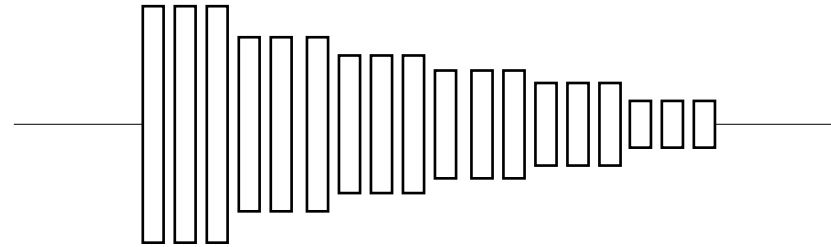
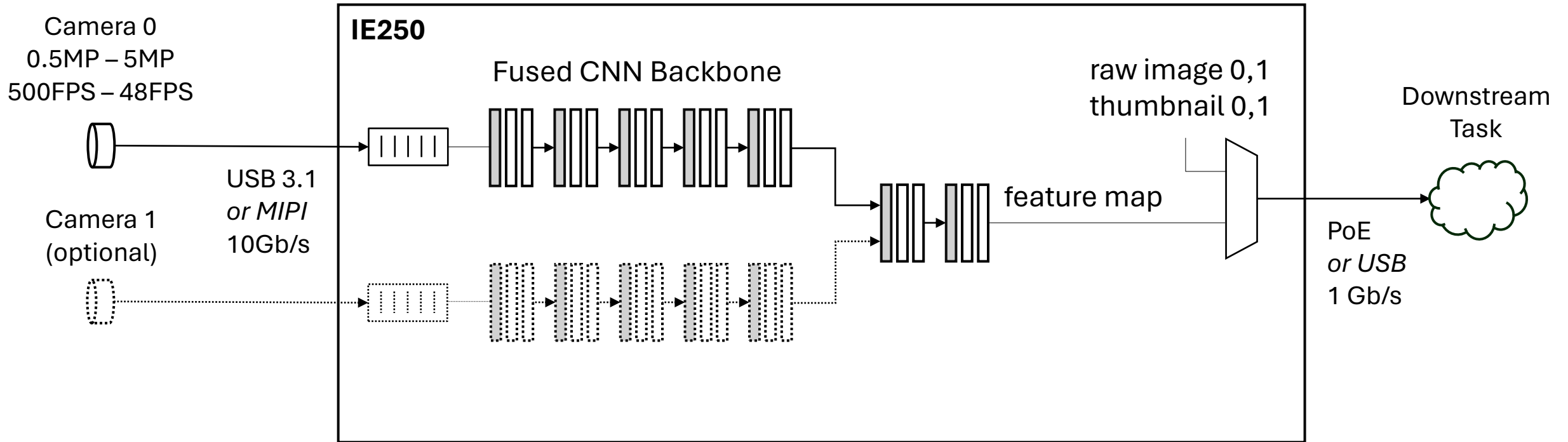


# Silicon Perception



High Speed AI

# IE250 Single Chip Image Encoder



# IE250 Data Sheet

Compute Fabric	Agilex 7 027, 20M weights (FP8), 3.2 TFLOP/s (FP32)
Encoder Models	VGG-like CNN backbone, 21 layers, 15M weights, 3.1 TFLOP/s <a href="https://github.com/siliconperception/models">https://github.com/siliconperception/models</a>  Model IE250B-050-500 : 2x700x700 RGB → 2x2x512 features @ 500 FPS Model IE250-200-125 : 1400x1400 RGB → 2x2x512 features @ 125 FPS Model IE250-400-60 : 2048x2048 RGB → 7x7x512 features @ 60 FPS
Throughput	250M pixels/s
Latency	<1 ms
Power	<15 W
Camera Interface	Dual USB 3.1 10Gb/s, <a href="#">USB3 Vision Standard</a>
Downstream Interface	PoE 12W, ARP, UDP, RTP/RTSP, HTTPS

# IE250 CNN Backbone Architecture

