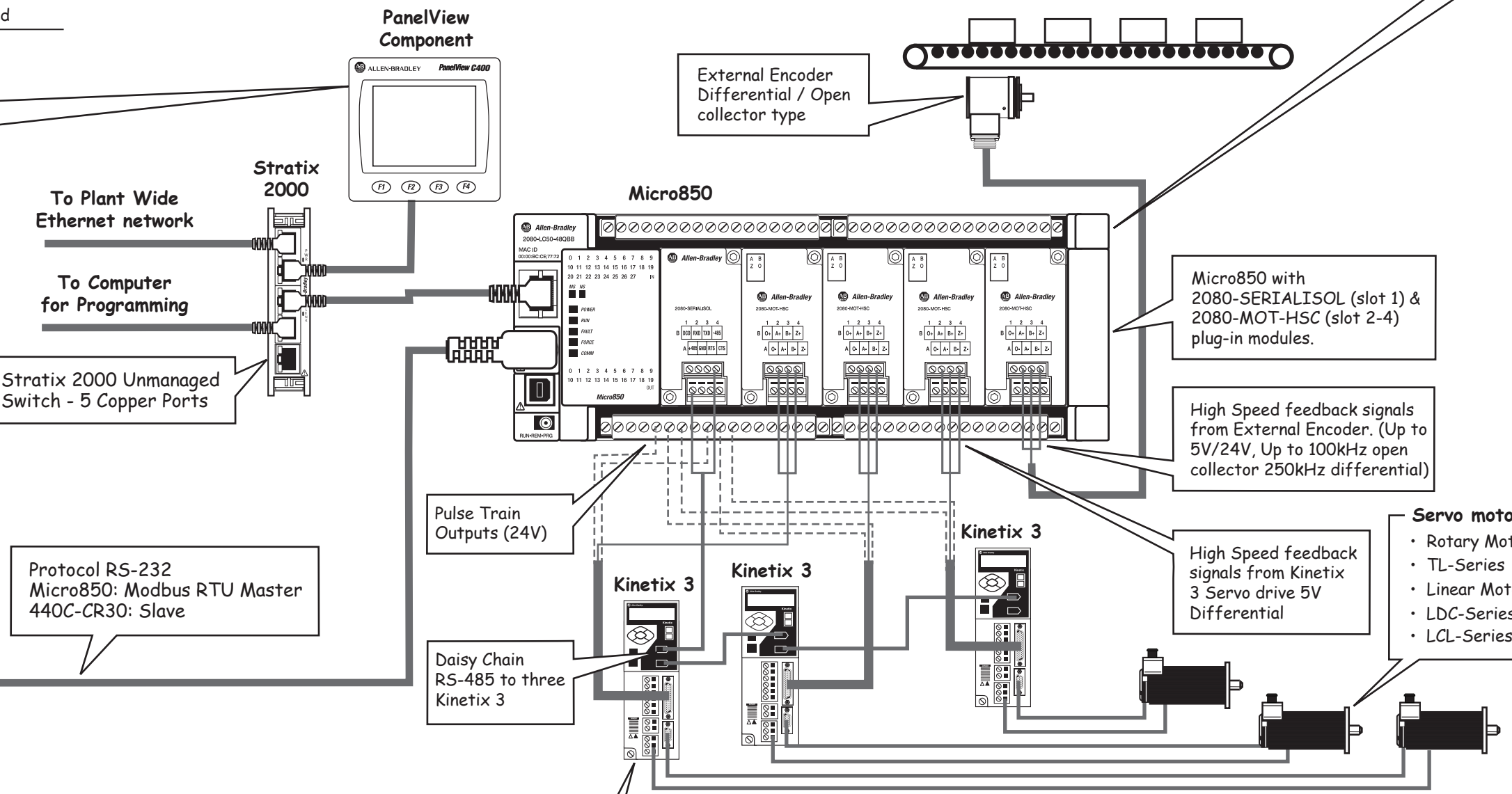
- 4.3, 5.7 ,10.7 inch Display Sizes
- Monochrome Transmissive FSTN Options/Color Transmissive TFT, Analog Touch

Panelview Component Configuration

- Optimized for compatibility with MicroLogix™, SLC™, and Micro800 controllers.
- Features include unicode language switching, alarm messages and history, and basic recipe capability
- User Interface through Web browser

Panelview Component Capacity

- Supports communication via RS-232 (DH-485), RS-232 (DF1), RS-485 and Ethernet
- Two USB ports for transferring files or updating firmware, Supports SD memory cards



Protocol RS-232
Micro850: Modbus RTU Master
440C-CR30: Slave

Pulse Train Outputs (24V)

Daisy Chain RS-485 to three Kinetix 3

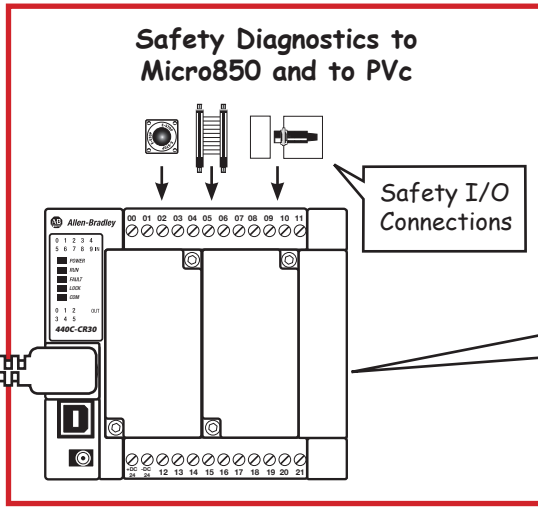
Micro850 with 2080-SERIALISOL (slot 1) & 2080-MOT-HSC (slot 2-4) plug-in modules.

High Speed feedback signals from External Encoder. (Up to 5V/24V, Up to 100kHz open collector 250kHz differential)

High Speed feedback signals from Kinetix 3 Servo drive 5V Differential

Servo motors

- Rotary Motors
- TL-Series
- Linear Motors
- LDC-Series Iron Core
- LCL-Series Ironless



440C-CR30 Safety Relay

- Compact DIN rail mount safety relay
- 22 embedded Safety I/O
- Support for 16 standard I/O via plug-ins

Kinetix 3 Configuration

- Automatic motor recognition and gain settings
- Cost-effective motion control solution for smaller, low-axis count applications
- Flexible command interfaces including digital I/O, analog, pulse train and Modbus-RTU
- Configurable with Connected Component Workbench Software

Kinetix 3 Capacity

- Input volt range of 170...264V AC single and three-phase
- Continuous power output of 0.05 W...1.5 kW
- Modbus-RTU serial communications for changing drive parameters during runtime

Kinetix 3 Performance

- CCAT contains Building blocks for indexing up to 3 axis

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



Micro800 PTO Motion Popular Configuration Drawing

Bill of Materials

Qty	Catalog #	Description
System: Controller Hardware		
1	2080-LC50-48QBB	Micro 850 Controller
1	2080- SERIALISOL	RS232/485 isolated serial port Plug in Module
3	2080-MOT-HSC	Micro800 Motion Feedback Axis plug-in Module
HMI Hardware		
1	2711C T4T	PanelView C400, touch terminal
Safety Relay Module		
1	440C-CR30-22BBB	Compact DIN rail mount safety relay designed with 22 embedded Safety I/O and support for 16 standard I/O via plug-ins
1	1761-CBL-HM02	Communication cable
Motion Hardware		
2	2071-AP1	Kinetix 3 , 2.38Amps
2	TL-A130P-BJ32AA	Servo Motor
2	2090-CFBM6DD-CCAA03	Cable,Feedback,M-Circ.Plastic.D-DB15,INCR CC ,Std,3M
2	2090-CPWM6DF-16AA03	Cable,Power,M-Circ.Plastic.D-Flying Lead,16AWG ,Std,3M
1	2090-CCMDSDS-48AA01	Serial Communication cable between K3 drive & 2080-SERIALISOL plug-in
1		Serial Communication cable between K3 drives
<p>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</p>		
System: Communication Hardware		
1	1783-US05T	Stratix 2000 Unmanaged Switch - 5 Copper Ports
4	1585J-M8TBJM-1M	Shielded Ethernet Cable
Configuration Tool Required		
1	9328-SO001-EN-C	Connected Components Workbench software

About this Configuration

This Micro 850 Controller based low cost system demonstrates the power and scalability of the Component class on an Ethernet I/P based network. This system utilizes standard Ethernet I/P technology to connect to plant wide network. This configuration also highlights Micro850 Capabilities in Connecting Safety relay, Motion control & HMI .

A key advantage of this architecture is the ability to use Connected Components Workbench a common integrated environment for programming, configuration, commissioning, and motion tools for the Kinetix 3 ,Panelview Component , and Micro 800 Controller family of products.

About the Products

Micro 850 Controllers

- The Micro850 controller is equipped with the same form factor, plug-in support, instruction/data size and motion capabilities as the 24-pt and 48-pt Micro830 controllers
- Support up to four Micro850 Expansion I/O modules, Up to a maximum of 132 I/O points (with 48-pt model)
- Designed for larger standalone machine applications that require more I/O or higher performance analog I/O than supported by Micro830.
- Structured Text, Ladder Diagram and Function Block editors that support
- Symbolic addressing
- Connected Components Workbench software is used for PLC programming, HMI, drives and safety relay configuration

Micro 850 Plug-in Module

2080-MOT-HSC

- The new Allen-Bradley Micro800 Motion Feedback Axis plug-in enhances high speed counter function to Micro800 controllers.
- With input frequency to 250 kHz, it supports both 5V differential line driver input and 24VDC input with 1 physical digital output and 15 virtual digital outputs.
- Its programmable limit switch function makes it easy for user to turn ON and OFF output based on the counter value.
- Through its motion feedback axis mode, virtual axis mode and touch probe function, the new plug-in addition provides an easy and intuitive way for users to obtain motion positioning information..

440C-CR30 Safety Relay

- Programmable Safety Relay designed for flexibility in a simple safety system
- Predefined Safety Functions provide an easy to use system that is programed and configured using CCW software
- Compact DIN rail mount designed with 22 embedded Safety I/O and support for 16 standard I/O via plug-ins in a 110mm wide package
- Built in communications for programming and HMI diagnostic display

PanelView Component

- A full line of displays ranging from 2" to 10",
- Communicate to MicroLogix, Micro800 and SLC controllers via serial (RS232 or RS422/RS485) networks on all terminals, and Ethernet on the C400, C600 and C1000 displays.
- Features include unicode language switching, alarm messages and history, and basic recipe capability
- PanelView Component software (DesignStation) is an offline programming software offering better user experience with significant DesignTime performance improvement

Kinetix 3 Servo Drives

- Single-axis solution for low-complexity motion applications, with or without a PLC
- Digital I/O, analog, preset velocity, and pulse-train command interfaces
- Performs indexing on up to 64 points through serial communication or over digital I/O
- 170...264V AC, (200V-class) single-phase or three-phase

1783 Stratix 2000™ Unmanaged Switches

- Multiple port count and fiber options are available
- Copper ports are 10/100 Mbps, full- or half-duplex
- Fiber ports are 100 Mbps, full-duplex, with an LC fiber optic connector
- Ideal Ethernet switch for small, isolated networks
- Auto negotiates speed and duplex settings
- Operates on 20V AC or 24V DC power
- Automatic cable cross-over detection

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