CLAIMS

1. A method for in-line optical testing, comprising:

providing a substrate;

forming an optical device on the substrate;

forming a test circuit on the substrate, wherein the test circuit is optically coupled to the optical device and wherein the test circuit comprises one or more couplers;

performing an optical test on the optical device with the test circuit; and

removing the test circuit after performing the optical test, wherein removing the test circuit comprises reconfiguring the test circuit by a subsequent fabrication process step, wherein reconfiguring the test circuit comprises depositing a cladding layer over the test circuit to reconfigure the test circuit and wherein at least one of the one or more couplers has a different coupling coefficient under different clad conditions.

2. The method of claim 1, wherein the optical device and the test circuit are simultaneously formed.

3. The method of claim 1, wherein the one or more couplers are selected from the group consisting of an inter-layer optical coupler, an edge coupler, a grating coupler, and a directional coupler.

4. The method of claim 3, wherein the edge coupler comprises one of a nano-taper coupler and a suspended coupler.

5. The method of claim 3, wherein the directional coupler comprises an asymmetrical direction coupler.

6. The method of claim 5, wherein the asymmetrical directional coupler has at least one of a different height and a different width than the optical device.

7. The method of claim 1, wherein the test circuit further comprises a bus waveguide coupled to at least one of the one or more couplers.