Flat Display Connections (FDC)

AXOLINK®
Flat Cable Assemblies

FDC-Flat Display Connections

AXOLINK™

FDC-Flat Display Connections are made from AXOJUMP™ Flat Flexible Cables and industry standard display connectors such as DF-9, DF-19, FI-SE or FI-X.

Advantages

Small dimensions: low profile, narrow width design.
Low cost, high reliability.
Excellent flexibility and flex-life.

General characteristics

0.50 mm, 1.00 mm and 1.25 mm pitches, Standard FFC, ZIF interface
FDC with DF-9 cable assemblies are compliant with VESA (Video Electronics Standard Association) FPD-I-1 (Flat Panel Display Interface).

Product availability

<table>
<thead>
<tr>
<th>FFC type</th>
<th>DF-9**</th>
<th>DF-19*</th>
<th>FI-SE*</th>
<th>FI-X*</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.50 (mm)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.00 (mm)</td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>1.25 (mm)</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Number of conductors</td>
<td>14</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>30</td>
<td></td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>31</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

*Standard version is shielded for these connector types. Non shielded versions also available.
**Standard version is non-shielded (shielded version on request).

All versions can be supplied with custom folds.
## Processing forms

### DF9

Non-shielded version (FDC), Shielded version on request.

<table>
<thead>
<tr>
<th>AMF01</th>
<th>BM08</th>
<th>AMM15</th>
<th>CMZ22</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Diagram]</td>
<td>![Diagram]</td>
<td>![Diagram]</td>
<td>![Diagram]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AMM02</th>
<th>BM09</th>
<th>AFF16</th>
<th>CFZ23</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Diagram]</td>
<td>![Diagram]</td>
<td>![Diagram]</td>
<td>![Diagram]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AFF03</th>
<th>BFF10</th>
<th>BMF17</th>
<th>CFZ24</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Diagram]</td>
<td>![Diagram]</td>
<td>![Diagram]</td>
<td>![Diagram]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AMF04</th>
<th>AMM11</th>
<th>BMM18</th>
<th>DMZ25</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Diagram]</td>
<td>![Diagram]</td>
<td>![Diagram]</td>
<td>![Diagram]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BMM05</th>
<th>AFF12</th>
<th>BFF19</th>
<th>DMZ26</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Diagram]</td>
<td>![Diagram]</td>
<td>![Diagram]</td>
<td>![Diagram]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BFF06</th>
<th>AMF13</th>
<th>BMF20</th>
<th>DFZ27</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Diagram]</td>
<td>![Diagram]</td>
<td>![Diagram]</td>
<td>![Diagram]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BMF07</th>
<th>AFM14</th>
<th>CMZ21</th>
<th>DFZ28</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Diagram]</td>
<td>![Diagram]</td>
<td>![Diagram]</td>
<td>![Diagram]</td>
</tr>
</tbody>
</table>
DF19
Non-shielded version (FDC), shielded version (FDB).

EMM29
PIN1

EMM30
PIN1

FMZ31
PIN1

FMZ32
PIN1

FI-SE
Non-shielded version (FDC), shielded version (FDB).

EMM33
PIN1 - PIN20

EMM34
PIN1 - PIN1

FMZ35

FMZ36

FI-X
Non-shielded version (FDC), shielded version (FDB).

EMM37
PIN1 - PIN20

EMM38
PIN1 - PIN1

FMZ39

FMZ40

FI-S
ZIF

FI-S
ZIF

FI-X
ZIF

FI-X
ZIF
Where there is a ZIF connector at one end, the standard number of ways for the ZIF will be 2 more than the DF-19/FI-SE/FI-X connector at the other end (for DF-9 versions the number of ways is equal for both connectors). If same number of ways (14, 20 or 30) is required for the ZIF on DF-19/FI-SE/FI-X versions, AXON' can punch the ZIF end to ensure compatibility.

Off-the-shelf products

AXON' keeps several standard lengths of Flat Flexible Cables in stock with 31 or 41 conductors for the different assembly types to assure a short delivery time. Immediately after receipt of your order, the termination process is started. Any connector configuration shown on the following pages is possible.
### Standard AXOLINK™ assembly lengths

- 76 mm  
- 102 mm  
- 152 mm  
- 203 mm  
- 254 mm

### Quick prototyping for electrical validation

AXON' can provide small quantities of AXOLINK™ prototypes for electrical validation. Dependent on the availability of cable, AXON’ may propose the exact length required or a slightly different length to provide the quickest response.

### Special products

AXON' can also provide special AXOLINK™ products, in particular:
- special number of conductors
- special markings,
- any special length,
- moisture protection of the assembly,
- folded versions,
- ferrites on the assembly,
- shielding,
- shielding with grounding,
- gold plating: for DF-19/FI-SE and FI-X the gold plating available on the ZIF end.

### Processing forms

#### Connection schemes

**A**

**B**

**C**

**D**

**E**

**F**

For “ZIF” ending of DF-19 / FI-SE / FI-X versions, connector ways = number of conductors + 2.
### Identification code

<table>
<thead>
<tr>
<th>FDC</th>
<th>41</th>
<th>0100</th>
<th>A</th>
<th>M</th>
<th>M</th>
<th>02</th>
</tr>
</thead>
</table>

**Connection scheme**
- 1 through 40 as defined on the connection scheme

**Connector type C2**
- M: MALE (Header) - DF-9 / DF-19 / FI-SE / FI-X
- F: FEMALE (Receptacle) - DF-9 only
- Z: ZIF

**Connector type C1**
- M: MALE (Header) - DF-9 / DF-19 / FI-SE / FI-X
- F: FEMALE (Receptacle) - DF-9 only

**Connection type**
- A: connector-connector - same face
- B: connector-connector - opposite face
- C: DF-9 to ZIF - same face
- D: DF-9 to ZIF - opposite face
- E: connector - connector
  - (only for DF-19 / FI-SE / FI-X)
- F: connector - ZIF (only for DF-19 / FI-SE / FI-X)

**Length**
- End to end length including connector (mm)
  - Minimum length: 52 mm

**Number of conductors**
- 31 or 41 for DF-9
- 14, 20 or 30 for DF-19
- 20 for FI-SE
- 14, 20 or 30 for FI-X

**FDC** = Non shielded version
- (DF-9, DF-19, FI-SE, FI-X connectors)

**FDB** = Shielded version
- (DF-9, DF-19, FI-SE, FI-X connectors)

Any special version on request