12 (a) On a PCB, the maximum $Z_0$ obtainable is mostly a function of how far apart the trace and its reference plane can be. This affects the board thickness. Also, how thin a trace can be as dictated by the manufacturing process.

The minimum $Z_0$ on a PCB is limited by the routing congestion caused by a wire trace. Also, the minimum thickness of the PCB limits how low the $Z_0$ can be.

(b) On a coax cable, maximum $Z_0$ is limited by the diameter of the coax and how thin the center conductor can be made without breakage becoming a problem.

Minimum $Z_0$ on a coax cable is limited by how thin the dielectric material can be before the breakdown voltage is approached in the application.