Global and China Flexible Printed Circuit (FPC) Industry Report, 2009-2010

In PCB industry in 2009, the output value of flexible printed circuit board (FPC) dropped least in percentage, mainly due to a bit fall in FPC market. Entering 2010, FPC industry grows further, which is driven by the demand from smart phones, e-books, LED panels and notebook computers. Actually, any thin and small electronic product has strong demand for FPC.

Smart phone have more functions, including touch screen, GPS, and WLAN, etc. Meanwhile, a variety of special sensors have been added, such as acceleration sensors, inclination sensors, gyroscopes, magnetic sensors, pressure sensor. These additional functions are integrated in modules, which must be linked by FPC or Flex-Rigid Boards. Moreover, antennas, batteries, speakers should also be connected by FPC or Flex-Rigid Boards out of consideration for internal layout and cubage. Although it is a bar phone, iPhone employs 10 to 15 pieces of FPC, doubling the need of 5 to 7 for general cell phones.
E-book market grows rapidly. The shipment of global e-book market reached about 1 million in 2008 and 3.82 million in 2009, and it is expected to record 9.3 million in 2010. A common e-book requires 5 to 12 pieces of FPC. Apple's IPAD uses about 16 pieces or so, which greatly spurs the demand for FPC.

The drive of notebook computer for FPC can be presented in two respects. First, the revolving shaft of laptop partially exerts FPC. Second, Win7 system supports touch screen which needs to be connected by FPC. LED panel is primarily the LED light bar and mostly equipped with FPC. LED witnessed explosive growth in 2009 and 2010. Still, Japan holds more than 50% shares of the entire FPC industry inasmuch as the general fields to which FPC gets applied, mainly hard drives, optical drives, digital cameras, DV and vehicle use, are controlled by Japanese manufacturers, and they also firmly occupy the upstream, with complete industry chains. South Korean FPC companies converge in mobile phone sector and Taiwanese FPC counterparts in cell phone and notebook computer, while American FPC vendors focus upon mobile phones and printers.
### Ranking of 18 FPC Vendors in the World by Revenue, 2009-2010

<table>
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<tr>
<th>Vendor</th>
<th>Revenue in 2009 (US$ min)</th>
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<td>Mektron</td>
<td>1649</td>
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<tr>
<td>Fujikura</td>
<td>967</td>
<td>970</td>
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<tr>
<td>M-FLEX</td>
<td>764</td>
<td>795</td>
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<tr>
<td>SUMITOMO</td>
<td>626</td>
<td>788</td>
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<tr>
<td>Nitto Denko Career Technology</td>
<td>430</td>
<td>400</td>
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<tr>
<td>FOXCONN</td>
<td>258</td>
<td>308</td>
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<tr>
<td>Infrareflex</td>
<td>196</td>
<td>267</td>
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<tr>
<td>SONY Chemical</td>
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<td>Sumitomo Bakelite</td>
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<td>Kinwong</td>
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<td>Flexium</td>
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<td>NEW FLEX</td>
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<td>40</td>
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<tr>
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