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Model 3000-45
(4x64) 2-wire Matrix
90400320



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Regulatory compliance information

This product complies with the essential requirements of the following applicable European Directives, and carries the CE mark accordingly.

89/336/EEC and 73/23/EEC	EMC Directive and Low Voltage Directive
EN61010-1 (1993)	Electrical Safety
EN61326-1 (1997)	EMC – Emissions and Immunity
Manufacturer's Name:	**Manufacturer's Address**
Giga-tronics, Incorporated	4650 Norris Canyon Road San Ramon, California 94583 U.S.A.
Type of Equipment:	**Model Series Number**
Switching Module	3000-45

Declaration of Conformity on file. Contact Giga-tronics at the following;

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Record of Changes to This Manual

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TPCI Number	TPCI Issue Date	Date Entered	Comments

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Revision History			
Revision	**Description of Change**	**Chg Order #**	**Approved By**
A	Initial Release		
B	Updated		
C	Reformatted 2/12		RCW

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Chapter 1 **Introduction**

1.1 Safety and Manual Conventions

This manual contains conventions regarding safety and equipment usage as described below.

1.1.1 Product Reference

Throughout this manual, the term “Common Core Switching Platform, Series 8800” refers to all models of within the series, unless otherwise specified.

1.1.2 Personal Safety Alert



WARNING: Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

1.1.3 Equipment Safety Alert



CAUTION: Indicates a situation which can damage or adversely affect the product or associated equipment.

1.1.4 Notes

Notes are denoted and used as follows:

NOTE: Highlights or amplifies an essential operating or maintenance procedure, practice, condition or statement.

1.1.5 Electrical Safety Precautions

Any servicing instructions are for use by service-trained personnel only. To avoid personal injury, do not perform any service unless you are qualified to do so.

For continued protections against fire hazard, replace the AC line fuse only with a fuse of the same current rating and type. Do not use repaired fuses or short circuited fuse holders.

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Chapter 2 **Configuration Table**

PL90400320

Assy 90400320

PCA (MB)

PL 85004000-001

Assy 85004000

SCH85004000

PCA (DB)

PL 85004040

Assy 85004040

SCH85004040

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Chapter 3 Functional Description

3.1 Introduction

This manual provides the necessary information for the maintenance of the Model 3000-45 Switch Matrix.

3.2 General Description

This module is a dual wire 4x64 matrix switch. Each relay in the module is individually controlled. Any and all relays can be closed. The module is designed to support precision testing designs such as ATE. This module is ideal for high quality multi-channel measurement or stimulus switching. Each relay is coaxially shielded to a separate analog ground plane. The Interface and mechanical construction meets the specification of the VXIbus System Specification, rev 1.2 through 1.4.

ASCOR Model 3000-45 Switch Matrix

Features

Four dual wire 4x16 matrices with >>70MHz bandwidth connected together through isolation circuits to form a 4x64 dual wire matrix. Expandable through additional daughterboards.

Electrical Specifications

DC parameters:

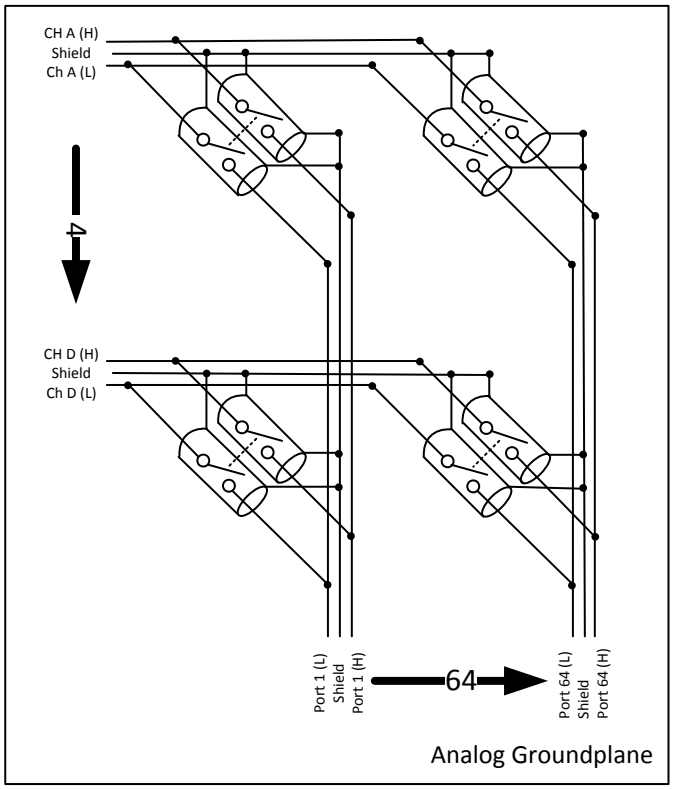
Switching voltage:	200 Volts
Switching current:	0.5 Amps
Carry current:	1.5 Amps
Contact rating:	10 Watts

AC Parameters:

Bandwidth:	70MHz into 50Ω, each line with respect to shield

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Chapter 4 **Block Diagram**



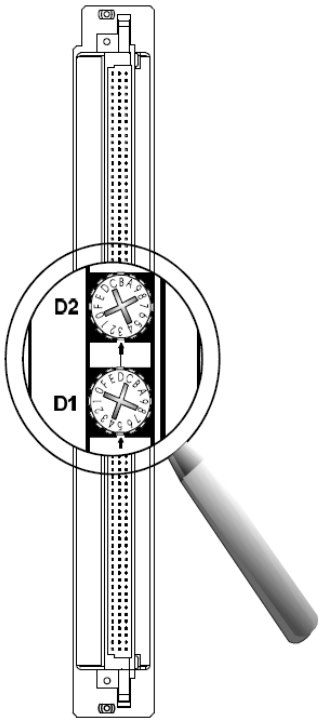
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Chapter 5 Controls and Indicators

The following controls and indicators are provided to select and display the functions of the ASCOR 3000-45 Module's operating environment.

5.1 VXI LOGICAL ADDRESS

The Logical Address Switch is dual circular switches, D1 and D2 which are located at the rear of the module. The address can be set to any value between 1 and 255 (decimal) or 1 and FF (hexadecimal), (address 0 is reserved for the resource manager). However, the Module fully supports Dynamic Configuration as defined in ***Section F of the VXI specification,*** address 255 (FF) should be selected only if the Resource Manager also supports Dynamic Configuration.



5.2 LEDs

The following LEDs are visible at the Module's front panel to indicate the

status of the module's operation:

5.2.1 "BUS" LED

This green color LED is normally off and will flash on when the module is addressed by the system.

5.2.2 "PWR" LED

This red color LED is normally on when the Module is Powered up.

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Chapter 6 Internal Settings

The following items are inside the module and can be reached by removing the side cover.

6.1 FUSE

The ASCOR VXI 3000-45 uses a 10 Amp fuse in the +5 Volt line and is located on the Mother Board (MB) assembly.

6.2 VXI_{bus} INTERRUPT LEVEL SELECTION

The VXIbus interrupt level is set with three bits in the “3Eh” register.

See the section on “A16 ADDRESS SPACE REGISTER DESCRIPTION”.

The interrupt level is factory set to “no interrupt”.

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Chapter 7 **Specifications**

Electrical

Voltage Max	200VDC, 200VACpk
Current Max	1.5A (carry)
	0.5A (switched)
Power Max	10W
Path Impedance	50Ω
Bandwidth	>70MHz
Crosstalk	< -40dB (at 50MHz)

Environmental

Temperature	
Operating	0° to 55°C
Storage	-40° to 75°C
Humidity (non-condensing)	
Operating	10 to 90%
Storage	0 to 95%

Mechanical

	“C” size VXI

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Chapter 9 **Programming**

The Model 3000-45 a VXI register based module. The switch paths are controlled via VXIMAX™ which is the 16/32 bit data controller. The Model 3000-45 can be programmed in 16 bit or 32 bit wide data. Through your VXI controller, write the data to the appropriate register as shown on the register map for the relay or relays in the register that is being closed. When the data bit is true, the relay chosen will be closed. The state of the relays in a register can be determined by reading the desired register. The data read back represents the value at the coil of the relay. This allows verification that the program register has correctly controlled the relay coil.

The following register maps are shown in two configurations: 16 bit mode and 32 bit mode. In each section,16 bit and 32 bit, the register map is organized to show the relay designation in each register. It is followed by the register's functionality and the path connections to the front panel.

Programming of the Model 3000-45 is very simple. The module is organized into 4 pins per register in16 bit mode or 8 pins per register in 32 bit mode. A pin is controlled by a group of 4 bits within the program registers. These bits select one or more the four available channels. Typically, only one channel is assigned to a pin for optimum performance. Whenever a pin is selected in a group, the appropriate channel isolation relay must be closed to complete the path. The isolation relays is the last register in the mother board and daughter board.

For example:
To close pin 1 to channel A and to close pin 2 to channel B would set the following register:

Register 8000h: control pins 1- 4

15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1

Register 8010h: controls the isolation relays

15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1

Register Map - 16 and 32 Bit

MSB

MODE: 32	MODE: 16	15	14	13	12	11	10	9	8
8000h-lower	8000h	K16	K15	K14	K13	K12	K11	K10	K9

LSB

MODE: 32	MODE: 16	7	6	5	4	3	2	1	0
8000h-lower	8000h	K8	K7	K6	K5	K4	K3	K2	K1

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MSB

MODE: 32	+	+	MODE: 16	+	15(31)	14(30)	13(29)	12(28)	11(27)	10(26)	9(25)	8(24)
8000h-upper	+	+	8002h	+	K32	K31	K30	K29	K28	K27	K26	K25

LSB

MODE: 32	+	+	MODE: 16	+	7(23)	6(22)	5(21)	4(20)	3(19)	2(18)	1(17)	0(16)
8000h-upper	+	+	8002h	+	K24	K23	K22	K21	K20	K19	K18	K17

MSB

MODE: 32			MODE: 16		15	14	13	12	11	10	9	8
8004h-lower			8004h		K48	K47	K46	K45	K44	K43	K42	K41

LSB

MODE: 32			MODE: 16		7	6	5	4	3	2	1	0
8004h-lower			8004h		K40	K39	K38	K37	K36	K35	K34	K33

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PCB NUMBER: SCH85004000

MSB

MODE: 32			MODE: 16		15(31)	14(30)	13(29)	12(28)	11(27)	10(26)	9(25)	8(24)
8004h-upper			8006h		K64	K63	K62	K61	K60	K59	K58	K57

LSB

MODE: 32			MODE: 16		7(23)	6(22)	5(21)	4(20)	3(19)	2(18)	1(17)	0(16)
8004h-upper			8006h		K56	K55	K54	K53	K52	K51	K50	K49

MSB

MODE: 32			MODE: 16		15	14	13	12	11	10	9	8
8008h-lower			8008h		K80	K79	K78	K77	K76	K75	K74	K73

LSB

MODE: 32			MODE: 16		7	6	5	4	3	2	1	0
8008h-lower			8008h		K72	K71	K70	K69	K68	K67	K66	K65

MSB

MODE: 32			MODE: 16		15(31)	14(30)	13(29)	12(28)	11(27)	10(26)	9(25)	8(24)
8008h-upper			800ah		K96	K95	K94	K93	K92	K91	K90	K89

LSB

MODE: 32			MODE: 16		7(23)	6(22)	5(21)	4(20)	3(19)	2(18)	1(17)	0(16)
8008h-upper			800ah		K88	K87	K86	K85	K84	K83	K82	K81

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PCB NUMBER: SCH85004000

MSB

MODE: 32			MODE: 16		15	14	13	12	11	10	9	8
800ch-lower			800ch		K112	K111	K110	K109	K108	K107	K106	K105

LSB

MODE: 32			MODE: 16		7	6	5	4	3	2	1	0
800ch-lower			800ch		K104	K103	K102	K101	K100	K99	K98	K97

MSB

MODE: 32			MODE: 16		15(31)	14(30)	13(29)	12(28)	11(27)	10(26)	9(25)	8(24)
800ch-upper			800eh		K128	K127	K126	K125	K124	K123	K122	K121

LSB

MODE: 32			MODE: 16		7(23)	6(22)	5(21)	4(20)	3(19)	2(18)	1(17)	0(16)
800ch-upper			800eh		K120	K119	K118	K117	K116	K115	K114	K113

MSB

MODE: 32			MODE: 16		15	14	13	12	11	10	9	8
8010h-lower			8010h		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

LSB

MODE: 32			MODE: 16		7	6	5	4	3	2	1	0
8010h-lower			8010h		K136	K135	K134	K133	K132	K131	K130	K129

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PCB NUMBER: SCH85004000
REGISTER: 8000h, , MODE: 16/32 bit, , +
FUNCTION: Control Matrix Pins 1-4, Channels A , B, C, D, , , , +

BIT	FUNCTION	CONNECTION (H, L, Shld.)	RELAY	COMMENT (H, L, Shld.)
0	Chan A, Pin 1	J1-50, 49, 48	K1	Chan A is J2- 35, 36, 34
1	Chan B, Pin 1	J1-50, 49, 48	K2	Chan B is J2- 32, 33, 31
2	Chan C, Pin 1	J1-50, 49, 48	K3	Chan C is J2- 5, 6, 4
3	Chan D, Pin 1	J1-50, 49, 48	K4	Chan D is J2-2, 3, 1
4	Chan A, Pin 2	J1-25, 24, 23	K5	Chan A is J2- 35, 36, 34
5	Chan B, Pin 2	J1-25, 24, 23	K6	Chan B is J2- 32, 33, 31
6	Chan C, Pin 2	J1-25, 24, 23	K7	Chan C is J2- 5, 6, 4
7	Chan D, Pin 2	J1-25, 24, 23	K8	Chan D is J2-2, 3, 1
8	Chan A, Pin 3	J1-47, 46, 45	K9	Chan A is J2- 35, 36, 34
9	Chan B, Pin 3	J1-47, 46, 45	K10	Chan B is J2- 32, 33, 31
10	Chan C, Pin 3	J1-47, 46, 45	K11	Chan C is J2- 5, 6, 4
11	Chan D, Pin 3	J1-47, 46, 45	K12	Chan D is J2-2, 3, 1
12	Chan A, Pin 4	J1-22, 21, 20	K13	Chan A is J2- 35, 36, 34
13	Chan B, Pin 4	J1-22, 21, 20	K14	Chan B is J2- 32, 33, 31
14	Chan C, Pin 4	J1-22, 21, 20	K15	Chan C is J2- 5, 6, 4
15	Chan D, Pin 4	J1-22, 21, 20	K16	Chan D is J2-2, 3, 1

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PCB NUMBER: SCH85004000
REGISTER: 8000h, , **MODE: 32 bit, BITS 16-31**, , +
REGISTER: 8002h, , **MODE: 16 bit**<$!C5,5,0,255,255,255>, , +
FUNCTION: Control Matrix Pins 5-8, Channels A , B, C, D, , , , +

BIT	FUNCTION	CONNECTION (H, L, Shld.)	RELAY	COMMENT (H, L, Shld.)
0(16)	Chan A, Pin 5	J1-44, 43, 42	K17	Chan A is J2- 35, 36, 34
1(17)	Chan B, Pin 5	J1-44, 43, 42	K18	Chan B is J2- 32, 33 , 31
2(18)	Chan C, Pin 5	J1-44, 43, 42	K19	Chan C is J2- 5, 6, 4
3(19)	Chan D, Pin 5	J1-44, 43, 42	K20	Chan D is J2-2, 3, 1
4(20)	Chan A, Pin 6	J1-19, 18, 17	K21	Chan A is J2- 35, 36, 34
5(21)	Chan B, Pin 6	J1-19, 18, 17	K22	Chan B is J2- 32, 33 , 31
6(22)	Chan C, Pin 6	J1-19, 18, 17	K23	Chan C is J2- 5, 6, 4
7(23)	Chan D, Pin 6	J1-19, 18, 17	K24	Chan D is J2-2, 3, 1
8(24)	Chan A, Pin 7	J1-41, 40, 39	K25	Chan A is J2- 35, 36, 34
9(25)	Chan B, Pin 7	J1-41, 40, 39	K26	Chan B is J2- 32, 33 , 31
10(26)	Chan C, Pin 7	J1-41, 40, 39	K27	Chan C is J2- 5, 6, 4
11(27)	Chan D, Pin 7	J1-41, 40, 39	K28	Chan D is J2-2, 3, 1
12(28)	Chan A, Pin 8	J1-16, 15, 14	K29	Chan A is J2- 35, 36, 34
13(29)	Chan B, Pin 8	J1-16, 15, 14	K30	Chan B is J2- 32, 33 , 31
14(30)	Chan C, Pin 8	J1-16, 15, 14	K31	Chan C is J2- 5, 6, 4
15(31)	Chan D, Pin 8	J1-16, 15, 14	K32	Chan D is J2-2, 3, 1

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PCB NUMBER: SCH85004000
REGISTER: 8004h, , MODE: 16/32 bit, , +
FUNCTION: Control Matrix Pins 9-12, Channels A , B, C, D, , , , +

BIT	FUNCTION	CONNECTION (H, L, Shld.)	RELAY	COMMENT (H, L, Shld.)
0	Chan A, Pin 9	J1-38, 37, 36	K33	Chan A is J2- 35, 36, 34
1	Chan B, Pin 9	J1-38, 37, 36	K34	Chan B is J2- 32, 33, 31
2	Chan C, Pin 9	J1-38, 37, 36	K35	Chan C is J2- 5, 6, 4
3	Chan D, Pin 9	J1-38, 37, 36	K36	Chan D is J2-2, 3, 1
4	Chan A, Pin 10	J1-13, 12, 11	K37	Chan A is J2- 35, 36, 34
5	Chan B, Pin 10	J1-13, 12, 11	K38	Chan B is J2- 32, 33, 31
6	Chan C, Pin 10	J1-13, 12, 11	K39	Chan C is J2- 5, 6, 4
7	Chan D, Pin 10	J1-13, 12, 11	K40	Chan D is J2-2, 3, 1
8	Chan A, Pin 11	J1-35, 34, 33	K41	Chan A is J2- 35, 36, 34
9	Chan B, Pin 11	J1-35, 34, 33	K42	Chan B is J2- 32, 33, 31
10	Chan C, Pin 11	J1-35, 34, 33	K43	Chan C is J2- 5, 6, 4
11	Chan D, Pin 11	J1-35, 34, 33	K44	Chan D is J2-2, 3, 1
12	Chan A, Pin 12	J1-10, 9, 8	K45	Chan A is J2- 35, 36, 34
13	Chan B, Pin 12	J1-10, 9, 8	K46	Chan B is J2- 32, 33, 31
14	Chan C, Pin 12	J1-10, 9, 8	K47	Chan C is J2- 5, 6, 4
15	Chan D, Pin 12	J1-10, 9, 8	K48	Chan D is J2-2, 3, 1

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PCB NUMBER: SCH85004000
REGISTER: 8004h, , **MODE: 32 bit, BITS 16-31**, , +
REGISTER: 8006h, , **MODE: 16 bit**<$!C5,5,0,255,255,255>, , +
FUNCTION: Control Matrix Pins 13-16, Channels A , B, C, D, , , , +

BIT	FUNCTION	CONNECTION (H, L, Shld.)	RELAY	COMMENT (H, L, Shld.)
0(16)	Chan A, Pin 13	J1-32, 31, 30	K49	Chan A is J2- 35, 36, 34
1(17)	Chan B, Pin 13	J1-32, 31, 30	K50	Chan B is J2- 32, 33, 31
2(18)	Chan C, Pin 13	J1-32, 31, 30	K51	Chan C is J2- 5, 6, 4
3(19)	Chan D, Pin 13	J1-32, 31, 30	K52	Chan D is J2-2, 3, 1
4(20)	Chan A, Pin 14	J1-7, 6, 5	K53	Chan A is J2- 35, 36, 34
5(21)	Chan B, Pin 14	J1-7, 6, 5	K54	Chan B is J2- 32, 33, 31
6(22)	Chan C, Pin 14	J1-7, 6, 5	K55	Chan C is J2- 5, 6, 4
7(23)	Chan D, Pin 14	J1-7, 6, 5	K56	Chan D is J2-2, 3, 1
8(24)	Chan A, Pin 15	J1-29, 28, 27	K57	Chan A is J2- 35, 36, 34
9(25)	Chan B, Pin 15	J1-29, 28, 27	K58	Chan B is J2- 32, 33, 31
10(26)	Chan C, Pin 15	J1-29, 28, 27	K59	Chan C is J2- 5, 6, 4
11(27)	Chan D, Pin 15	J1-29, 28, 27	K60	Chan D is J2-2, 3, 1
12(28)	Chan A, Pin 16	J1-4, 3, 2	K61	Chan A is J2- 35, 36, 34
13(29)	Chan B, Pin 16	J1-4, 3, 2	K62	Chan B is J2- 32, 33, 31
14(30)	Chan C, Pin 16	J1-4, 3, 2	K63	Chan C is J2- 5, 6, 4
15(31)	Chan D, Pin 16	J1-4, 3, 2	K64	Chan D is J2-2, 3, 1

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PCB NUMBER: SCH85004000
REGISTER: 8008h, , MODE: 16/32 bit, , +
FUNCTION: Control Matrix Pins 17-23, Channels A , B, C, D, , , , +

BIT	FUNCTION	CONNECTION (H, L, Shld.)	RELAY	COMMENT (H, L, Shld.)
0	Chan A, Pin 17	J2-60, 59, 58	K65	Chan A is J2- 35, 36, 34
1	Chan B, Pin 17	J2-60, 59, 58	K66	Chan B is J2- 32, 33, 31
2	Chan C, Pin 17	J2-60, 59, 58	K67	Chan C is J2- 5, 6, 4
3	Chan D, Pin 17	J2-60, 59, 58	K68	Chan D is J2-2, 3, 1
4	Chan A, Pin 18	J2-30, 29, 28	K69	Chan A is J2- 35, 36, 34
5	Chan B, Pin 18	J2-30, 29, 28	K70	Chan B is J2- 32, 33, 31
6	Chan C, Pin 18	J2-30, 29, 28	K71	Chan C is J2- 5, 6, 4
7	Chan D, Pin 18	J2-30, 29, 28	K72	Chan D is J2-2, 3, 1
8	Chan A, Pin 19	J2-57, 56, 55	K73	Chan A is J2- 35, 36, 34
9	Chan B, Pin 19	J2-57, 56, 55	K74	Chan B is J2- 32, 33, 31
10	Chan C, Pin 19	J2-57, 56, 55	K75	Chan C is J2- 5, 6, 4
11	Chan D, Pin 19	J2-57, 56, 55	K76	Chan D is J2-2, 3, 1
12	Chan A, Pin 20	J2-27, 26, 25	K77	Chan A is J2- 35, 36, 34
13	Chan B, Pin 20	J2-27, 26, 25	K78	Chan B is J2- 32, 33, 31
14	Chan C, Pin 20	J2-27, 26, 25	K79	Chan C is J2- 5, 6, 4
15	Chan D, Pin 20	J2-27, 26, 25	K80	Chan D is J2-2, 3, 1

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PCB NUMBER: SCH85004000
REGISTER: 8008h, , **MODE: 32 bit, BITS 16-31**, , +
REGISTER: 800ah, , **MODE: 16 bit**<$!C5,5,0,255,255,255>, , +
FUNCTION: Control Matrix Pins 21-24, Channels A , B, C, D, , , , +

BIT	FUNCTION	CONNECTION (H, L, Shld.)	RELAY	COMMENT (H, L, Shld.)
0(16)	Chan A, Pin 21	J2-54, 53, 52	K81	Chan A is J2- 35, 36, 34
1(17)	Chan B, Pin 21	J2-54, 53, 52	K82	Chan B is J2- 32, 33, 31
2(18)	Chan C, Pin 21	J2-54, 53, 52	K83	Chan C is J2- 5, 6, 4
3(19)	Chan D, Pin 21	J2-54, 53, 52	K84	Chan D is J2-2, 3, 1
4(20)	Chan A, Pin 22	J2-24, 23, 22	K85	Chan A is J2- 35, 36, 34
5(21)	Chan B, Pin 22	J2-24, 23, 22	K86	Chan B is J2- 32, 33, 31
6(22)	Chan C, Pin 22	J2-24, 23, 22	K87	Chan C is J2- 5, 6, 4
7(23)	Chan D, Pin 22	J2-24, 23, 22	K88	Chan D is J2-2, 3, 1
8(24)	Chan A, Pin 23	J2-51, 50, 49	K89	Chan A is J2- 35, 36, 34
9(25)	Chan B, Pin 23	J2-51, 50, 49	K90	Chan B is J2- 32, 33, 31
10(26)	Chan C, Pin 23	J2-51, 50, 49	K91	Chan C is J2- 5, 6, 4
11(27)	Chan D, Pin 23	J2-51, 50, 49	K92	Chan D is J2-2, 3, 1
12(28)	Chan A, Pin 24	J2-21, 20, 19	K93	Chan A is J2- 35, 36, 34
13(29)	Chan B, Pin 24	J2-21, 20, 19	K94	Chan B is J2- 32, 33, 31
14(30)	Chan C, Pin 24	J2-21, 20, 19	K95	Chan C is J2- 5, 6, 4
15(31)	Chan D, Pin 24	J2-21, 20, 19	K96	Chan D is J2-2, 3, 1

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PCB NUMBER: SCH85004000
REGISTER: 800ch, , MODE: 16/32 bit, , +
FUNCTION: Control Matrix Pins 25-28, Channels A , B, C, D, , , , +

BIT	FUNCTION	CONNECTION (H, L, Shld.)	RELAY	COMMENT (H, L, Shld.)
0	Chan A, Pin 25	J2-48, 47, 46	K97	Chan A is J2- 35, 36, 34
1	Chan B, Pin 25	J2-48, 47, 46	K98	Chan B is J2- 32, 33, 31
2	Chan C, Pin 25	J2-48, 47, 46	K99	Chan C is J2- 5, 6, 4
3	Chan D, Pin 25	J2-48, 47, 46	K100	Chan D is J2-2, 3, 1
4	Chan A, Pin 26	J2-18, 17, 16	K101	Chan A is J2- 35, 36, 34
5	Chan B, Pin 26	J2-18, 17, 16	K102	Chan B is J2- 32, 33, 31
6	Chan C, Pin 26	J2-18, 17, 16	K103	Chan C is J2- 5, 6, 4
7	Chan D, Pin 26	J2-18, 17, 16	K104	Chan D is J2-2, 3, 1
8	Chan A, Pin 27	J2-45, 44, 43	K105	Chan A is J2- 35, 36, 34
9	Chan B, Pin 27	J2-45, 44, 43	K106	Chan B is J2- 32, 33, 31
10	Chan C, Pin 27	J2-45, 44, 43	K107	Chan C is J2- 5, 6, 4
11	Chan D, Pin 27	J2-45, 44, 43	K108	Chan D is J2-2, 3, 1
12	Chan A, Pin 28	J2-15, 14, 13	K109	Chan A is J2- 35, 36, 34
13	Chan B, Pin 28	J2-15, 14, 13	K110	Chan B is J2- 32, 33, 31
14	Chan C, Pin 28	J2-15, 14, 13	K111	Chan C is J2- 5, 6, 4
15	Chan D, Pin 28	J2-15, 14, 13	K112	Chan D is J2-2, 3, 1

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PCB NUMBER: SCH85004000
REGISTER: 800ch, , **MODE: 32 bit, BITS 16-31**, , +
REGISTER: 800eh, , **MODE: 16 bit**<$!C5,5,0,255,255,255>, , +
FUNCTION: Control Matrix Pins 29-32, Channels A , B, C, D, , , , +

BIT	FUNCTION	CONNECTION (H, L, Shld.)	RELAY	COMMENT (H, L, Shld.)
0(16)	Chan A, Pin 29	J2-42, 41, 40	K113	Chan A is J2- 35, 36, 34
1(17)	Chan B, Pin 29	J2-42, 41, 40	K114	Chan B is J2- 32, 33, 31
2(18)	Chan C, Pin 29	J2-42, 41, 40	K115	Chan C is J2- 5, 6, 4
3(19)	Chan D, Pin 29	J2-42, 41, 40	K116	Chan D is J2-2, 3, 1
4(20)	Chan A, Pin 30	J2-12, 11, 10	K117	Chan A is J2- 35, 36, 34
5(21)	Chan B, Pin 30	J2-12, 11, 10	K118	Chan B is J2- 32, 33, 31
6(22)	Chan C, Pin 30	J2-12, 11, 10	K119	Chan C is J2- 5, 6, 4
7(23)	Chan D, Pin 30	J2-12, 11, 10	K120	Chan D is J2-2, 3, 1
8(24)	Chan A, Pin 31	J2-39, 38, 37	K121	Chan A is J2- 35, 36, 34
9(25)	Chan B, Pin 31	J2-39, 38, 37	K122	Chan B is J2- 32, 33, 31
10(26)	Chan C, Pin 31	J2-39, 38, 37	K123	Chan C is J2- 5, 6, 4
11(27)	Chan D, Pin 31	J2-39, 38, 37	K124	Chan D is J2-2, 3, 1
12(28)	Chan A, Pin 32	J2-9, 8, 7	K125	Chan A is J2- 35, 36, 34
13(29)	Chan B, Pin 32	J2-9, 8, 7	K126	Chan B is J2- 32, 33, 31
14(30)	Chan C, Pin 32	J2-9, 8, 7	K127	Chan C is J2- 5, 6, 4
15(31)	Chan D, Pin 32	J2-9, 8, 7	K128	Chan D is J2-2, 3, 1

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PCB NUMBER: SCH85004000
REGISTER: 8010h, , MODE: 16/32 bit, , +
FUNCTION: Control Matrix, Isolation relays, Channels A , B, C, D, , , , +

BIT	FUNCTION	CONNECTION (H, L, Shld.)	RELAY	COMMENT (H, L, Shld.)
0	Isolation Chan A, Grp 1	J2-35, 36, 34	K129	Chan A is J2- 35, 36, 34
1	Isolation Chan B, Grp 1	J2-32, 33, 31	K130	Chan B is J2- 32, 33, 31
2	Isolation Chan C, Grp 1	J2-5, 6, 4	K131	Chan C is J2- 5, 6, 4
3	Isolation Chan D, Grp 1	J2-2, 3, 1	K132	Chan D is J2-2, 3, 1
4	Isolation Chan A, Grp 2	J2-35, 36, 34	K133	Chan A is J2- 35, 36, 34
5	Isolation Chan B, Grp 2	J2-32, 33, 31	K134	Chan B is J2- 32, 33, 31
6	Isolation Chan C, Grp 2	J2-5, 6, 4	K135	Chan C is J2- 5, 6, 4
7	Isolation Chan D, Grp 2	J2-2, 3, 1	K136	Chan D is J2-2, 3, 1
8				
9				
10				
11				
12				
13				
14				
15				

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Register Map - 16 and 32 Bit

MSB

MODE: 32			MODE: 16		15	14	13	12	11	10	9	8
8020h-lower			8020h		K16	K15	K14	K13	K12	K11	K10	K9

LSB

MODE: 32			MODE: 16		7	6	5	4	3	2	1	0
8020h-lower			8020h		K8	K7	K6	K5	K4	K3	K2	K1

MSB

MODE: 32			MODE : 16		15(31)	14(30)	13(29)	12(28)	11(27)	10(26)	9(25)	8(24)
8020h -upper			8022h		K32	K31	K30	K29	K28	K27	K26	K25

LSB

MODE: 32			MODE: 16		7(23)	6(22)	5(21)	4(20)	3(19)	2(18)	1(17)	0(16)
8020h-upper			8022h		K24	K23	K22	K21	K20	K19	K18	K17

MSB

MODE: 32			MODE: 16		15	14	13	12	11	10	9	8
8024h-lower			8024h		K48	K47	K46	K45	K44	K43	K42	K41

LSB

MODE: 32			MODE: 16		7	6	5	4	3	2	1	0
8024h-lower			8024h		K40	K39	K38	K37	K36	K35	K34	K33

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PCB NUMBER: SCH85004040

MSB

MODE: 32			MODE: 16		15(31)	14(30)	13(29)	12(28)	11(27)	10(26)	9(25)	8(24)
8024h-upper			8026h		K64	K63	K62	K61	K60	K59	K58	K57

LSB

MODE: 32			MODE: 16		7(23)	6(22)	5(21)	4(20)	3(19)	2(18)	1(17)	0(16)
8024h-upper			8026h		K56	K55	K54	K53	K52	K51	K50	K49

MSB

MODE: 32			MODE: 16		15	14	13	12	11	10	9	8
8028h-lower			8028h		K80	K79	K78	K77	K76	K75	K74	K73

LSB

MODE: 32			MODE: 16		7	6	5	4	3	2	1	0
8028h-lower			8028h		K72	K71	K70	K69	K68	K67	K66	K65

MSB

MODE: 32			MODE: 16		15(31)	14(30)	13(29)	12(28)	11(27)	10(26)	9(25)	8(24)
8028h-upper			802ah		K96	K95	K94	K93	K92	K91	K90	K89

LSB

MODE: 32			MODE: 16		7(23)	6(22)	5(21)	4(20)	3(19)	2(18)	1(17)	0(16)
8028h-upper			802ah		K88	K87	K86	K85	K84	K83	K82	K81

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PCB NUMBER: SCH85004040

MSB

MODE: 32			MODE: 16		15	14	13	12	11	10	9	8
802ch-lower			802ch		K112	K111	K110	K109	K108	K107	K106	K105

LSB

MODE: 32			MODE: 16		7	6	5	4	3	2	1	0
802ch-lower			802ch		K104	K103	K102	K101	K100	K99	K98	K97

MSB

MODE: 32			MODE: 16		15(31)	14(30)	13(29)	12(28)	11(27)	10(26)	9(25)	8(24)
802ch-upper			802eh		K128	K127	K126	K125	K124	K123	K122	K121

LSB

MODE: 32			MODE: 16		7(23)	6(22)	5(21)	4(20)	3(19)	2(18)	1(17)	0(16)
8024h-upper			802eh		K120	K119	K118	K117	K116	K115	K114	K113

MSB

MODE: 32			MODE: 16		15	14	13	12	11	10	9	8
8030h-lower			8030h		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

LSB

MODE: 32			MODE: 16		7	6	5	4	3	2	1	0
8030h-lower			8030h		K136	K135	K134	K133	K132	K131	K130	K129

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PCB NUMBER: SCH85004040
REGISTER: 8020h, , MODE: 16/32 bit, , +
FUNCTION: Control Matrix Pins 33-36, Channels A , B, C, D, Daughter Board #1, , , , +

BIT	FUNCTION	CONNECTION (H, L, Shld.)	RELAY	COMMENT (H, L, Shld.)
0	Chan A, Pin 33	J3-50, 49, 48	K1	Chan A is J2- 35, 36, 34
1	Chan B, Pin 33	J3-50, 49, 48	K2	Chan B is J2- 32, 33, 31
2	Chan C, Pin 33	J3-50, 49, 48	K3	Chan C is J2- 5, 6, 4
3	Chan D, Pin 33	J3-50, 49, 48	K4	Chan D is J2-2, 3, 1
4	Chan A, Pin 34	J3-25, 24, 23	K5	Chan A is J2- 35, 36, 34
5	Chan B, Pin 34	J3-25, 24, 23	K6	Chan B is J2- 32, 33, 31
6	Chan C, Pin 34	J3-25, 24, 23	K7	Chan C is J2- 5, 6, 4
7	Chan D, Pin 34	J3-25, 24, 23	K8	Chan D is J2-2, 3, 1
8	Chan A, Pin 35	J3-47, 46, 45	K9	Chan A is J2- 35, 36, 34
9	Chan B, Pin 35	J3-47, 46, 45	K10	Chan B is J2- 32, 33, 31
10	Chan C, Pin 35	J3-47, 46, 45	K11	Chan C is J2- 5, 6, 4
11	Chan D, Pin 35	J3-47, 46, 45	K12	Chan D is J2-2, 3, 1
12	Chan A, Pin 36	J3-22, 21, 20	K13	Chan A is J2- 35, 36, 34
13	Chan B, Pin 36	J3-22, 21, 20	K14	Chan B is J2- 32, 33, 31
14	Chan C, Pin 36	J3-22, 21, 20	K15	Chan C is J2- 5, 6, 4
15	Chan D, Pin 36	J3-22, 21, 20	K16	Chan D is J2-2, 3, 1

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PCB NUMBER: SCH85004040
REGISTER: 8020h, , **MODE: 32 bit, BITS 16-31**, , +
REGISTER: 8022h, , **MODE: 16 bit**<$!C5,5,0,255,255,255>, , +
FUNCTION: Control Matrix Pins 37-40, Channels A , B, C, D, Daughter Board #1, , , , +

BIT	FUNCTION	CONNECTION (H, L, Shld.)	RELAY	COMMENT (H, L, Shld.)
0(16)	Chan A, Pin 37	J3-44, 43, 42	K17	Chan A is J2- 35, 36, 34
1(17)	Chan B, Pin 37	J3-44, 43, 42	K18	Chan B is J2- 32, 33, 31
2(18)	Chan C, Pin 37	J3-44, 43, 42	K19	Chan C is J2- 5, 6, 4
3(19)	Chan D, Pin 37	J3-44, 43, 42	K20	Chan D is J2-2, 3, 1
4(20)	Chan A, Pin 38	J3-19, 18, 17	K21	Chan A is J2- 35, 36, 34
5(21)	Chan B, Pin 38	J3-19, 18, 17	K22	Chan B is J2- 32, 33, 31
6(22)	Chan C, Pin 38	J3-19, 18, 17	K23	Chan C is J2- 5, 6, 4
7(23)	Chan D, Pin 38	J3-19, 18, 17	K24	Chan D is J2-2, 3, 1
8(24)	Chan A, Pin 39	J3-41, 40, 39	K25	Chan A is J2- 35, 36, 34
9(25)	Chan B, Pin 39	J3-41, 40, 39	K26	Chan B is J2- 32, 33, 31
10(26)	Chan C, Pin 39	J3-41, 40, 39	K27	Chan C is J2- 5, 6, 4
11(27)	Chan D, Pin 39	J3-41, 40, 39	K28	Chan D is J2-2, 3, 1
12(28)	Chan A, Pin 40	J3-16, 15, 14	K29	Chan A is J2- 35, 36, 34
13(29)	Chan B, Pin 40	J3-16, 15, 14	K30	Chan B is J2- 32, 33, 31
14(30)	Chan C, Pin 40	J3-16, 15, 14	K31	Chan C is J2- 5, 6, 4
15(31)	Chan D, Pin 40	J3-16, 15, 14	K32	Chan D is J2-2, 3, 1

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PCB NUMBER: SCH85004040
REGISTER: 8024h, , MODE: 16/32 bit, , +
FUNCTION: Control Matrix Pins 41-44, Channels A , B, C, D, Daughter Board #1, , , , +

BIT	FUNCTION	CONNECTION (H, L, Shld.)	RELAY	COMMENT (H, L, Shld.)
0	Chan A, Pin 41	J3-38, 37, 36	K33	Chan A is J2- 35, 36, 34
1	Chan B, Pin 41	J3-38, 37, 36	K34	Chan B is J2- 32, 33, 31
2	Chan C, Pin 41	J3-38, 37, 36	K35	Chan C is J2- 5, 6, 4
3	Chan D, Pin 41	J3-38, 37, 36	K36	Chan D is J2-2, 3, 1
4	Chan A, Pin 42	J3-13, 12, 11	K37	Chan A is J2- 35, 36, 34
5	Chan B, Pin 42	J3-13, 12, 11	K38	Chan B is J2- 32, 33, 31
6	Chan C, Pin 42	J3-13, 12, 11	K39	Chan C is J2- 5, 6, 4
7	Chan D, Pin 42	J3-13, 12, 11	K40	Chan D is J2-2, 3, 1
8	Chan A, Pin 43	J3-35, 34, 33	K41	Chan A is J2- 35, 36, 34
9	Chan B, Pin 43	J3-35, 34, 33	K42	Chan B is J2- 32, 33, 31
10	Chan C, Pin 43	J3-35, 34, 33	K43	Chan C is J2- 5, 6, 4
11	Chan D, Pin 43	J3-35, 34, 33	K44	Chan D is J2-2, 3, 1
12	Chan A, Pin 44	J3-10, 9, 8	K45	Chan A is J2- 35, 36, 34
13	Chan B, Pin 44	J3-10, 9, 8	K46	Chan B is J2- 32, 33, 31
14	Chan C, Pin 44	J3-10, 9, 8	K47	Chan C is J2- 5, 6, 4
15	Chan D, Pin 44	J3-10, 9, 8	K48	Chan D is J2-2, 3, 1

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PCB NUMBER: SCH85004040
REGISTER: 8024h, , **MODE: 32 bit, BITS 16-31**, , +
REGISTER: 8026h, , **MODE: 16 bit**<$!C5,5,0,255,255,255>, , +
FUNCTION: Control Matrix Pins 45-48, Channels A , B, C, D, Daughter Board #1, , , , +

BIT	FUNCTION	CONNECTION (H, L, Shld.)	RELAY	COMMENT (H, L, Shld.)
0(16)	Chan A, Pin 45	J3-32, 31, 30	K49	Chan A is J2- 35, 36, 34
1(17)	Chan B, Pin 45	J3-32, 31, 30	K50	Chan B is J2- 32, 33, 31
2(18)	Chan C, Pin 45	J3-32, 31, 30	K51	Chan C is J2- 5, 6, 4
3(19)	Chan D, Pin 45	J3-32, 31, 30	K52	Chan D is J2-2, 3, 1
4(20)	Chan A, Pin 46	J3-7, 6, 5	K53	Chan A is J2- 35, 36, 34
5(21)	Chan B, Pin 46	J3-7, 6, 5	K54	Chan B is J2- 32, 33, 31
6(22)	Chan C, Pin 46	J3-7, 6, 5	K55	Chan C is J2- 5, 6, 4
7(23)	Chan D, Pin 46	J3-7, 6, 5	K56	Chan D is J2-2, 3, 1
8(24)	Chan A, Pin 47	J3-29, 28, 27	K57	Chan A is J2- 35, 36, 34
9(25)	Chan B, Pin 47	J3-29, 28, 27	K58	Chan B is J2- 32, 33, 31
10(26)	Chan C, Pin 47	J3-29, 28, 27	K59	Chan C is J2- 5, 6, 4
11(27)	Chan D, Pin 47	J3-29, 28, 27	K60	Chan D is J2-2, 3, 1
12(28)	Chan A, Pin 48	J3-4, 3, 2	K61	Chan A is J2- 35, 36, 34
13(29)	Chan B, Pin 48	J3-4, 3, 2	K62	Chan B is J2- 32, 33, 31
14(30)	Chan C, Pin 48	J3-4, 3, 2	K63	Chan C is J2- 5, 6, 4
15(31)	Chan D, Pin 48	J3-4, 3, 2	K64	Chan D is J2-2, 3, 1

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PCB NUMBER: SCH85004040
REGISTER: 8028h, , MODE: 16/32 bit, , +
FUNCTION: Control Matrix Pins 49-52, Channels A , B, C, D, Daughter Board #1, , , , +

BIT	FUNCTION	CONNECTION (H, L, Shld.)	RELAY	COMMENT (H, L, Shld.)
0	Chan A, Pin 49	J4-50, 49, 48	K65	Chan A is J2- 35, 36, 34
1	Chan B, Pin 49	J4-50, 49, 48	K66	Chan B is J2- 32, 33, 31
2	Chan C, Pin 49	J4-50, 49, 48	K67	Chan C is J2- 5, 6, 4
3	Chan D, Pin 49	J4-50, 49, 48	K68	Chan D is J2-2, 3, 1
4	Chan A, Pin 50	J4-25, 24, 23	K69	Chan A is J2- 35, 36, 34
5	Chan B, Pin 50	J4-25, 24, 23	K70	Chan B is J2- 32, 33, 31
6	Chan C, Pin 50	J4-25, 24, 23	K71	Chan C is J2- 5, 6, 4
7	Chan D, Pin 50	J4-25, 24, 23	K72	Chan D is J2-2, 3, 1
8	Chan A, Pin 51	J4-47, 46, 45	K73	Chan A is J2- 35, 36, 34
9	Chan B, Pin 51	J4-47, 46, 45	K74	Chan B is J2- 32, 33, 31
10	Chan C, Pin 51	J4-47, 46, 45	K75	Chan C is J2- 5, 6, 4
11	Chan D, Pin 51	J4-47, 46, 45	K76	Chan D is J2-2, 3, 1
12	Chan A, Pin 52	J4-22, 21, 20	K77	Chan A is J2- 35, 36, 34
13	Chan B, Pin 52	J4-22, 21, 20	K78	Chan B is J2- 32, 33, 31
14	Chan C, Pin 52	J4-22, 21, 20	K79	Chan C is J2- 5, 6, 4
15	Chan D, Pin 52	J4-22, 21, 20	K80	Chan D is J2-2, 3, 1

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PCB NUMBER: SCH85004040
REGISTER: 8028h, , **MODE: 32 bit, BITS 16-31**, , +
REGISTER: 802ah, , **MODE: 16 bit**<$!C5,5,0,255,255,255>, , +
FUNCTION: Control Matrix Pins 53-56, Channels A , B, C, D, Daughter Board #1, , , , +

BIT	FUNCTION	CONNECTION (H, L, Shld.)	RELAY	COMMENT (H, L, Shld.)
0(16)	Chan A, Pin 53	J4-44, 43, 42	K81	Chan A is J2- 35, 36, 34
1(17)	Chan B, Pin 53	J4-44, 43, 42	K82	Chan B is J2- 32, 33, 31
2(18)	Chan C, Pin 53	J4-44, 43, 42	K83	Chan C is J2- 5, 6, 4
3(19)	Chan D, Pin 53	J4-44, 43, 42	K84	Chan D is J2-2, 3, 1
4(20)	Chan A, Pin 54	J4-19, 18, 17	K85	Chan A is J2- 35, 36, 34
5(21)	Chan B, Pin 54	J4-19, 18, 17	K86	Chan B is J2- 32, 33, 31
6(22)	Chan C, Pin 54	J4-19, 18, 17	K87	Chan C is J2- 5, 6, 4
7(23)	Chan D, Pin 54	J4-19, 18, 17	K88	Chan D is J2-2, 3, 1
8(24)	Chan A, Pin 55	J4-41, 40, 39	K89	Chan A is J2- 35, 36, 34
9(25)	Chan B, Pin 55	J4-41, 40, 39	K90	Chan B is J2- 32, 33, 31
10(26)	Chan C, Pin 55	J4-41, 40, 39	K91	Chan C is J2- 5, 6, 4
11(27)	Chan D, Pin 55	J4-41, 40, 39	K92	Chan D is J2-2, 3, 1
12(28)	Chan A, Pin 56	J4-16, 15, 14	K93	Chan A is J2- 35, 36, 34
13(29)	Chan B, Pin 56	J4-16, 15, 14	K94	Chan B is J2- 32, 33, 31
14(30)	Chan C, Pin 56	J4-16, 15, 14	K95	Chan C is J2- 5, 6, 4
15(31)	Chan D, Pin 56	J4-16, 15, 14	K96	Chan D is J2-2, 3, 1

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PCB NUMBER: SCH85004040
REGISTER: 802ch, , MODE: 16/32 bit, , +
FUNCTION: Control Matrix Pins 57-60, Channels A , B, C, D, Daughter Board #1, , , , +

BIT	FUNCTION	CONNECTION (H, L, Shld.)	RELAY	COMMENT (H, L, Shld.)
0	Chan A, Pin 57	J4-38, 37, 36	K97	Chan A is J2- 35, 36, 34
1	Chan B, Pin 57	J4-38, 37, 36	K98	Chan B is J2- 32, 33, 31
2	Chan C, Pin 57	J4-38, 37, 36	K99	Chan C is J2- 5, 6, 4
3	Chan D, Pin 57	J4-38, 37, 36	K100	Chan D is J2-2, 3, 1
4	Chan A, Pin 58	J4-13, 12, 11	K101	Chan A is J2- 35, 36, 34
5	Chan B, Pin 58	J4-13, 12, 11	K102	Chan B is J2- 32, 33, 31
6	Chan C, Pin 58	J4-13, 12, 11	K103	Chan C is J2- 5, 6, 4
7	Chan D, Pin 58	J4-13, 12, 11	K104	Chan D is J2-2, 3, 1
8	Chan A, Pin 59	J4-35, 34, 33	K105	Chan A is J2- 35, 36, 34
9	Chan B, Pin 59	J4-35, 34, 33	K106	Chan B is J2- 32, 33, 31
10	Chan C, Pin 59	J4-35, 34, 33	K107	Chan C is J2- 5, 6, 4
11	Chan D, Pin 59	J4-35, 34, 33	K108	Chan D is J2-2, 3, 1
12	Chan A, Pin 60	J4-10, 9, 8	K109	Chan A is J2- 35, 36, 34
13	Chan B, Pin 60	J4-10, 9, 8	K110	Chan B is J2- 32, 33, 31
14	Chan C, Pin 60	J4-10, 9, 8	K111	Chan C is J2- 5, 6, 4
15	Chan D, Pin 60	J4-10, 9, 8	K112	Chan D is J2-2, 3, 1

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PCB NUMBER: SCH85004040
REGISTER: 802ch, , **MODE: 32 bit, BITS 16-31**, , +
REGISTER: 802eh, , **MODE: 16 bit**<$!C5,5,0,255,255,255>, , +
FUNCTION: Control Matrix Pins 61-64, Channels A , B, C, D, Daughter Board #1, , , , +

BIT	FUNCTION	CONNECTION (H, L, Shld.)	RELAY	COMMENT (H, L, Shld.)
0(16)	Chan A, Pin 61	J4-32, 31, 30	K113	Chan A is J2- 35, 36, 34
1(17)	Chan B, Pin 61	J4-32, 31, 30	K114	Chan B is J2- 32, 33, 31
2(18)	Chan C, Pin 61	J4-32, 31, 30	K115	Chan C is J2- 5, 6, 4
3(19)	Chan D, Pin 61	J4-32, 31, 30	K116	Chan D is J2-2, 3, 1
4(20)	Chan A, Pin 62	J4-7, 6, 5	K117	Chan A is J2- 35, 36, 34
5(21)	Chan B, Pin 62	J4-7, 6, 5	K118	Chan B is J2- 32, 33, 31
6(22)	Chan C, Pin 62	J4-7, 6, 5	K119	Chan C is J2- 5, 6, 4
7(23)	Chan D, Pin 62	J4-7, 6, 5	K120	Chan D is J2-2, 3, 1
8(24)	Chan A, Pin 63	J4-29, 28, 27	K121	Chan A is J2- 35, 36, 34
9(25)	Chan B, Pin 63	J4-29, 28, 27	K122	Chan B is J2- 32, 33, 31
10(26)	Chan C, Pin 63	J4-29, 28, 27	K123	Chan C is J2- 5, 6, 4
11(27)	Chan D, Pin 63	J4-29, 28, 27	K124	Chan D is J2-2, 3, 1
12(28)	Chan A, Pin 64	J4-4, 3, 2	K125	Chan A is J2- 35, 36, 34
13(29)	Chan B, Pin 64	J4-4, 3, 2	K126	Chan B is J2- 32, 33, 31
14(30)	Chan C, Pin 64	J4-4, 3, 2	K127	Chan C is J2- 5, 6, 4
15(31)	Chan D, Pin 64	J4-4, 3, 2	K128	Chan D is J2-2, 3, 1

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PCB NUMBER: SCH85004040
REGISTER: 8030h, , MODE: 16/32 bit, , +
FUNCTION: Control Matrix, Isolation relays, Channels A , B, C, D, Daughter Board #1, , , , +

BIT	FUNCTION	CONNECTION (H, L, Shld.)	RELAY	COMMENT (H, L, Shld.)
0	Isolation Chan A, Grp 1	J2-35, 36, 34	K129	Chan A is J2- 35, 36, 34
1	Isolation Chan B, Grp 1	J2-32, 33, 31	K130	Chan B is J2- 32, 33, 31
2	Isolation Chan C, Grp 1	J2-5, 6, 4	K131	Chan C is J2- 5, 6, 4
3	Isolation Chan D, Grp 1	J2-2, 3, 1	K132	Chan D is J2-2, 3, 1
4	Isolation Chan A, Grp 2	J2-35, 36, 34	K133	Chan A is J2- 35, 36, 34
5	Isolation Chan B, Grp 2	J2-32, 33, 31	K134	Chan B is J2- 32, 33, 31
6	Isolation Chan C, Grp 2	J2-5, 6, 4	K135	Chan C is J2- 5, 6, 4
7	Isolation Chan D, Grp 2	J2-2, 3, 1	K136	Chan D is J2-2, 3, 1
8				
9				
10				
11				
12				
13				
14				
15				

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