

RESET_ST

Clear data registers
clr_w_regs = '1'

IDLE

Wait for a new sample

F

VIN = '1'

T

LATCH_EN_1

Process the new sample
en_latch = '1'
en_reg = '1'

F

VIN = '1'

T

LATCH_EN_OUT_VAL

Output data is valid
VOUT='1'
Process a new incoming sample
en_latch='1'
en_reg = '1'

T

VIN = '1'

F

OUT_VAL

Output data is valid
VOUT='1'

F

VIN = '1'

T