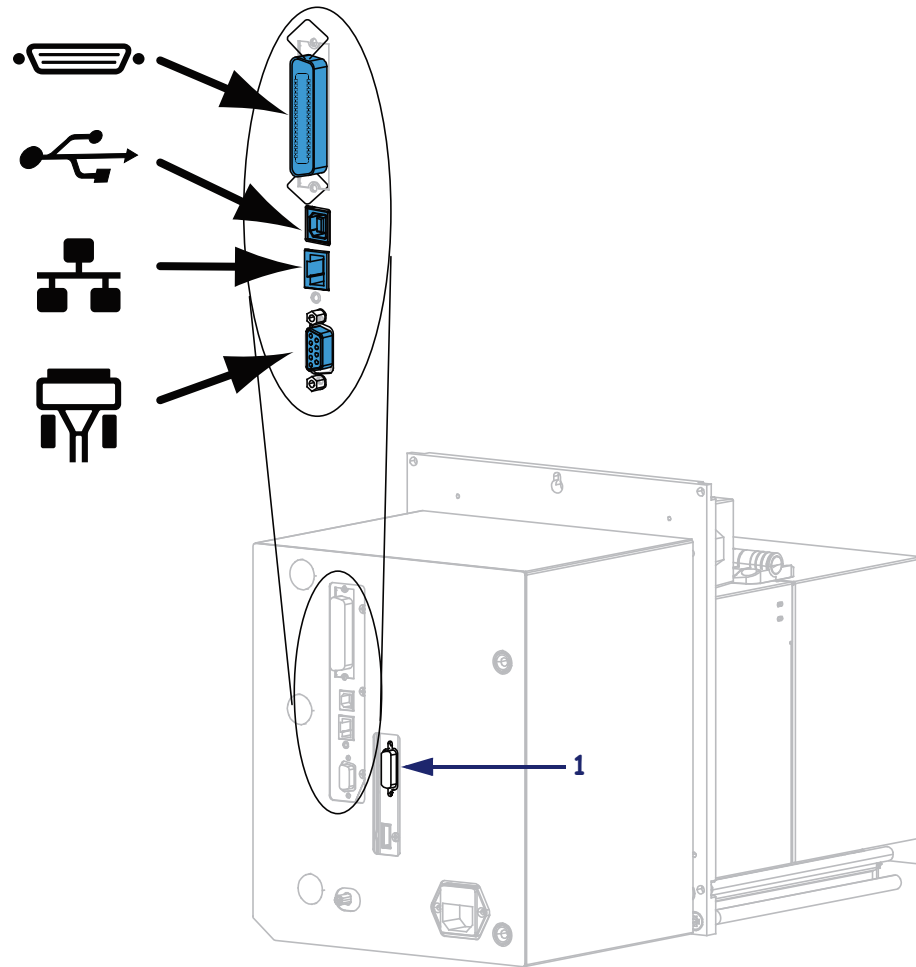






Select a Data Communication Interface

You may connect your print engine to a computer using one or more of the available connections. The standard connections are shown in [Figure 8](#). A ZebraNet wired or wireless print server option or a parallel port may also be present on your print engine.

Figure 8 • Communication Interfaces



	parallel port
	USB port
	wired Ethernet port
	serial port
1	applicator port

[Table 4 on page 56](#) provides basic information about data communication interfaces that you can use to connect your print engine to a computer. You may send label formats to the print engine through any data communication interface that is available. Select an interface that is supported by both your print engine and your computer or your Local Area Network (LAN).

Caution • Ensure that the print engine power is off (O) before connecting data communications cables. Connecting a data communications cable while the power is on (I) may damage the print engine.

Table 4 • Data Communication Interfaces

Interface	Standard or Option	Description
RS-232 Serial	Standard	<p>Limitations and Requirements</p> <ul style="list-style-type: none"> • Maximum cable length of 50 ft (15.24 m). • You may need to change print engine parameters to match the host computer. • You need to use a null-modem adaptor to connect to the print engine if using a standard modem cable. <p>Connections and Configuration The baud rate, number of data and stop bits, the parity, and the XON/XOFF or DTR control must match those of the host computer.</p>
USB	Standard	<p>Limitations and Requirements</p> <ul style="list-style-type: none"> • Maximum cable length of 16.4 ft (5 m). • No print engine parameter changes required to match the host computer. <p>Connections and Configuration No additional configuration is necessary.</p>
8-bit Parallel data interface	Standard	<p>Limitations and Requirements</p> <ul style="list-style-type: none"> • Maximum cable length of 10 ft (3 m). • Recommended cable length of 6 ft (1.83 m). • No print engine parameter changes required to match the host computer. • A wired or wireless print server (if installed) takes up this port on the print engine. <p>Connections and Configuration No additional configuration is necessary.</p>

Parallel Data Port

The parallel data interface supports IEEE 1284 bidirectional parallel communications in nibble mode. The parallel interface provides a means of communication that typically is faster than the serial interface methods. In this method, the bits of data that make up a character are sent all at one time over several wires in the cable, one bit per wire.

When communicating via the parallel port, the values selected on the print engine must be the same as those used by the host equipment connected to the print engine. Port selection for status information is determined by the channel sending the request. The parallel port can be set for bidirectional or unidirectional communication. The default setting is bidirectional.

Parallel Cabling Requirements

A standard 36-pin parallel connector is available on the back of the print engine for connection to the data source. An IEEE-1284 compatible bidirectional parallel data cable is required when this communication method is used. The required cable must have a standard 36-pin parallel connector on one end that is plugged into the mating connector located at the rear of the print engine. The other end of the cable connects to the print engine connector at the host computer. Port selection for status information is determined each time the print engine is turned on.

Parallel Port Interconnections

Table 8 shows the pin configuration and function of a standard computer-to-printer parallel cable.

Table 8 • Parallel Cable Pin Configuration


36-Pin Connectors	Description
1	nStrobe/HostClk
2–9	Data Bits 1–8
10	nACK/PtrClk
11	Busy/PtrBusy
12	PError/ACKDataReq
13	Select/Xflag
14	nAutoFd/HostBusy
15	Not used
16, 17	Ground
18	+5 V at 750 mA The maximum current draw may be limited by option configuration.
	 To enable this capability, a qualified service technician must install a jumper on the print engine’s main logic board on JP1, pins 2 and 3.
19–30	Ground

Table 8 • Parallel Cable Pin Configuration (Continued)

36-Pin Connectors	Description
31	nInit
32	nFault/NDataAvail
33, 34	Not used
35	+5 V through a 1.8 K Ω Resistor
36	NSelectin/1284 active