

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\_regs = '1'

F

VIN = '1'

T

LATCH\_EN\_OUT\_VAL

*Output data is valid*  
VOUT='1'  
*Process a new incoming sample*  
en\_latch='1'

T

VIN = '1'

F

OUT\_VAL

*Output data is valid*  
VOUT='1'

F

VIN = '1'

T

