CLAIMS

1. A resistor-capacitor (RC) circuit comprising: a plurality of leads in a first metal layer adjacent a semiconductor die, wherein the plurality of leads are configured into a metal layer resistor and configured into a metal layer capacitor that is coupled to the metal layer resistor, and wherein the plurality of leads have the same width; and wherein the plurality of leads includes a plurality of longitudinally-extending leads, a first set of longitudinally-extending fingers, and a second set of longitudinally-extending fingers; the metal layer resistor including the plurality of longitudinally-extending leads, the plurality of longitudinally-extending leads being arranged in parallel according to a first gap between neighboring ones of the longitudinally-extending leads and coupled to each other; and the metal layer capacitor including the first set of longitudinally-extending fingers and the second set of longitudinally-extending fingers, wherein the first set of longitudinally-extending fingers are interdigitated with the second set of longitudinally-extending fingers according to an interdigitation gap, and wherein the interdigitation gap equals the first gap.

2. The RC circuit of claim 1, wherein the metal layer resistor includes a plurality of laterally-extending connectors configured to couple together the longitudinally-extending leads.

3. The RC circuit of claim 1, wherein the metal layer resistor is connected in series with the metal layer capacitor.

4. The RC circuit of claim 1, wherein the metal layer resistor is connected in parallel with the metal layer capacitor.

5. The RC circuit of claim 1, wherein the metal layer resistor further includes a plurality of longitudinally-extending leads arranged in parallel in a second metal layer adjacent the semiconductor die according to the first gap between neighboring ones of the longitudinally-extending leads in the second metal layer.

6. The RC circuit of claim 1, wherein the metal layer capacitor further includes a first set of longitudinally-extending fingers in a second metal layer adjacent the semiconductor die, wherein the first set of longitudinally-extending fingers in the second metal layer are interdigitated according to the interdigitation gap with a second set of longitudinally-extending fingers in the second metal layer.

7. The RC circuit of claim 1 wherein each longitudinally-extending lead extends across a first length, and wherein each longitudinally-extending finger extends across the first length.

8. The RC circuit of claim 1, wherein the first metal layer is an aluminum metal layer.

9. The RC circuit of claim 1, wherein the first metal layer is a copper metal layer.

10. The RC circuit of claim 1, wherein the semiconductor die includes active circuitry configured to drive an input signal through a first via into a first end of the metal layer resistor and to receive an output signal at a circuit node through a second via at a second end of the metal layer resistor.

11. The RC circuit of claim 10, wherein the circuit node is connected to the first set of longitudinally-extending fingers through a third via, and wherein the active circuitry includes a ground node connected to the second set of longitudinally-extending fingers through a fourth via.

12. A resistor-capacitor (RC) circuit, comprising: a metal layer resistor in a first metal layer adjacent a semiconductor die, the metal layer resistor including a plurality of longitudinally-extending leads each having a first width and separated by a first gap equaling the first width; and a metal layer capacitor in the first metal layer including at least a pair of longitudinally-extending fingers interdigitated according to the first gap with at least at least one opposing longitudinally-extending finger, wherein each longitudinally-extending finger has the first width.

13. The RC circuit of claim 12, wherein the metal layer resistor is coupled in series with the metal layer capacitor.

14. The RC circuit of claim 12, wherein the metal layer resistor is coupled in parallel with the metal layer capacitor.