

【F2L四向双态手法】BR部 作者：张砷镓 2010.8.6

编号	槽位	公式	时间
A0		$(R' U R) F (R U R' \underline{U'} R F')$	1.0s
A1		$(R U R U) (R \underline{U'} R' \underline{U'} R')$	1.0s
		$(R U) (R U R' \underline{U'}) (R' \underline{U'} R')$	1.1s
A2		$(R' U) (l \underline{U'} R) (U l')$	0.9s
		$d' (R' F' R U) (R \underline{U'} R' F)$	1.0s

B1



$(R' \underline{U} R U)^*2 (R' \underline{U} R)$

0.7s



$(R' U R \underline{U}') (R' \underline{U} R \underline{U}' R' U R')$

0.8s

B2



$(R' U R' F) (R F R)$

0.6s



$U' (I \underline{U}') (R' U I') (U R)$

0.9s

C1



$(R' U R) (U R' \underline{U} R U' \underline{U}') (R' U R)$

0.9s

C2



$(R2' F' \underline{U}' F) (U R \underline{U}' R)$

0.9s

D1



$(R' U R' \underline{U}') F' U F R^2$

0.9s

D2



$(R^2 F' U' F) (U R U' R)$

0.8s

E1



$(R' U R \underline{U}') (R' U R)$

0.4s



$\underline{U' U'} (R' U R \underline{U}') (R' U R)$

0.6s

E2



$y (R \underline{U'} R' U) (R \underline{U'} R')$

0.6s



$d' \underline{U'} (R \underline{U'} R' U) (R \underline{U'} R')$

0.8s

F1



$y (R \ U \ R' \ \underline{U}') (R \ U \ R')$

0.7s



$d' \ \underline{U}' (R \ U \ R' \ \underline{U}') (R \ U \ R')$

0.8s

F2



$(R' \ \underline{U}' \ R \ U) (R' \ \underline{U}' \ R)$

0.4s



$\underline{U}' \underline{U}' (R' \ \underline{U}' \ R \ U) (R' \ \underline{U}' \ R)$

0.6s

G1



$(R' \ U) (R \ \underline{U}' \underline{U}') (R' \ U \ R)$

0.6s



$\underline{U}' \underline{U}' (R' \ U) (R \ \underline{U}' \underline{U}') (R' \ U \ R)$

0.8s

G2



$(R' U^2)(R \underline{U}') (R' \underline{U}' R)$

0.6s



$y' (R \underline{U}') (R' U^2) (R \underline{U}' R')$

0.8s

H1



$R' F (R' F R \underline{U}' R)$

0.7s



$\underline{U}' \underline{U}' R' F (R' F R \underline{U}' R)$

0.8s

H2



$y (R U R') y' (U R' \underline{U}' R)$

0.9s



$d (L U L') B (r' \underline{U}' r)$

1.0s

I1



$(R' U R)$

0.2s



$U' \underline{U'} (R' U R)$

0.4s

I2



$x' \underline{U'} (R U R')$

0.3s



$d' (R' \underline{U'} R)$

0.4s

J1



$y' L' U^2 (L^2 U) (L'^2 U) L$

1.0s



$y (R U' \underline{U'} R' \underline{U'}) (R U R' \underline{U'}) (R U R')$

1.1s

J2



$(R \ U' \underline{U}) (R'2 \ \underline{U}' R2 \ \underline{U}' R')$

0.8s



$(R \ U \ R' \ U) (R \ U' \underline{U}' R'2 \ \underline{U}' R)$

0.9s

K1



$(R' \ U2) (R \ \underline{U}') (R' \ \underline{U}') (R \ \underline{U}') (R' \ U \ R)$

1.0s



$(R' \ \underline{U}' \ R) \ U \ (R' \ U2 \ R) \ \underline{U}' \ (R' \ \underline{U}' \ R)$

1.0s

K2



$(R' \ U \ R \ U' \underline{U}' \ y) (R \ U \ R')$

0.8s



$(R' \ \underline{U}' \ I \ U) (L \ \underline{F}2 \ L' \ \underline{U}')$

0.9s

L1



$y (R \underline{U}') (R' U) (R U R')$

0.8s



$d' \underline{U}' (R \underline{U}') (R' U) (R U R')$

0.9s

L2



$(R' U R \underline{U}') (R' \underline{U}' R)$

0.4s



$\underline{U}' \underline{U}' (R' U R \underline{U}') (R' \underline{U}' R)$

0.6s

M1



$x' U (L \underline{F}' L' \underline{U}') (R' F R)$

0.8s



$(R' \underline{U}' \mid R \underline{U}') (R' U \mid U R)$

0.9s

M2



$(R' \underline{U}') (R \underline{U'U'}) (R' \underline{U'} R U) (R' \underline{U'} R)$

1.0s



$(R2 \underline{U'U'}) (R U R' U) R2$

1.0s

N1



$(R' U2) (R U R' \underline{U'} R)$

0.7s



$\underline{U'U'} (R' U2) (R U R' \underline{U'} R)$

0.9s

N2



$(\underline{I \underline{U'}}) (R' U \underline{I' U}) (R \underline{U'} R' U R)$

0.9s



$d' U' (R \underline{U'U'}) (R' \underline{U'} R U) R'$

0.9s

Q1



$(R' \underline{U}' R \underline{U}' U') (R' U R)$

0.6s



$\underline{U}' U' (R' \underline{U}' R \underline{U}' U') (R' U R)$

0.8s

Q2



$y (R U R' \underline{U}') (R \underline{U}' U' R')$

0.8s



$(r' U) (R \underline{U}' R' \underline{U}') r$

0.7s

R1



$y (R U R' U) (R U R')$

0.8s



$(R' U R U' y) (R U R')$

0.8s

R2



$y (R \underline{U}' R' U y') (R' \underline{U}' R)$

0.7s



$(R' \underline{U}' R \underline{U}') (R' \underline{U}' R)$

0.5s

S1



$(R' U^2 R \underline{U'U'}) (R' U R)$

0.8s



$\underline{U'U'} (R' U^2 R \underline{U'U'}) (R' U R)$

1.0s

S2



$F (R U R'^2 \underline{U}' R F')$

0.7s



$d (L U^2) (L' U^2) (L \underline{U}' L')$

1.0s

T1



$f R f$

0.4s



$d' U' (R U R')$

0.5s

T2



$R' \underline{U}' R$

0.2s



$\underline{U}' \underline{U}' (R' \underline{U}' R)$

0.4s

U1



$(R' U^2) (R \underline{U}') (R' U R)$

0.6s



$\underline{U}' \underline{U}' (R' U^2) (R \underline{U}') (R' U R)$

0.8s

U2



$(R' U) (R \underline{U}) (R' U' U R)$

1.0s



$d' U' (R \underline{U' U'}) R' U (R \underline{U'} R')$

0.9s

V1



$f (U R^2 \underline{U'}) f'$

0.9s



$(R' \underline{U'} R) (f R f')$

0.9s

V2



$(R' U) (R \underline{U' U'}) (R' \underline{U'} R)$

0.7s



$(R' \underline{U'} R \underline{U'}) (R' U R)$

0.5s