

WHAT IS CLAIMED IS:

1. An apparatus comprising:
a control circuit comprising a supply sense circuit configured to sense variations between a power supply to ground potential and to generate a control signal in response to the variation;
a variable impedance circuit coupled to the control circuit and a signal distribution network, the impedance level of the variable impedance circuit adjusted in response to the control signal.
2. The apparatus of claim 1, further comprising a bias circuit configured to generate a potential that is combined with the control signal to set the control signal to a desired nominal operating range.
3. The apparatus of claim 1, wherein the variable impedance circuit comprises a variable capacitor.
4. The apparatus of claim 1, wherein the variable impedance circuit comprises a capacitor in series with a transistor.
5. The apparatus of claim 4, wherein the transistor is configured as a switch, and is switched on and off in response to the control signal.
6. The apparatus of claim 4, wherein the transistor is configured as a variable resistor, and the resistance is varied in response to the control signal.
7. The apparatus of claim 1, wherein the variable impedance circuit comprises a plurality of capacitor transistor branches connected in parallel to the signal distribution network.
8. The apparatus of claim 7, wherein the transistors are configured as switches and selected ones of the transistors are switched on to obtain a desired impedance.
9. The apparatus of claim 1, wherein the signal distribution network comprises a Serialized/Deserialized (SerDes) data transmission network.
10. The apparatus of claim 1, wherein the signal distribution network comprises a clock distribution network.
11. An apparatus comprising:
a driver coupled to a signal distribution network, the driver connected to a power supply and ground;

- a control circuit configured to sense a variation in the supply to ground potential and to generate a control signal in response to the variation;
- a variable impedance circuit coupled to the signal distribution network, the impedance of the variable impedance network varied in response to the control signal.
12. The apparatus of claim 11, wherein the variable impedance circuit comprises a variable capacitor.
13. The apparatus of claim 11, wherein the variable impedance circuit comprises a capacitor in series with a transistor.
14. The apparatus of claim 13, wherein the transistor is controlled in response to the control signal to produce a variable resistance.
15. An apparatus comprising:
- a receiver coupled to a signal distribution network, the receiver connected to a power supply and ground;
- a control circuit configured to sense a variation in the power supply to ground potential and to generate a control signal in response to the variation;
- a variable impedance circuit coupled to the signal distribution network, the impedance of the variable impedance network varied in response to the control signal.
16. The apparatus of claim 15, wherein the variable impedance circuit comprises a variable capacitor.
17. The apparatus of claim 15, wherein the variable impedance circuit comprises a capacitor in series with a transistor.
18. The apparatus of claim 17, wherein the transistor is controlled in response to the control signal to produce a variable resistance.
19. A method of compensating for delays introduced in a signal distribution network by variations in supply to ground potential, the method comprising:
- sensing variations between a supply to ground potential;
- generating a control signal based at least in part on the variations; and
- adjusting a variable impedance coupled to the signal distribution network in response to the control signal.
20. An apparatus comprising:
- means for sensing variations between a supply to ground potential;
- means for generating a control signal based at least in part on the variations; and

means for adjusting a variable impedance coupled to a signal distribution network in response to the control signal.