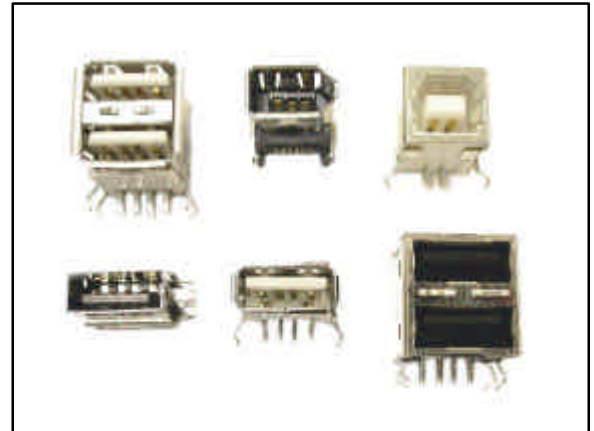


Edac series 690 USB (Universal Serial Bus) and series 693 (IEEE1394) connectors are industry-standard data transfer devices used to interconnect computers to peripheral devices such as scanners and printers. A wide variety of styles are available including right angle, vertical, and a unique right angle vertical that minimizes board space. USB products are compatible with asynchronous and isochronous data transfer methods up to 1.2 Mbps and utilize plug and play technology. Edac manufactures both USB and IEEE1394 connectors in through-hole or SMT board styles as well as molded cable assemblies for USB A, B, mini-USB and IEEE variations (see cable series 628 and table below). Edac can also manufacture USB units stacked with RJ45s (with or without LEDs) on special order.



## SPECIFICATIONS

- USB 1.1 or USB 2.0 available
- Minimum mating cycles: 1500 per EIA 364-09
- Insulator Housing: UL 94V-0 thermoplastic
- Contact Material: P Bronze (USB), Copper Alloy (1394)
- Contact Plating: Gold Flash or Gold Plate over nickel
- Contact Resistance: 30 milliohms maximum
- Insulation Resistance: 100 megaohms minimum
- Current Rating: 1 amp maximum under 30 degrees C
- Voltage Rating: 30 volts AC rms maximum
- DW Voltage: 750 vac@0asl (USB), DC500 (1394)
- Shield Housing: copper alloy
- Mate/Un-mate: 35/10 Newtons per EIA 364-13
- Temperature Range -55 to +85 degrees C

**Popular styles are stocked by our authorized distributors worldwide. Factory minimum order quantity (MOQ) is 1,000 pieces per item.**

## ORDERING CODE

**SAMPLE PART NUMBER: 693-006-620-003**

- **693 = Series Number:** 690 = USB (1.1 or 2.0), 693 = IEEE 1394a Standard
- **006 = Number of contacts:** 004 = single jack USB; 006 = single jack IEEE 1394a; 008 = dual stacked USB type A; 012 = triple stacked USB type A
- **6 = Gold thickness:** 2 = gold flash (standard for original USB). 3 = 15u gold plate (USB 1.1 only), 6 = 30u gold plate (mandatory for series 693 to meet IEEE 1394a specification; also mandatory for USB 2.0).
- **20 = Contact Orientation:** *FOR SERIES 690:* 21 = Right angle contacts (jack face 90 degrees from PCB and parallel to board). 60 = vertical contacts (jack face 180 degrees from PCB), 61 = Right angle vertical (jack face 90 degrees from PCB and vertical to board), 99 = surface mount right angle contacts. *FOR SERIES 693:* 20 = Right angle contacts (jack face 90 degrees from PCB and parallel to board). 21 = Right angle vertical (jack face 90 degrees from PCB and vertical to board), 22 = vertical contacts (jack face 180 degrees from PCB), 99 = surface mount right angle contacts.
- **003 = Connector Type:** 003 = IEEE 1394a, 013 = USB Type A, 023 = USB Type B, 033 = Miniature USB Type A, 043 = Miniature USB Type B
- **Popular cable assemblies (all connectors are male):**

628-000-940 = USB A to Mini USB A x 1 meter	628-000-906-1 = IEEE1394a both ends x 0.7meter
628-000-942 = USB A to USB A x 1.8 meters	628-000-906-2 = IEEE1394a both ends x 2.0 meters
628-000-943 = USB A to USB B x 1.8 meters	628-000-906-3 = IEEE1394a both ends x 4.5 meters
628-000-944 = USB B to USB B x 1.8 meters	628-000-906-4 = IEEE1394a both ends x 10.0 meters