CLAIMS

What is claimed:

1. An apparatus for testing an integrated circuit of an electronic device, comprising:

a test electronics frame;

a power source;

a power electrical path connecting the power source to power contacts on the electronic device;

a signal source;

a plurality of signal electrical paths, each connecting the signal source to a respective signal contact on the electronic device, the power source and the signal source being located in the test electronics frame and jointly forming part of a test electronics module; and

a blower frame;

a blower mounted the blower frame and jointly being part of a blower module, the test electronics module and the blower module forming an apparatus frame and being removably mounted to one another, the blower blowing air through at least part of the apparatus frame.

2. The apparatus of claim 1, wherein the apparatus frame includes a driver electronics part and an oven part, the blower being an oven blower and the blower frame being an oven blower frame housing the electronics device, the oven blower being mounted to the oven blower frame and jointly being part of an oven blower module, the oven blower blowing air through the oven blower part.

3. The apparatus of claim 2, wherein the apparatus frame includes a driver blower frame, further comprising:

a driver electronics blower mounted to the driver electronics blower frame and jointly being part of an driver electronics blower module, the driver blower blowing air through the driver electronics part, the test electronics module and the driver electronics module being removably mounted to one another.

4. The apparatus of claim 1, further comprising:

a blower bearing mount secured to the apparatus frame, wherein the blower includes:

a blower bearing held by the lower bearing mount;

a blower input shaft held by the blower bearing and being rotatable relative to the blower bearing mount; and

a fan mounted on the shaft to rotate together with the shaft.

5. The apparatus of claim 4, further comprising:

a blower motor bearing mount secured to the apparatus frame;

a blower motor including:

a blower motor body secured to the apparatus frame;

a blower motor stator held by the blower motor body;

a blower motor rotor rotatably held by the blower motor body;

a blower motor output shaft connected to the blower motor rotor for rotation therewith, the blower input shaft being driven by the blower motor output shaft.

6. The apparatus of claim 5, further comprising:

a blower motor pulley connected to the blower motor output shaft;

a blower pulley connected to the blower input shaft; and

a drive belt running over the motor pulley and the blower pulley.

7. The apparatus of claim 6, further comprising:

a spacer component between the apparatus frame and a selected one of the mounts, the spacer component being removable to permit removal of the drive belt.

8. The apparatus of claim 7, wherein selected mount is the blower bearing mount, the blower pulley being located between the blower bearing and the fan.

9. The apparatus of claim 1, further comprising:

first and second sets of opposing rails, first and second sides of a respective device holder being releasably held by opposing rails of the first and second sets of rails, the air blowing through the rails.

10. The apparatus of claim 9, further comprising:

a device holder substrate;

a plurality of device holder terminals on the device holder substrate, each for contacting a respective contact on a respective electronic device;

a plurality of device holder signal contacts secured to the device holder substrate, each device holder signal contact having a surface for releasably mating with a respective surface of a respective signal connector terminal;

a plurality of device holder signal conductors connecting the device holder signal contacts to device holder terminals connected to signal contacts on the electronic devices;

a power contact secured to the device holder substrate, the power connector having a contact surface for releasably mating with a respective surface of a respective power connector terminal; and

at least one device holder power conductor connecting the device holder board power contact to a power contacts on one of the electronic devices.

11. The apparatus of claim 9, further comprising:

an interior frame that is removably located within the apparatus frame, the interior frame having first and second opposing vertical sides and the first and second sets of opposing rails being located on first and second opposing side walls, respectively, of the subframe.

12. The apparatus of claim 11, wherein the interior frame has third and fourth opposing side walls, further comprising:

third and fourth sets of opposing rails being located on the third and fourth opposing vertical sides of the subframe, first and second sides of a first electronics board being releasably held by opposing rails of the third and fourth sets of rails and the first electronics board electrically connecting to the device holder subassembly.

13. The apparatus of claim 12, wherein the interior frame has a fifth vertical side opposing the fourth side wall, further comprising:

fifth and sixth sets of opposing rails being located on the fourth and fifth opposing vertical sides of the subframe, first and second sides of a second electronics board being releasably held by opposing rails of the fifth and sixth sets of rails and the second electronics board electrically connecting to the device holder subassembly.

14. A method of testing an integrated circuit of an electronic device, comprising:

holding the device against a surface of a holder so that signal and power terminals of the holder are in contact with signal and power contacts on the electronic device;

providing signals through the signal terminals and contacts to the integrated circuit;

providing power through the power terminals and contacts to the integrated circuit; and

blowing air with a blower through at least part of the apparatus frame, wherein the apparatus frame includes a test electronics frame and a blower frame, the power source and the signal source being located in the test electronics frame

and forming part of a test electronics module, and the blower being mounted the blower frame and being part of a blower module.

15. The method of claim 14, further comprising:

removably mounting the test electronics module and the blower module to one another.

16. The method of claim 14, wherein the apparatus frame includes a driver electronics part and an oven part, the blower being an oven blower and the blower frame being an oven blower frame housing the electronics device, the oven blower being mounted to the oven blower frame and jointly being part of an oven blower module, the oven blower blowing air through the oven blower part.

17. The method of claim 16, wherein the apparatus frame includes a driver blower frame, a driver electronics blower mounted to the driver electronics blower frame and jointly being part of a driver electronics blower module, further comprising:

removably mounting the test electronics module and the driver electronics module removably to one another for the driver blower to blow air through the driver electronics part.

18. The method of claim 14, further comprising:

releasably holding first and second sides of a respective device holders by a opposing rails of first and second sets of rails, the air blowing through the rails.

19. The method of claim 18, further comprising:

removing a interior frame out of the apparatus frame, the first and second sets of opposing rails being located on first and second opposing vertical sides of the subframe.

20. An apparatus for testing an integrated circuit of an electronic device, comprising:

an apparatus frame;

an electric tester including, a power source mounted to the apparatus frame, a power electrical path connecting the power source to power contacts on the electronic device, a signal source, and a plurality of signal electrical paths, each connecting the signal source to a respective signal contact on the electronic device;

a blower bearing mount secured to the apparatus frame, a blower including a blower bearing held by the lower bearing mount, a blower input shaft held by the blower bearing and being rotatable relative to the blower bearing mount, and a fan

mounted on the shaft to rotate together with the shaft and blowing air through at least part of the apparatus frame;

a blower motor bearing mount secured to the apparatus frame;

a blower motor including a blower motor body secured to the apparatus frame, a blower motor stator held by the blower motor body, a blower motor rotor rotatably held by the blower motor body, a blower motor output shaft connected to the blower motor rotor for rotation therewith, the blower input shaft being driven by the blower motor output shaft,a blower motor pulley connected to the blower motor output shaft;

a blower pulley connected to the blower input shaft;

a drive belt running over the motor pulley and the blower pulley; and

a spacer component between the apparatus frame and a selected one of the mounts, the spacer component being removable to permit removal of the drive belt.

21. The apparatus of claim 20, further comprising:

a blower mounted to the apparatus frame, the blower blowing air through at least part of the apparatus frame.

22. The apparatus of claim 21, wherein the apparatus frame includes a test electronics frame and a blower frame, the power source and the signal source being

located in the test electronics frame and jointly forming part of a test electronics module, and the blower being mounted the blower frame and jointly being part of a blower module, the test electronics module and the blower module being removably mounted to one another.

23. The apparatus of claim 22, wherein the apparatus frame includes a driver electronics part and an oven part, the blower being an oven blower and the blower frame being an oven blower frame housing the electronics device, the oven blower being mounted to the oven blower frame and jointly being part of an oven blower module, the oven blower blowing air through the oven blower part.

24. The apparatus of claim 23, wherein the apparatus frame includes a driver blower frame, further comprising:

a driver electronics blower mounted to the driver electronics blower frame and jointly being part of an driver electronics blower module, the driver blower blowing air through the driver electronics part, the test electronics module and the driver electronics module being removably mounted to one another.

25. The apparatus of claim 20, wherein selected mount is the blower bearing mount, the blower pulley being located between the blower bearing and the fan.

26. An apparatus for testing an integrated circuit of an electronic device, comprising:

an apparatus frame;

a interior frame that is removably located within the apparatus frame, the interior frame having first and second opposing vertical sides and first and second sets of opposing rails being located on first and second opposing side walls, respectively, of the subframe, first and second sides of a respective device holder being releasably held by opposing rails of the first and second sets of rails;

a power source mounted to the apparatus frame;

a power electrical path connecting the power source to power contacts on the electronic device;

a signal source; and

a plurality of signal electrical paths, each connecting the signal source to a respective signal contact on the electronic device.

27. The apparatus of claim 26, further comprising:

a blower mounted to the apparatus frame, the blower blowing air through at least part of the interior frame.

28. The apparatus of claim 27, wherein the apparatus frame includes a test electronics frame and a blower frame, the power source and the signal source being located in the test electronics frame and jointly forming part of a test electronics module, and the blower being mounted the blower frame and jointly being part of a blower module, the test electronics module and the blower module being removably mounted to one another.

29. The apparatus of claim 26, wherein the interior frame has third and fourth opposing side walls, further comprising:

third and fourth sets of opposing rails being located on the third and fourth opposing vertical sides of the subframe, first and second sides of a first electronics board being releasably held by opposing rails of the third and fourth sets of rails and the first electronics board electrically connecting to the device holder subassembly.

30. The apparatus of claim 29, wherein the interior frame has a fifth vertical side opposing the fourth side wall, further comprising:

fifth and sixth sets of opposing rails being located on the fourth and fifth opposing vertical sides of the subframe, first and second sides of a second electronics board being releasably held by opposing rails of the fifth and sixth sets

of rails and the second electronics board electrically connecting to the device holder subassembly.

31. The apparatus of claim 26, further comprising a first module including:

a first connector including:

a connector body;

a first set of connector terminals on the connector body for connecting to respective ones of a first set of device holder contacts of a device holder;

a first set of connector contacts on the connector body for connecting to respective ones of a first set of board terminals of a board; and

a first set of connector conductors carried by the connector body and connecting the first set of connector terminals to the first set of connector contacts;

a first set of contact spring portions, each contact spring portion of the first set of contact spring portions urging a respective connector contact of the first set of connector contacts against a respective board contact of the first set of board contacts; and

a second set of terminal spring portions, each terminal spring portion of the second set of terminal spring portions urging a respective connector terminal of the second set of connector terminals against a respective board terminal of the second set of board terminals.

32. A method of testing an integrated circuit of an electronic device, comprising:

releasably holding first and second sides of a respective device holders by a opposing rails of first and second sets of rails;

holding the device against a surface of a first device holder so that signal and power terminals of the holder are in contact with signal and power contacts on the electronic device;

providing signals through the signal terminals and contacts to the integrated circuit;

providing power through the power terminals and contacts to the integrated circuit; and

removing a interior frame out of the apparatus frame, the first and second sets of opposing rails being located on first and second opposing vertical sides of the subframe.

33. The method of claim 32, further comprising:

blowing air with a blower through at least part of the interior frame.

34. The method of claim 33, wherein the apparatus frame includes a test electronics frame and a blower frame, the power source and the signal source being

located in the test electronics frame and forming part of a test electronics module, and the blower being mounted the blower frame and being part of a blower module, further comprising:

removably mounting the test electronics module and the blower module to one another.

35. The method of claim 32, wherein third and fourth sets of opposing rails are located on third and fourth opposing vertical sides of the subframe, first and second sides of the first electronics board being releasably held by opposing rails of the third and fourth sets of rails and the first electronics board electrically connecting to the device holder subassembly.

36. The method of claim 35, wherein fifth and sixth sets of opposing rails are located on the fourth and a fifth opposing vertical sides of the subframe, first and second sides of the second electronics board being releasably held by opposing rails of the fifth and sixth sets of rails and the second electronics board electrically connecting to the device holder subassembly.

37. An apparatus for testing an integrated circuit of an electronic device, comprising:

(i) an apparatus frame;

(ii) a first connector including:

a connector body;

a first set of connector terminals on the connector body for connecting to respective ones of a first set of device holder contacts of a device holder;

a first set of connector contacts on the connector body for connecting to respective ones of a first set of board terminals of a board; and

a first set of connector conductors carried by the connector body and connecting the first set of connector terminals to the first set of connector contacts;

a second set of connector terminals on the connector body, the second set of connector terminals being spaced from the first set of connector terminals in a direction that the device holder engages with the connector body;

(iii) a power source mounted to the apparatus frame;

(iv) a power electrical path connecting the power source to power contacts on the electronic device;

(v) a signal source; and

(vi) a plurality of signal electrical paths, each connecting the signal source to a respective signal contact on the electronic device, at least one of the connector contacts forming part of one of the electrical paths.

38. The apparatus of claim 37, further comprising:

first and second sets of opposing rails, first and second sides of a respective device holder being releasably held by opposing rails of the first and second sets of rails.

39. The apparatus of claim 38, further comprising:

a device holder substrate;

a plurality of device holder terminals on the device holder substrate, each for contacting a respective contact on a respective electronic device;

a plurality of device holder signal contacts secured to the device holder substrate, each device holder signal contact having a surface for releasably mating with a respective surface of a respective signal connector terminal;

a plurality of device holder signal conductors connecting the device holder signal contacts to device holder terminals connected to signal contacts on the electronic devices;

a power contact secured to the device holder substrate, the power connector having a contact surface for releasably mating with a respective surface of a respective power connector terminal; and

at least one device holder power conductor connecting the device holder board power contact to a power contacts on one of the electronic devices.

40. The apparatus of claim 37, wherein the device holder includes first and second sets of device holder contacts spaced from one another on a device holder substrate and contacting the first and second sets of connector terminals respectively.

41. The apparatus of claim 37, further comprising:

a second set of connector contacts on the connector body, the second set of connector contacts being spaced from the first set of connector contacts in a direction that the board engages with the connector body.

42. The apparatus of claim 41, wherein the first set of connector conductors connect the first connector terminals with the first connector contacts, further comprising:

a second set of connector conductors connecting the second set of connector contacts with the second set of connector terminals.

43. The apparatus of claim 42, further comprising:

a first set of terminal spring portions, each terminal spring portion of the first set of terminal spring portions urging a respective connector terminal of the first set

of connector terminals against a respective board contact of the first set of board contacts;

a second set of terminal spring portions, each terminal spring portion of the second set of terminal spring portions urging a respective connector terminal of the second set of connector terminals against a respective board contact of the second set of board contacts;

a first set of contact spring portions, each contact spring portion of the first set of contact spring portions urging a respective connector contact of the first set of connector contacts against a respective board contact of the first set of board contacts; and

a second set of terminal spring portions, each terminal spring portion of the second set of terminal spring portions urging a respective connector terminal of the second set of connector terminals against a respective board terminal of the second set of board terminals.

44. The apparatus of claim 42, wherein the board includes first and second sets of board terminals spaced from one another on a board substrate and contacting the first and second sets of connector contacts respectively.

45. The apparatus of claim 37, further including:

a first insulation piece secured against the connector body.

46. The apparatus of claim 42, wherein the first integrated module includes:

a feedthrough board including:

a feedthrough board substrate; and

a first feedthrough board electric conductor carried by the feedthrough board substrate and connected to the first connector contact, the first insulation piece being located against the feedthrough board substrate.

47. The apparatus of claim 42, wherein the first integrated module includes:

a second insulation piece secured to the connector body on an opposite side to the first insulation piece.

48. The apparatus of claim 42, wherein the first integrated module includes:

a feedthrough board including:

a feedthrough board substrate; and

a first feedthrough board electric conductor carried by the feedthrough board substrate and connected to the first connector contact, the first and second insulation pieces being located against and on opposite sides of the feedthrough

~~board substrate.~~

~~49~~1. A device holder subassembly, comprising:

a device holder substrate having an upper and a lower sides;

a plurality of device holder terminals on the upper side of the device holder substrate, each for contacting a respective contact on a respective electronic device;

a plurality of device holder signal contacts secured to the device holder substrate, each device holder signal contact having a surface for releasably mating with a respective surface of a respective signal connector terminal;

a plurality of device holder signal conductors connecting the device holder signal contacts to device holder terminals connected to signal contacts on the electronic devices;

a device holder power contact secured to the device holder substrate, the power connector having a contact surface for releasably mating with a respective surface of a respective power connector terminal; and

at least one device holder power conductor connecting the device holder board power contact to a power contacts on one of the electronic devices, wherein the device holder signal and power contacts are for mating the signal and power connector terminals, the signal and power connector terminals including first and second sets of connector terminals on the upper side of the device holder substrate and third and fourth sets of connector terminals on the lower side of the device holder substrate, the second set of connector terminals being spaced from the first set of connector terminals in a direction that the device holder engages with the connector body and, the fourth set of connector terminals being spaced from the third set of connector terminals in the direction that the device holder engages with the connector body, wherein the first,

second, third and fourth sets of connector terminals are connected to respective ones of the device holder terminals on the upper side of the device holder substrate.

~~50~~2. The device holder subassembly of claim ~~49~~ 1, wherein the device holder includes first and second sets of device holder contacts spaced from one another on the ~~a~~ device holder substrate and contacting the first and second sets of connector terminals respectively.

~~51~~3. A module comprising:

a first connector including:

a connector body;

a first set of connector terminals on the connector body for connecting to respective ones of a first set of device holder contacts of a device holder;

a first set of connector contacts on the connector body for connecting to respective ones of a first set of board terminals of a board;

a first set of connector conductors carried by the connector body and connecting the first set of connector terminals to the first set of connector contacts; and

a second set of connector terminals on the connector body, the second set of connector terminals being spaced from the first set of connector terminals in a direction that the device holder engages with the connector body;

a second set of connector contacts on the connector body, the second set of connector contacts being spaced from the first set of connector contacts in a direction that the board engages with the connector body;

a second set of connector conductors carried by the connector body and connecting the second set of connector terminals to the second set of connector contacts;

a feedthrough board including:

a feedthrough board substrate;

first and second sets of board terminals spaced from one another on the feedthrough board substrate and contacting the first and second sets of connector contacts respectively; and

a first and second sets of feedthrough board electric conductors carried by the feedthrough board substrate and connected to the first and second sets of board terminals respectively; and

a first insulation piece secured against the connector body, the first insulation piece being located against the feedthrough board substrate.

~~52. The module of claim 51, further comprising:~~

~~a second set of connector contacts on the connector body, the second set of connector contacts being spaced from the first set of connector contacts in a direction that the board engages with the connector body.~~

~~53. The module of claim 52, wherein the first set of connector conductors connect the first connector terminals with the first connector contacts, further comprising:~~

~~a second set of connector conductors connecting the second set of connector contacts with the second set of connector terminals.~~

~~54. The module of claim 53, wherein the board includes first and second sets of~~

~~board terminals spaced from one another on a board substrate and contacting the first and second sets of connector contacts respectively.~~

~~55. The module of claim 51, further including:~~

~~a first insulation piece secured against the connector body.~~

~~56. The module of claim 55, wherein the first integrated module includes:~~

~~a feedthrough board including:~~

~~a feedthrough board substrate; and~~

~~a first feedthrough board electric conductor carried by the feedthrough board substrate and connected to the first connector contact, the first insulation piece being located against the feedthrough board substrate.~~

~~57~~4. The module of claim ~~55~~ 3, wherein the first integrated module includes:

a second insulation piece secured to the connector body on an opposite side to the first insulation piece.

~~58. The module of claim 57, wherein the first integrated module includes:~~

~~a feedthrough board including:~~

~~a feedthrough board substrate; and~~

~~a first feedthrough board electric conductor carried by the feedthrough board substrate and connected to the first connector contact, the first and second insulation pieces being located against and on opposite sides of the feedthrough board substrate.~~

59. An apparatus for testing an integrated circuit of an electronic device, comprising:

(i) an apparatus frame;

(ii) a first integrated module including:

a connector body;

a first set of connector terminals on the connector body for connecting to respective ones of a first set of device holder contacts of a device holder;

a first set of connector contacts on the connector body for connecting to respective ones of a first set of board terminals of a board; and

a first set of connector conductors carried by the connector body and connecting the first set of connector terminals to the first set of connector contacts; and

an insulation piece secured against the connector body;

(iii) a power source mounted to the apparatus frame;

(iv) a power electrical path connecting the power source to power contacts on the electronic device;

(v) a signal source; and

(vi) a plurality of signal electrical paths, each connecting the signal source to a respective signal contact on the electronic device, at least one of the connector contacts forming part of one of the electrical paths.

60. The apparatus of claim 59, further comprising:

a second set of connector terminals on the connector body, the second set of connector terminals being spaced from the first set of connector terminals in a direction that the device holder engages with the connector body.

61. The apparatus of claim 60, wherein the device holder includes first and second sets of device holder contacts spaced from one another on a device holder substrate and contacting the first and second sets of connector terminals respectively.

62. The apparatus of claim 59, wherein the first integrated module includes:

a feedthrough board including:

a feedthrough board substrate; and

a first feedthrough board electric conductor carried by the feedthrough board substrate and connected to the first connector contact, the first insulation piece being located against the feedthrough board substrate.

63. The apparatus of claim 59, wherein the first integrated module includes:

~~a second insulation piece secured to the connector body on an opposite side to the first insulation piece.~~

~~64. The apparatus of claim 63, wherein the first integrated module includes:~~

~~a feedthrough board including:~~

~~a feedthrough board substrate; and~~

~~a first feedthrough board electric conductor carried by the feedthrough board substrate and connected to the first connector contact the first and second insulation pieces being located against and on opposite sides of the feedthrough board substrate.~~

~~65. The apparatus of claim 64, further comprising:~~

~~a plurality of said integrated modules jointly forming an insulated wall.~~

~~66~~5. A module comprising:

(i) a first connector including:

a connector body;

a first set of connector terminals on the connector body for connecting to respective ones of a first set of device holder contacts of a device holder;

a first set of connector contacts on the connector body for connecting to respective ones of a first set of board terminals of a board; and

a first set of connector conductors carried by the connector body and connecting the first set of connector terminals to the first set of connector contacts; and

(ii) an insulation piece secured against an outer surface of the connector body.

~~67~~6. The module of claim ~~66~~ 5, further comprising:

a second set of connector terminals on the connector body, the second set of connector terminals being spaced from the first set of connector terminals in a direction that the device holder engages with the connector body.

~~68~~7. The module of claim ~~67~~ 6, wherein the device holder includes first and second sets of device holder contacts spaced from one another on a device holder substrate and contacting the first and second sets of connector terminals respectively.

~~69~~8. The module of claim ~~66~~ 5, further comprising ~~wherein the first integrated module includes~~:

a feedthrough board including:

a feedthrough board substrate; and

a first feedthrough board electric conductor carried by the feedthrough board substrate and connected to the first connector contact, the first insulation piece being located against the feedthrough board substrate.

~~70~~9. The module of claim ~~66~~5, further comprising ~~wherein the first integrated module includes~~:

a second insulation piece secured to the connector body on an opposite side to the first insulation piece.

~~71~~10. The module of claim ~~70~~ 9, further comprising ~~wherein the first integrated module includes~~:

a feedthrough board including:

a feedthrough board substrate; and

a first feedthrough board electric conductor carried by the feedthrough board substrate and connected to the first connector contact, the first and second insulation pieces being located against and on opposite sides of the feedthrough board substrate.

~~72. An apparatus for testing an integrated circuit of an electronic device, comprising:~~

~~(i) an apparatus frame;~~

~~(ii) a first driver board including:~~

a first driver board substrate;

a first driver board electric conductor carried by the driver board substrate; and

a first driver board terminal connected to the first driver board electric conductor, a first one of the connector contacts being electrically connected to the first driver board terminal; and

(iii) a first connector including:

a connector body;

a first set of connector terminals on the connector body for connecting to respective ones of a first set of device holder contacts of a device holder;

a first set of connector contacts on the connector body for connecting to respective ones of a first set of board terminals of a board; and

a first set of connector conductors carried by the connector body and connecting the first set of connector terminals to the first set of connector contacts, wherein the first connector contact is offset from a line at right angles to a side of the driver board substrate at the driver board terminal to which it is connected.

73. The apparatus of claim 72, further comprising a first module including:

a first connector including:

a connector body;

a first set of connector terminals on the connector body for connecting to respective ones of a first set of device holder contacts of a device holder;

a first set of connector contacts on the connector body for connecting to respective ones of a first set of board terminals of a board; and

a first set of connector conductors carried by the connector body and connecting the first set of connector terminals to the first set of connector contacts.

74. The apparatus of claim 72, further comprising:

a second set of connector terminals on the connector body, the second set of connector terminals being spaced from the first set of connector terminals in a direction that the device holder engages with the connector body.

75. The apparatus of claim 74, wherein the device holder includes first and second sets of device holder contacts spaced from one another on a device holder substrate and contacting the first and second sets of connector terminals respectively.

76. The apparatus of claim 74, further comprising:

a second set of connector contacts on the connector body, the second set of connector contacts being spaced from the first set of connector contacts in a direction that the board engages with the connector body.

77. The apparatus of claim 76, wherein the first set of connector conductors connect the first connector terminals with the first connector contacts, further comprising:

a second set of connector conductors connecting the second set of connector contacts with the second set of connector terminals.

78. The apparatus of claim 77, wherein the board includes first and second sets of board terminals spaced from one another on a board substrate and contacting the first and second sets of connector contacts respectively.

79. The apparatus of claim 72, further comprising:

a power source mounted to the apparatus frame;

a power electrical path connecting the power source to power contacts on the electronic device;

a signal source; and

a plurality of signal electrical paths, each connecting the signal source to a respective signal contact on the electronic device, at least one of the connector contacts forming part of one of the electrical paths.

80. The apparatus of claim 72, further comprising:

a backplane board including:

a backplane substrate; and

a first backplane electric conductor carried by the backplane substrate and extending from a first driver board terminal plane through the first diver board terminal to a first connector contact plane through the first connector contact, the first driver board terminal plane and the first connector contact plane being spaced and parallel to one another, the first backplane electric conductor connecting the first driver board terminal and the first connector contacts electrically to one another.

81. The apparatus of claim 80, wherein the first connector contact plane is parallel to and offset from a plane of the driver board substrate.

82. The apparatus of claim 72, further comprising:

a feedthrough board including:

a feedthrough board substrate; and

a first feedthrough board electric conductor carried by the feedthrough board substrate and extending in a direction other than at right angles to a plane of the first driver board substrate, the first feedthrough board electric conductor connecting the first driver board terminal and the first connector contacts electrically to one another.

83. The apparatus of claim 72, wherein the first feedthrough board electric conductor extends in a direction other than at right angles to a plane of the first driver board substrate.

84. The apparatus of claim 72, wherein the first connector contact is offset from the first driver board terminal in a direction parallel to a plane of the driver board substrate.

85. The apparatus of claim 72, further comprising:

a second driver board including:

a second driver board substrate;

a second driver board electric conductor carried by the driver board substrate; and

a second driver board terminal connected to the second driver board electric conductor, the second driver board terminal being connected to the first driver board terminal.

86. The apparatus of claim 85, further comprising;

a feedthrough board including:

a feedthrough board substrate; and

a feedthrough board electric conductor carried by the feedthrough board substrate and connecting the first and second driver board terminals to one another.

87. The apparatus of claim 86, further comprising:

a first backplane board including:

a first backplane substrate; and

a first backplane electric conductor carried by the first backplane substrate and connecting the first driver board terminal and the feedthrough board electric conductor electrically to one another; and

a second backplane board including:

a second backplane substrate separate from the first backplane substrate; and

a second backplane electric conductor carried by the second backplane substrate and connecting the second driver board terminal and the feedthrough board electric conductor electrically to one another.

88. The apparatus of claim 87, wherein the first and second backplane substrates extend in a plane that is at right angles to planes of the first and second driver board substrates and a plane of the feedthrough substrate.

89. The apparatus of claim 85, wherein the first driver board is a power board and the second driver board is a signal board.

90. An apparatus for testing an integrated circuit of an electronic device, comprising:

(i) an apparatus frame defining a door opening;

(ii) a door mechanism including:

a first translation system mounted to the apparatus frame;

a first hinge base mounted to the first translation system, the first translation system allowing for translation of the first hinge base relative to the apparatus frame between a storage position and an operational position;

a door panel mounted to the first hinge base, the door panel being pivotally movable relative to the first hinge base when the first hinge base is in the operational position between a storage orientation wherein the door opening is open and an closed orientation wherein the door panel closes the door opening; and

a latch mechanism that releasably maintains the door in the closed position; and

(iii) an electric tester in the apparatus frame, including:

a power source mounted to the apparatus frame;

a power electrical path connecting the power source to power contacts on the electronic device;

a signal source; and

a plurality of signal electrical paths, each connecting the signal source to a respective signal contact on the electronic device.

91. The apparatus of claim 90, further comprising:

a blower mounted to the apparatus frame, the blower blowing air through at least part of the apparatus frame.

92. The apparatus of claim 91, wherein the apparatus frame includes a test electronics frame and a blower frame, the power source and the signal source being

located in the test electronics frame and jointly forming part of a test electronics module, and the blower being mounted the blower frame and jointly being part of a blower module, the test electronics module and the blower module being removably mounted to one another.

93. The apparatus of claim 90, further comprising:

first and second sets of opposing rails, first and second sides of a respective device holder being releasably held by opposing rails of the first and second sets of rails.

94. The apparatus of claim 93, further comprising:

a device holder substrate;

a plurality of device holder terminals on the device holder substrate, each for contacting a respective contact on a respective electronic device;

a plurality of device holder signal contacts secured to the device holder substrate, each device holder signal contact having a surface for releasably mating with a respective surface of a respective signal connector terminal;

a plurality of device holder signal conductors connecting the device holder signal contacts to device holder terminals connected to signal contacts on the electronic devices;

a power contact secured to the device holder substrate, the power connector having a contact surface for releasably mating with a respective surface of a respective power connector terminal; and

at least one device holder power conductor connecting the device holder board power contact to a power contacts on one of the electronic devices.

95. The apparatus of claim 93, further comprising:

a interior frame that is removably located within the apparatus frame, the interior frame having first and second opposing vertical sides and the first and second sets of opposing rails being located on first and second opposing side walls, respectively, of the subframe.

96. The apparatus of claim 90, further comprising:

a second translation system mounted to the apparatus frame;

a second hinge base mounted to the second translation system, the second translation system allowing for translation of the second hinge base relative to the apparatus frame between the storage position and the operational position, the door panel being mounted to the second hinge base, the door panel being pivotally movable relative to the second hinge base when the hinge base is in the operational

position between the storage orientation wherein the door opening is open and the closed orientation wherein the door panel closes the door opening.

97. The apparatus of claim 96, wherein the first and second translation systems are upper and lower translation systems and the door pivots about an axis that is substantially vertical.

98. The apparatus of claim 96, further comprising:

a connecting structure that secures the first and second hinge bases to one another, wherein the first translation system includes a first track that is mounted to the apparatus frame and a first wheel that is rotatably mounted to the first pivot base, the first wheel having an outer surface that rides on the rail.