



# Technical Seminar Series

*Be Smart — Choose the Right Part*

**Welcome to “Keep Current! Learn more about High Power Connectors and Connection Systems.”**



**Join Amphenol, FCI, and Molex as they discuss their latest technologies in high power connector solutions and mixed power and signal connectors.**

**Sept. 26, 2006**



# Technical Seminar Series

*Be Smart — Choose the Right Part*

Welcome – Lew LaFornara, TTI, Inc.

## Technology Line-Up

### **Bishop & Associates, Inc.**

- Bob Hult

### **Amphenol**

- Steve Fitzgerald

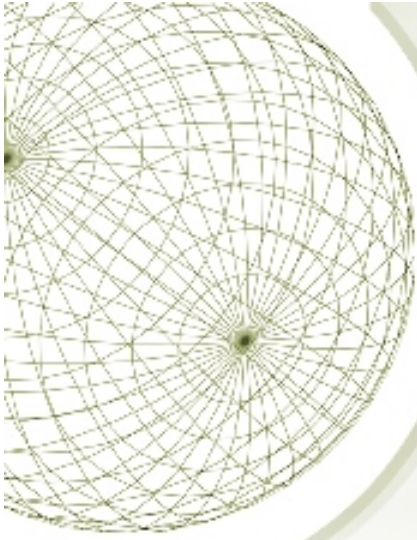
### **FCI**

- Scott Kleinle

### **Molex**

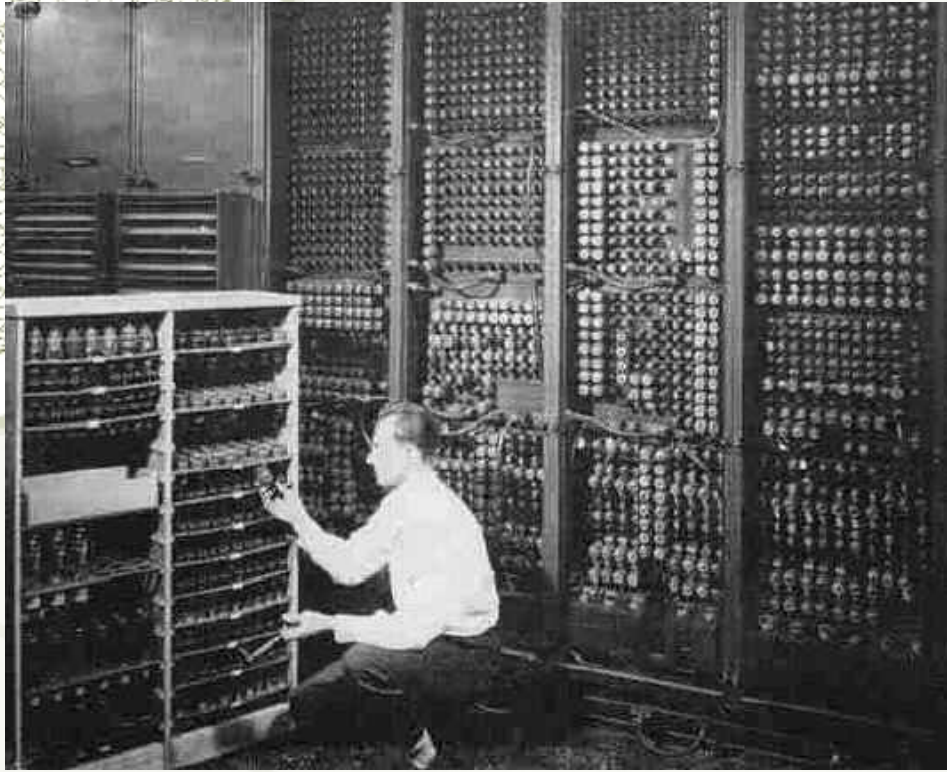
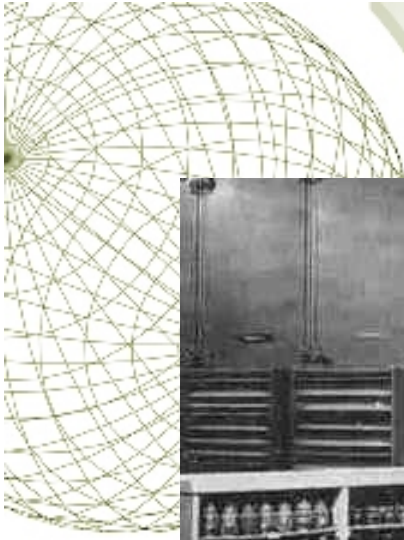
- Mike Bean

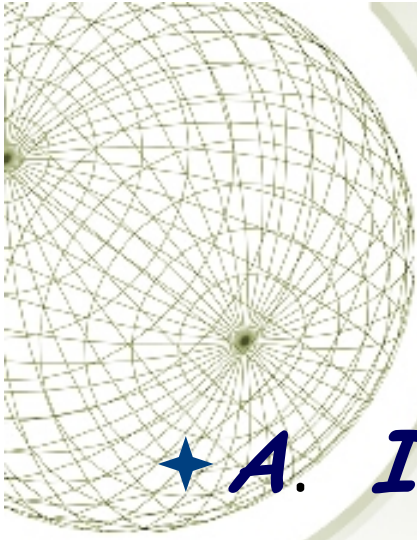
## Q&A



# *Power Connectors*

*Bob Hult  
Director of Product Technology  
Bishop & Associates Inc.*





# *Design Considerations*

- ★ *A. Increasing power demands*
- ★ *B. Greater system packaging density*
- ★ *C. Distribution system*
- ★ *D. Thermal management*
- ★ *E. Reduced design cycle time*
- ★ *F. Cost reduction*

# *Server Farm*





# *Power Connector Criteria*

- ★ *A. Contact resistance / Change*
- ★ *B. Power / Voltage Rating*
  - ★ *1. Acceptable "T" rise*
  - ★ *2. Ambient temperature*
  - ★ *3. # of contacts energized*
  - ★ *4. Contact termination*



# *Additional Factors*

- 1. Mating / unmating forces*
- 2. Durability*
- 3. Low inductance*
- 4. Environmental exposure*
- 5. Airflow blockage*
- 6. Compatibility with other connectors*
- 7. Blind rack and panel mating*
- 8. Manufacturability*
- 9. Industry standard support*



# *Power Connector Evolution*

- ★ *Improved contact materials*
  - ★ *Base metal*
  - ★ *Plating*
- ★ *Stamped and formed vs. screw machined*
- ★ *Multiple points of contact*
- ★ *Designed for hot plugability*
- ★ *Modular design*
- ★ *Commodity vs. custom connectors*