```
lat.Const=[1]                    // lattice constant, 1x1 real
lat.Primitive=...                // Primitive vectors, (3x3/2x2/1x1)
[1/2,1/2,0;1/2,0,1/2;0,1/2,1/2]
lat.Sublatt=[0,0,0;1/2,1/2,1/2]  // sublattice position, (nx3/nx2/nx1/)
lat.Order=[1]                    // Nearest Neighbor Order, 1x1 integer

============= PiLib Variable =============
lat.recip_vec, @full, the reciprocal lattice vectors
ORDER=    0, SIZE=[    3,    3], TYPE=REAL

        1         2         3

   6.283185   6.283185  -6.283185
   6.283185  -6.283185   6.283185
  -6.283185   6.283185   6.283185

============= PiLib Variable =============
lat.surr_site(1),  @full, surrouding sites [order, dist, sublatt, n1, n2, n3, x, y, z]
ORDER=    0, SIZE=[    7,    9], TYPE=REAL

        1         2         3         4         5         6         7         8         9

   0.000000  0.000000  1.000000  0.000000  0.000000  0.000000  0.000000  0.000000  0.000000
   1.000000  0.500000  2.000000 -1.000000 -1.000000  0.000000 -0.500000  0.000000  0.000000
   1.000000  0.500000  2.000000 -1.000000  0.000000 -1.000000  0.000000 -0.500000  0.000000
   1.000000  0.500000  2.000000 -1.000000  0.000000  0.000000  0.000000  0.000000  0.500000
   1.000000  0.500000  2.000000  0.000000 -1.000000 -1.000000  0.000000  0.000000 -0.500000
   1.000000  0.500000  2.000000  0.000000 -1.000000  0.000000  0.000000  0.500000  0.000000
   1.000000  0.500000  2.000000  0.000000  0.000000 -1.000000  0.500000  0.000000  0.000000

============= PiLib Variable =============
lat.surr_site(2), @full, surrouding sites [order, dist, sublatt, n1, n2, n3, x, y, z]
ORDER=    0, SIZE=[    7,    9], TYPE=REAL

        1         2         3         4         5         6         7         8         9

   0.000000  0.000000  2.000000  0.000000  0.000000  0.000000  0.500000  0.500000  0.500000
   1.000000  0.500000  1.000000  0.000000  0.000000  1.000000  0.000000  0.500000  0.500000
   1.000000  0.500000  1.000000  0.000000  1.000000  0.000000  0.500000  0.000000  0.500000
   1.000000  0.500000  1.000000  0.000000  1.000000  1.000000  0.500000  0.500000  1.000000
   1.000000  0.500000  1.000000  1.000000  0.000000  0.000000  0.500000  0.500000  0.000000
   1.000000  0.500000  1.000000  1.000000  0.000000  1.000000  0.500000  1.000000  0.500000
   1.000000  0.500000  1.000000  1.000000  1.000000  0.000000  1.000000  0.500000  0.500000
```