

SoC

Video
Decoder

Arithmetic Decoder

mVDO

mVDO Scheduler

Optional
Line Buffer

Dec
Core 1

Dec
Core 2

...

Dec
Core n

Cache +
Memory Management

Decoded Frame

Scheduler Unit

tile
meta
data

bitonic
sort

frequency
-aware
core
allocator

n

to decoder
cores

Freq Region 1

Dec
Core 1

...

Dec
Core
 $n/2$

Freq Region 2

Dec
Core
 $n/2 + 1$

...

Dec
Core
 n