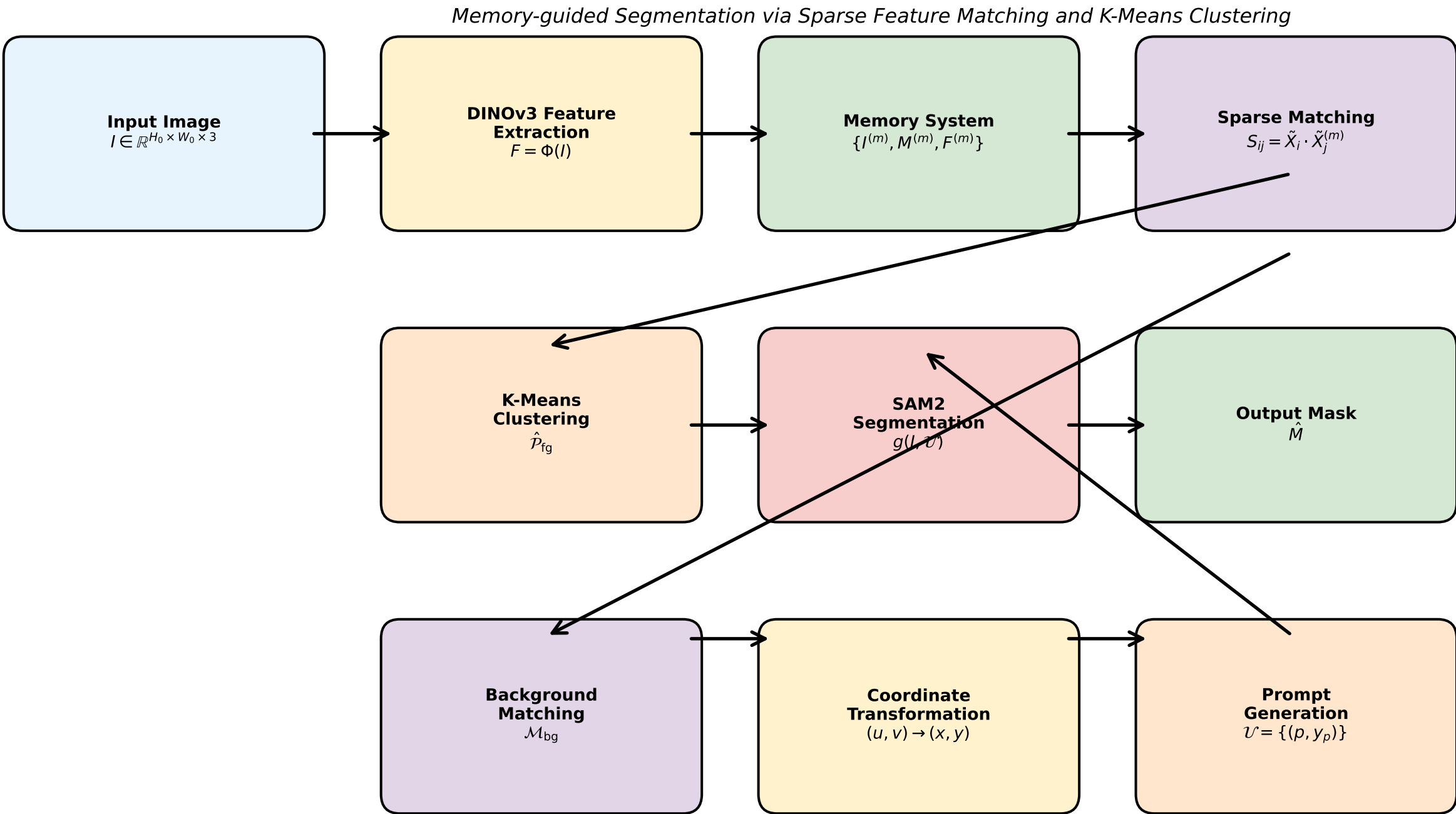


Memory SAM: Sparse Keypoint-based Prompt Generation Pipeline

- Input Processing
- Feature Extraction
- Memory System
- Sparse Matching
- Clustering
- SAM2 Model
- Output Generation



Normalization: $\tilde{X}_i = \frac{X_i}{\|X_i\|_2 + \epsilon}$

Foreground: $I_{fg} = \{i \mid M[u(i), v(i)] = 1\}$

Similarity: $S_{ij} \geq \tau_{fg}$

Selection: $\ell^* = \arg \max_{\ell} s_{\ell}$