Impedance Controlled Flexible Flat Cable

BACKGROUND

As electronic devices demand higher digital serial data transmission rate, recent development of serial I/O interface accelerates in tandem with an increasing need for high performance Flexible Flat Cable (FFC) to control components/parts cost. At higher data speeds, ability to maintain Signal Integrity (Quality) becomes critical through impedance control and matching.

COMPLETE DIGITAL SERIAL DATA LINK

VENTURA V-FLEX® IMPEDANCE CONTROLLED FFC

Ventura V-Flex® High Performance Cost Effective Impedance Controlled FFC utilizes JSB TECH’s proprietary V-Flex Selective Shielding FFC™ method employing both Shielding and Controlled Capacitance to achieve the required characteristic impedance.

RESULTS

TDR Single Ended Impedance Characteristic (1)

SELECTIVE SHIELDING FFC™
Multiple impedance values in one FFC cable

EYE DIAGRAM FOR HIGH PERFORMANCE Ventura V-Flex® FLEXIBLE FLAT CABLE

MERITS & IMPLICATIONS

1) Minimize the use of expensive shielding material (up to 50%) to achieve Impedance Matching.
2) Very Competitive Cost FFC while improving/maintaining existing EMI & ESD performance
3) Highly customizable to meet the various impedance design specification
4) Conformance to various High Speed Serial Data link standards

APPLICATIONS:

Laser/Inkjet printers/Scanner, Blue-Ray Player, Car Audio, Optical Drive, Iphone/Ipad related and other mobile devices utilizing serial I/O technologies

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