# **Flexible Printed Circuit Assembly**

# BROAD OFFERING/HIGH PERFORMANCE/COST SAVING/ CUSTOMIZED/VALUE ADDED FLEX CABLE ASSEMBLY

Amphenol's BergStak®, MezzoStak®, Conan®, ComboStak® and PowerStak® are industry proven board-to-board solutions. To enlarge the advantages of these recognized board-to-board solutions, we have expanded our offering with Flexible Printed Circuit (FPC) assemblies, which provide design flexibility to customers.

- Flexible option for space constraint environments where PCBs are not an option
- Comprehensive range of pitch sizes, positions and stack heights to satisfy all needs
- High-speed performance up to 16Gb/s
- Utilize SMT process with higher process consistency, and lower assembly cost
- Fully customized solutions using all advantages of boardto-board connectors like mating reliability and different profile heights



#### **FEATURES**

- Broad offering of:
- Pitch sizes: 0.4mm 2.0mm
- Positions: 2 200
- Heights:1.5mm 20mm
- FPC lengths: 100mm to 500mm
- Special FPC shapes
- High-speed signal capability of up to 16Gb/s
- FPC cable with SMT process
- Flexible Printed Cable utilizing all advantages of board to board connectors

#### **BENEFITS**

 Comprehensive range of sizes and profile heights to satisfy all needs when board-to-board or wire-to-board connections are not an option

- Suitable for high data transmission applications
- Space, cost and weight saving and higher process consistency, compared to CTW cable assembly or PCB-to-board connections
- Wide choice of mating interfaces; current rating capability; vibration resistance (USCAR spec) and locking features available

# **▶** Flexible Printed Circuit Assembly

### TECHNICAL INFORMATION

#### **MATERIAL**

■ Housing: High temperature thermoplastic LCP(UL94V-0)

■ Terminal: Copper Alloy

■ Plating: Gold flash/15µin/30µin Gold or GXT®

#### **MECHANICAL PERFORMANCE**

Durability: 30-200 cycles

■ Mechanical Shock: EIA 364-27 or USCAR2 V2

Vibration: MIL-STD-202, Method 201 or USCAR2 V2

#### **ELECTRICAL PERFORMANCE**

 Current Rating: 0.3A-20A per contact (all contacts powered)

Insulation Resistance: 1000MΩ min.
Voltage Rating: 30V-100VAC/VDC

■ LLCR: 20mΩ max.

■ Data Rate: up to 16Gb/s

#### **ENVIRONMENTAL**

■ Operating Temperature Range: -55°C to +125°C

#### **PACKAGING**

Tray

#### TARGET MARKETS/APPLICATIONS



Automotive



Communications



Consumer



IT/DA



Industrial & Instrumentation



Medical

## **PART NUMBERS**

Description	Part Numbers
Bergstak® 0.40mm Flex Cable, 40position, Cable length 100mm	10170897-A040010LF
Bergstak® 0.40mmFlexible Printed Cable, 30pos ; 3.5mm height ; 100mm	10170897-B030010LF
Bergstak® 0.50mmFlexible Printed Cable, 50pos ; 3mm height ; 100mm	10170897-C050010LF
Bergstak® HS 0.50mm Flex Cable, 40position, Cable length 100mm	10170897-D040010LF
MezzoStak® Flexible Printed Cable, 30pos, 2mm height ; 100mm	10170897-E030010LF
Bergstak® 0.80mmFlexible Printed Cable, 40pos ; 5mm height ; 100mm	10170897-F040010LF
Bergstak® HS 0.80mm Flex Cable, 80position, Cable length 100mm	10170897-G080010LF
Conan® Flexible Printed Cable, 31pos ; 4.5mm height ; 200mm	10170897-H031020LF
ComboStak® 0.80mm Flex Cable, 1P 30S 1P, Cable length 100mm	10170897-I030010LF

# **▶** Flexible Printed Circuit Assembly

### **TECHNICAL INFORMATION**

## **PART NUMBER SELECTOR**

