WHAT IS CLAIMED IS:

1. A half-width computing device, comprising:

a half-width chassis;

one or more circuit board assemblies, in a primarily horizontal orientation, coupled to the chassis;

one or more processors coupled to at least one of the circuit board assemblies; and

one or more stacks of two 3.5-inch hard disk drives coupled to the chassis,

wherein the half-width computing device has a height more than 1 U and not more than 1.5U.

2. The computing device of claim 1, wherein the height of the computing device is about 1.5U.

3. The computing device of claim 1, wherein at least one of the stacks of two 3.5-inch hard disk drives are mounted on the half-width chassis to the rear of at least one the processors.

4. The computing device of claim 1, further comprising one or more rows of 3.5 inch hard disk drives coupled to the half-width chassis, wherein at least one of the stacks of two 3.5-inch hard disk drives is included in at least one of the rows.

5. The computing device of claim 1, further comprising an arrangement of one or more rows of hard disk drives devices and one or more columns of hard disk drives, wherein at least one of the stacks of two 3.5-inch hard disk drives is included in at least one of the rows.

6. The computing device of claim 1, wherein at least one of the stacks of 3.5 inch hard disk drives is coupled to the chassis with the length of the 3.5 inch hard disk drives running perpendicular to the length of the half-width computing device.

7. The computing device of claim 1, wherein the one or more processors comprise two or more processors coupled to the circuit board assembly, wherein at least two of the processors are staggered across the width of the computing device, wherein at least two rows of DIMMs are staggered across the width of the computing device in a complementary fashion to the staggered processors.

8. The computing device of claim 1, further comprising one or more power supply units coupled to the half-width chassis, wherein at least one of the power supply units is configured to supply power to at least one of the processors or to at least one of the 3.5 inch hard disk drives.

9. The computing device of claim 1, further comprising a power distribution board coupled to the half-width chassis, wherein at least one of the power distribution boards is configured to supply power to at least one of the processors or to at least one of the 3.5 inch hard disk drives.

10. The computing device of claim 1, further comprising one or more fans coupled to the half-width chassis, wherein at least one of the fans is configured to move air across heat producing components of the half-width computing device.

11. A half-width chassis assembly, comprising:

a half-width chassis configured to receive:

one or more circuit board assemblies in a primarily horizontal orientation; and

one or more stacks of two 3.5-inch hard disk drives coupled to the chassis; and

one or more mounting portions configurable to couple the half-width chassis in a rack,

wherein the half-width chassis assembly has a height more than 1 U and not more than 1.5U.

12. The chassis assembly of claim 11, wherein the height of the chassis assembly is about 1.5U.

13. The chassis assembly of claim 11, further comprising a tray coupled to the chassis, wherein the tray is configurable to hold at least one of the 3.5-inch hard disk drives in a stacked relationship above at least one other of the 3.5-inch hard disk drives.

14. The chassis assembly of claim 11, wherein tray is configurable to allow at least one of the 3.5 inch hard disk drives in at least one of the stacks to be removed separately from at least one other of the 3.5 inch hard disk drives in the at least one stack.

15. The chassis assembly of claim 11, wherein the tray is configured to maintain at least one hard disk drive in at least one of the stack in a spaced relationship to at least one other hard disk drive in the stack and such that an air gap exists between at least two tiers of 3.5 inch hard disk drives in the at least one the stack.

5

WHAT IS CLAIMED IS:

1. A half-width computing device, comprising:

a half-width chassis;

one or more circuit board assemblies, in a primarily horizontal orientation, coupled to the half-width chassis;

one or more processors coupled to at least one of the circuit board assemblies; and

one or more stacks of two 3.5-inch hard disk drives coupled to the half-width chassis,

wherein the half-width computing device has a height of more than 1 U and not more than 1.5U,

wherein the half-width computing device is configured to couple into a rack comprising a plurality of standard slots such that at least 0.5U of height of one of the standard slots partially occupied by the half-width computing device is available for at least a portion of an additional device above or below the half-width computing device, and such that at least a portion of a width of one of the standard slots partially occupied by the half-width computing device is available for at least a portion of an additional device.

2. The half-width computing device of claim 1, wherein the height of the half-width computing device is about 1.5U.

3. The half-width computing device of claim 1, wherein at least one of the stacks of two 3.5-inch hard disk drives are mounted on the half-width chassis to the rear of at least one the processors.

4. The half-width computing device of claim 1, further comprising one or more rows of 3.5 inch hard disk drives coupled to the half-width chassis, wherein at least one of the stacks of two 3.5-inch hard disk drives is included in at least one of the rows.

5. The half-width computing device of claim 1, further comprising an arrangement of one or more rows of hard disk drives devices and one or more columns of hard disk drives,

wherein at least one of the stacks of two 3.5-inch hard disk drives is included in at least one of the rows.

6. The half-width computing device of claim 1, wherein at least one of the stacks of 3.5 inch hard disk drives is coupled to the chassis with the length of the 3.5 inch hard disk drives running perpendicular to the length of the half-width computing device.

7. The half-width computing device of claim 1, wherein the one or more processors comprise two or more processors coupled to the one or more circuit board assemblies, wherein at least two of the two or more processors are staggered across the width of the half-width computing device, wherein at least two rows of DIMMs are staggered across the width of the half-width computing device in a complementary fashion to the staggered two or more processors.

8. The half-width computing device of claim 1, further comprising one or more power supply units coupled to the half-width chassis, wherein at least one of the power supply units is configured to supply power to at least one of the processors or to at least one of the 3.5 inch hard disk drives.

9. The half-width computing device of claim 1, further comprising a power distribution board coupled to the half-width chassis, wherein at least one of the power distribution boards is configured to supply power to at least one of the processors or to at least one of the 3.5 inch hard disk drives.

10. The half-width computing device of claim 1, further comprising one or more fans coupled to the half-width chassis, wherein at least one of the fans is configured to move air across heat producing components of the half-width computing device.

11. A half-width chassis assembly, comprising:

a half-width chassis configured to receive:

one or more circuit board assemblies in a primarily horizontal orientation; and

one or more stacks of two 3.5-inch hard disk drives coupled to the half-width chassis; and

one or more mounting portions configurable to couple the half-width chassis in a rack,

wherein the half-width chassis assembly has a height more than 1 U and not more than 1.5U,

wherein the half-width chassis is configured to couple into the rack such that at least 0.5U of height of one of the standard slots partially occupied by the half-width chassis is available for at least a portion of an additional device above or below the half-width chassis, and such that at least a portion of a width of one of the standard slots partially occupied by the half-width chassis is available for at least a portion of an additional device.

12. The half-width chassis assembly of claim 11, wherein the height of the half-width chassis assembly is about 1.5U.

13. The half-width chassis assembly of claim 11, further comprising a tray coupled to the half-width chassis, wherein the tray is configured to hold at least one of the 3.5-inch hard disk drives in a stacked relationship above at least one other of the 3.5-inch hard disk drives.

14. The half-width chassis assembly of claim 13, wherein the tray is configured to allow at least one of the 3.5 inch hard disk drives in at least one of the stacks to be removed separately from at least one other of the 3.5 inch hard disk drives in the at least one stack.

15. The half-width chassis assembly of claim 13, wherein the tray is configured to maintain at least one hard disk drive in at least one of the stacks in a spaced relationship to at least one other hard disk drive in the stack and such that an air gap exists between at least two tiers of 3.5 inch hard disk drives in the at least one the stack.