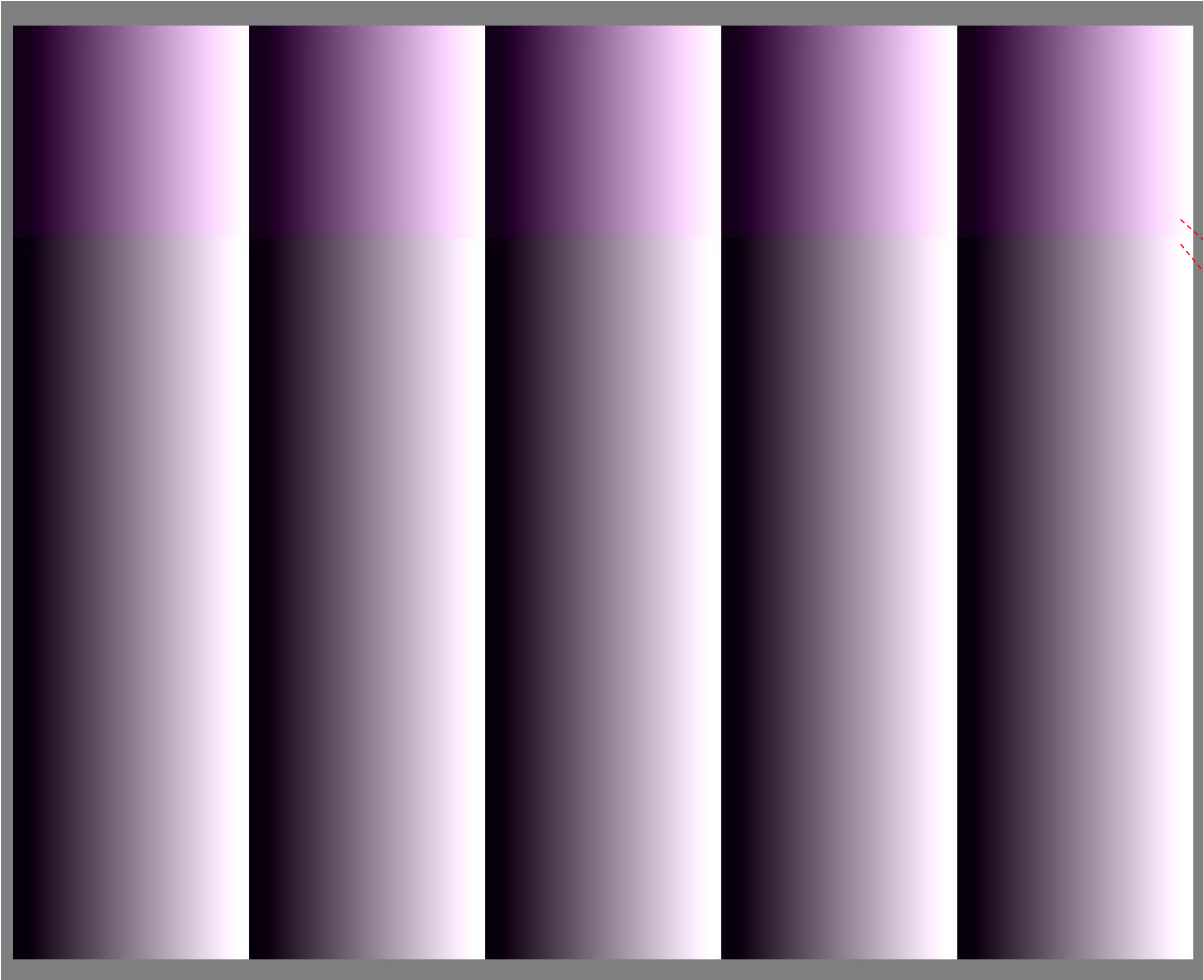


# YUV 4:2:2 Image 60fps



Frame Count Pixel Count

	↓	↓	↓	↓	↓	↓	↓															
00066190	8D	C8	8D	C9	8D	CA	8D	CB	8D	CC	8D	CD	8D	CE	8D	CF						
000661A0	8D	D0	8D	D1	8D	D2	8D	D3	8D	D4	8D	D5	8D	D6	8D	D7						
000661B0	8D	D8	8D	D9	8D	DA	8D	DB	8D	DC	8D	DD	8D	DE	8D	DF						
000661C0	8D	E0	8D	E1	8D	E2	8D	E3	8D	E4	8D	E5	8D	E6	8D	E7						
000661D0	8D	E8	8D	E9	8D	EA	8D	EB	8D	EC	8D	ED	8D	EE	8D	EF						
000661E0	8D	F0	8D	F1	8D	F2	8D	F3	8D	F4	8D	F5	8D	F6	8D	F7						
000661F0	8D	F8	8D	F9	8D	FA	8D	FB	8D	FC	8D	FD	8D	FE	8D	FF						
00066200	8D	00	8D	01	8D	02	8D	03	8D	04	8D	05	8D	06	8D	07						
00066210	8D	08	8D	09	8D	0A	8D	0B	8D	0C	8D	0D	8D	0E	8D	0F						
00066220	8D	10	8D	11	8D	12	8D	13	8D	14	8D	15	8D	16	8D	17						
00066230	8D	18	8D	19	8D	1A	8D	1B	8D	1C	8D	1D	8D	1E	8D	1F						
00066240	8D	20	8D	21	8D	22	8D	23	8D	24	8D	25	8D	26	8D	27						
00066250	8D	28	8D	29	8D	2A	8D	2B	8D	2C	8D	2D	8D	2E	8D	2F						
00066260	8D	30	8D	31	8D	32	8D	33	8D	34	8D	35	8D	36	8D	37						
00066270	8D	38	8D	39	8D	3A	8D	3B	8D	3C	8D	3D	8D	3E	8D	3F						
00066280	8D	40	8D	41	8D	42	8D	43	8D	44	8D	45	8D	46	8D	47						
00066290	8D	48	8D	49	8D	4A	8D	4B	8D	4C	8D	4D	8D	4E	8D	4F						
000662A0	8D	50	8D	51	8D	52	8D	53	8D	54	8D	55	8D	56	8D	57						
000662B0	8D	58	8D	59	8D	5A	8D	5B	8D	5C	8D	5D	8D	5E	8D	5F						
000662C0	8D	60	8D	61	8D	62	8D	63	8D	64	8D	65	8D	66	8D	67						
000662D0	8D	68	8D	69	8D	6A	8D	6B	8D	6C	8D	6D	8D	6E	8D	6F						
000662E0	8D	70	8D	71	8D	72	8D	73	8D	74	8D	75	8D	76	8D	77						
000662F0	8D	78	8D	79	8D	7A	8D	7B	8D	7C	8D	7D	8D	7E	8D	7F						
00066300	85	80	85	81	85	82	85	83	85	84	85	85	85	86	85	87						
00066310	85	88	85	89	85	8A	85	8B	85	8C	85	8D	85	8E	85	8F						
00066320	85	90	85	91	85	92	85	93	85	94	85	95	85	96	85	97						
00066330	85	98	85	99	85	9A	85	9B	85	9C	85	9D	85	9E	85	9F						
00066340	85	A0	85	A1	85	A2	85	A3	85	A4	85	A5	85	A6	85	A7						
00066350	85	A8	85	A9	85	AA	85	AB	85	AC	85	AD	85	AE	85	AF						
00066360	85	B0	85	B1	85	B2	85	B3	85	B4	85	B5	85	B6	85	B7						
00066370	85	B8	85	B9	85	BA	85	BB	85	BC	85	BD	85	BE	85	BF						
00066380	85	C0	85	C1	85	C2	85	C3	85	C4	85	C5	85	C6	85	C7						
00066390	85	C8	85	C9	85	CA	85	CB	85	CC	85	CD	85	CE	85	CF						
000663A0	85	D0	85	D1	85	D2	85	D3	85	D4	85	D5	85	D6	85	D7						
000663B0	85	D8	85	D9	85	DA	85	DB	85	DC	85	DD	85	DE	85	DF						
000663C0	85	E0	85	E1	85	E2	85	E3	85	E4	85	E5	85	E6	85	E7						
000663D0	85	E8	85	E9	85	EA	85	EB	85	EC	85	ED	85	EE	85	EF						
000663E0	85	F0	85	F1	85	F2	85	F3	85	F4	85	F5	85	F6	85	F7						
000663F0	85	F8	85	F9	85	FA	85	FB	85	FC	85	FD	85	FE	85	FF						
00066400	85	00	85	01	85	02	85	03	85	04	85	05	85	06	85	07						
00066410	85	08	85	09	85	0A	85	0B	85	0C	85	0D	85	0E	85	0F						
00066420	85	10	85	11	85	12	85	13	85	14	85	15	85	16	85	17						
00066430	85	18	85	19	85	1A	85	1B	85	1C	85	1D	85	1E	85	1F						
00066440	85	20	85	21	85	22	85	23	85	24	85	25	85	26	85	27						
00066450	85	28	85	29	85	2A	85	2B	85	2C	85	2D	85	2E	85	2F						
00066460	85	30	85	31	85	32	85	33	85	34	85	35	85	36	85	37						
00066470	85	38	85	39	85	3A	85	3B	85	3C	85	3D	85	3E	85	3F						
00066480	85	40	85	41	85	42	85	43	85	44	85	45	85	46	85	47						

Diff : 8 (=8D-85)  
(MMAP Buffer Size)

- Image generated for testing  
Y : Pixel count , UV : Frame count
- The bottom part of the image is the previous buffer value

```

-----> irqs-off
-----> need-resched
-----> hardirq/softirq
-----> preempt-depth
delay
TASK-PID   CPU#     |          |          |
kworker/0:3-233 [000] ...1 48.128929: rtpcu_queue_peek_from_isr_failed: timestamp:1693659712 queue:0x0b4a3c58
kworker/0:3-233 [000] ...1 48.128933: rtpcu_start: timestamp:1693660452
kworker/0:3-233 [000] ...1 48.280928: rtpcu_vinotify_handle_msg: timestamp:1698126616 tag:GSTMUX_STREAM channel:0xff frame:0 vi_timestamp:1698126176 data:0x00000100
kworker/0:3-233 [000] ...1 48.280932: rtpcu_vinotify_handle_msg: timestamp:1698351721 tag:CHANSEL_PXL_SOF channel:0x00 frame:0 vi_timestamp:1698351183 data:0x00000001
kworker/0:3-233 [000] ...1 48.280933: rtpcu_vinotify_handle_msg: timestamp:1698351884 tag:ATOMP_FS channel:0x00 frame:0 vi_timestamp:1698351193 data:0x00000000
kworker/0:3-233 [000] ...1 48.280934: rtpcu_vinotify_handle_msg: timestamp:1698440822 tag:CHANSEL_LOAD_FRAMED channel:0x04 frame:0 vi_timestamp:1698440409 data:0x08000000
kworker/0:3-233 [000] ...1 48.280936: rtpcu_queue_peek_from_isr_failed: timestamp:169860572 queue:0x0b4a3c58
kworker/0:3-233 [000] ...1 48.280937: rtpcu_vinotify_handle_msg: timestamp:1698851311 tag:CHANSEL_PXL_EOF channel:0x00 frame:0 vi_timestamp:1698850908 data:0x02cf0002
kworker/0:3-233 [000] ...1 48.280938: rtpcu_vinotify_handle_msg: timestamp:1698855467 tag:ATOMP_FE channel:0x00 frame:0 vi_timestamp:1698855022 data:0x00000000
kworker/0:3-233 [000] ...1 48.280939: rtpcu_vinotify_handle_msg: timestamp:1698872565 tag:CHANSEL_PXL_SOF channel:0x00 frame:0 vi_timestamp:1698872030 data:0x00000001
kworker/0:3-233 [000] ...1 48.280940: rtpcu_vinotify_handle_msg: timestamp:1698872719 tag:ATOMP_FS channel:0x00 frame:0 vi_timestamp:1698872041 data:0x00000000
kworker/0:3-233 [000] ...1 48.280941: rtpcu_vinotify_handle_msg: timestamp:1698962054 tag:CHANSEL_LOAD_FRAMED channel:0x04 frame:0 vi_timestamp:1698961641 data:0x08000000
kworker/0:3-233 [000] ...1 48.280942: rtpcu_vinotify_handle_msg: timestamp:1699372164 tag:CHANSEL_PXL_EOF channel:0x00 frame:0 vi_timestamp:1699371755 data:0x02cf0002
kworker/0:3-233 [000] ...1 48.280943: rtpcu_vinotify_handle_msg: timestamp:1699376314 tag:ATOMP_FE channel:0x00 frame:0 vi_timestamp:1699375869 data:0x00000000
kworker/0:3-233 [000] ...1 48.280943: rtpcu_vinotify_handle_msg: timestamp:1699393409 tag:CHANSEL_PXL_SOF channel:0x00 frame:0 vi_timestamp:1699392877 data:0x00000001
kworker/0:3-233 [000] ...1 48.280944: rtpcu_vinotify_handle_msg: timestamp:1699393554 tag:ATOMP_FS channel:0x00 frame:0 vi_timestamp:1699392888 data:0x00000000
kworker/0:3-233 [000] ...1 48.280945: rtpcu_vinotify_handle_msg: timestamp:1699483192 tag:CHANSEL_LOAD_FRAMED channel:0x04 frame:0 vi_timestamp:1699482780 data:0x08000000
kworker/0:3-233 [000] ...1 48.332941: rtpcu_vinotify_handle_msg: timestamp:1699893011 tag:CHANSEL_PXL_EOF channel:0x00 frame:0 vi_timestamp:1699892603 data:0x02cf0002
kworker/0:3-233 [000] ...1 48.332946: rtpcu_vinotify_handle_msg: timestamp:1699897159 tag:ATOMP_FE channel:0x00 frame:0 vi_timestamp:1699896716 data:0x00000000
kworker/0:3-233 [000] ...1 48.332947: rtpcu_vinotify_handle_msg: timestamp:1699914265 tag:CHANSEL_PXL_SOF channel:0x00 frame:0 vi_timestamp:1699913724 data:0x00000001
kworker/0:3-233 [000] ...1 48.332948: rtpcu_vinotify_handle_msg: timestamp:1699914412 tag:ATOMP_FS channel:0x00 frame:0 vi_timestamp:1699913735 data:0x00000000
kworker/0:3-233 [000] ...1 48.332949: rtpcu_vinotify_handle_msg: timestamp:1700007683 tag:CHANSEL_LOAD_FRAMED channel:0x04 frame:0 vi_timestamp:1700007270 data:0x08000000
kworker/0:3-233 [000] ...1 48.332950: rtpcu_vinotify_handle_msg: timestamp:1700413859 tag:CHANSEL_PXL_EOF channel:0x00 frame:0 vi_timestamp:1700413450 data:0x02cf0002
kworker/0:3-233 [000] ...1 48.332951: rtpcu_vinotify_handle_msg: timestamp:1700418011 tag:ATOMP_FE channel:0x00 frame:0 vi_timestamp:1700417564 data:0x00000000
kworker/0:3-233 [000] ...1 48.332951: rtpcu_vinotify_handle_msg: timestamp:1700435104 tag:CHANSEL_PXL_SOF channel:0x00 frame:0 vi_timestamp:1700434572 data:0x00000001
kworker/0:3-233 [000] ...1 48.332952: rtpcu_vinotify_handle_msg: timestamp:1700435247 tag:ATOMP_FS channel:0x00 frame:0 vi_timestamp:1700434583 data:0x00000000
kworker/0:3-233 [000] ...1 48.332953: rtpcu_vinotify_handle_msg: timestamp:1700525597 tag:CHANSEL_LOAD_FRAMED channel:0x04 frame:0 vi_timestamp:1700525185 data:0x08000000
kworker/0:3-233 [000] ...1 48.332954: rtpcu_vinotify_handle_msg: timestamp:1700934705 tag:CHANSEL_PXL_EOF channel:0x00 frame:0 vi_timestamp:1700934297 data:0x02cf0002
kworker/0:3-233 [000] ...1 48.332955: rtpcu_vinotify_handle_msg: timestamp:1700938856 tag:ATOMP_FE channel:0x00 frame:0 vi_timestamp:1700938411 data:0x00000000

```

- Operation Sequence ( by timestamp )

1. SOF : Start of Frame
2. FS : Frame Start
3. **LOAD** : Load Frame
4. EOF : End of Frame



- Suggested Operation Sequence

1. SOF : Start of Frame
2. FS : Frame Start
3. EOF : End of Frame
4. **LOAD** : Load Frame

- Start frame load before the buffer is filled with one image
- If the processor is too busy to process an image at 60 fps, the image looks like normal