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BACKGROUND

Halogen Free **RoHS**

Existing product and fabrication method/processes of Flexible Printed Circuit (FPC) require intensive use of acidic etching chemical, generating large amount of toxic waste and use of expensive polyimide materials. These provide the impetus to perform R&D in expanding the existing commercial applications of relatively lower cost yet environmentally friendly Variable-Pitch Flexible Flat Cable (FFC) as an effective substitute.

Conventional Products





Innovative New Products

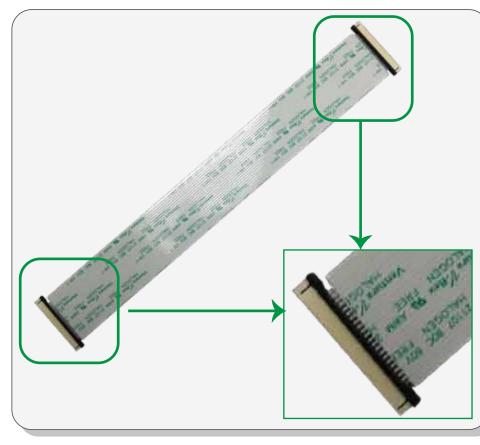


Ventura V-Flex® Variable-Pitch FFC (A BREAKTHROUGH INVENTION & MANUFACTURING TECHNOLOGY)

JSB Tech Pte Ltd & A*STAR (Singapore Government Research Agency) have co-developed to innovate a breakthrough world's first **Ventura** *V***-Flex[®] Variable-Pitch Flexible Flat Cable supported by SPRING Singapore.**

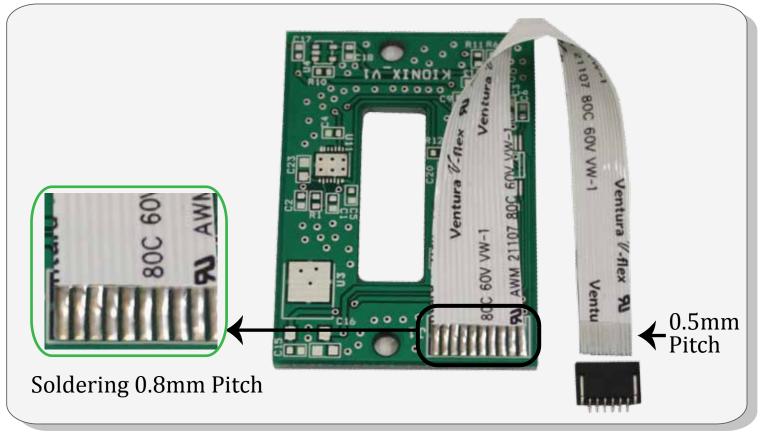
RESULT:

Conventional FFC



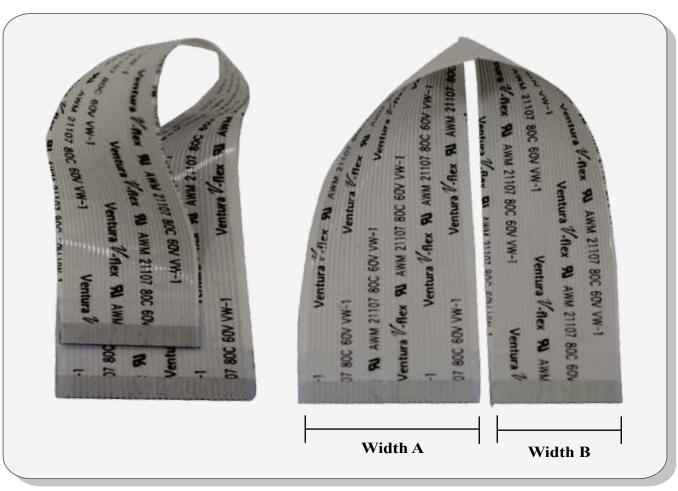
Conventional FFC (Both sides 0.5mm Pitch plugged into 2 connectors)

New Dual-Pitch FFC



Dual-Pitch FFC (One Side plugged into 0.5mm pitch connector & the other side 0.8mm pitch soldered directly on PCB)

New Dual-Pitch FFC



Dual-Pitch FFCs (Width A = 0.8mm pitch & Width B = 0.5mm Pitch)

MERITS & IMPLICATIONS

1) Replace expensive polyimide based FPC with economical polyester based FFC - Reduction of component COST by > 50%

- Reduce component/part DELIVERY LEAD TIME from 3 weeks to 3 days 2)
- Environmental Friendly No etching chemical required 3)

COST SAVINGS resulting from eliminating one connector achieved by soldering expanded-pitch terminal of FFC directly on PCB

APPLICATIONS:

Digital Camera, Mobile/Handheld Devices, Audio & Video Entertainment System, Blu-Ray Player, Optical Drive, Game Consoles, Tablet & Laptop PC, Laser/Inkjet printers/Scanner and other mobile devices utilizing serial I/O technologies



JSB TECH Pte Ltd Innovation & Technology Driven



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A*STAR is a Singapore Government Research Agency with the mission of fostering world-class scientific research and talent for Singapore SPRING Singapore is an agency under the Ministry of Trade and Industry responsible for helping Singapore enterprises to grow