RGB Branch

Template

Search Region

TIR Branch

Template

Search Region

Patch Embedding

Transformer Block ··· Transformer Block Transformer Block ··· Transformer Block

MFI MFI MFI

Transformer Block ··· Transformer Block Transformer Block ··· Transformer Block

Contextual Aggregation Module

Offset Generator

Cross Attention

Cross Attention

Offset Generator

Cross Attention
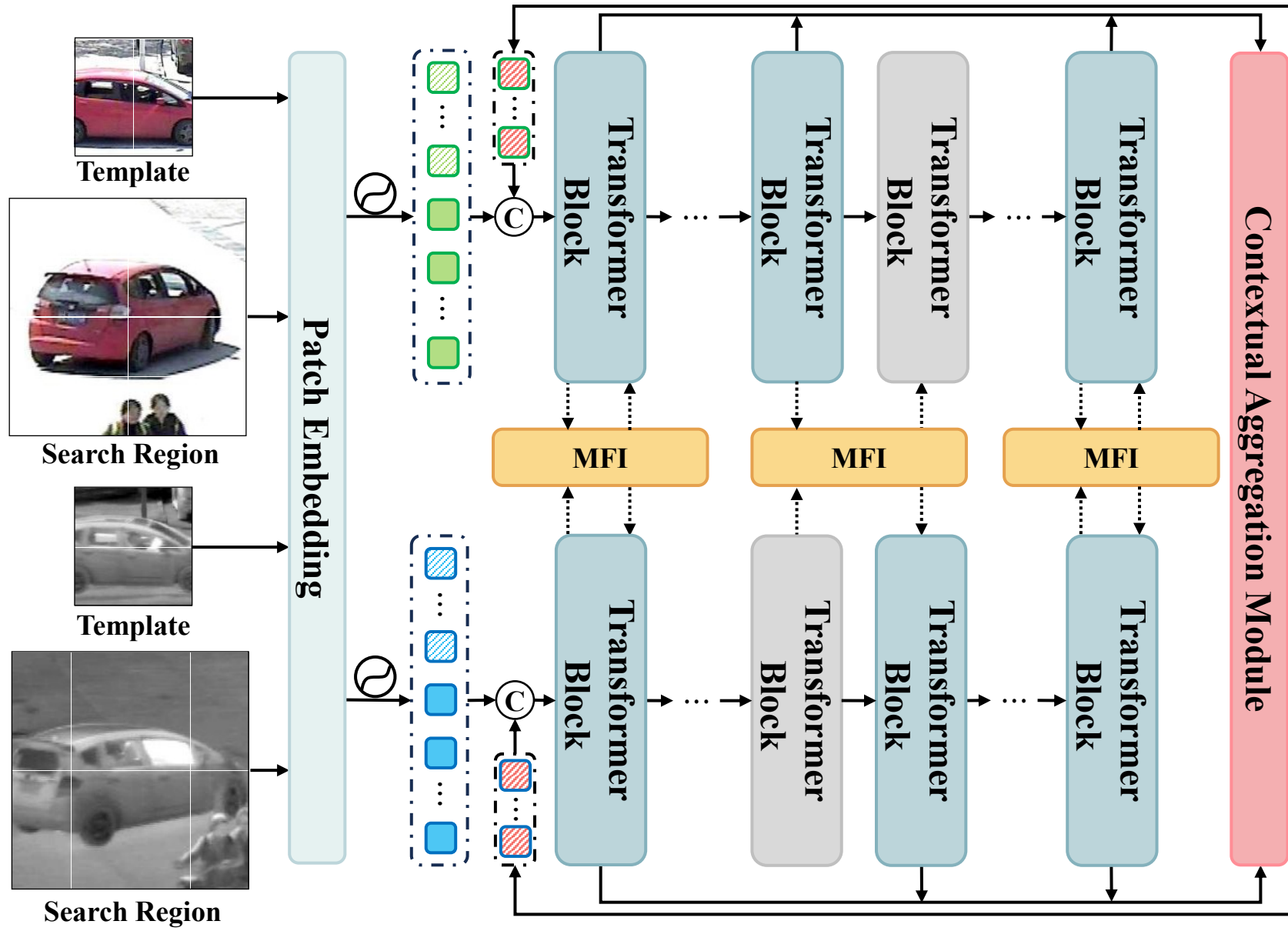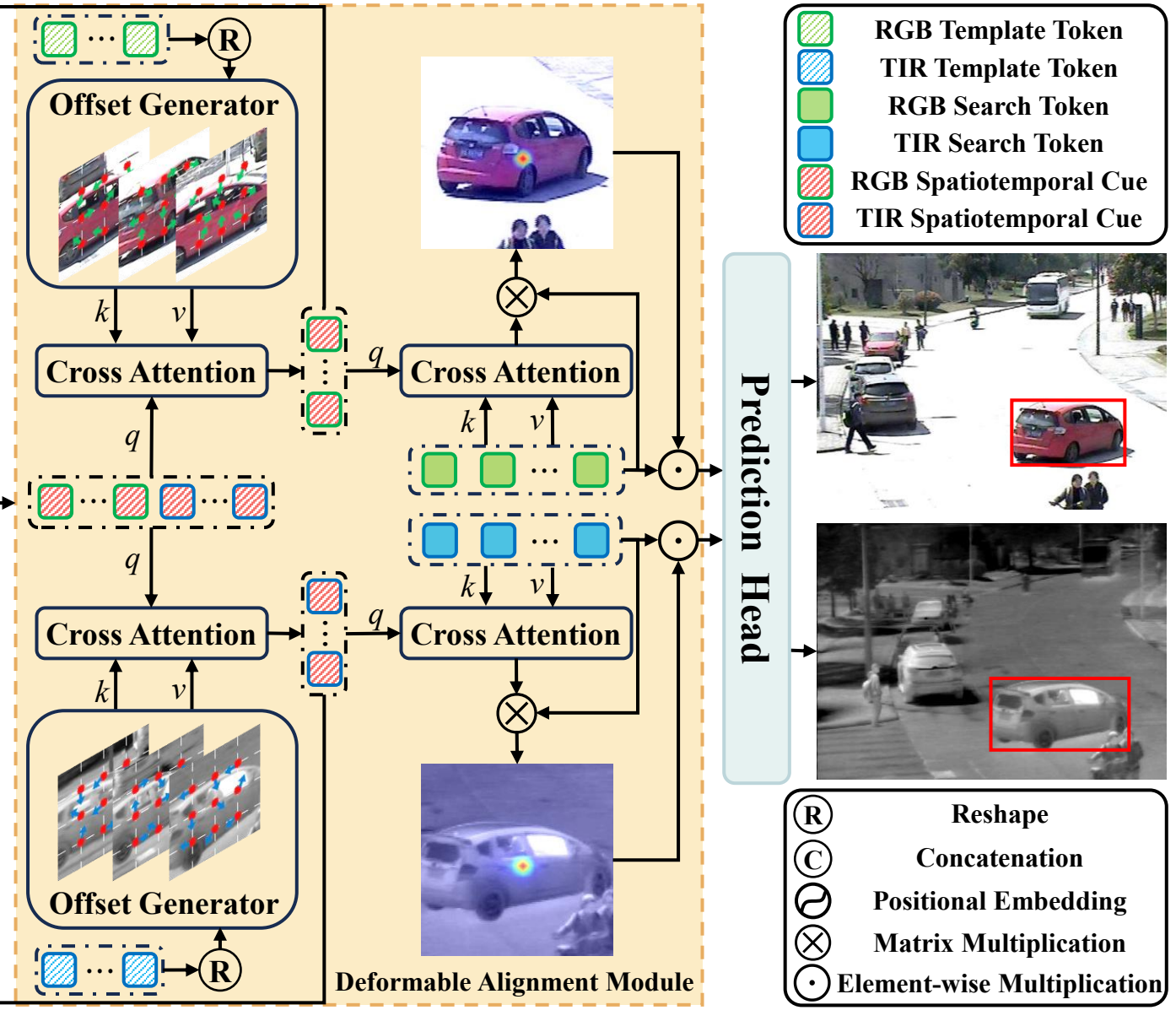
Cross Attention

k v q q k v

Deformable Alignment Module

Prediction Head

RGB Template Token
TIR Template Token
RGB Search Token
TIR Search Token
RGB Spatiotemporal Cue
TIR Spatiotemporal Cue

Ⓡ Reshape
Ⓒ Concatenation
Positional Embedding
⊗ Matrix Multiplication
⊙ Element-wise Multiplication