

Designing Intelligent Surveillance Camera System

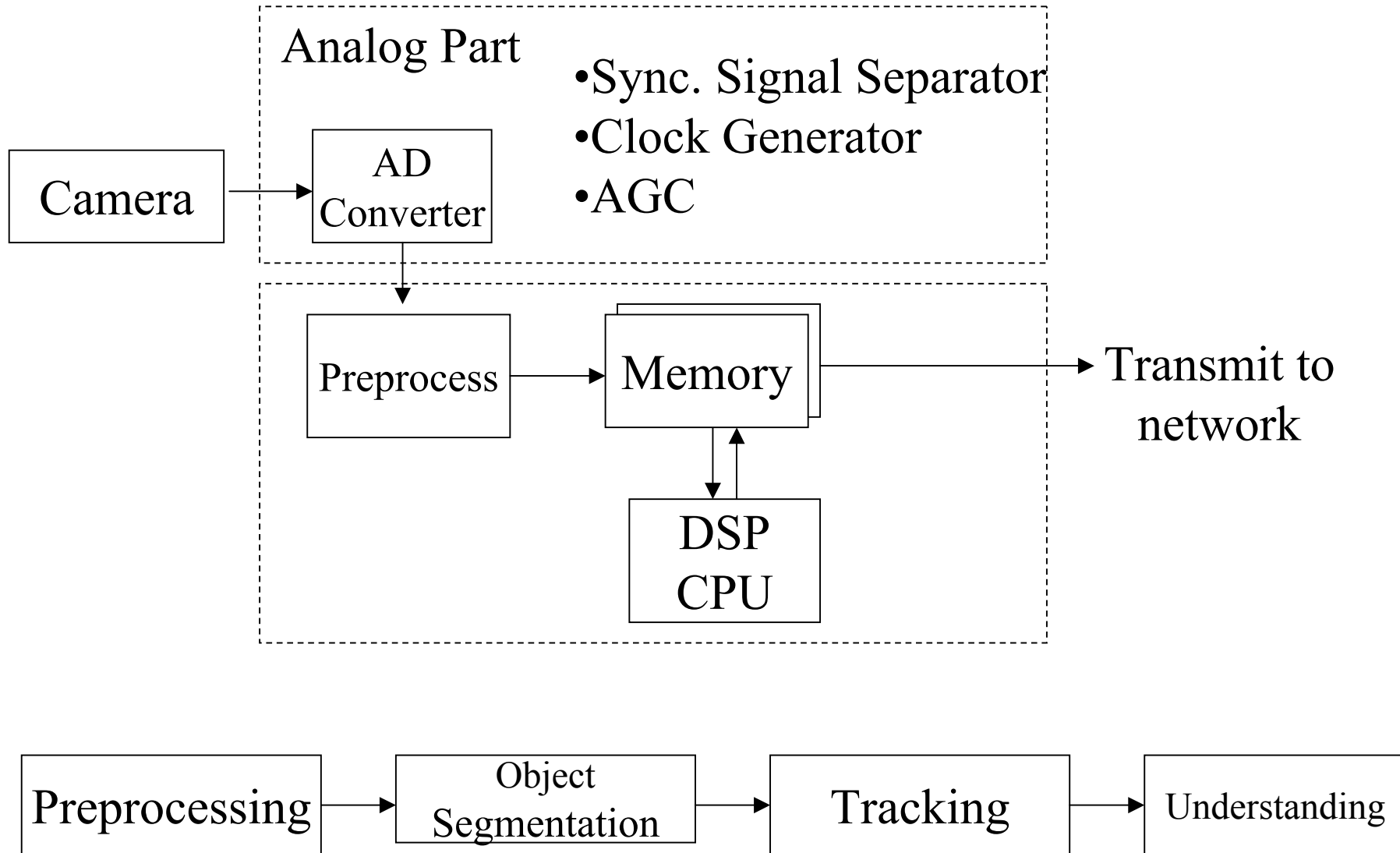
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Some Features of Intelligent Surveillance Camera

- Multiple cameras (wide coverage)
 - Surveillance camera network
- Video processing
 - object tracking / Recognition / understanding
 - Pipeline processing, complex processing.
- Non-realtime, low-resolution image can be transmitted
- Recognition/understanding sometimes requires database
- Architecture differs depending on the process

Architecture



Different Architectures of Video-Processing Camera

	Architecture
1	Custom made digital IC board. Preprocess, DSP and Memories are discrete.
2	Several CPUs deal with different task. CPUs are serialies connected to process the video as pipeline
3	A/D converted image are directly into PC
4	A/D, Sync Process, Preprocess, Memory and DSP are all in one chip
5	A/D, memory and DSP performs some simple comptation and remote PC deal with the complex process