p1
Vp1
dc 0 pulse(0, {vdd}, 5n, 100p, 100p, {per/2-5n}, {per})

p2
Vp2
dc {vdd} pulse({vdd}, 0, 0, 100p, 100p, {per/2+5n}, {per})

VDD
Vsup
dc {vdd}
GND

VSS
Vss
dc 0
GND

VMID
Vmid
dc {vdd/2}
GND

VL
Vl
dc 0.25
GND

VH
Vh
dc {vdd-0.25}
GND

resb
Vresb
dc 0 pwl(0, 0, {per/2}, 0, {per/2+100p} {vdd})

sg13g2_inv_1
A
x3
res

GND
res
S14
mysw

C2
2p
m=1

E1
-1000

GND
VMID

GND
res
S15
mysw

C4
2p
m=1

E4
-1000

GND
VMID

GND p1
vi
Vin
dc 7m
VMID

S1
mysw

C1
1p
m=1

GND p2
S2
mysw

vo1

GND p2
S5
mysw

C3
1p
m=1

GND p1
S6
mysw

GND p1
S9
mysw
vo2

C5
1p
m=1
GND

p2
vcmp
resb
E2
TABLE {V(vo2,0)} = (599.9mV, 0V) (600.1mV, {vdd})
GND

comparator

flipflop
CLK
D   sg13g2_dfrbp_1   Q
RESET_B   Q_N
x1

S3
mysw
GND

p2
S10
mysw
GND

S11
mysw
GND

VL   VH

x2
Q   CLK
Q_N   sg13g2_dfrbp_1   D
RESET_B

p1
q
resb

p1
S4
mysw
VMID

p1
S7
mysw
GND

p2
S8
mysw
VMID

S12
mysw
GND

S13
mysw
GND

VL   VH

q
qb

NGSPICE
.param temp=27 vdd=1.2 per=1u
.model mysw SW vt={vdd/2} ron=10k roff=1gig
.option method=gear reltol=1e-4

.control
save all
tran 1n 65u
plot vo1 vo2 q
set wr_singlescale
set wr_vecnames
wrdata tb_ideal_idsm2_scaled.txt vo1 vo2 q p1 p2
.endc

MODEL
.lib $::SG13G2_MODELS/cornerMOSlv.lib mos_tt
.lib $::SG13G2_MODELS/cornerRES.lib res_typ
.inc /foss/pdks/sg13g2/libs.ref/sg13g2_stdcell/spice/sg13g2_stdcell.spice

SCHEM