

$$\begin{aligned}
 \textit{Speedup}_{\text{CUDA,tree.png}} &= \frac{21595 \text{ ms}}{\frac{1961 \text{ KB}}{1.6 \text{ GB/s}} + \frac{1961 \text{ KB}}{31.5 \text{ GB/s}} + 2 \times 126 \times \left( \frac{2.88}{256} \times 85.69 \text{ ms} + \frac{1961 \text{ KB}}{31.5 \text{ GB/s}} \right) + \frac{1961 \text{ KB}}{6.2 \text{ GB/s}}} \\
 &= \frac{21595 \text{ ms}}{1.20 \text{ ms} + 0.06 \text{ ms} + 252 \times (0.97 \text{ ms} + 0.06 \text{ ms}) + 0.30 \text{ ms}} \\
 &= \frac{21595 \text{ ms}}{260 \text{ ms}} \approx 83
 \end{aligned}$$