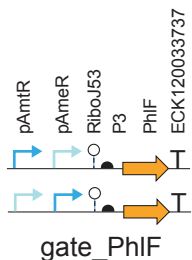
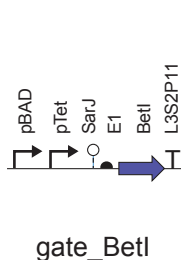


Gate devices

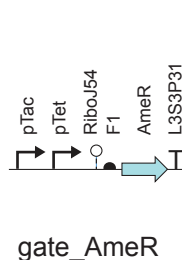
2 solutions



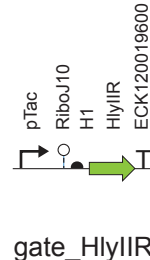
1 solution



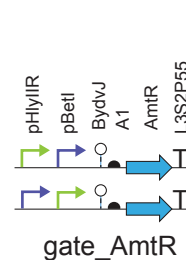
1 solution



1 solution



2 solutions

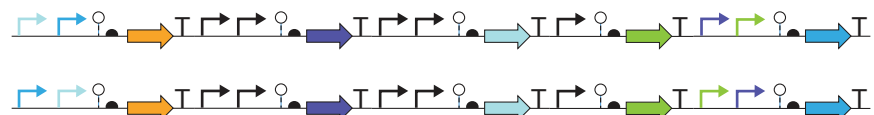


Panel 1

gate_PhIF	BEFORE	gate_BetI	AND
gate_BetI	BEFORE	gate_AmeR	AND
gate_AmeR	BEFORE	gate_HlyIIR	AND
gate_HlyIIR	BEFORE	gate_AmtR	AND
FORWARD	gate_PhIF	AND	
FORWARD	gate_BetI	AND	
FORWARD	gate_AmeR	AND	
FORWARD	gate_HlyIIR	AND	
FORWARD	gate_AmtR	AND	

Fixed repressor order, and all gates in the forward orientation

4 solutions

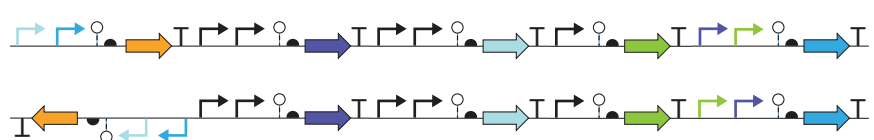


Panel 2

gate_PhIF	BEFORE	gate_BetI	AND
gate_BetI	BEFORE	gate_AmeR	AND
gate_AmeR	BEFORE	gate_HlyIIR	AND
gate_HlyIIR	BEFORE	gate_AmtR	AND
FORWARD	gate_BetI	AND	
FORWARD	gate_AmeR	AND	
FORWARD	gate_HlyIIR	AND	
FORWARD	gate_AmtR	AND	

Removed rule: FORWARD gate_PhIF

8 solutions

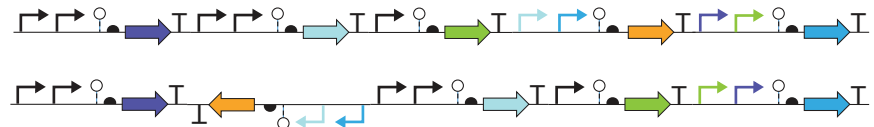


Panel 3

gate_BetI	BEFORE	gate_AmeR	AND
gate_AmeR	BEFORE	gate_HlyIIR	AND
gate_HlyIIR	BEFORE	gate_AmtR	AND
FORWARD	gate_BetI	AND	
FORWARD	gate_AmeR	AND	
FORWARD	gate_HlyIIR	AND	
FORWARD	gate_AmtR	AND	

Removed rule: gate_PhIF BEFORE gate_BetI

40 solutions

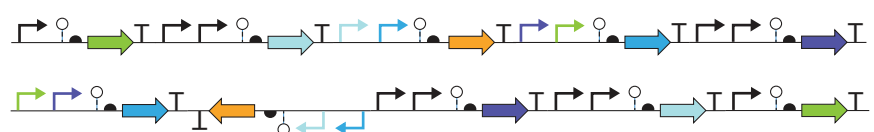


Panel 4

FORWARD	gate_BetI	AND	
FORWARD	gate_AmeR	AND	
FORWARD	gate_HlyIIR	AND	
FORWARD	gate_AmtR	AND	

Removed rules: all rules with BEFORE order constraints

960 solutions



Panel 5

(no constraints)

All order/orientation rules removed

15,360 solutions

