

What is claimed is:

1. A standard cell circuit, comprising:
 - a first high aspect ratio voltage rail extending along a first longitudinal axis in a first direction, the first high aspect ratio voltage rail having a height-to-width ratio greater than 1.0 and configured to receive a first supply voltage;
 - a second high aspect ratio voltage rail extending along a second longitudinal axis in the first direction substantially parallel to the first high aspect ratio voltage rail, the second high aspect ratio voltage rail having a height-to-width ratio greater than 1.0; and
 - a circuit device electrically coupled to the first high aspect ratio voltage rail and the second high aspect ratio voltage rail, wherein a voltage differential between the first high aspect ratio voltage rail and the second high aspect ratio voltage rail provides power to the circuit device.
2. The standard cell circuit of claim 1, further comprising one or more metal lines extending along one or more corresponding longitudinal axes different from the first longitudinal axis and the second longitudinal axis in the first direction substantially parallel to the first high aspect ratio voltage rail and the second high aspect ratio voltage rail, wherein:
 - each metal line of the one or more metal lines has a width approximately equal to a critical dimension of a process technology of the standard cell circuit;
 - the first high aspect ratio voltage rail has a width between approximately two (2) and three (3) times the width of each metal line of the one or more metal lines; and
 - the second high aspect ratio voltage rail has a width approximately between two (2) and three (3) times the width of each metal line of the one or more metal lines.

3. The standard cell circuit of claim 2, wherein:
the height-to-width ratio of the first high aspect ratio voltage rail is approximately equal to 4.0; and
the height-to-width ratio of the second high aspect ratio voltage rail is approximately equal to 4.0.
4. The standard cell circuit of claim 2, wherein:
the height-to-width ratio of the first high aspect ratio voltage rail is approximately equal to 3.0; and
the height-to-width ratio of the second high aspect ratio voltage rail is approximately equal to 3.0.
5. The standard cell circuit of claim 2, wherein:
the height-to-width ratio of the first high aspect ratio voltage rail is approximately equal to 2.0; and
the height-to-width ratio of the second high aspect ratio voltage rail is approximately equal to 2.0.
6. The standard cell circuit of claim 1, further comprising one or more metal lines extending along one or more corresponding longitudinal axes different from the first longitudinal axis and the second longitudinal axis in the first direction substantially parallel to the first high aspect ratio voltage rail and the second high aspect ratio voltage rail, wherein:
each metal line of the one or more metal lines has a width approximately equal to a critical dimension of a process technology of the standard cell circuit;
the first high aspect ratio voltage rail has a width between approximately one (1) and two (2) times the width of each metal line of the one or more metal lines disposed in a metal layer; and
the second high aspect ratio voltage rail has a width between approximately one (1) and two (2) times a critical dimension of a metal line of the one or more metal lines.

7. The standard cell circuit of claim 6, wherein:
the height-to-width ratio of the first high aspect ratio voltage rail is
approximately equal to 4.0; and
the height-to-width ratio of the second high aspect ratio voltage rail is
approximately equal to 4.0.
8. The standard cell circuit of claim 6, wherein:
the height-to-width ratio of the first high aspect ratio voltage rail is
approximately equal to 3.0; and
the height-to-width ratio of the second high aspect ratio voltage rail is
approximately equal to 3.0.
9. The standard cell circuit of claim 6, wherein:
the height-to-width ratio of the first high aspect ratio voltage rail is
approximately equal to 2.0; and
the height-to-width ratio of the second high aspect ratio voltage rail is
approximately equal to 2.0.
10. The standard cell circuit of claim 1, further comprising one or more metal lines
extending along one or more corresponding longitudinal axes different from the first
longitudinal axis and the second longitudinal axis in the first direction substantially
parallel to the first high aspect ratio voltage rail and the second high aspect ratio voltage
rail, wherein:
each metal line of the one or more metal lines has a width approximately equal
to a critical dimension of a process technology of the standard cell
circuit;
the first high aspect ratio voltage rail has a width approximately equal to the
width of each metal line of the one or more metal lines disposed in a
metal layer; and
the second high aspect ratio voltage rail has a width approximately equal to the
width of each metal line of the one or more metal lines.

11. The standard cell circuit of claim 10, wherein:
the height-to-width ratio of the first high aspect ratio voltage rail is
approximately equal to 4.0; and
the height-to-width ratio of the second high aspect ratio voltage rail is
approximately equal to 4.0.
12. The standard cell circuit of claim 10, wherein:
the height-to-width ratio of the first high aspect ratio voltage rail is
approximately equal to 3.0; and
the height-to-width ratio of the second high aspect ratio voltage rail is
approximately equal to 3.0.
13. The standard cell circuit of claim 10, wherein:
the height-to-width ratio of the first high aspect ratio voltage rail is
approximately equal to 2.0; and
the height-to-width ratio of the second high aspect ratio voltage rail is
approximately equal to 2.0.
14. The standard cell circuit of claim 1, wherein the second high aspect ratio voltage rail is configured to receive a second supply voltage.
15. The standard cell circuit of claim 1, wherein the second high aspect ratio voltage rail is electrically coupled to ground.
16. The standard cell circuit of claim 1 integrated into an integrated circuit (IC).
17. The standard cell circuit of claim 1 integrated into a device selected from the group consisting of: a set top box; an entertainment unit; a navigation device; a communications device; a fixed location data unit; a mobile location data unit; a global positioning system (GPS) device; a mobile phone; a cellular phone; a smart phone; a session initiation protocol (SIP) phone; a tablet; a phablet; a server; a computer; a portable computer; a mobile computing device; a wearable computing device; a desktop

computer; a personal digital assistant (PDA); a monitor; a computer monitor; a television; a tuner; a radio; a satellite radio; a music player; a digital music player; a portable music player; a digital video player; a video player; a digital video disc (DVD) player; a portable digital video player; an automobile; a vehicle component; avionics systems; a drone; and a multicopter.

18. A standard cell circuit, comprising:

- a means for providing a first supply voltage to the standard cell circuit extending along a first longitudinal axis in a first direction, wherein the means for providing the first supply voltage has a height-to-width ratio greater than 1.0;
- a means for providing a second supply voltage to the standard cell circuit extending along a second longitudinal axis in the first direction substantially parallel to the means for providing the first supply voltage, wherein the means for providing the second supply voltage has a height-to-width ratio greater than 1.0; and
- a means for providing a circuit function electrically coupled to the means for providing the first supply voltage and the means for providing the second supply voltage, wherein a voltage differential between the means for providing the first supply voltage and the means for providing the second supply voltage provides power to the means for providing the circuit function.

19. The standard cell circuit of claim 18, further comprising one or more means for transferring current extending along one or more corresponding longitudinal axes different from the first longitudinal axis and the second longitudinal axis in the first direction substantially parallel to the means for providing the first supply voltage and the means for providing the second supply voltage, wherein:

- each means for transferring current of the one or more means for transferring current has a width approximately equal to a critical dimension of a process technology of the standard cell circuit;

the means for providing the first supply voltage has a width between approximately two (2) and three (3) times the width of each means for transferring current of the one or more means for transferring current; and

the means for providing the second supply voltage has a width between approximately two (2) and three (3) times the width of each means for transferring current of the one or more means for transferring current.

20. The standard cell circuit of claim 18, further comprising one or more means for transferring current extending along one or more corresponding longitudinal axes different from the first longitudinal axis and the second longitudinal axis in the first direction substantially parallel to the means for providing the first supply voltage and the means for providing the second supply voltage, wherein:

each means for transferring current of the one or more means for transferring current has a width approximately equal to a critical dimension of a process technology of the standard cell circuit;

the means for providing the first supply voltage has a width between approximately one (1) and two (2) times the width of each means for transferring current of the one or more means for transferring current; and

the means for providing the second supply voltage has a width between approximately one (1) and two (2) times the width of each means for transferring current of the one or more means for transferring current.

21. The standard cell circuit of claim 18, further comprising one or more means for transferring current extending along one or more corresponding longitudinal axes different from the first longitudinal axis and the second longitudinal axis in the first direction substantially parallel to the means for providing the first supply voltage and the means for providing the second supply voltage, wherein:

each means for transferring current of the one or more means for transferring current has a width approximately equal to a critical dimension of a process technology of the standard cell circuit;

the means for providing the first supply voltage has a width approximately equal to the width of each means for transferring current of the one or more means for transferring current; and

the means for providing the second supply voltage has a width approximately equal to the width of each means for transferring current of the one or more means for transferring current.

22. A method for manufacturing a standard cell circuit employing high aspect ratio voltage rails for reduced resistance, comprising:

disposing a first high aspect ratio voltage rail along a first longitudinal axis in a first direction, wherein the first high aspect ratio voltage rail has a height-to-width ratio greater than 1.0 and is configured to receive a first supply voltage;

disposing a second high aspect ratio voltage rail extending along a second longitudinal axis in the first direction substantially parallel to the first high aspect ratio voltage rail, wherein the second high aspect ratio voltage rail has a height-to-width ratio greater than 1.0; and

forming a circuit device that is electrically coupled to the first high aspect ratio voltage rail and the second high aspect ratio voltage rail, wherein a voltage differential between the first high aspect ratio voltage rail and the second high aspect ratio voltage rail provides power to the circuit device.

23. The method of claim 22, further comprising disposing one or more metal lines extending along one or more corresponding longitudinal axes different from the first longitudinal axis and the second longitudinal axis in the first direction substantially parallel to the first high aspect ratio voltage rail and the second high aspect ratio voltage rail, wherein each metal line of the one or more metal lines has a width approximately equal to a critical dimension of a process technology of the standard cell circuit.

24. The method of claim 23, wherein:

disposing the first high aspect ratio voltage rail comprises disposing the first high aspect ratio voltage rail having a width between approximately two

- (2) and three (3) times the width of each metal line of the one or more metal lines; and
- disposing the second high aspect ratio voltage rail comprises disposing the second high aspect ratio voltage rail having a width between approximately two (2) and three (3) times the width of each metal line of the one or more metal lines.
25. The method of claim 23, wherein:
- disposing the first high aspect ratio voltage rail comprises disposing the first high aspect ratio voltage rail having a width between approximately one (1) and two (2) times the width of each metal line of the one or more metal lines; and
- disposing the second high aspect ratio voltage rail comprises disposing the second high aspect ratio voltage rail having a width between approximately one (1) and two (2) times the width of each metal line of the one or more metal lines.
26. The method of claim 23, wherein:
- disposing the first high aspect ratio voltage rail comprises disposing the first high aspect ratio voltage rail having a width approximately equal to the width of each metal line of the one or more metal lines; and
- disposing the second high aspect ratio voltage rail comprises disposing the second high aspect ratio voltage rail having a width approximately equal to the width of each metal line of the one or more metal lines.