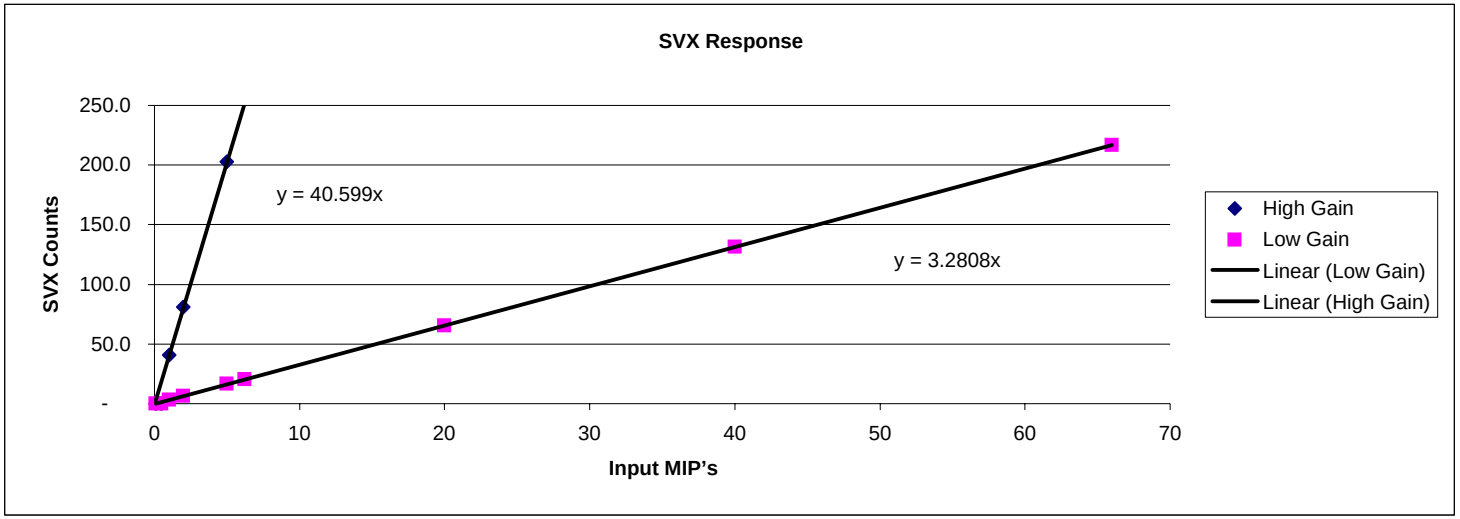
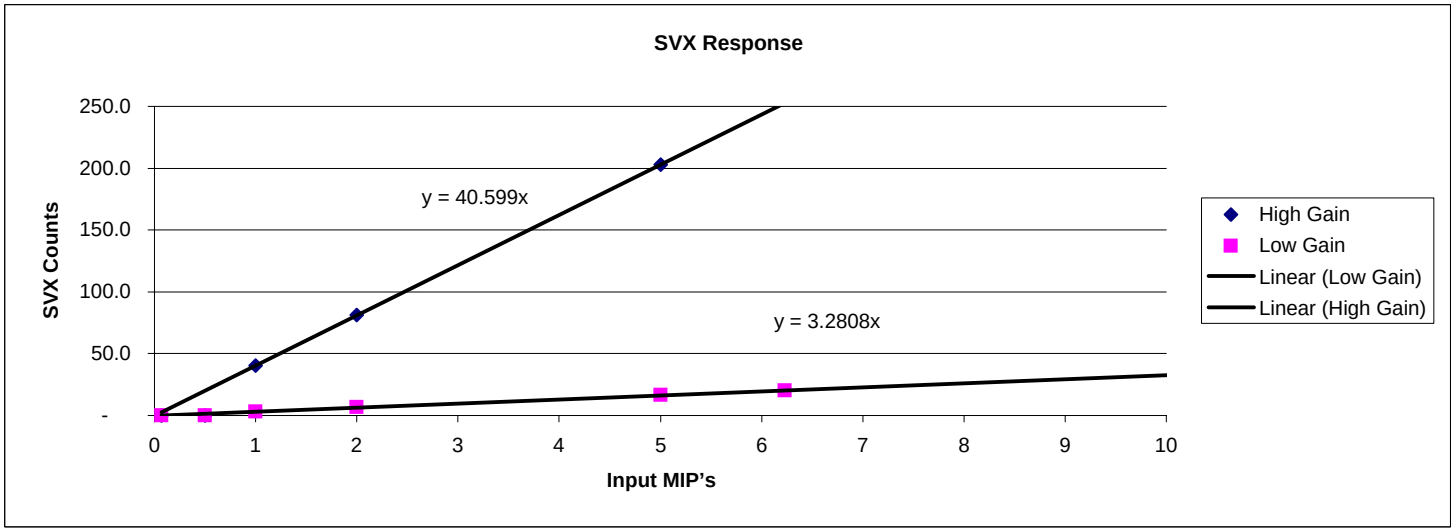
CPS Charge Sharing

15 p.e. per MIP
40 K VLPC Gain

VLPC Output MIP	15pe/MIP pe	40K Gain fC	Drain	HIGH Gain %	HIGH Gain fC	SIFT Output gain	SIFT Output fC	SVX scale	SVX counts	LOW Gain %	LOW Gain fC	SIFT Output gain	SIFT Output fC	SVX scale	SVX counts
0.067	1.0	6.44	59%	33%	2.13	0.75	1.59	25	16.3	8%	0.5	0.25	0.1	25	1.3
0.5	7.5	48.06	59%	33%	15.86	0.75	11.89	25	121.8	8%	3.8	0.25	1.0	25	9.8
1	15.0	96.12	59%	33%	31.72	0.75	23.79	150	40.6	8%	7.7	0.25	1.9	150	3.3
2	30.0	192.24	59%	33%	**63.44**	0.75	47.58	150	81.2	8%	15.4	0.25	3.8	150	6.6
5	75.0	480.60	59%	33%	158.60	0.75	118.95	150	203.0	8%	**38.4**	0.25	9.6	150	16.4
6.23	93.5	598.83	59%	33%	197.61	0.75	148.21	150	252.9	8%	47.9	0.25	12.0	150	20.4
20	300.0	1,922.40	59%	33%	634.39	0.75	475.79	150	812.0	8%	153.8	0.25	38.4	150	65.6
40	600.0	3,844.80	59%	33%	1,268.78	0.75	951.59	150	######	8%	307.6	0.25	76.9	150	131.2
66	990.0	6,343.92	59%	33%	2,093.49	0.75	1,570.12	150	######	8%	507.5	0.25	126.9	150	216.5

High Gain =>	33%	X	0.75	=	0.2475	Ration of =>	12.375
Low Gain =>	8%	X	0.25	=	0.02		


SVX Response
250.0
200.0
150.0
100.0
50.0
-
SVX Counts
0
10
20
30
40
50
60
70
Input MIP's
y = 40.599x
y = 3.2808x
High Gain
Low Gain
Linear (Low Gain)
Linear (High Gain)

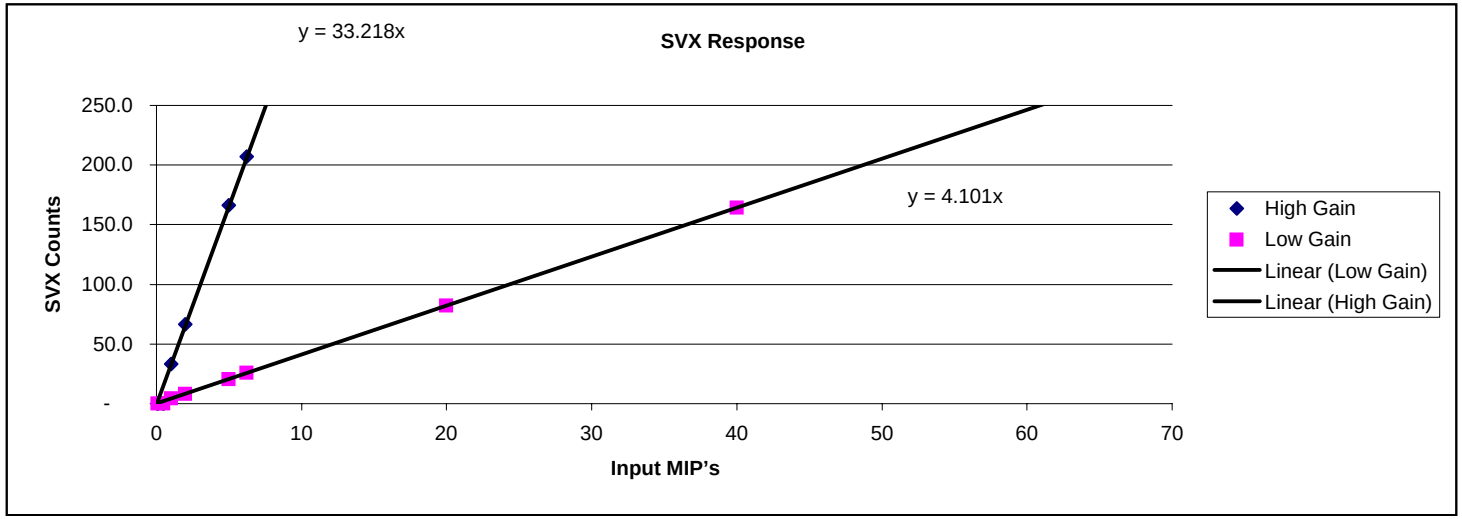

SVX Response
250.0
200.0
150.0
100.0
50.0
-
SVX Counts
0
1
2
3
4
5
6
7
8
9
10
Input MIP's
y = 40.599x
y = 3.2808x
High Gain
Low Gain
Linear (Low Gain)
Linear (High Gain)

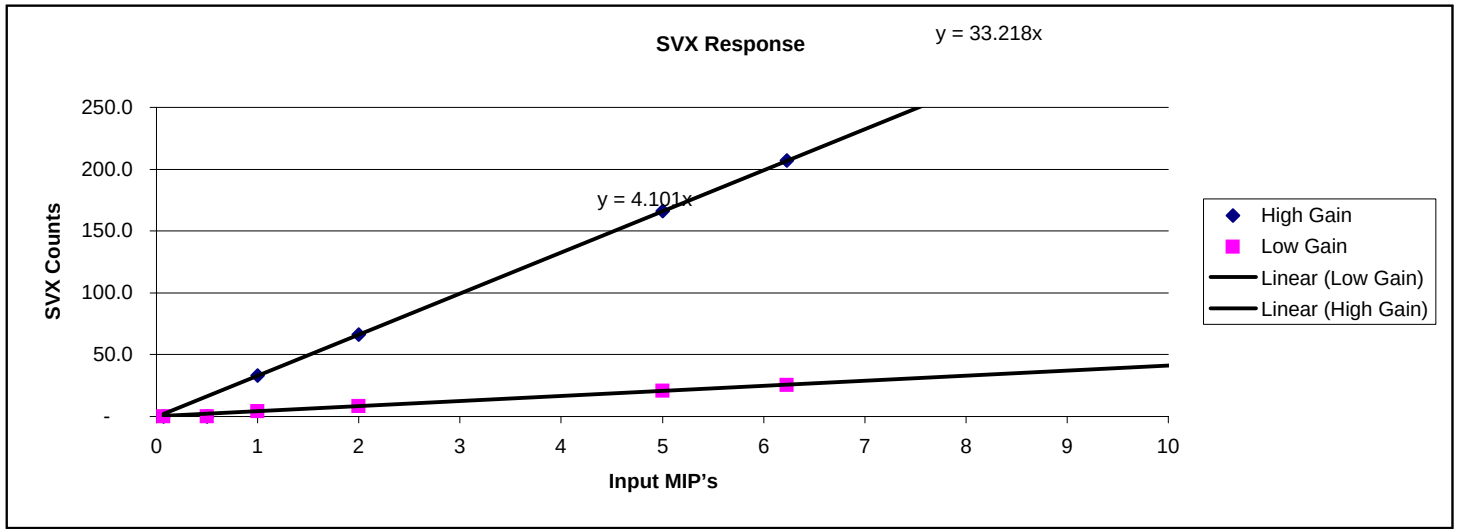
FPS Charge Sharing

15 p.e. per MIP
40 K VLPC Gain

VLPC Output MIP	15pe/MIP pe	40K Gain fC	Drain	HIGH Gain %	HIGH Gain fC	SIFT Output gain	SIFT Output fC	SVX scale	SVX counts	LOW Gain %	LOW Gain fC	SIFT Output gain	SIFT Output fC	SVX scale	SVX counts
0.067	1.0	6.44	63%	27%	1.74	0.75	1.30	25	13.4	10%	0.6	0.25	0.2	25	1.6
0.5	7.5	48.06	63%	27%	12.98	0.75	9.73	25	99.7	10%	4.8	0.25	1.2	25	12.3
1	15.0	96.12	63%	27%	25.95	0.75	19.46	150	33.2	10%	9.6	0.25	2.4	150	4.1
2	30.0	192.24	63%	27%	**51.90**	0.75	38.93	150	66.4	10%	19.2	0.25	4.8	150	8.2
5	75.0	480.60	63%	27%	129.76	0.75	97.32	150	166.1	10%	**48.1**	0.25	12.0	150	20.5
6.23	93.5	598.83	63%	27%	161.68	0.75	121.26	150	207.0	10%	59.9	0.25	15.0	150	25.5
20	300.0	1,922.40	63%	27%	519.05	0.75	389.29	150	664.4	10%	192.2	0.25	48.1	150	82.0
40	600.0	3,844.80	63%	27%	1,038.10	0.75	778.57	150	######	10%	384.5	0.25	96.1	150	164.0
66	990.0	6,343.92	63%	27%	1,712.86	0.75	1,284.64	150	######	10%	634.4	0.25	158.6	150	270.7
0.067	1.0	6.44	0%	100%	6.44	0.75	4.83	25	49.5						
0.075	1.1	7.21	0%	100%	7.21	0.75	5.41	25	55.4						
0.1	1.5	9.61	0%	100%	9.61	0.75	7.21	150	12.3						
0.2	3.0	19.22	0%	100%	19.22	0.75	14.42	150	24.6						
0.3	4.5	28.84	0%	100%	**28.84**	0.75	21.63	150	36.9						
0.5	7.5	48.06	0%	100%	48.06	0.75	36.05	150	61.5						
1	15.0	96.12	0%	100%	96.12	0.75	72.09	150	123.0						
2	30.0	192.24	0%	100%	192.24	0.75	144.18	150	246.1						
4	60.0	384.48	0%	100%	384.48	0.75	288.36	150	492.1						

High Gain =>	27%	X	0.75	=	0.2025	Ration of =>	8.1
Low Gain =>	10%	X	0.25	=	0.025		


y = 33.218x
SVX Response
y = 4.101x
SVX Counts
250.0
200.0
150.0
100.0
50.0
-
0
10
20
30
40
50
60
70
Input MIP's
High Gain
Low Gain
Linear (Low Gain)
Linear (High Gain)


SVX Response
y = 33.218x
y = 4.101x
SVX Counts
250.0
200.0
150.0
100.0
50.0
-
0
1
2
3
4
5
6
7
8
9
10
Input MIP's
High Gain
Low Gain
Linear (Low Gain)
Linear (High Gain)