CLAIMS

1. A flow module comprising:

a plurality of outer walls equal-distant from a central axis, the plurality of outer walls including a first outer wall, a second outer wall, a third outer wall, and a fourth outer wall;

an inner wall;

two or more pairs of radial walls connecting the outer walls and the inner wall, wherein the outer walls, inner wall and two or more pairs of radial walls define evacuation channels and a center portion, the center portion and evacuation channels fluidly isolated from each other by the inner and radial walls;

a first through hole formed through the first outer wall and a second through hole formed through the second outer wall, wherein the first and second through holes are fluidly coupled to the center portion, wherein the first and second through holes are 180 degrees apart and linearly aligned through the central axis;

a third through hole formed through the third outer wall and fluidly coupled to the center portion; and

a fourth through hole formed through the fourth outer wall and fluidly coupled to the center portion,

wherein the third and fourth through holes are 180 degrees apart and linearly aligned through the central axis; and

wherein the flow module has four evacuation channels and the evacuation channels are symmetrical.

2. A processing chamber for processing a substrate, comprising:

a process module enclosing a process region;

a central axis vertically disposed through a center of the processing chamber;

a flow module comprising:

a plurality of outer walls equal-distant from a central axis, the plurality of outer walls including a first outer wall, a second outer wall, a third outer wall, and a fourth outer wall;

an inner wall;

two or more pairs of radial walls connecting the outer walls and the inner wall, wherein the outer walls, inner wall and two or more pairs of radial walls define evacuation channels and a center portion, the center portion and evacuation channels fluidly isolated from each other by the inner and radial walls;

a first through hole formed through the first outer wall and a second through hole formed through the second outer wall, wherein the first and second through

holes are fluidly coupled to the center portion, wherein the first and second through holes are 180 degrees apart and linearly aligned through the central axis;

a third through hole formed through the third outer wall and fluidly coupled to the center portion; and

a fourth through hole formed through the fourth outer wall and fluidly coupled to the center portion,

wherein the third and fourth through holes are 180 degrees apart and linearly aligned through the central axis; and

wherein the flow module has four evacuation channels and the evacuation channels are symmetrical;

a substrate support chassis, the chassis being sealingly coupled to the inner wall of the flow module; and

a substrate support assembly comprising a support plate and a base, wherein the support plate is disposed in the process region to support a substrate therein, wherein the base is accessible through the first, second, third, and fourth through holes.

3. A processing platform comprising:

a transfer chamber having a transfer chamber robot;

a load lock chamber coupled to the transfer chamber and a factory interface; and

a plurality of processing chambers shaped with four external surfaces and coupled to the transfer chamber at a slit valve door on a first external surface of the four external surfaces, wherein at least one of the processing chambers comprises:

a process module enclosing a process region;

a central axis vertically disposed through a center of the processing chamber;

a flow module comprising:

an outer wall equal-distant from the central axis;

an inner wall;

two or more pairs of radial walls connected between the outer wall and the inner wall, wherein the outer wall, inner wall and two or more pairs of radial walls define evacuation channels and a center portion, the center portion and evacuation channels fluidly isolated from each other in the flow module; and

a first through hole formed through the outer wall and a second through hole formed through the outer wall, wherein the first and second through holes are fluidly coupled to the center portion, wherein the first

through hole and second through hole are 180 degrees apart and linearly aligned through the central axis;

a third through hole formed through the outer wall and fluidly coupled to the center portion; and

a fourth through hole formed through the outer wall and fluidly coupled to the center portion,

wherein the third and fourth through holes are 180 degrees apart and linearly aligned through the central axis; and

wherein the flow module has four evacuation channels and the evacuation channels are symmetrical;

a substrate support chassis, the chassis being sealingly coupled to the inner wall of the flow module;

a substrate support assembly comprising a support plate and a base, wherein the support plate is disposed in the process region to support a substrate therein, and wherein the base is accessible through the first, second, third, and fourth through holes; and

a match circuit is electrically coupled to the substrate support assembly and the match circuit is attached to one of the four external surfaces of the processing chamber and wherein the match circuit is attached adjacent to one of the first, second, third, and fourth through holes.

4. The processing platform of claim 3, wherein the match circuit is on a second external surface opposite the first external surface having the slit valve.

5. The processing platform of claim 3, wherein the match circuit is on a third external surface adjacent the first external surface having the slit valve.