

# Rate vs. Nthreads

hd\_rawdata\_042120\_010.evio

Haswell E5-2695 v3 @ 2.30GHz

Rate (Hz)

$$R = \frac{1}{T_{\text{serial}} + \frac{1}{N} T_{\text{parallel}}}$$

N = 28 threads

Multi-threading efficiency: 88.8%

$$\left( \text{eff} = \frac{T_{\text{para}}}{N \cdot T_{\text{serial}} + T_{\text{para}}} \right)$$

offmon launch

T<sub>serial</sub> = 1.1ms

T<sub>parallel</sub> = 248.7ms

Nthreads

