

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

bitonic
sort

frequency
-aware
core
allocator

tile
metadata

n

to decoder
cores

Freq Zone 1

Dec
Core 1

...

Dec Core
 $n / 2$

Freq Zone 2

Dec Core
 $n/2 + 1$

...

Dec
Core n