WHAT IS CLAIMED IS:

1. An electronic device comprising:

a first connector having a plurality of contacts; and

control circuitry operatively coupled to at least some of the plurality of contacts, wherein the control circuitry is configured to:

detect when a second connector is mated with the first connector,

in response to the detection, send a command over a first contact in the plurality of contacts, and

if a response to the command is received over the first contact, set internal connections to one or more contacts in the plurality of contacts.

2. The electronic device of claim 1 further comprising detection circuitry configured to:

in response to detecting mating of the second connector, switch the first contact from an open state to be connected with the control circuitry thereby enabling the control circuitry to send the command over the first contact.

3. The electronic device of claim 1 wherein if no response is received over the first contact, the control circuitry is further configured to send the command over a second contact in the plurality of contacts.

4. The electronic device of claim 1 wherein the response includes information about configuration of contacts in the second connector.

5. The electronic device of claim 4 wherein the control circuitry sets internal connections to the one or more contacts in the plurality of contacts based on the configuration information of the contacts in the second connector.

6. The electronic device of claim 1 wherein to detect when the second connector is mated with the first connector, the control circuitry is further configured to:

monitor a connection detection contact in the plurality of contacts; and

determine that the second connector is mated with the first connector when it detects a logic low on the connection detection contact.

7. The electronic device of claim 1 wherein the first connector is a receptacle connector and the second connector is a plug connector.

8. The electronic device of claim 7 wherein the detect step detects when the plug connector is inserted into the receptacle connector.

9. The electronic device of claim 1 wherein the first connector comprises:
a housing that forms a cavity configured to receive the second connector; and
wherein the plurality of contacts are arranged as a single row on an anterior surface of the cavity.

10. The electronic device of claim 9 further comprising a retention latch disposed on an external side of the housing.

11. The electronic device of claim 9 wherein the plurality of contacts include between 2 and 10 signal contacts.

12. The electronic device of claim 1 wherein the first connector comprises:
a housing that forms a cavity configured to receive the second connector; and
wherein the plurality of contacts are arranged in a first row and a second row along a top anterior surface of the cavity and a bottom anterior surface of the cavity, respectively.

13. The electronic device of claim 12 wherein the first row and the second row each has equal number of contacts arranged therein.

14. An electronic device comprising:
a first connector having a first plurality of contacts including a signal contact and a detection contact; and
detection circuitry operatively coupled to the detection contact and the signal contact, wherein the detection circuitry is configured to:
monitor the detection contact to detect connection of a second connector with the first connector, wherein the second connector includes a second plurality of contacts and is associated with an accessory,
receive a message from the accessory via the signal contact, the message including configuration information for the second set of contacts; and

configure at least one of the first plurality of contacts based on the configuration information for the second plurality of contacts.

15. The electronic device of claim 14 wherein the configuration information for the second set of contacts includes information about a function associated with one or more of the second plurality of contacts.

16. The electronic device of claim 14 wherein the first plurality of contacts includes up to 16 contacts.

17. The electronic device of claim 14 wherein the first connector is a receptacle connector and the second connector is a plug connector.

18. The electronic device of claim 14 wherein the first connector comprises:

a housing that forms a cavity configured to receive the second connector; and

wherein the first plurality of contacts are arranged as a single row on an anterior surface of the cavity.

19. A method of configuring a receptacle connecter having a housing that defines an interior cavity into which a plug connector can be inserted in either a first orientation or a second orientation rotated 180 degrees from the first orientation and a first plurality of electrical contacts positioned along a first interior surface of the interior cavity, the plug connector having a second plurality of electrical contacts, the method comprising:

detecting, by a first device coupled to the receptacle connector, insertion of the plug connector into the interior cavity, wherein each contact in the second plurality of electrical contacts is in physical contact with a corresponding contact in the first plurality of electrical contacts;

sending, by the first device, via the receptacle connector, a signal over a first contact from the first plurality of electrical contacts;

monitoring, by the first device, the first contact to determine if a response is received for the signal;

if the response is not received over the first contact, sending, by the first device, via the receptacle connector, a signal over a second contact of the first plurality of electrical contacts;

monitoring, by the first device, a second contact to determine if a response is received for the signal;

determining, by the first device, whether the plug connector is inserted in the first orientation or the second orientation based on whether the response is received over the first contact or the second contact;

receiving, by the first device, configuration information for the second plurality of contacts of the plug connector;

setting, by the first device, internal connections to at least some of the first plurality of electrical contacts according to a first mapping when the plug connector is inserted into the interior cavity in the first orientation and setting internal connections to the at least some of the first plurality of electrical contacts according to a second mapping when the plug connector is inserted into the interior cavity in the second orientation.

20. The method of claim 19 wherein the signal comprises a request and the response comprises a response to the request.

21. The method of claim 20 wherein the request is for sending identification information associated with an accessory coupled to the plug connector.

22. The method of claim 19 wherein detecting insertion of the plug connector into the interior cavity further comprises:

electrically coupling at least one contact from the first plurality of electrical contacts to a ground contact of the plug connector;

receiving, by the first device, an indication indicating the coupling; and

determining, by the first device, that the plug connector is inserted into the receptacle connector based on the indication.

23. The method of claim 22 wherein the indication comprises an electrical signal equivalent to a logic low.

24. An electronic device comprising:

a receptacle connector including a first set of electrical contacts, wherein the receptacle connector is capable of accepting a plug connector that can be mated either in a first orientation or a second orientation 180 degrees rotated from the first orientation; and

circuitry coupled to the receptacle connector and configured to:

detect mating of the plug connector to the receptacle connector, wherein the plug connector includes a second set of electrical contacts;

in response to the detection, send a command over a first contact from the first set of electrical contacts;

monitor the first contact to determine whether a response to the command was received over the first contact;

receive the response over the first contact;

determine that the plug connector is mated in the first orientation based on the response;

receive configuration information about the second set of electrical contacts of the plug connector; and

configure at least one contact in the first set of contacts based on the first orientation and the configuration information about the second set of contacts.

25. The electronic device of claim 24 wherein the circuitry is further configured to:

if the response is not received over the first contact, send the command over a second contact from the first set of contacts;

monitor the second contact to determine whether a response to the command was received over the second contact;

if the response is received over the second contact, determine that the plug connector is mated in the second orientation;

receive configuration information about the second set of contacts of the plug connector; and

configure at least one contact in the first set of contacts based on the second orientation and the configuration information about the second set of contacts.

26. The electronic device of claim 25 wherein the circuitry is further configured to:

activate the first contact by closing a first switch associated with the first contact prior to sending the command over the first contact; and

activate the second contact by closing a second switch associated with the second contact and deactivate the first contact by opening the first switch prior to sending the command over the second contact.

WHAT IS CLAIMED IS:

1. An electronic device comprising:

a plurality of different types of communication circuitry including at least a first type of communication circuitry configured to enable the electronic device to communicate with another electronic device using a first communication protocol and a second type of communication circuitry configured to enable the electronic device to communicate with another electronic device using a second communication protocol different than the first communication protocol; and

a first connector having a plurality of contacts including a first contact and at least one data contact;

switching circuitry operatively coupled between the plurality of different types of communication circuitry and the at least one data contact; and

control circuitry operatively coupled to the switching circuitry and configured to:

detect when a second connector associated with a second electronic device is mated with the first connector, in response to the detection, send a command comprising a plurality of bits to the second electronic device over the first contact in the plurality of contacts requesting contact configuration information, and

if a response to the command including the requested contact configuration information is received over the first contact, control the switching circuitry to connect the data contact to one of the plurality of different types of communication circuitry based on information in the response.

2. The electronic device of claim 1 further comprising detection circuitry configured to:

in response to detecting mating of the second connector, switch the first contact from an open state to be connected with the control circuitry thereby enabling the control circuitry to send the command over the first contact.

3. The electronic device of claim 1 wherein if no response is received over the first contact, the control circuitry is further configured to send the command over a second contact in the plurality of contacts.

4. The electronic device of claim 1 wherein the response to the command including the requested contact configuration information is in the form of a data structure that includes a command response field and a payload field, where the command response field defines a response to commands communicated to the second electronic device by the electronic device and the payload field includes a pin selection field enables the first electronic device to identify a communication protocol from the plurality of communication protocols and identify one or more contacts in the plurality of contacts over which the identified communication protocol is to be used.

5. The electronic device of claim 4 wherein and the payload field further includes an accessory capability field defining one or more capabilities of the second electronic device.

6. The electronic device of claim 1 wherein to detect when the second connector is mated with the first connector, the control circuitry is further configured to monitor a connection detection contact in the plurality of contacts; and

determine that the second connector is mated with the first connector when it detects a logic low on the connection detection contact.

7. The electronic device of claim 1 wherein the first connector is a receptacle connector and the second connector is a plug connector.

8. The electronic device of claim 7 wherein the detect step detects when the plug connector is inserted into the receptacle connector.

9. The electronic device of claim 1 wherein the first connector comprises:

a housing that forms a cavity configured to receive the second connector; and

wherein the plurality of contacts are arranged as a single row on an anterior surface of the cavity.

10. The electronic device of claim 9 further comprises first and second retention latches disposed on opposite sides of the housing.

11. The electronic device of claim 1 wherein the plurality of contacts includes first and second pairs of differential data contacts and wherein, based on information in the response, the control circuitry controls the switching circuitry to connect the first pair of differential data contacts to the first type of communication circuitry within the plurality of different types of communication circuitry and controls the switching circuitry to connect the second pair of differential data contacts to the second type of communication circuitry within the plurality of different types of communication circuitry.

12. The electronic device of claim 1 wherein the first connector comprises:

a housing that forms a cavity configured to receive the second connector; and

wherein the plurality of contacts are arranged in a first row and a second row along a top anterior surface of the cavity and a bottom anterior surface of the cavity, respectively.

13. The electronic device of claim 12 wherein the first row and the second row each has equal number of contacts arranged therein.

14. A method of configuring a receptacle connector having a housing that defines an interior cavity into which a plug connector can be inserted in either a first orientation or a second orientation rotated 180 degrees from the first orientation and a first plurality of electrical contacts

positioned along a first interior surface of the interior cavity, the plug connector having a second plurality of electrical contacts, the method comprising:

detecting, by a first device coupled to the receptacle connector, insertion of the plug connector into the interior cavity, wherein each contact in the second plurality of electrical contacts is in physical contact with a corresponding contact in the first plurality of electrical contacts;

sending, by the first device, via the receptacle connector, a signal over a first contact from the first plurality of electrical contacts;

monitoring, by the first device, the first contact to determine if a response is received for the signal;

if the response is not received over the first contact, sending, by the first device, via the receptacle connector, a signal over a second contact of the first plurality of electrical contacts;

monitoring, by the first device, a second contact to determine if a response is received for the signal;

determining, by the first device, whether the plug connector is inserted in the first orientation or the second orientation based on whether the response is received over the first contact or the second contact;

receiving, by the first device, configuration information for the second plurality of contacts of the plug connector;

setting, by the first device, internal connections to at least some of the first plurality of electrical contacts according to a first mapping when the plug connector is inserted into the interior cavity in the first orientation and setting internal connections to the at least some of the first plurality of electrical contacts according to a second mapping when the plug connector is inserted into the interior cavity in the second orientation.

15. The method of claim 14 wherein the signal comprises a request and the response comprises a response to the request.

16. The method of claim 15 wherein the request is for sending identification information associated with an accessory coupled to the plug connector.

17. The method of claim 14 wherein detecting insertion of the plug connector into the interior cavity further comprises:

electrically coupling at least one contact from the first plurality of electrical contacts to a ground contact of the plug connector;

receiving, by the first device, an indication indicating the coupling; and

determining, by the first device, that the plug connector is inserted into the receptacle connector based on the indication.

18. The method of claim 17 wherein the indication comprises an electrical signal equivalent to a logic low.

19. An electronic device comprising:

a receptacle connector including a first plurality of electrical contacts, wherein the receptacle connector is capable of accepting a plug connector that can be mated either in a first orientation or a second orientation 180 degrees rotated from the first orientation, the first plurality of electrical contacts including first and second contacts and at least one data contact;

a plurality of different types of communication circuitry including at least a first type of communication circuitry configured to enable the electronic device to communicate with another electronic device using a first communication protocol and a second type of communication circuitry configured to enable the electronic device to communicate with another electronic device using a second communication protocol different than the first communication protocol;

switching circuitry operatively coupled between the plurality of different types of communication circuitry and the at least one data contact; and

control circuitry operatively coupled to the switching circuitry and configured to:

detect mating of a plug connector associated with a second electronic device to the receptacle connector, wherein the plug connector includes a second plurality of electrical contacts;

in response to the detection, send a command comprising a plurality of bits to the second electronic device over the first contact in the first plurality of electrical contacts, the command requesting contact configuration information; and

if a response to the command including the requested contact configuration information is received over the first contact, control the switching circuitry to connect the data contact to one of the plurality of different types of communication circuitry;

based on information in the response.

20. The electronic device of claim 19 wherein the response to the command including the requested contact configuration information is in the form of a data structure that includes a command response field and a payload field, where the command response field defines a response to commands communicated to the second electronic device by the electronic device and the payload field includes a pin selection field enables the first electronic device to identify a communication protocol from the plurality of communication protocols and identify one or more contacts in the plurality of contacts over which the identified communication protocol is to be used.

21. The electronic device of claim 20 wherein the payload field further includes an accessory capability field defining one or more capabilities of the second electronic device.

22. The electronic device of claim 19 wherein the first plurality of contacts includes up to 16 contacts.

23. The electronic device of claim 19 wherein the first connector comprises:

a housing that forms a cavity configured to receive the second connector; and

wherein the first plurality of contacts are arranged as a single row on an anterior surface of the cavity.

24. The electronic device of claim 19 wherein the circuitry is further configured to:

if the response is not received over the first contact, send the command over the second contact in the first plurality of contacts; and

if a response to the command including the requested contact configuration information is received over the second contact, control the switching circuitry to connect the data contact in the first plurality of contacts to one of the plurality of different types of communication circuitry based on information in the response about the second plurality of contacts.

25. The electronic device of claim 24 wherein the circuitry is further configured to:

control the switching circuitry to set the first and second contacts in an open state prior to detecting mating of the plug connector to the receptacle connector, and after detecting mating of the plug connector to the second connector:

(i) activate the first contact by closing a first switch associated with the first contact prior to sending the command over the first contact; and,

prior to sending the command over the second contact, activate the second contact by closing a second switch associated with the second contact and deactivate the first contact by opening the first switch.

26. The electronic device of claim 24 wherein the control circuitry sets internal connections to the one or more contacts in the plurality of contacts based on the configuration information of the contacts in the second connector and the payload field further includes an accessory capability field defining one or more capabilities of the second electronic device.

27. The electronic device of claim 19 wherein the response to the command including the requested contact configuration information is in the form of a data structure that includes a command response field and a payload field, where the command response field defines a response to commands communicated to the second electronic device by the electronic device and the payload field includes a pin selection field enables the first electronic device to identify a communication protocol from the plurality of communication protocols and identify one or more contacts in the plurality of contacts over which the identified communication protocol is to be used.