
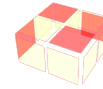
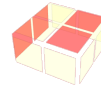
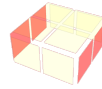
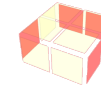


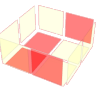
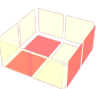


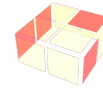
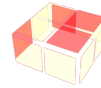
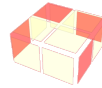
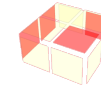



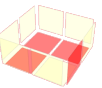
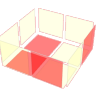


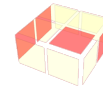


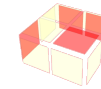
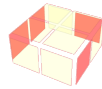

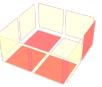
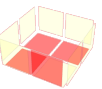



Sortega

2-Gen Optimal Orientation Algs - Formal method suggestion by Michael Gottlieb - Algs by Lucas Garron, Nov 8-9, 2010 - Alg Sheet 1.0 (Nov 09, 2010)

At least one QTM optimal and one HTM optimal 2-gen solution for every one of the 243 (pre-symmetry-reduction to 72) cases is represented here.

Top → Bottom ↓								
		$(U')R U2 R' U2 R U2 R$	$R2 U R' U2 R U2 R$ $(U')R2 U' R U2 R' U2 R$	$(U')R' U2 R' U2 R$ $(U)R U2 R U2 R$	$(U)R2 U2 R$	$R' U' R U R' U2 R$ $(U2)R U R' U' R U2 R$ $(U')R2 U R2 U2 R U2 R$ $(U)R U R' U R2 U2 R$	$(U')R2 U R' U R$	$R2 U' R U' R$
	$R U2 R U2 R' U2 R$	$(U')R$	$R' U R' U2 R U2 R$ $(U')R U' R U2 R' U2 R$	$(U')R2 U2 R' U2 R$ $(U)R2 U2 R U2 R$	$R U' R' U R' U' R' U2 R$ $(U)R U2 R U2 R' U2 R U2 R$	$R' U' R U' R$ $(U2)R U R' U' R$ $(U)R U2 R2 U' R$	$R U' R2 U R' U R$ $(U')R' U R2 U' R U2 R$	$R U' R2 U R' U2 R$ $(U')R' U R2 U' R U' R$
	$R2 U R' U2 R' U2 R$	$(U')R2 U R2 U2 R' U2 R$ $(U)R U' R U R2 U2 R$	$R U' R2 U R$ $(U')R' U R2 U' R$	$R2 U R2 U2 R$	$(U)R U2 R2 U R$	$R2 U' R U' R U' R$ $(U2)R2 U R' U R' U R$	$R2 U2 R U' R U2 R$ $(U2)R U2 R2 U' R U2 R$ $(U')R U R' U R' U R$	$R' U' R U' R U' R$ $(U')R2 U2 R' U R' U2 R$ $(U)R U' R U' R2 U R$
Top → Bottom ↓								
	$R U2 R' U2 R$	$R' U' R$	$(U)R' U2 R$	$R U' R' U R' U2 R$ $(U2)R' U R U2 R' U2 R$	$R U2 R2 U' R U' R$ $(U2)R2 U R2 U' R U2 R$ $(U')R' U' R U2 R' U2 R$ $(U)R U R' U R' U2 R$	$R' U R2 U2 R U2 R$ $(U2)R U R2 U R' U2 R$ $(U)R U' R2 U' R U' R$	$(U2)R' U R' U2 R$	$R2 U R' U' R U2 R$
	$(U2)R' U R' U R U' R$ $(U')R U R2 U2 R' U2 R$	$R U2 R' U2 R U' R U2 R$ $(U)R U' R' U R' U2 R U2 R$	$(U)R U' R U' R U2 R$	$(U')R U' R$	$(U')R2 U R$	$R2 U' R U2 R$	$R U' R U' R U' R$ $(U')R' U' R2 U R' U2 R$	$R U2 R U' R U2 R$
	$(U')R' U R U' R$	$R' U R U2 R$	$(U)R2 U' R U' R U2 R$	$R U' R U R' U2 R$ $(U2)R' U R' U2 R' U2 R$ $(U')R U2 R U' R' U R$ $(U)R U' R2 U R2 U2 R$	$(U2)R' U2 R U' R U2 R$	$R' U' R U2 R$ $(U)R U2 R U' R$	$(U2)R' U R2 U2 R$ $(U')R U' R U' R$	$R U R2 U R$
Top → Bottom ↓								
	$(U2)R' U R2 U2 R' U2 R$ $(U')R U' R U' R' U R$	$R U2 R U' R U' R U2 R$ $(U)R U2 R U2 R' U R' U2 R$	$(U')R' U R' U R' U2 R$	$(U)R' U R$	$(U')R2 U' R$	$(U')R2 U R' U2 R$	$(U2)R' U R' U R' U R$ $(U')R U R2 U' R U2 R$	$R' U2 R' U R' U2 R$
	$(U)R' U2 R U2 R$	$(U)R U R$	$(U')R U2 R$	$R' U R U' R U2 R$ $(U2)R U' R' U2 R U2 R$	$R2 U' R2 U R' U2 R$ $(U2)R U2 R' U R U' R$ $(U')R U R' U2 R U2 R$ $(U)R' U' R U' R U2 R$	$(U2)R U' R' U R U' R$ $(U')R U R2 U2 R U2 R$ $(U)R' U' R2 U' R U2 R$	$R U' R U2 R$	$R2 U' R U R' U2 R$
	$(U2)R U' R' U R$	$(U)R U' R' U2 R$	$(U')R2 U R' U R' U2 R$	$R' U' R' U' R U2 R$ $(U2)R U R' U2 R' U2 R$ $(U)R U2 R2 U R' U R$ $(U')R' U R2 U R2 U2 R$	$R U2 R' U R' U2 R$	$(U2)R U2 R' U R$ $(U')R U R' U2 R$	$R U R2 U2 R$ $(U')R' U R' U R$	$R U' R2 U' R$