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SCB 9202
Analogue Signal Conditioning Board

Product Specification

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1. INTRODUCTION

The SCB 9202 is a small analogue signal conditioning board used to route signals from Industry Pack I/O to front panel SCSI connectors in the IOC 9010 and VME64X VTB 8307 Mixed Signal Transition Board. Sixteen pairs of circuits are signal conditioned by resistor-capacitor filter networks. These can be enabled or by-passed by selection jumpers. A power connector accepts isolated +/-12Vpower from the main board and routes it to particular pins on the SCSI and IP-I/O connectors

2. PRODUCT SPECIFICATIONS

2.1 Power Requirements

+/-12V is accepted from main-board mounted DC-DC converters for routing to the main unit SCSI and IP I/O connectors.

2.2 Operating Temperature Range

0 to +45 deg Celsius ambient.

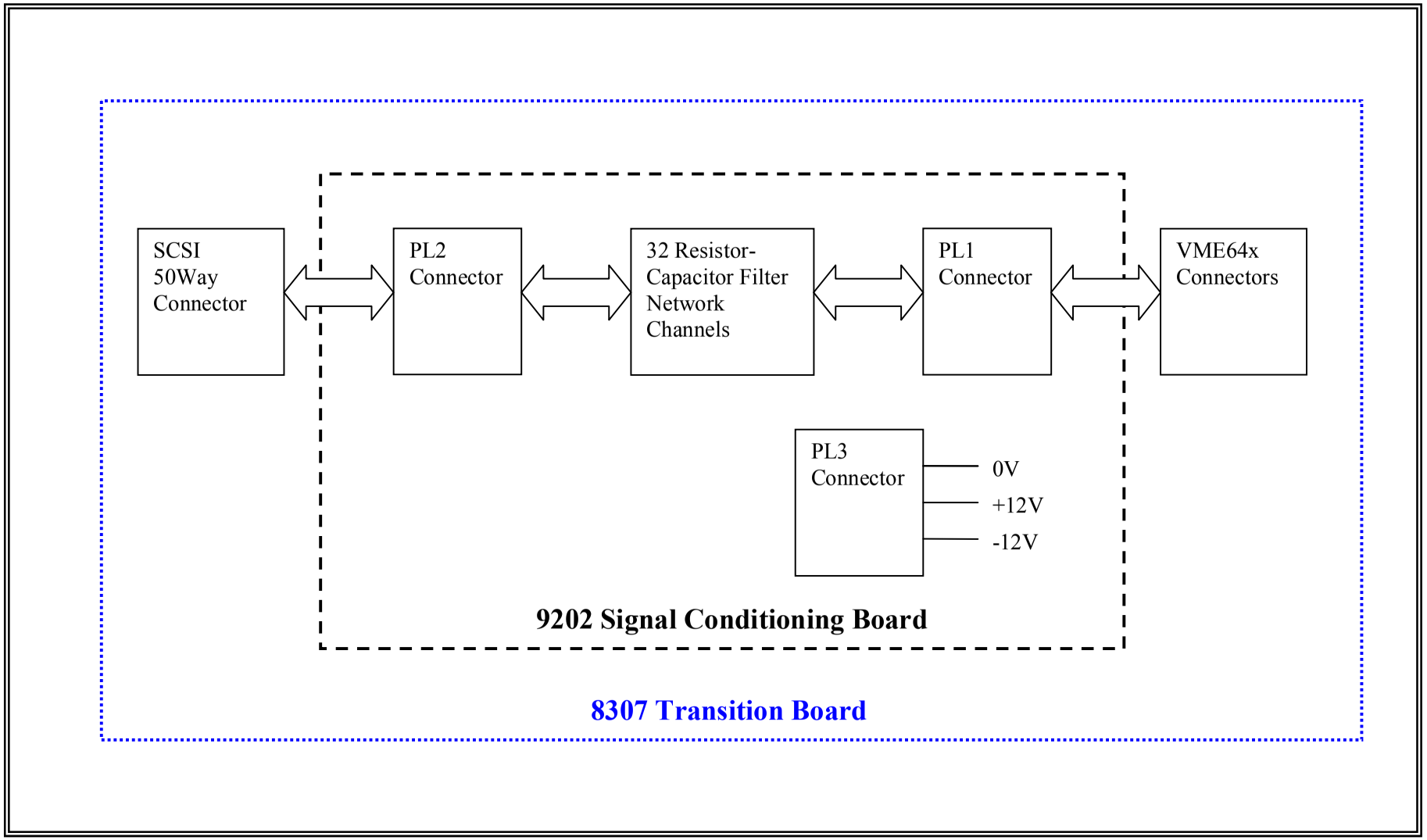
2.3 Mechanical

Printed circuit board with two 50-way sockets PL1, PL2 and 6 way power plug PL3 (+/-12V and AGND)
Board Dimensions: 2.55 x 1.80 inches

2.4 Signal Specifications

PL2/1 to PL2/32 are arranged in pairs which are filtered and routed to PL1/1 to PL1/32
PL2/1 to PL1/1 has 1k resistance in series
PL2/2 to PL1/2 has 1k resistance in series
PL1/1 to PL1/2 has 3n3F capacitance between the pins
Hence PL2/1 and PL2/2 look into 2k resistance with 3.3nF capacitance filter network.
PL1/1 and PL1/2 accept the filtered output.
Jumpers J1 and J2 allow the filter to be included or by-passed.
PL2/1 has 1M resistance to AGND
PL2/2 has 1M resistance to AGND
This circuit is repeated 16 times for compatibility with the 8401,8402,8403,8404 and 8411 ADCs and DACs.

Pins PL2/33 to PL2/50 are routed straight through to PL1/33 to PL1/50.



Block Diagram Example of connections between the 8307 transition card and 9202 SCB module

Table1 of Signal Allocation PL1 on 9202 SCB

Pin	Signal	Pin	Signal
1	VME I/O 1 +ve	26	VME I/O 13 -ve
2	VME I/O 1 -ve	27	VME I/O 14 +ve
3	VME I/O 2 +ve	28	VME I/O 14 -ve
4	VME I/O 2 -ve	29	VME I/O 15 +ve
5	VME I/O 3 +ve	30	VME I/O 15 -ve
6	VME I/O 3 -ve	31	VME I/O 16 +ve
7	VME I/O4 +ve	32	VME I/O 16 -ve
8	VME I/O 4 -ve	33	GO IN
9	VME I/O 5 +ve	34	/GO IN
10	VME I/O 5 -ve	35	XTrigger
11	VME I/O 6 +ve	36	/XTrigger
12	VME I/O 6 -ve	37	GO OUT
13	VME I/O 7 +ve	38	/GO OUT
14	VME I/O 7 -ve	39	XClk
15	VME I/O 8 +ve	40	/XClk
16	VME I/O 8 -ve	41	+12VX
17	VME I/O 9 +ve	42	AGND
18	VME I/O 9 -ve	43	+12VX
19	VME I/O 10 +ve	44	AGND
20	VME I/O 10 -ve	45	-12VX
21	VME I/O 11 +ve	46	AGND
22	VME I/O 11 -ve	47	-12VX
23	VME I/O 12 +ve	48	AGND
24	VME I/O 12 -ve	49	
25	VME I/O 13 +ve	50	AGND

Table2 of Signal Allocation PL2 on 9202 SCB

Pin	Signal	Pin	Signal
1	SCSI I/O 1 +ve	26	SCSI I/O 13 -ve
2	SCSI I/O 1 -ve	27	SCSI I/O 14 +ve
3	SCSI I/O 2 +ve	28	SCSI I/O 14 -ve
4	SCSI I/O 2 -ve	29	SCSI I/O 15 +ve
5	SCSI I/O 3 +ve	30	SCSI I/O 15 -ve
6	SCSI I/O 3 -ve	31	SCSI I/O 16 +ve
7	SCSI I/O4 +ve	32	SCSI I/O 16 -ve
8	SCSI I/O 4 -ve	33	GO IN
9	SCSI I/O 5 +ve	34	/GO IN
10	SCSI I/O 5 -ve	35	XTrigger
11	SCSI I/O 6 +ve	36	/XTrigger
12	SCSI I/O 6 -ve	37	GO OUT
13	SCSI I/O 7 +ve	38	/GO OUT
14	SCSI I/O 7 -ve	39	XClk
15	SCSI I/O 8 +ve	40	/XClk
16	SCSI I/O 8 -ve	41	+12VX
17	SCSI I/O 9 +ve	42	AGND
18	SCSI I/O 9 -ve	43	+12VX
19	SCSI I/O 10 +ve	44	AGND
20	SCSI I/O 10 -ve	45	-12VX
21	SCSI I/O 11 +ve	46	AGND
22	SCSI I/O 11 -ve	47	-12VX
23	SCSI I/O 12 +ve	48	AGND
24	SCSI I/O 12 -ve	49	
25	SCSI I/O 13 +ve	50	AGND

PL3 Connections

Pins 1&2 N/C
Pins 3 N/C
Pin 4 AGND
Pin 5 +12V
Pin 6 -12V

Table3 of 9010 or 8307 SCSI Pin Allocation

Pin	Signal	Pin	Signal
1	I/O 1 -	26	I/O 1 +
2	I/O 2 -	27	I/O 2 +
3	I/O 3 -	28	I/O 3 +
4	I/O 4 -	29	I/O 4 +
5	I/O 5 -	30	I/O 5 +
6	I/O 6 -	31	I/O 6 +
7	I/O 7 -	32	I/O 7 +
8	I/O 8 -	33	I/O 8 +
9	I/O 9 -	34	I/O 9 +
10	I/O 10 -	35	I/O 10 +
11	I/O 11 -	36	I/O 11 +
12	I/O 12 -	37	I/O 12 +
13	I/O 13 -	38	I/O 13 +
14	I/O 14 -	39	I/O 14 +
15	I/O 15 -	40	I/O 15 +
16	I/O 16 -	41	I/O 16 +
17	GO IN-	42	GO IN+
18	XTRIG N	43	XTRIG P
19	GO OUT-	44	GO OUT+
20	XCLK N	45	XCLK P
21	AGND	46	+12V
22	AGND	47	+12V
23	AGND	48	-12V
24	AGND	49	-12V
25	AGND	50	