# Advanced Embedded Passives Technology Consortium

## Wrap Up
## Key Lessons Learned

*Larry Marcanti - Nortel Networks*


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# Objectives of the AEPT program

- Meet the need of the microelectronics industry for more dense, higher performance products with proven embedded passives technology
- Provide usable, cost-effective solutions for large format circuit boards—solutions that demonstrate high-manufacturing yield
- Provide cost modeling and process design tools easily usable by product designers
- Reduce the system cost of resistors by 50% compared to SMT chip resistors.

# *Significant Developments* of the AEPT program

- **Development of new materials enabling the embedding of the capacitors and resistors within the organic substrate**
- **Development of the substrate fabrication process using the new resistor and capac-itor materials in large format applications**
- **Development of new equipment to trim up or down resistor values to meet design specifications**

# *Significant Developments* of the AEPT program *(cont.)*

- **Development of new NN electromagnetic modeling tool to assist in and accelerate the design simulation process**
- **New process cost modeling decision tools to assist in product design decisions for cost, size and performance**
- **Offerings of new materials that allow PCBs to become smaller, and to operate at higher speeds with increased functionality.**