

ISC CM Controls Chassis		Left Rail						
Name	Color	Rail	Module	Number	Channel	Type	Adapter	Pin
Power								
24V	violet	L	OMRON	DC_1	24V	P	TBLOCK	
0V	gray	L	OMRON	DC_1	0V	P	TBLOCK	
24V	violet	L	EK1101	0	24V	P	TBLOCK	
0V	gray	L	EK1101	0	0V	P	TBLOCK	
24V	violet	L	EK1101	0	+	P	TBLOCK	
0V	gray	L	EK1101	0	-	P	TBLOCK	
24V	violet	L	EL9400	6	24V	P	TBLOCK	
0V	gray	L	EL9400	6	0V	P	TBLOCK	
5V_1	red	L	EL9400	6	+	P	DC_1	+V
5VRET_1	black	L	EL9400	6	-	P	DC_1	-V
24V	violet	L	EL9400	14	24V	P	TBLOCK	
0V	gray	L	EL9400	14	0V	P	TBLOCK	
5V_1	red	L	EL9400	14	+	P	DC_1	+V
5VRET_1	black	L	EL9400	14	-	P	DC_1	-V
Common Mode Servo B								
5VRET_1	black	L	EL3102	1	COM	P	DC_1	
Input monitor +	green	L	EL3102	1	+I1	AI	7	9
Input monitor -	white	L	EL3102	1	-I1	AI	7	28
Monitor at split +	green	L	EL3102	1	+I2	AI	7	10
Monitor at split -	white	L	EL3102	1	-I2	AI	7	29
5VRET_1	black	L	EL3102	2	COM	P	DC_1	
Fast monitor +	green	L	EL3102	2	+I1	AI	7	11
Fast monitor -	white	L	EL3102	2	-I1	AI	7	30
Slow path feedback monitor +	green	L	EL3102	2	+I2	AI	7	12
Slow path feedback monitor -	white	L	EL3102	2	-I2	AI	7	31
5VRET_1	black	L	EL3102	3	COM	P	DC_1	
Slow monitor +	green	L	EL3102	3	+I1	AI	7	13
Slow monitor -	white	L	EL3102	3	-I1	AI	7	32
	green	L	EL3102	3	+I2	AI		
	white	L	EL3102	3	-I2	AI		
5VRET_1	black	L	EL4132	4	COM	P	DC_1	
Common path offset +	blue	L	EL4132	4	O1	AO	7	15
Common path offset -	yellow	L	EL4132	4	COM	AO	7	34
Slow path offset +	blue	L	EL4132	4	O2	AO	7	16
Slow path offset -	yellow	L	EL4132	4	COM	AO	7	35
5VRET_1	black	L	EL4132	5	COM	P	DC_1	
Slow path output offset +	blue	L	EL4132	5	O1	AO	7	17
Slow path output offset -	yellow	L	EL4132	5	COM	AO	7	36
	blue	L	EL4132	5	O2	AO		
	yellow	L	EL4132	5	COM	AO		
5VRET_1	black	L	EL1124	7	-	P	7	19
Fast path limits reached	brown	L	EL1124	7	I1	BI	7	6
OK	brown	L	EL1124	7	I2	BI	7	25
	brown	L	EL1124	7	I3	BI		
	brown	L	EL1124	7	I4	BI		
Gain slider fast path bit 0	orange	L	EL2124	8	O1	BO	7	1
Gain slider fast path bit 1	orange	L	EL2124	8	O2	BO	7	20
Gain slider fast path bit 2	orange	L	EL2124	8	O3	BO	7	2
Gain slider fast path bit 3	orange	L	EL2124	8	O4	BO	7	21
5VRET_1	black	L	EL2124	9	-	P	7	4
Gain slider fast path bit 4	orange	L	EL2124	9	O1	BO	7	3
Gain slider fast path bit 5	orange	L	EL2124	9	O2	BO	7	22
Excitation B enable	orange	L	EL2124	9	O3	BO	7	23
Option B enable	orange	L	EL2124	9	O4	BO	7	5
LE	orange	L	EL2124	10	O1	BO	7	24
Excitation slow path	orange	L	EL2124	10	O2	BO	7	7
Polarity input 1 path	orange	L	EL2124	10	O3	BO	7	26
Polarity input 2 path	orange	L	EL2124	10	O4	BO	7	8
5VRET_1	black	L	EL2124	11	-	P	8	4
Gain slider input 1 bit 0	orange	L	EL2124	11	O1	BO	8	1
Gain slider input 1 bit 1	orange	L	EL2124	11	O2	BO	8	20

Gain slider input 1 bit 2	orange	L	EL2124	11	O3	BO	8	2
Gain slider input 1 bit 3	orange	L	EL2124	11	O4	BO	8	21
Gain slider input 1 bit 4	orange	L	EL2124	12	O1	BO	8	3
Gain slider input 1 bit 5	orange	L	EL2124	12	O2	BO	8	22
Gain slider input 2 bit 0	orange	L	EL2124	12	O3	BO	8	23
Gain slider input 2 bit 1	orange	L	EL2124	12	O4	BO	8	5
Gain slider input 2 bit 2	orange	L	EL2124	13	O1	BO	8	24
Gain slider input 2 bit 3	orange	L	EL2124	13	O2	BO	8	6
Gain slider input 2 bit 4	orange	L	EL2124	13	O3	BO	8	25
Gain slider input 2 bit 5	orange	L	EL2124	13	O4	BO	8	7
Input 1 enable	orange	L	EL2124	15	O1	BO	8	8
Input 2 enable	orange	L	EL2124	15	O2	BO	8	27
Output 1 switch	orange	L	EL2124	15	O3	BO	8	9
Boost stages bit 0	orange	L	EL2124	15	O4	BO	8	28
Boost stages bit 1	orange	L	EL2124	16	O1	BO	8	10
Compensation enable	orange	L	EL2124	16	O2	BO	8	29
Excitation A enable	orange	L	EL2124	16	O3	BO	8	30
Option A enable	orange	L	EL2124	16	O4	BO	8	12
SVRET_1	black	L	EL2124	17	-	P	8	33
Polarity slow path	orange	L	EL2124	17	O1	BO	8	31
Common filter enable	orange	L	EL2124	17	O2	BO	8	13
Fast path enable	orange	L	EL2124	17	O3	BO	8	32
Fast path polarity	orange	L	EL2124	17	O4	BO	8	14
Slow path option enable	orange	L	EL2124	18	O1	BO	8	15
Bypass enable	orange	L	EL2124	18	O2	BO	8	34
Slow output offset +5V fixed	orange	L	EL2124	18	O3	BO	8	16
Slow output offset enable	orange	L	EL2124	18	O4	BO	8	35
Slow path compensation enable	orange	L	EL2124	19	O1	BO	8	17
Slow path boost enable	orange	L	EL2124	19	O2	BO	8	36
Slow path filter enable	orange	L	EL2124	19	O3	BO	8	37
Fast path limiter enable	orange	L	EL2124	19	O4	BO	8	19

ISC CM Controls Chassis				Middle Rail				
Name	Color	Rail	Module	Number	Channel	Type	Adapter	Pin
Power								
24V	violet	M	OMRON	DC_2	24V	P	TBLOCK	
0V	gray	M	OMRON	DC_2	0V	P	TBLOCK	
24V	violet	M	EK1101	0	24V	P	TBLOCK	
0V	gray	M	EK1101	0	0V	P	TBLOCK	
24V	violet	M	EK1101	0	+	P	TBLOCK	
0V	gray	M	EK1101	0	-	P	TBLOCK	
24V	violet	M	EL9400	6	24V	P	TBLOCK	
0V	gray	M	EL9400	6	0V	P	TBLOCK	
5V_2	red	M	EL9400	6	+	P	DC_2	+V
5VRET_2	black	M	EL9400	6	-	P	DC_2	-V
24V	violet	M	EL9400	14	24V	P	TBLOCK	
0V	gray	M	EL9400	14	0V	P	TBLOCK	
5V_2	red	M	EL9400	14	+	P	DC_2	+V
5VRET_2	black	M	EL9400	14	-	P	DC_2	-V
Common Mode Servo A								
5VRET_2	black	M	EL3102	1	COM	P	DC_2	
Input monitor +	green	M	EL3102	1	+I1	AI	5	9
Input monitor -	white	M	EL3102	1	-I1	AI	5	28
Monitor at split +	green	M	EL3102	1	+I2	AI	5	10
Monitor at split -	white	M	EL3102	1	-I2	AI	5	29
5VRET_2	black	M	EL3102	2	COM	P	DC_2	
Fast monitor +	green	M	EL3102	2	+I1	AI	5	11
Fast monitor -	white	M	EL3102	2	-I1	AI	5	30
Slow path feedback monitor +	green	M	EL3102	2	+I2	AI	5	12
Slow path feedback monitor -	white	M	EL3102	2	-I2	AI	5	31
5VRET_2	black	M	EL3102	3	COM	P	DC_2	
Slow monitor +	green	M	EL3102	3	+I1	AI	5	13
Slow monitor -	white	M	EL3102	3	-I1	AI	5	32
	green	M	EL3102	3	+I2	AI		
	white	M	EL3102	3	-I2	AI		
5VRET_2	black	M	EL4132	4	COM	P	DC_2	
Common path offset +	blue	M	EL4132	4	O1	AO	5	15
Common path offset -	yellow	M	EL4132	4	COM	AO	5	34
Slow path offset +	blue	M	EL4132	4	O2	AO	5	16
Slow path offset -	yellow	M	EL4132	4	COM	AO	5	35
5VRET_2	black	M	EL4132	5	COM	P	DC_2	
Slow path output offset +	blue	M	EL4132	5	O1	AO	5	17
Slow path output offset -	yellow	M	EL4132	5	COM	AO	5	36
	blue	M	EL4132	5	O2	AO		
	yellow	M	EL4132	5	COM	AO		
5VRET_2	black	M	EL1124	7	-	P	5	19
Fast path limits reached	brown	M	EL1124	7	I1	BI	5	6
OK	brown	M	EL1124	7	I2	BI	5	25
	brown	M	EL1124	7	I3	BI		
	brown	M	EL1124	7	I4	BI		
Gain slider fast path bit 0	orange	M	EL2124	8	O1	BO	5	1
Gain slider fast path bit 1	orange	M	EL2124	8	O2	BO	5	20
Gain slider fast path bit 2	orange	M	EL2124	8	O3	BO	5	2
Gain slider fast path bit 3	orange	M	EL2124	8	O4	BO	5	21
5VRET_1	black	M	EL2124	9	-	P	5	4
Gain slider fast path bit 4	orange	M	EL2124	9	O1	BO	5	3
Gain slider fast path bit 5	orange	M	EL2124	9	O2	BO	5	22
Excitation B enable	orange	M	EL2124	9	O3	BO	5	23
Option B enable	orange	M	EL2124	9	O4	BO	5	5
LE	orange	M	EL2124	10	O1	BO	5	24
Excitation slow path	orange	M	EL2124	10	O2	BO	5	7
Polarity input 1 path	orange	M	EL2124	10	O3	BO	5	26
Polarity input 2 path	orange	M	EL2124	10	O4	BO	5	8
5VRET_2	black	M	EL2124	11	-	P	6	4
Gain slider input 1 bit 0	orange	M	EL2124	11	O1	BO	6	1
Gain slider input 1 bit 1	orange	M	EL2124	11	O2	BO	6	20

Gain slider input 1 bit 2	orange	M	EL2124	11	O3	BO	6	2
Gain slider input 1 bit 3	orange	M	EL2124	11	O4	BO	6	21
Gain slider input 1 bit 4	orange	M	EL2124	12	O1	BO	6	3
Gain slider input 1 bit 5	orange	M	EL2124	12	O2	BO	6	22
Gain slider input 2 bit 0	orange	M	EL2124	12	O3	BO	6	23
Gain slider input 2 bit 1	orange	M	EL2124	12	O4	BO	6	5
Gain slider input 2 bit 2	orange	M	EL2124	13	O1	BO	6	24
Gain slider input 2 bit 3	orange	M	EL2124	13	O2	BO	6	6
Gain slider input 2 bit 4	orange	M	EL2124	13	O3	BO	6	25
Gain slider input 2 bit 5	orange	M	EL2124	13	O4	BO	6	7
Input 1 enable	orange	M	EL2124	15	O1	BO	6	8
Input 2 enable	orange	M	EL2124	15	O2	BO	6	27
Output 1 switch	orange	M	EL2124	15	O3	BO	6	9
Boost stages bit 0	orange	M	EL2124	15	O4	BO	6	28
Boost stages bit 1	orange	M	EL2124	16	O1	BO	6	10
Compensation enable	orange	M	EL2124	16	O2	BO	6	29
Excitation A enable	orange	M	EL2124	16	O3	BO	6	30
Option A enable	orange	M	EL2124	16	O4	BO	6	12
SVRET_1	black	M	EL2124	17	-	P	6	33
Polarity slow path	orange	M	EL2124	17	O1	BO	6	31
Common filter enable	orange	M	EL2124	17	O2	BO	6	13
Fast path enable	orange	M	EL2124	17	O3	BO	6	32
Fast path polarity	orange	M	EL2124	17	O4	BO	6	14
Slow path option enable	orange	M	EL2124	18	O1	BO	6	15
Bypass enable	orange	M	EL2124	18	O2	BO	6	34
Slow output offset +5V fixed	orange	M	EL2124	18	O3	BO	6	16
Slow output offset enable	orange	M	EL2124	18	O4	BO	6	35
Slow path compensation enable	orange	M	EL2124	19	O1	BO	6	17
Slow path boost enable	orange	M	EL2124	19	O2	BO	6	36
Slow path filter enable	orange	M	EL2124	19	O3	BO	6	37
Fast path limiter enable	orange	M	EL2124	19	O4	BO	6	19

ISC CM Controls Chassis				Right Rail				
Name	Color	Rail	Module	Number	Channel	Type	Adapter	Pin
Power								
24V	violet	R	OMRON	DC_3	24V	P	TBLOCK	
0V	gray	R	OMRON	DC_3	0V	P	TBLOCK	
24V	violet	R	EK1101	0	24V	P	TBLOCK	
0V	gray	R	EK1101	0	0V	P	TBLOCK	
24V	violet	R	EK1101	0	+	P	TBLOCK	
0V	gray	R	EK1101	0	-	P	TBLOCK	
24V	violet	R	EL9400	6	24V	P	TBLOCK	
0V	gray	R	EL9400	6	0V	P	TBLOCK	
5V_3	red	R	EL9400	6	+	P	DC_3	+V
5VRET_3	black	R	EL9400	6	-	P	DC_3	-V
5V_4	red	R	EL9190	9	+	P	DC_4	+V
5VRET_4	black	R	EL9190	9	-	P	DC_4	-V
24V	violet	R	OMRON	DC_4	24V	P	TBLOCK	
0V	gray	R	OMRON	DC_4	0V	P	TBLOCK	
24V	violet	R	SOLA HD	24V	24V	P	TBLOCK	
0V	gray	R	SOLA HD	0V	0V	P	TBLOCK	
Low Noise VCO								
5VRET_3	black	R	EL3102	1	COM	P	DC_3	
Monitor 1 +	green	R	EL3102	1	+I1	AI	4	1
Monitor 1 -	white	R	EL3102	1	-I1	AI	4	14
Monitor 2 +	green	R	EL3102	1	+I2	AI	4	2
Monitor 2 -	white	R	EL3102	1	-I2	AI	4	15
5VRET_3	black	R	EL3102	2	COM	P	DC_3	
Monitor 3 +	green	R	EL3102	2	+I1	AI	4	3
Monitor 3 -	white	R	EL3102	2	-I1	AI	4	16
Temp 1 +	green	R	EL3102	2	+I2	AI	4	4
Temp 1 -	white	R	EL3102	2	-I2	AI	4	17
5VRET_3	black	R	EL3102	3	COM	P	DC_3	
Temp 2 +	green	R	EL3102	3	+I1	AI	4	5
Temp 2 -	white	R	EL3102	3	-I1	AI	4	18
Temp 3 +	green	R	EL3102	3	+I2	AI		6
Temp 3 -	white	R	EL3102	3	-I2	AI		19
5VRET_3	black	R	EL3102	4	COM	P	DC_3	
Tune monitor +	blue	R	EL3102	4	+I1	AI	4	10
Tune monitor -	yellow	R	EL3102	4	-I1	AI	4	23
Spare +	blue	R	EL3102	4	+I2	AI	4	12
Spare -	yellow	R	EL3102	4	-I2	AI	4	25
5VRET_3	black	R	EL4132	5	COM	P	DC_3	
Tune adjust +	blue	R	EL4132	5	O1	AO	4	11
Tune adjust -	yellow	R	EL4132	5	COM	AO	4	24
	blue	R	EL4132	5	O2	AO		
	yellow	R	EL4132	5	COM	AO		
5VRET_3	black	R	EL1124	7	-	P	4	20
Excitation switch	brown	R	EL1124	7	I1	BI	4	9
OK	brown	R	EL1124	7	I2	BI	4	7
	brown	R	EL1124	7	I3	BI		
	brown	R	EL1124	7	I4	BI		
Excitation enable	orange	R	EL2124	8	O1	BO	4	8
	orange	R	EL2124	8	O2	BO		
	orange	R	EL2124	8	O3	BO		
	orange	R	EL2124	8	O4	BO		
Delay Line Phase Shifter A/B								
5VRET_4	black	R	EL2124	10	-	P	2	14
Bit 0/A	orange	R	EL2124	10	O1	BO	2	1
Bit 1/A	orange	R	EL2124	10	O2	BO	2	2
Bit 2/A	orange	R	EL2124	10	O3	BO	2	3
Bit 3/A	orange	R	EL2124	10	O4	BO	2	4
Bit 4/A	orange	R	EL2124	11	O1	BO	2	5
Bit 5/A	orange	R	EL2124	11	O2	BO	2	6
Bit 6/A	orange	R	EL2124	11	O3	BO	2	7
Bit 7/A	orange	R	EL2124	11	O4	BO	2	8

Bit 8/A	orange	R	EL2124	12	O1	BO	2	9
LE/A	orange	R	EL2124	12	O2	BO	2	10
Bit 0/B	orange	R	EL2124	12	O3	BO	3	1
Bit 1/B	orange	R	EL2124	12	O4	BO	3	2
5VRET_4	black	R	EL2124	13	-	P	3	14
Bit 2/B	orange	R	EL2124	13	O1	BO	3	3
Bit 3/B	orange	R	EL2124	13	O2	BO	3	4
Bit 4/B	orange	R	EL2124	13	O3	BO	3	5
Bit 5/B	orange	R	EL2124	13	O4	BO	3	6
Bit 6/B	orange	R	EL2124	14	O1	BO	3	7
Bit 7/B	orange	R	EL2124	14	O2	BO	3	8
Bit 8/B	orange	R	EL2124	14	O3	BO	3	9
LE/B	orange	R	EL2124	14	O4	BO	3	10