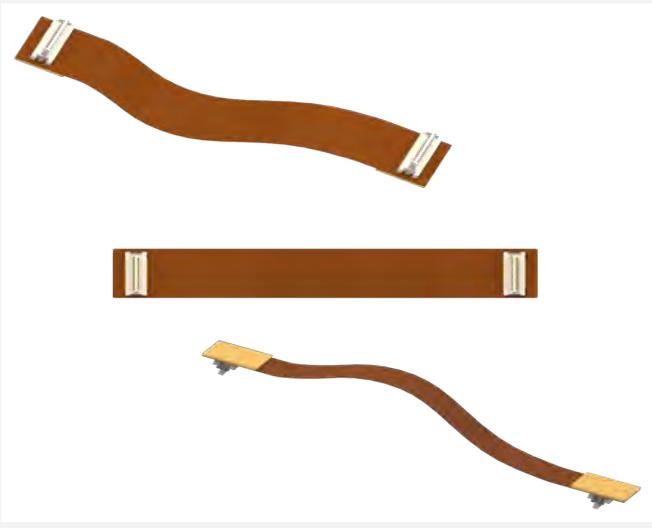# Flexible Printed Circuit Assembly

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 board–to–board connectors like mating reliability and different profile heights

TARGET MARKETS

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

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–100V AC/DC

▪ 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
MezzoStak® Flexible Printed Cable, 30pos, 2mm height ; 100mm	10170897–E030010LF
Conan® Flexible Printed Cable, 31pos ; 4.5mm height ; 200mm	10170897–H031020LF
Bergstak® 0.40mm Flexible Printed Cable, 30pos ; 3.5mm height ; 100mm	10170897–B030010LF
Bergstak® 0.50mm Flexible Printed Cable, 50pos ; 3mm height ; 100mm	10170897–C050010LF
Bergstak® 0.80mm Flexible Printed Cable, 40pos ; 5mm height ; 100mm	10170897–F040010LF

TECHNICAL INFORMATION

PART NUMBER SELECTOR

| 10170897 | — | T | AAA | BBB | LF | Lead–free compatibility |

Base Part Number

Type of Connectors	
A	BergStak® 0.4mm
B	BergStak® 0.4mm SA
C	BergStak® 0.5mm SA
D	BergStak HS™ 0.5mm
E	Mezzostak® 0.5mm
F	BergStak® 0.8mm
G	BergStak HS™ 0.8mm
H	Conan® 1.00mm
I	ComboStak® and PowerStak®

AAA	Position
030	30
031	31

BBB	Cable length
010	100
020	200

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