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## Where do the Politicians Stand on Technology Issues?

Gary Breed  
Editorial Director



At first, I had a hard time deciding what to write about this month. Then, while watching the news about the earliest-starting presidential campaign, I decided to see what the candidates had to say about issues related to technology—telecommunications policy, science and engineering education, research support, etc.

With the emergence of candidates' Web pages as a key information source in all political campaigns, that's where I went to find out their views. I assumed that these well-organized political campaigns would have comprehensive information on a wide range of issues, not just the "hot button" items constantly mentioned in campaign speeches.

I was wrong.

A candidates' position on any issue is usually condensed into a paragraph, although one or two "signature" issues may have more depth and detail. If they have anything at all to say related to technology, it's usually a broad statement like: "We need to support development of alternative energy sources to cut our dependence on foreign oil while improving the health of the environment and slowing global warming."

OK, I understand the dominance of big issues like healthcare costs and the financial and political implications of Iraq. And I appreciate that it's early in the race, with the first primaries and caucuses months away. However, the race *is* underway and the candidates should be impressing us with some substance behind the sound bites ... but in the absence of any real information from the candidates, I'll suggest a few questions on subjects I think they should eventually address:

### Technology in Education

What will you do to encourage students to dig deeper into science and mathematics—at all levels of education from elementary school through college? Also, please identify how there will be sufficient resources to carry out that plan.

### Foreign Students

Where do you stand on foreign university students in science and engineering? Should they be encouraged to come to the U.S. for their advanced

education, or should there be limitations and conditions? Why?

### **Research**

What is your overall commitment to Federal research funding? What are your priorities for areas of research that warrant Federal support? What is your plan to assure fair and balanced evaluation of research proposals?

### **Regulation**

What do you believe is the Federal Communications Commission's appropriate role, i.e., regulatory only or technological management—and how much technical capability should be available within the agency? Will you appoint at least one technologist (scientist or engineer) to the Commission? If not, why not?

### **Future of Telecommunications**

Do you have a telecommunications policy that will help manage the regulatory and social changes brought about by the wireless revolution as well as convergence of wired and wireless delivery systems? How does the Federal government's role as representative of all citizens balance with marketplace forces that are driven mainly by large telecommunications companies?

It may take until next summer to find some answers. These issues will certainly be addressed when the official platforms of the major political parties are finalized at their conventions.

I hope you will be watching with me to see what all politicians—at the local, state and national level—have to say about the things that

directly affect our working lives. Then we can add that information to the other things we care about when selecting which candidate to vote for.

### **Inside This Issue**

OK, enough politics! In this issue, we cover a wide variety of topics—handset design, microwave circuits, measurements, RFIC/MMIC design, and even a bit of history (see the Design Ideas column). Technical depth ranges from basic tutorial to the latest design techniques, with practical methods included as well.

Along with our usual mix of new product coverage, industry news and upcoming events, we hope these articles solve at least one problem or answer one question that helps you deal with the design you are working on *today*.