stat=['f'] | N=[1] | J = 1 | M=40 | pbc = 0

$$\hat{H}_{tot} = \sum_{i=0}^{M/2-1} v(c_{A_{i}}^{\dagger} a_{B_{i}} + h.c) + w(c_{A_{i+1}}^{\dagger} a_{B_{i}} + h.c), \quad \hat{H}_{total} | \lambda \rangle = E_{\lambda} | \lambda \rangle$$

