CLAIMS:

1. A tunable lens system for substrate inspection, the tunable lens system comprising:

a microscope objective positioned opposite a substrate to magnify the substrate; and

a review channel, comprising:

a telescope objective including at least two lens components to generate a telecentric intermediate image;

an eyepiece including at least two lens components to recollimate the telecentric intermediate image;

a fluidic focusing device with a variable focus shift based on a variable index of refraction, the fluidic focusing device to focus the review channel to a set focus position; and

an imager to generate a review image of the substrate.

2. The tunable lens system of claim 1, further comprising:

an inspection channel including a tube lens module and a detector to generate an inspection image.

3. The tunable lens system of claim 2 wherein the review image and the inspection image are generated in parallel and the review image has a higher resolution than the inspection image.

4. The tunable lens system of claim 1, further comprising:

a focus channel to determine contour information of the substrate.

5. The tunable lens system of claim 4, wherein the contour information is used to adjust a focus of an inspection channel.

6. The tunable lens system of claim 1, wherein the telescope objective includes four spherical lens components for telecentric imaging.

7. The tunable lens system of claim 6, wherein the four spherical lens components include a singlet lens, a triplet lens, and two doublet lenses.

8. The tunable lens system of claim 1, wherein the eyepiece includes four lens components including two singlet lenses and one doublet lens.

9. The tunable lens system of claim 1, wherein the fluidic focusing device includes a tunable acoustic gradient lens.

10. A method for assisting inspection of a substrate, the method comprising:

positioning the substrate opposite a microscope objective;

generating a telecentric intermediate image using at least two lens components of a telescope objective;

recollimating the telecentric intermediate image using at least two lens components of an eyepiece;

adjusting a focus level of a fluidic focusing device based on an applied charge; and

generating a review image of the substrate.

11. The method of claim 10, further comprising:

generating an inspection image of the substrate substantially simultaneously to the review image, wherein the review image has a higher resolution than the inspection image.

12. The method of claim 11, further comprising:

determining contour information of the substrate based on a near infrared spectrum; and

adjusting a focus level of the inspection image based on the contour information.

13. The method of claim 10, wherein the telescope objective includes four spherical lens components for telecentric imaging, and

wherein the fluidic focusing device includes a tunable acoustic gradient lens.

14. The method of claim 13, wherein the four spherical lens components include a singlet lens, a triplet lens, and two doublet lenses.

15. The method of claim 10, wherein the eyepiece includes three lens components including two singlet lenses and one doublet lens.