

Modicon® Advance Program Your Migration to the Future



Advance your legacy products to state-of-the-art Modicon hardware and software

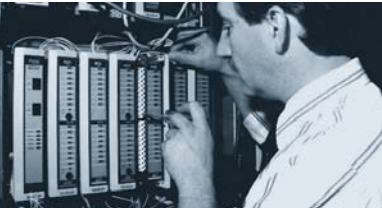
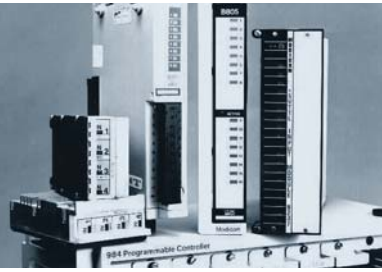


Modicon® PLC Support for Today and Tomorrow

For over 30 years, Schneider Electric has provided the most innovative automation technology to the marketplace. Our Modicon PLCs have set the standard for reliability, quality and long-lasting performance for a wide variety of applications.

Some of these manufacturing systems are becoming increasingly difficult to maintain as their electronic components age and become obsolete. Today, you are looking for cost-effective methods of preserving your hardware and programming investment while extending component life and improving your manufacturing process.

Now more than ever, Schneider Electric is supporting our installed base of Modicon customers with technical expertise, service and support to ensure that your systems are performing at optimal performance levels. As a part of our comprehensive service offering, we are introducing an innovative PLC migration program that creates a simple process to update your legacy systems based upon your specific needs and requirements.



MODICON 584



Modicon PLC Migration

Our Modicon Advance Program allows you to select the right level of upgrade required for your processors, software and I/O points, allowing you to better manage the migration process so that it fits into your scheduled maintenance downtime and budget.

Ranging from a one-step, all-inclusive migration to a phased approach, we will work with you to identify which type of upgrade is best suited for your unique situation. Your legacy Modicon platform will be updated to a new Modicon® Quantum™ processor with the option of either retaining your current 984-based ladder logic software or converting to the new IEC-based Unity™ platform. You can also, if desired, select to replace your processor, ladder logic software, current I/O and other components to create a modern Modicon process automation system. The choice is up to you.

Program Profiles

Three options are available to allow you to customize the timing and extent of your individual migration program:

• Partial Migration

A single-step upgrade of your processor to a Modicon Quantum, while retaining your current ladder logic software.

• Incremental Migration

A phased approach consisting of three simple steps to migrate your legacy platform to a new Modicon Quantum processor, convert your current ladder logic software to IEC-based Unity software, and upgrade your I/O based on whatever timeframe you choose.

• Total Migration

A complete, single-step migration to a state-of-the-art platform that consists of a Modicon Quantum processor, IEC-based Unity software, and upgraded I/O.

We can additionally provide custom service and support packages based upon your individual system needs and requirements, providing Legacy spares, maintenance programs and software training and support.

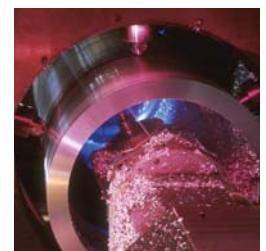
Reducing Risk and Operational Costs

There are numerous benefits of advancing to newer Modicon processors, including a lower cost of ownership, reduced maintenance, and increased reliability associated with new electronic components. Additionally, you will have better access to the latest technologies and state of the art components, better diagnostics and the potential for increased productivity.

The Modicon Advance Program is one of the many ways we pledge our dedication to improving your operational performance. No matter if you decide to migrate or maintain your current system, be sure that Schneider Electric will be there to support you.

Key Advantages of the Modicon Advance Program

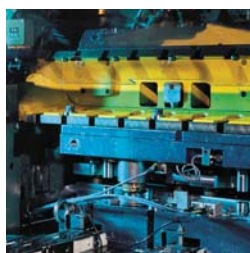
- **Increased production and efficiency**
- **Enhanced connectivity through access to multiple network options**
- **Lower repair costs**
- **Reduced downtime**
- **Improved reliability of newer electronic components**
- **Warranty coverage**



Modicon Advance Program Overview

The Modicon Advance Program provides several options that allow you to confidently migrate your automation system at your pace, updating those system components that you deem necessary for operation.

	Current Installation	Partial Migration	Incremental Migration	Total Migration
Process Overview	Legacy Modicon processor and 984 Ladder Logic software	Options for migrating processor to a more modern Quantum platform while retaining existing 984LL software long-term	Phased approach over time that migrates processor, converts software and updates I/O to a modern automation platform	One-time migration of processor, software and I/O to a modern automation platform
Number of Steps	None	1-Step	3-Steps	1-Step
Migration Outline	Maintain current processor and software	Processor is migrated to either a Quantum 140 CPU 434 12A or 140 CPU 534 14A	<p><i>Step 1 –</i> Processor is migrated to a state-of-the-art Quantum</p> <p><i>Step 2 –</i> Optionally convert 984 Ladder Logic software to universal IEC 61131-3 format by Schneider Electric Services</p> <p><i>Step 3 –</i> Update of remote I/O and wiring.</p> <p><i>Step 2 and Step 3 can be done in reverse order if desired</i></p>	Processor is migrated to a state-of-the-art Quantum, with conversion of 984 Ladder Logic software to the universal IEC 61131-3 format by Schneider Electric Services, and update of remote I/O and wiring
Process Notes	<ul style="list-style-type: none"> Indefinite costs Risk of obsolescence of electronic components Unpredictable maintenance requirements Increased potential for downtime as products age 	<ul style="list-style-type: none"> Partially addresses many legacy platform concerns: <ul style="list-style-type: none"> Improved processor reliability Availability of MRO spares Increased communication throughput and options Faster speeds Expansion opportunity Smaller initial investment 	<ul style="list-style-type: none"> Smaller initial investment (may be able to finance using maintenance budget) Manage your upgrade investment based on your schedule and budget Comprehensive solution that addresses all concerns: <ul style="list-style-type: none"> Improved processor reliability Availability of MRO spares Increased communication throughput and options Faster speeds Potential to expand functionality (e.g., add machine functions, add diagnostics) Opportunity to increase machine capacity or throughput 	<ul style="list-style-type: none"> Lower overall investment with full benefits Manage your upgrade investment based on your schedule and budget One-time installation Comprehensive solution that addresses all concerns: <ul style="list-style-type: none"> Improved processor reliability Availability of MRO spares Increased communication throughput and options Faster speeds Potential to expand functionality (e.g., add machine functions, add diagnostics) Opportunity to increase machine capacity or throughput
Comparison	<ul style="list-style-type: none"> No change to current processor and software Warranty only on <i>repaired</i> units 	<ul style="list-style-type: none"> Partial migration (maintains current 984 Ladder Logic software long-term) A more limited ROI when compared with other migration options Warranty on new product purchases 	<ul style="list-style-type: none"> Total migration (over set period of time) Higher overall investment than other migration options Requires application or process to be offline multiple times Warranty on new product purchases 	<ul style="list-style-type: none"> Total migration (one-time) Lower overall cost when compared to incremental migration option Requires application or process to be offline only once Warranty on new product purchases



Migration Examples

Our Modicon Advance Program simplifies your migration process by offering a wide range of conversion options. As the examples below illustrate, we are able to provide a variety of solutions for your installation based upon your current platform and desired migration path.

Customer Type		Migration Assumptions	Estimated Cost Projection*		Migration Benefits
Example A Partial Migration	984 Controller with 800 Series I/O You know that converting I/O is costly and since the system is keeping up with demand, you only want to make small, discrete investments to extend the life of the machine.	You have the subscription service and have kept current with software. 984 controller with three 800 series I/O drops on S908. You choose to update the processor and keep the 984-based ladder logic program and I/O drops.	Backplane	\$ 186	Immediate <ul style="list-style-type: none"> Logic and program port directly to new processor Instant access to XMIT for ASCII communication Faster CPU and logic solve Faster effective Modbus Plus® communications Quantum features a smaller form factor (more available enclosure space)
			Power Supply	\$ 493	
Quantum CPU	\$ 3,630				
RIO Head	\$ 1,232				
Total	\$ 5,541				
Example B Partial Migration	584 Controller with 200 Series I/O You want to minimize all conversion costs both in capital expenditures as well as plant downtime at each effective shutdown.	You have the subscription service and have kept current with software. 584 controller with three 200 series I/O drops on S901. The three 200 series drops have P453 power supplies. You choose to update the processor and keep the 984-based ladder logic program and I/O drops by converting the I/O network to S908 (compatible with 800 Series and Quantum I/O).	Backplane	\$ 186	Future Upgrade Options <ul style="list-style-type: none"> Can replace each drop of I/O with Quantum I/O when they need to for just the cost of the hardware Access to Transparent Ready™ offering Access to multiple fieldbus modules CPU choice allows for eventual conversion to IEC
			Power Supply	\$ 493	
Quantum CPU	\$ 7,173				
RIO Head	\$ 1,232				
J290 Kit (x3)	\$ 12,900				
Total	\$ 21,984				
Example C Incremental Migration	984 Controller with 800 Series I/O You want to take full advantage of the functional efficiencies of IEC-based programming and a truly state-of-the-art hardware platform. However, you either need to spread this investment out over several years or cannot afford to take the machine off-line for an extended period of time since it performs a critical application.	You have the subscription service and have kept current with software. 984 slot mount controller with three 800 series I/O drops on S908. Each drop of 800 series I/O can be replaced with four 32 point 140DA135300 modules. Step 1 – Processor is migrated to a state-of-the-art Quantum Step 2 – Optionally convert 984 Ladder Logic software to universal IEC 61131-3 format by Schneider Electric Services Step 3 – Update remote I/O and wiring. <i>Step 2 and Step 3 can be done in reverse order if desired</i>	Step 1		All of above plus: <ul style="list-style-type: none"> Efficient use of memory in the controller for faster throughput DFB password protection Security editor Advanced diagnostics Built-in maintenance screens and other debug features Higher I/O density Smaller form factor I/O drops
			Backplane	\$ 186	
			Power Supply	\$ 493	
			Quantum CPU	\$ 3,630	
			RIO Head	\$ 1,232	
			Total	\$ 5,541	
Step 2					
IEC Software	\$ 3,700				
Conversion of processor to IEC operating system	\$ FREE				
984LL to IEC software conversion	\$ 2,500**				
Total	\$ 6,200				
Step 3					
Backplane (x3)	\$ 558				
Power Supply (x3)	\$ 1,479				
I/O Modules (x12)	\$ 9,612				
RIO Drop (x3)	\$ 3,696				
Total	\$ 15,345				
Example D Total Migration	984 Controller with 800 Series I/O Your machine performs a critical application and you want a complete hardware and software upgrade to extend the machine's life indefinitely. You want to take full advantage of the functional efficiencies of IEC-based programming and a truly state-of-the-art hardware platform, and have allocated production downtime and budget to obtain these benefits on an accelerated schedule.	984 slot mount controller with three 800 series I/O drops on S908. Each drop of 800 series I/O can be replaced with four 32 point 140DA135300 modules.	Quantum CPU	\$ 1,435	All of above plus: <ul style="list-style-type: none"> Integration costs (not represented here) are consolidated into a 1-time project May be able to purchase a lower-end Unity processor due to more efficient IEC programming
			RIO Head	\$ 1,232	
			RIO Drop (x3)	\$ 3,696	
			IEC Software	\$ 3,700	
			984LL to IEC software conversion	\$ 2,500**	
			Backplane (x4)	\$ 744	
			Power Supply (x4)	\$ 1,972	
			I/O Modules (x12)	\$ 9,612	
			Total	\$ 24,891	

*All estimated costs outlined in these examples are based on list levels and are for comparative reference only. Prices do not include associated integration, testing and related services that may or may not apply in specific cases. Actual costs will be determined based on your specific installation and migration path. Your discounts may vary; to request a free automation system audit, please follow the instructions for the Modicon PLC Assessment Form on the back cover of this document.

**Software conversion estimate is based on a 200 network program of average complexity. Your conversion fee will vary.

Getting Started

Complimentary Automation System Audit and Assessment

Schneider Electric is offering a free automation system audit and customized migration assessment to give you the right information to be able to select the best option for migrating your legacy Modicon equipment.

To take advantage of this opportunity, please fill out the following information and fax a photocopy of the assessment form to our PLC Migration Team at 1-978-975-9541. In a short time, your local Schneider Electric sales representative will contact you to arrange the best time to meet for the free audit of your current system and in-depth review of your migration options.

Modicon PLC Assessment Form

Company Name:

Contact Name:

Address:

Phone:

Fax:

Please fill in the following information regarding your current equipment:

Processor Model (CPU) and Type:

Remote I/O Model:

Number of Discrete & Analog I/O:

Number of I/O Drops:

Number of Networks of Ladder Logic:

Production Cost Per Hour of Downtime: \$

Is this a Validated Application for Food, Beverage or Pharmaceutical industries? (Yes or No)

What specific concerns do you have regarding your current legacy Modicon automation platform?

Are you looking to better integrate or functionally expand your application? If yes, in what way?

For more information about the Modicon Advance Program, contact your local Schneider Electric sales representative, automation distributor or visit us online at <http://www.us.telemecanique.com/migrate>.

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