

# Semiconductor Manufacturer Upgrades PLC-5 to ControlLogix

With the Allen-Bradley PLC-5 product family announced as end of life, a semiconductor manufacturer looks to MAVERICK for ControlLogix code translation with minimal downtime.

## Objective

The customer was utilizing Allen-Bradley® PLC-5s to operate their facilities management system (FMS). As the PLC-5s were approaching their end of life, they needed to execute an upgrade path to ControlLogix. The factory could not afford downtime during the upgrade and needed to meet an aggressive conversion schedule of about four processors per week.

## Results

The upgrade was completed on time utilizing MAVERICK's advanced program automation, global team and sophisticated quality checks.

## Solution

The customer had more than fifty PLC-5s that required upgrading to ControlLogix.

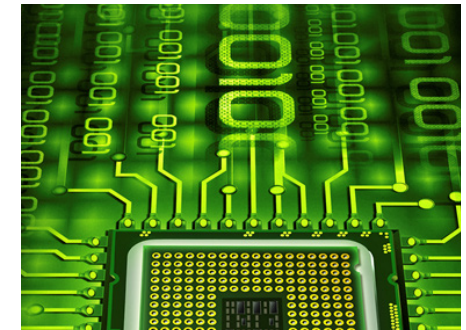
MAVERICK assembled a large, experienced, global team focused on achieving the massive workload and meeting the aggressive schedule for this project.

The MAVERICK team created comprehensive procedures for each step of the work process to ensure conversion consistency and quality.

Rockwell Automation provides a translation tool for PLC-5 to ControlLogix conversions; however, due to the advanced nature of the ControlLogix platform, this tool is not always a complete solution. In this case, the conversion tool converted less than 70% of the PLC-5 code to functional ControlLogix code. The MAVERICK team provided the additional effort to develop a complete conversion.

The MAVERICK team also superseded the rigid PLC-5 table addressing scheme with a ControlLogix tag name matching the SCADA, improving the relationship between the two for development and maintenance.

In order to utilize the higher resolution capabilities of the ControlLogix I/O, the scaling range for analog points was increased from 4095 to 30840 counts.



MAVERICK combined the information from the PLC-5s, the SCADA database and the I/O list, and created utilities to automate the conversion process in order to increase consistency across all aspects of the conversion, including automated testing of new panel hardware.

The MAVERICK team converted all peer to peer communications and I/O from DH+ to ControlNet to take advantage of the higher speed capabilities.

MAVERICK also developed custom testing code to ensure the newly converted code functionally matched the legacy PLC-5 code. This helped guarantee that each hardware conversion could be completed within a twelve-hour window allowed by operations.

Factory acceptance testing (FAT) was performed with the customer to ensure all functional requirements were met.

MAVERICK coordinated closely with the customer and the contractor responsible for the hardware conversion to maximize success of project.

### The MAVERICK Difference

MAVERICK's unique approach of automating significant portions of the conversion not only resulted in considerable cost savings, but also provided optimum accuracy and allowed for cutovers to take place flawlessly.



A Rockwell Automation Company

### MAVERICK Technologies, LLC

265 Admiral Trost Drive | Columbia, IL 62236 USA

+1.888.917.9100 | Fax +1.618.281.9191

info@mavtechglobal.com | mavtechglobal.com