



STANDARD DESIGN OPTIONS FOR INTEGRATED (CONNECTORIZED) FLEX/RIGID FLEX ASSEMBLIES

Properly designed flex and rigid flex assemblies offer significant space and weight savings compared to wire harnesses. Many design options are available, including integrated stiffeners, shielding, factory forming, selective bonding, termination, layer count and so on.

- 1 Right-angle surface mount Nanominiature plug connector
- 2 Hatch shield and solid copper shield flex
- 3 Series 801 Mighty Mouse receptacle with PC tails
- 4 AlphaLink® SL spring-loaded contact connector
- 5 Cross-hatch shield flex
- 6 Board-mount transceiver
- 7 Series 79 Micro-Crimp® right-angle PCB panel-mount receptacle
- 8 Solid copper shield flex

- 9 Micro-D 37-pin connector
- 10 Silver paste shield flex
- 11 Resistor, inductor, and capacitor
- 12 Series 88 SuperFly™ rear panel mount PCB receptacle
- 13 Black EMI film (suitable for commercial applications)
- 14 D38999 Series II type hermetic PC tail receptacle connector
- 15 ZIF (Zero Insertion Force) termination
- 16 6-layer rigid flex circuit board with BGA
- 17 Overmolded termination

GROUND PLANES AND SHIELDS

Managing EMI emissions and signal line impedance are critical aspects of flex circuit design. Effective use of ground / shield planes, appropriate connector interfaces, and matched-impedance flex circuits delivers optimal high-speed signal integrity.

Full copper shield

Cross-hatch mesh shield

Hybrid solid/mesh

Black Tatsua and silver epoxy

Connector-to-flex shielding (soldered pin insert)

Stitched vias

Polyimide-based for contact grounding