CLAIMS

1. A method comprising:

(a) moving an aliquot of first reagent fluid into a fluidic device;

(b) after step (a), moving a volume of fluid buffer into the fluidic device;

(c) after step (b), moving at least a portion of the volume of fluid buffer moved in step (b) from the fluidic device into a first fluid buffer reservoir;

(d) after step (c), moving an aliquot of second reagent fluid into the fluidic device;

(e) after step (d), moving a volume of fluid buffer into the fluidic device; and

(f) after step (e), moving at least a portion of the volume of fluid buffer moved in step (e) from the fluidic device into a second fluid buffer reservoir;

(g) after step (f), moving an aliquot of the first reagent fluid into the fluidic device;

(h) after step (g), moving a volume of fluid buffer into the fluidic device, wherein at least a portion of the volume of fluid buffer moved in step (h) is moved from the first fluid buffer reservoir;

(i) after step (h), moving an aliquot of the second reagent fluid into the fluidic device; and

(j) after step (i), moving a volume of fluid buffer into the fluidic device, wherein at least a portion of the volume of fluid buffer moved in step (j) is moved from the second fluid buffer reservoir.

2. The method of claim 1, further comprising:

(k) after step (h) and before step (i), moving at least a portion of the volume moved in step (h) back into the first fluid buffer reservoir; and

(l) after step (j), moving at least a portion of the volume moved in step (j) back into the second fluid buffer reservoir.

3. The method of claim 1, wherein step (b) comprises moving a volume of fluid buffer from the first fluid buffer reservoir into the fluidic device, and thereafter, moving a volume of fluid buffer from a common fluid buffer reservoir into the fluidic device, and

wherein step (e) comprises moving a volume of fluid buffer from the second fluid buffer reservoir into the fluidic device, and thereafter, moving a volume of fluid buffer from the common fluid buffer reservoir into the fluidic device.

4. The method of claim 3, wherein step (b), the volume of fluid buffer moved from the first fluid buffer reservoir is substantially equal to the volume of fluid buffer moved from the common fluid buffer reservoir.

5. The method of claim 1, wherein step (b) comprises moving a volume of fluid buffer from the first fluid buffer reservoir into the fluidic device; and

wherein step (e) comprises moving a volume of fluid buffer from the second fluid buffer reservoir into the fluidic device.

6. The method of claim 1, wherein the portion of fluid buffer moved to the first fluid buffer reservoir in step (c) ranges from about 30% to 70% of the volume of fluid buffer moved in step (b).

7. The method of claim 1, wherein in step (h), the portion of fluid buffer moved from the first fluid buffer reservoir ranges from about 30% to 70% of the volume of fluid buffer moved into the fluidic device.

8. The method of claim 1, wherein in step (d), the aliquot of the second reagent is not mixed with the aliquot of the first reagent in the fluidic device.

9. A computer readable medium encoded with computer-executable instructions that, when executed by a computer controller of an automated system, causes the system to execute the following system processes:

(a) move an aliquot of first reagent fluid into a fluidic device;

(b) after process (a), move a volume of fluid buffer into the fluidic device;

(c) after process (b), move at least a portion of the volume of fluid buffer moved in process (b) from the fluidic device into a first fluid buffer reservoir;

(d) after process (c), move an aliquot of second reagent fluid into the fluidic device;

(e) after process (d), move a volume of fluid buffer into the fluidic device; and

(f) after process (e), move at least a portion of the volume of fluid buffer moved in process (e) from the fluidic device into a second fluid buffer reservoir;

(g) after process (f), move an aliquot of the first reagent fluid into the fluidic device;

(h) after process (g), move a volume of fluid buffer into the fluidic device, wherein at least a portion of the volume of fluid buffer moved in process (h) is moved from the first fluid buffer reservoir;

(i) after process (h), move an aliquot of the second reagent fluid into the fluidic device; and

(j) after process (i), move a volume of fluid buffer into the fluidic device, wherein at least a portion of the volume of fluid buffer moved in process (j) is moved from the second fluid buffer reservoir.

10. The computer readable medium of claim 9, wherein process (b) comprises moving a volume of fluid buffer from the first fluid buffer reservoir into the fluidic device, and thereafter, moving a volume of fluid buffer from a common fluid buffer reservoir into the fluidic device, and

wherein process (e) comprises moving a volume of fluid buffer from the second fluid buffer reservoir into the fluidic device, and thereafter, moving a volume of fluid buffer from the common fluid buffer reservoir into the fluidic device.