

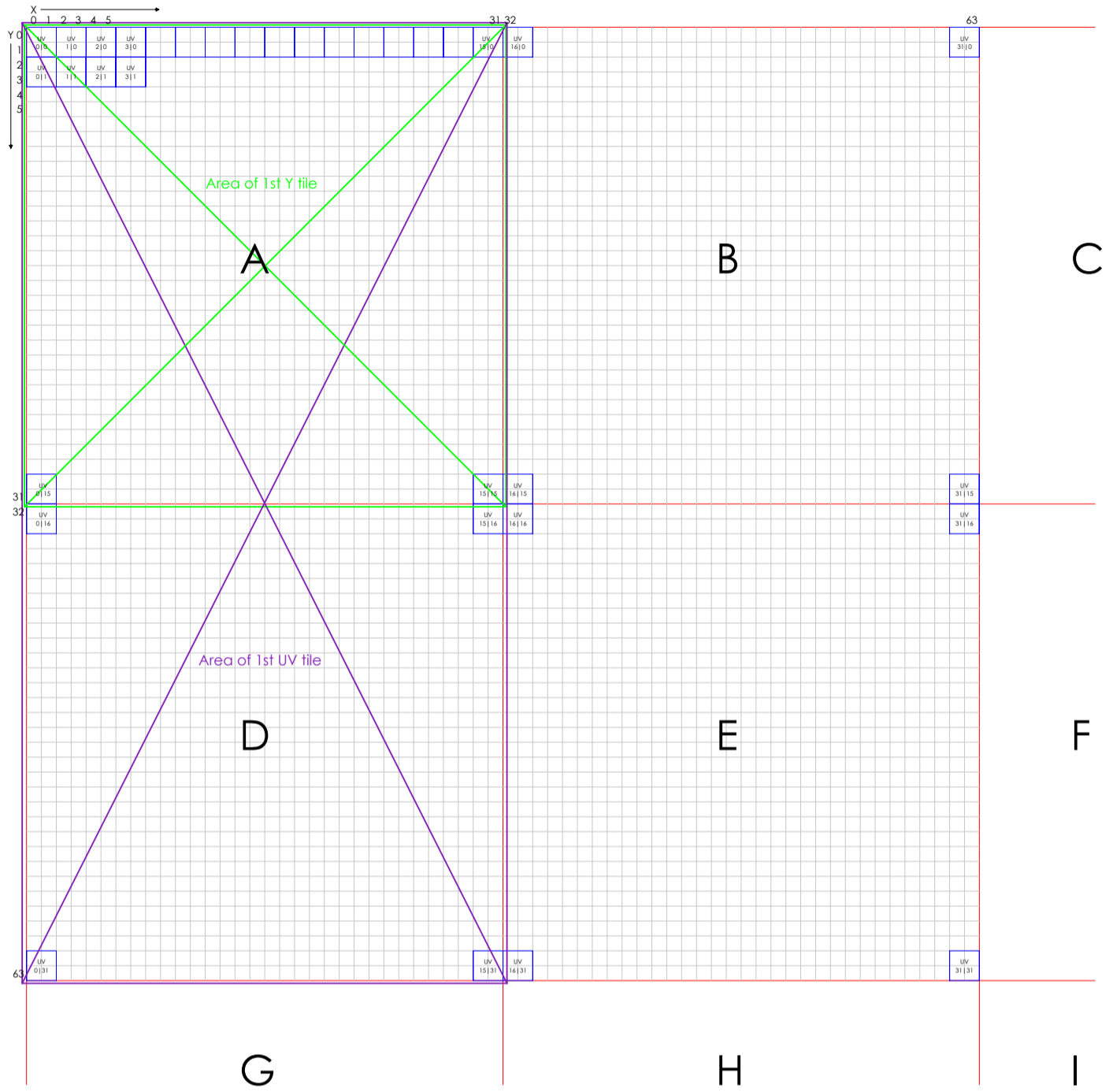
Sunxi video decoder tile format

Image

Example image 96x96 px  
9 areas á 32x32 px

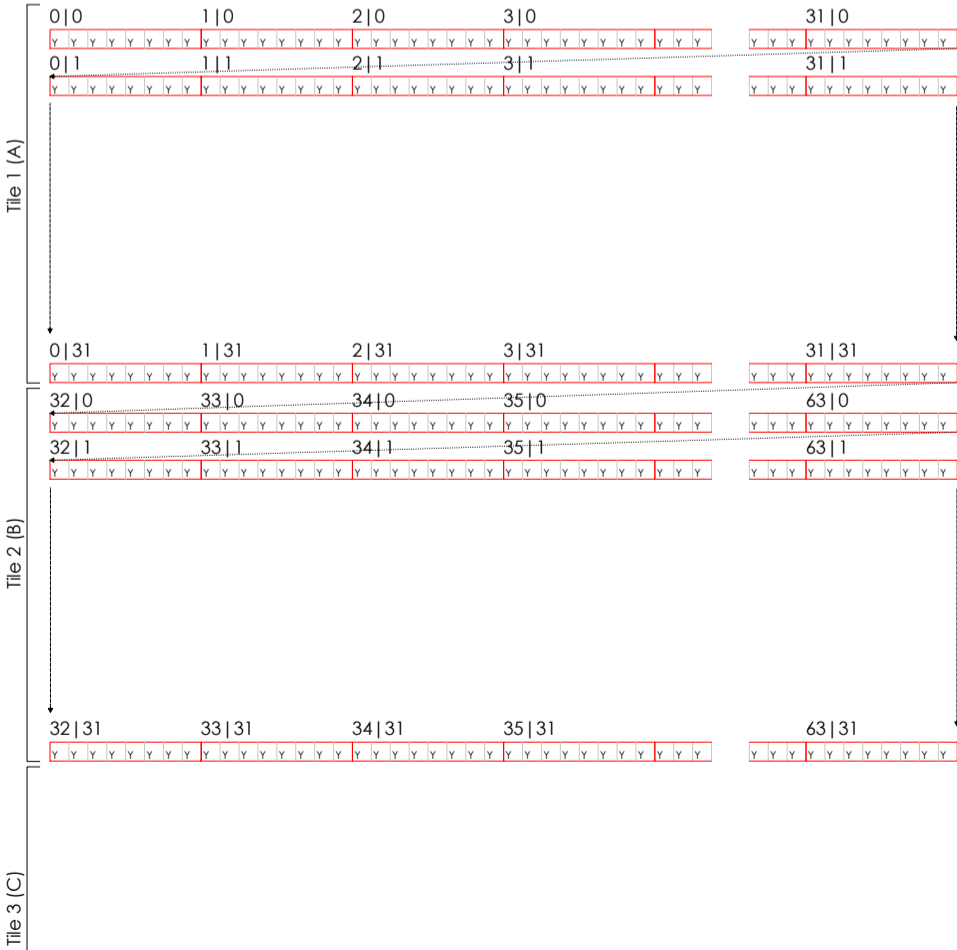
0 0	31 0	32 0	63 0	64 0	95 0
A		B		C	
0 31	31 31	32 31	63 31	64 31	95 31
0 32	31 32	32 32	63 32	64 32	95 32
D		E		F	
0 63	31 63	32 63	63 63	64 63	95 63
0 64	31 64	32 64	63 64	64 64	95 64
G		H		I	
0 95	31 95	32 95	63 95	64 95	95 95

Pixels

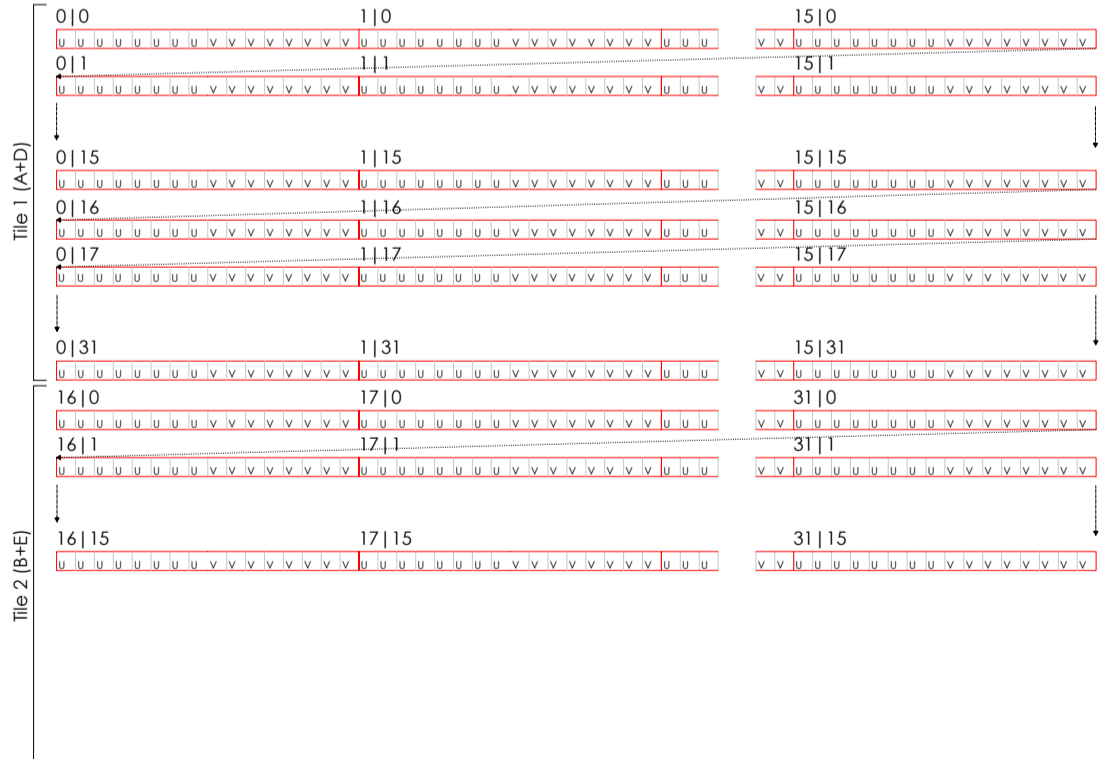


Memory layout

Y-Plane (width x height x 8bit)



UV-Plane (width/2 x height/2 x 16 bit)



Y-plane:

$$32^2Y(A) + 32^2Y(B) + 32^2Y(C) + 32^2Y(D) + 32^2Y(E) + 32^2Y(F) + 32^2Y(G) + 32^2Y(H) + 32^2Y(I)$$

32<sup>2</sup>Y(A) means: 32 \* 32 \* YYYYYYYY bits of pixel area A  
Memory size of Y-plane of 96\*96 frame: 9\*32\*32\*8bits = 9.216 bytes

UV-Plane:

$$16*32UV(A+D) + 16*32UV(B+E) + 16*32UV(C+F) + 16*32UV(G+undef) + 16*32UV(H+undef) + 16*32UV(I+undef)$$

32<sup>2</sup>UV(A+D) means: 32 \* 32 \* UUUUUUUUVVVVVVVV bits of pixel area A and D  
Memory size of UV-plane of 96\*96 frame: 6\*16\*32\*16bits = 6.144 bytes