Electronic Visions, Inc.

RM-23A replacement project
RM-80 Loop Simulator
RMCS Simulator

Presented by Ron Cook
Topics

- Electronic Visions Inc. (EVI) – Who we are
- RM-23A replacement project
- RM-80 Loop Simulator
- RMCS Simulator
- Conclusion
- Questions
Electronic Visions Inc. (EVI) - Who we are

- Established in September 1987
- Rockledge, Florida - Phone: 321-632-7530
- Custom software and specialized hardware design engineering for real time computing applications
- Industrial process control systems for power industry and factory automation
RM-23A replacement project

- Customer wanted a cost effective replacement
- Failure rate had increased
- Repair and maintaining is time consuming
- Made up of mainly discrete components
- Parts are old and often obsolete
RM-23A – customer’s current unit
RM-23A replacement plan

- Microprocessor based solution
- Create a new schematic
- Use today’s parts
- Write RM-23A simulation code
- Plug compatible with existing configurations
- New board manufactured
- Test, verify and validate new board
RM-23A replacement - results

- EVI’s Model 3284
- Built around an off-the-shelf embedded ARM microprocessor
- Microprocessor has as a 10-15 year life cycle
- Mounted on a single PCB that houses all switches, LEDs and LED modules
- Plug compatible for customer’s simulator configuration
- Delivered December 2017
RM-23A – front with filler panels
RM-23A – EVI’s Model 3284
RM-23A – single piece front panel
RM-23A – filler panels
RM-23A – current behind the panel
RM-23A – EVI’s behind the panel
RM-23A – EVI’s faceplate removed
EVI’s Model 3284 – RM23A replacement
RM-80 Loop Simulator

- EVI has written a low cost, simple to use RM-80 Loop Simulator
- Developed in 2013 to perform factory acceptance testing at FPL’s St. Lucie facility
- Updated in 2015 for factory acceptance testing at Wolf Creek facility
- Allows for EVIs’ RMCS software to be tested and demonstrated
- Simulates the RM-80 loop configuration for up to 5 loops and up to 31 RM-80s per loop
- Performs all RMCS related RM-80 functions
- Allows manipulation of Channel and Monitor items to generate alarm conditions
- Performs on/off capability for Purge, Pump, Filter and Check Source
RMCS Simulator

- EVI has also written and offers an RMCS Simulator
- Can be used from desktop, laptop or tablet
- Provides tools and information to test, verify and validate updates/changes before implementing into plant system
- Excellent tool for I&C training on the RMCS system
Conclusion

Electronic Visions Inc. provides complete system integration through custom software and hardware design engineering
Questions will be addressed by:
Harry ‘Butch’ Young
President

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