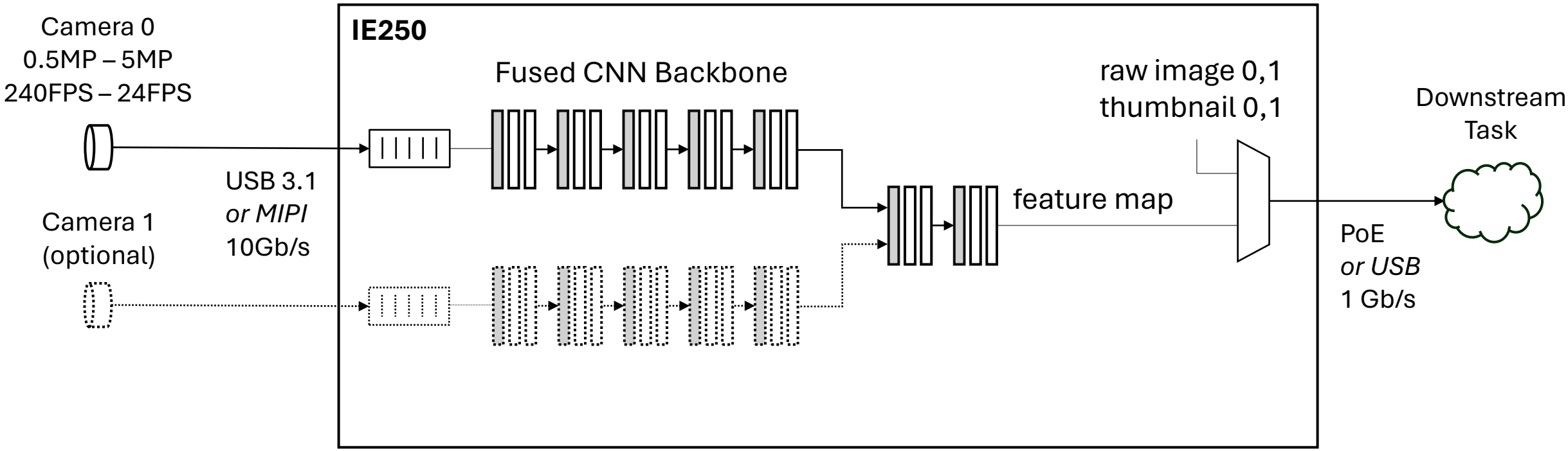
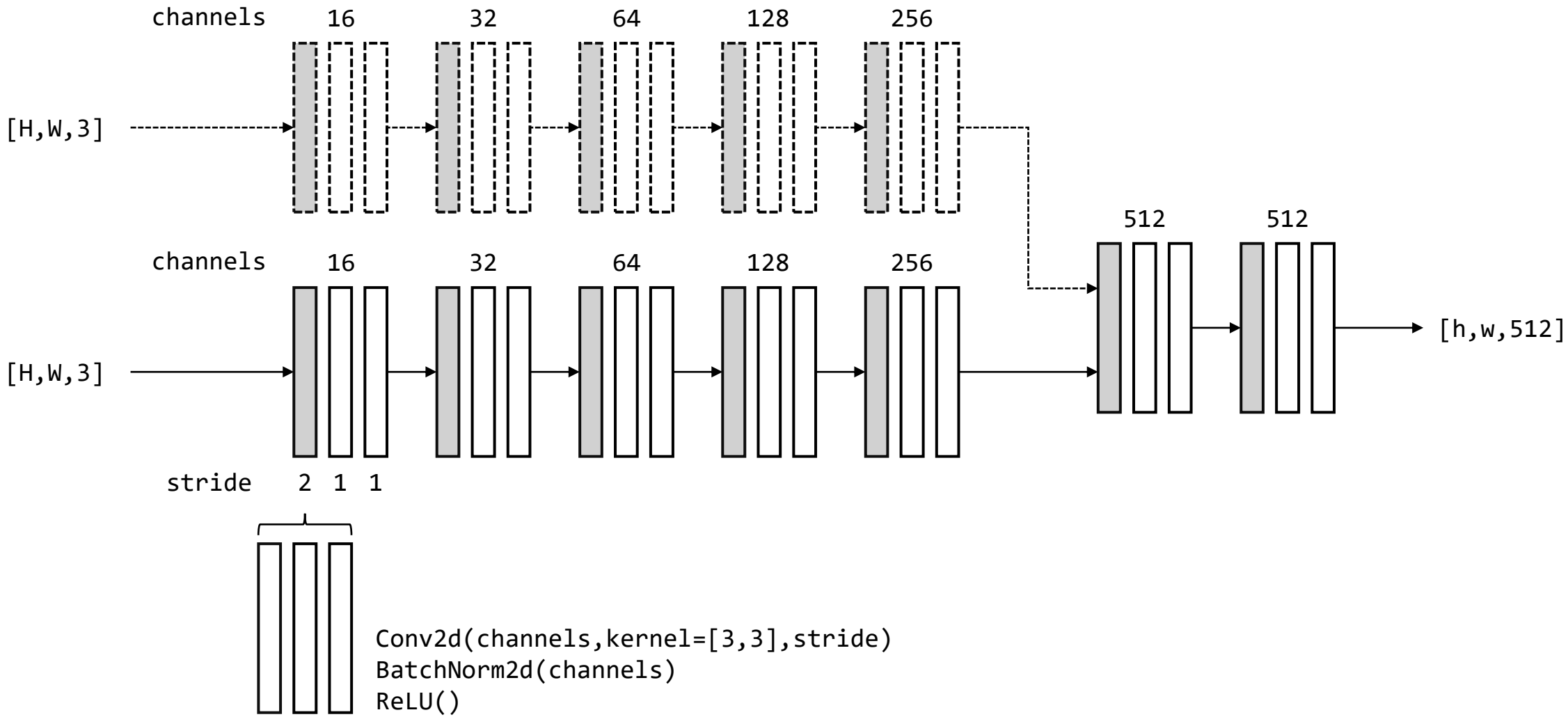
IE250 Single Chip Image Encoder



IE250 Data Sheet

Compute Fabric	Agilex 7 027, 16M weights (FP8), 3.2 TFLOP/s (FP32)

Encoder Models	VGG-like CNN backbone, 21 layers, 15M weights, 3.1 TFLOP/s
	https://github.com/siliconperception/models
	
	`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, USB3 Vision Standard
Downstream Interface	PoE 12W, ARP, UDP, RTP/RTSP, HTTPS

IE250 CNN Backbone Architecture