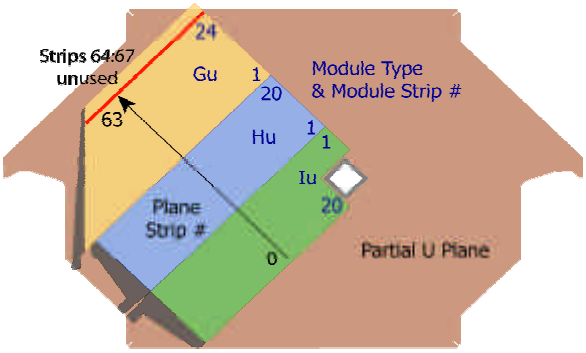
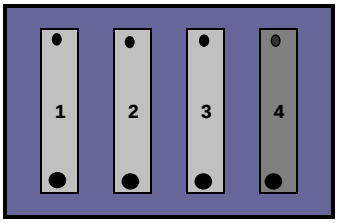
Type 1 Alner Box
Partial U Plane

Mappings between
- Module Strip Numbers as assigned on ANL module maps
- Fiber Cable pin-out at module end
- Fiber Cable pin-out at Alner Box end
- Box Fiber Number as assigned for internal threading
- Plane Strip Number as assigned in Offline software





Looking at the Fiber Cable side of the Alner Box
3 cables in, 4th unused - dots show cable polarity

Gu Module

Module Connector	●	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	●
Gu Module Strip #		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24							
Box Connector # 1	●	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	●
Box Fiber #		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24							
Plane Strip #		40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63							

Hu Module

Module Connector	●	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	●
Hu Module Strip #		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20											
Box Connector # 2	●	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	●
Box Fiber #		25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44											
Plane Strip #		20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39											

Iu Module

Module Connector	●	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	●
Iu Module Strip #		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20											
Box Connector # 3	●	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	●
Box Fiber #		45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64											
Plane Strip #		19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0											

Type 1 Alner Box
Partial U Plane

Mappings between
- Pixel Number
- Box Fiber Number
- Plane Strip Number
- Four D37 Output Cables

Pixel Number

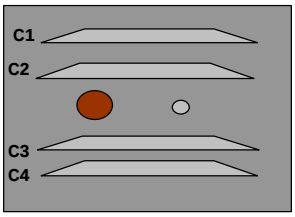
8	7	6	5	4	3	2	1
16	15	14	13	12	11	10	9
24	23	22	21	20	19	18	17
32	31	30	29	28	27	26	25
40	39	38	37	36	35	34	33
48	47	46	45	44	43	42	41
56	55	54	53	52	51	50	49
64	63	62	61	60	59	58	57

Box Fiber Number

28	15	2	53	40	27	14	1
4	55	42	29	16	3	54	41
44	31	18	5	56	43	30	17
20	7	58	45	32	19	6	57
60	47	34	21	8	59	46	33
36	23	10	61	48	35	22	9
12	63	50	37	24	11	62	49
52	39	26	13	64	51	38	25

Plane Strip Number

23	54	41	11	35	22	53	40
43	9	37	24	55	42	10	36
39	26	57	44	8	38	25	56
59	46	6	19	27	58	45	7
4	17	29	60	47	5	18	28
31	62	49	3	16	30	61	48
51	1	14	32	63	50	2	15
12	34	21	52	0	13	33	20



Schematic of back of Alner Box
Four D37, 1 HV 1 Lemo

Only the signal pin numbers are shown, top row, for each connector.

Connector C1 Pin #	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
Pixel #			16	15	8	7	14	13	6	5	12	11	4	3	10	9	2	1
Box Fiber #			4	55	28	15	42	29	2	53	16	3	40	27	54	41	14	1
Plane Strip #			43	9	23	54	37	24	41	11	55	42	35	22	10	36	53	40

Connector C2 Pin #	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
Pixel #			32	31	24	23	30	29	22	21	28	27	20	19	26	25	18	17
Box Fiber #			20	7	44	31	58	45	18	5	32	19	56	43	6	57	30	17
Plane Strip #			59	46	39	26	6	19	57	44	27	58	8	38	45	7	25	56

Connector C3 Pin #	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
Pixel #			48	47	40	39	46	45	38	37	44	43	36	35	42	41	34	33
Box Fiber #			36	23	60	47	10	61	34	21	48	35	8	59	22	9	46	33
Plane Strip #			31	62	4	17	49	3	29	60	16	30	47	5	61	48	18	28

Connector C4 Pin #	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
Pixel #			64	63	56	55	62	61	54	53	60	59	52	51	58	57	50	49
Box Fiber #			52	39	12	63	26	13	50	37	64	51	24	11	38	25	62	49
Plane Strip #			12	34	51	1	21	52	14	32	0	13	63	50	33	20	2	15

This Box uses 4 output cables which are "straight-through" and "one-for-one".
There is ONE connector at each end of the cable, and the pin assignments go straight through

Each of these Boxes feeds FOUR Minder boards.