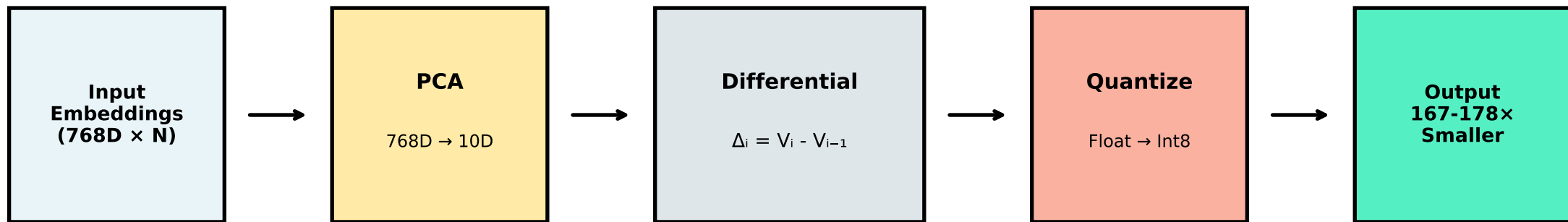


PCA + Differential Encoding Compression Pipeline



V_1, V_2, \dots, V_n

Variance: 95%

Small residuals

~13-16% loss

*Key insight: Consecutive embeddings lie on low-dimensional manifold ($D_2 < 1$)
→ Small deltas after PCA → High compression ratio*