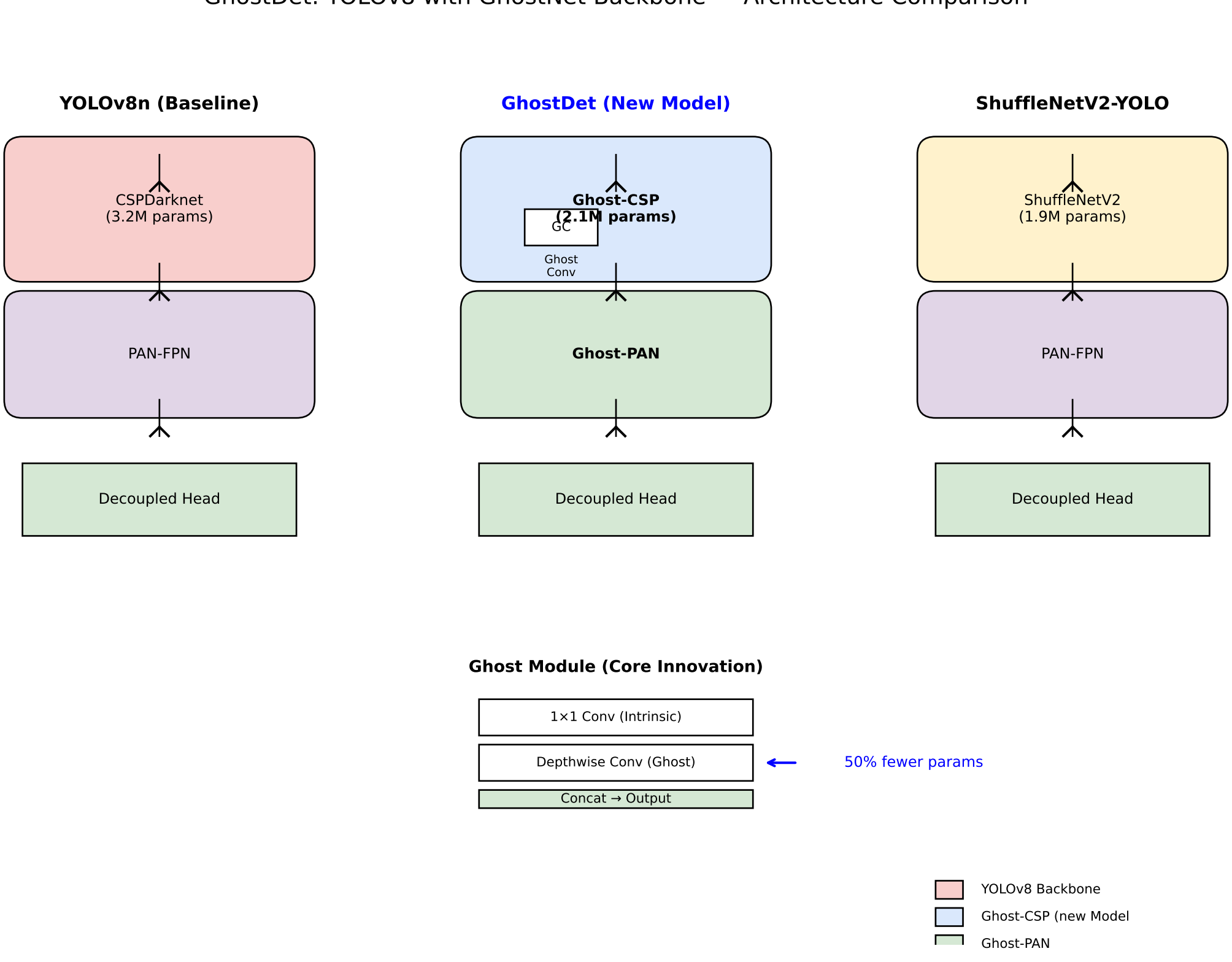
GhostDet: YOLOv8 with GhostNet Backbone — Architecture Comparison
YOLOv8n (Baseline)
CSPDarknet
(3.2M params)
PAN-FPN
Decoupled Head
GhostDet (New Model)
Ghost-CSP
(2.1M params)
GC
Ghost
Conv
Ghost-PAN
Decoupled Head
ShuffleNetV2-YOLO
ShuffleNetV2
(1.9M params)
PAN-FPN
Decoupled Head
Ghost Module (Core Innovation)
1×1 Conv (Intrinsic)
Depthwise Conv (Ghost)
Concat → Output
50% fewer params
YOLOv8 Backbone
Ghost-CSP (new Model
Ghost-PAN
ShuffleNetV2