Application Note

*Redundancy & Backup Solutions*

- 2500 Series™ includes solutions for redundancy of
  - Power supplies (2512-A)
  - Remote base controllers (2500-RIO-A)
  - CPUs (2541)

- Examples follow
Product Spotlight

*Redundancy & Backup Solutions – Remote Bases*

- Redundant RBC
- Redundant power
- Redundant power & redundant RBCs
Product Spotlight
Redundancy & Backup Solutions – Processors

- Redundant power with one CPU
- Redundant power & redundant CPUs using 2541 (note no local I/O is allowed)

To remote bases
Product Spotlight
Redundancy & Backup Solutions – Processors

• Redundant power & redundant CPUs using 2541 and multiple bases

To remote bases
Product Spotlight

**CPU Redundancy**

2541 Redundant Processor Manager

- Allow use of two 2500 Series™ CPUs in a redundant backup configuration
- I/O is connected to the control PLC using relay contacts
- Both PLCs see the inputs all the time
- 2541 monitors both PLCs and switches the I/O to the backup PLC in case of fault
- Critical data is written to the backup PLC
- No change in outputs when switching from primary to backup
Backup CPU with Redundant RBCs

Using independent cables to RBCs

Must be very short < 0.5m