

Architecture Components Comparison

Component	Baseline	CBAM	MTL
_____	_____	_____	_____
Backbone	ResNet152	ResNet152 + CBAM	ResNet50 (Shared)
Attention	<input type="checkbox"/> None	<input checked="" type="checkbox"/> CBAM (Layer 3 & 4)	<input type="checkbox"/> None
FPN	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Detection Head	<input type="checkbox"/> Faster R-CNN	<input type="checkbox"/> Faster R-CNN	<input type="checkbox"/> Faster R-CNN
Segmentation	<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> FCN-style Head
Depth Estimation	<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> Regression Head
_____	_____	_____	_____
Total Parameters	76.0M	76.7M	43.0M
Trainable Params	17.9M	18.5M	~10M (est.)
Param Overhead	Baseline	+0.9%	-43.4%
_____	_____	_____	_____
Training Time	4h 10m	~4h 30m	TBD (~6h est.)
Batch Size	32	32	16
Memory Usage	Baseline	Similar	Higher per batch