IDE Trace Routing Guidelines

Parameter	Trace Routing
Maximum Transfer Rate @ ATA100	100 MB/sec
Maximum length allowance for signals on the COM Express Carrier Board @ ATA100.	7.0 inches
Single-ended Impedance	55 Ω +/-15%
Trace width (W)	5mils (microstrip routing) (*)
Spacing between signals (inter-signal) (S)	7mils (microstrip routing) (*)
Length matching between strobe and data signals	Max. 450mils
Length matching between data signals	Max. 200mils
Length matching between strobe signals 'IDE_IOR' and 'IDE_IOW'.	Max. 100mils
Spacing from edge of plane	Min. 40mils
Reference plane	GND referenced preferred
Via Usage	Try to minimize number of vias