(a) Simplified Block diagram of NVIDIA AGX Xavier
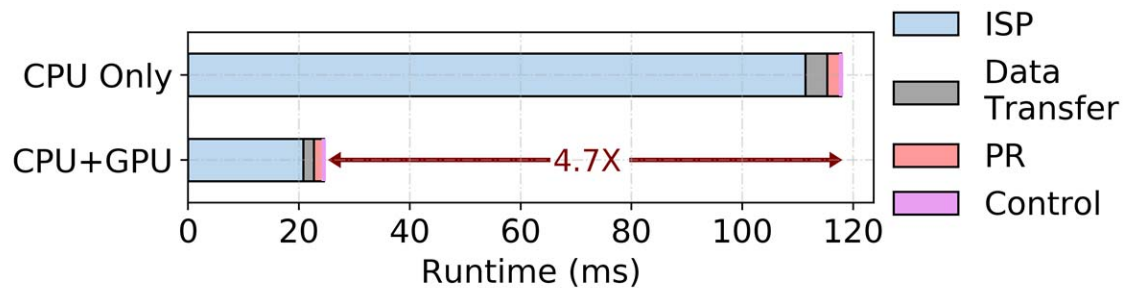
(b) Speed up from optimized task mapping

	CPU	GPU
ISP	• Input data loading	• Demosaicing • Denoising • Color Map • Gamut Map • Tone Map
JPEG Encode	• Formatting output codestream	• Forward DCT • Huffman encoding
JPEG Decode	• Parsing input codestream	• Inverse DCT • Huffman decoding
PR	• Sliding window based tracking • Inference	• Preprocessing • Image thresholding
C	• Entire control	

(c) CPU-GPU task partitioning