



Details:

1. FR-4 material characteristics: Dielectric Constant (1GHz) =4.6, Dissipation Factor (1GHz) =0.011
2. SATA Signal Cable: MOLEX 68561-0014, L= 500mm, Insertion Loss = -6dB@4.5GHz, Cross talk (NEXT) =-26dB@4.5GHz, Rise Time = 85ps (max)
3. SATA 7Pin Plug: MOLEX 67800-8002 No More Electrical Information.
4. AC-Coupling Capacitors: 10nF/10%/16V/0402 X7R Resonant Frequency≈10MHz
5. U1: TI SN75LVPE802RTJR Two-Channel 8 Gbps SATA Express Equalizer and Redriver
6. WANTED DATA RATING: SATAIII 6Gbps
7. L1 (RXP, RXN) = 48mm, L1 (TXP, TXN) = 45mm, Trace Width = 3.9mil, Neck Gap = 6.1mil, Differential impedance= 105.69 Ω
8. SAMTEC SEAF/SEAM Connectors: Meet VITA47, VITA57.1, VITA57.4, VITA74 VNX STANDARDS. Ran up to 56Gbps.
9. L2 (RXP, RXN) = 252mm, L2 (TXP, TXN) = 257mm, Trace Width = 4.1mil, Neck Gap = 9.9mil, Differential impedance= 93.69 Ω
10. TYCO VPX Connectors: P1 is 1410187-3, J1 is 1410140-1, Insertion Loss = -1dB@6GHz, Return Loss = -22dB@6GHz, Cross talk (NEXT) =-50dB@6GHz, Propagation Delay Time = 161ps (max)
11. L3 (RXP, RXN) = 255mm, L3 (TXP, TXN) = 266mm, Trace Width = 5.0mil, Neck Gap = 8.0mil, Differential impedance= 97.3 Ω
12. SATA 22Pin Plug: No More Electrical Information.