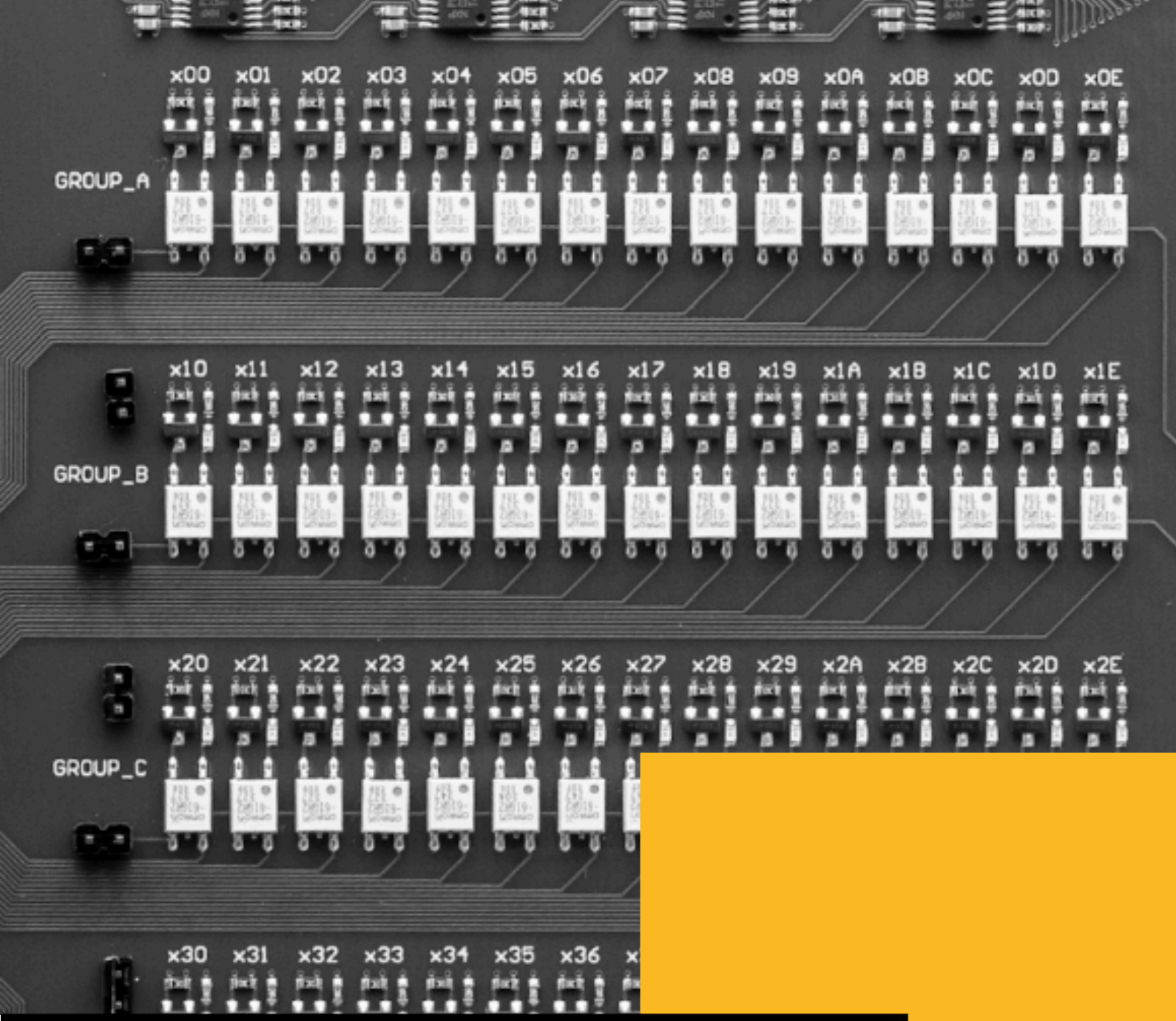


LF Multiplexer SSR - V1p1

26.08.2025 v1.3

PRODSP TECHNOLOGIES

Intended use - LFMUX_V1p1

This card is intended for **multi channel, low frequency, low current signal multiplexing and distribution.**

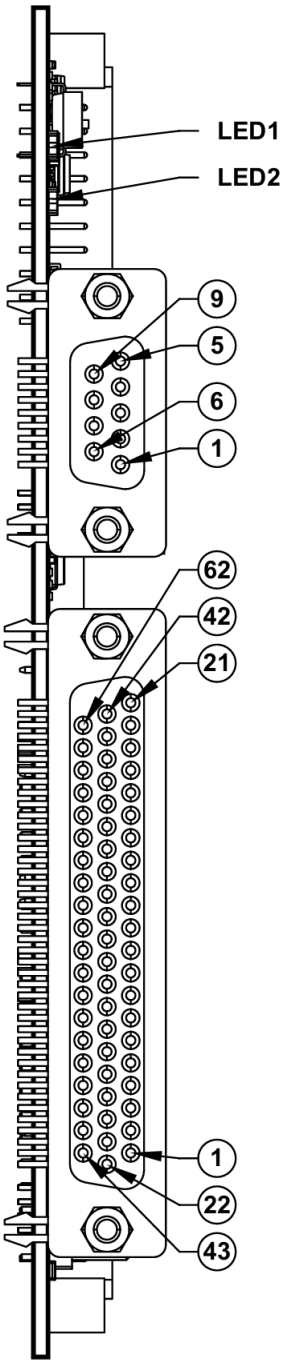
On the front there is a DSUB9 type connector which is the input side of the multiplexer. It has four inputs, A, B, C and D. The signal arriving into these pins can be multiplexed to the output connector DSUB62. The board is capable of connecting one input to multiple outputs simultaneously. **The switch type is a solid state relay** on this board, so both current directions are allowed. The board can be reconfigured with jumpers to make 4x 1:15 or 2x 1:30 or 1x 1:60 multiplexer configuration. This board can be swapped with an SMP_LFMUX_V2p0.

One such example could be, that a DMM + and - is connected to *input A* and *input C* and the board is configured to be a 2x 1:30 multiplexer. This way the DMM can be multiplexed to 30 different points (outputs). For more flexibility each input can be tied to 5 different signals on the back plane.

Electrical specification

Parameter	Symbol	Max	Unit
Current on any front panel pin	Ipmax	500	mA
Voltage between any font panel pins	Vpdiff	45	V_{DC}
Voltage on front panel pin to chassis	Vpc	50	V
Pin to pin resistance (front panel)	Ron	330	mΩ

Card pinout



Input connector (Counterpart: L17MHDM09+L77SDE09S)

Pin No.	Channel	Pin No.	Channel
1	Input D	6	nc
2	Input C	7	nc
3	nc	8	nc
4	Input B	9	nc
5	Input A	–	–

Output connector (Counterpart: L17MHDM37+L77HDC62S)

Pin No.	Channel	Pin No.	Channel	Pin No.	Channel
1	D-14	22	nc	43	D-13
2	D-11	23	D-12	44	D-10
3	D-8	24	D-9	45	D-7
4	D-5	25	D-6	46	D-4
5	D-2	26	D-3	47	D-1
6	C-14	27	D-0	48	C-13
7	C-11	28	C-12	49	C-10
8	C-8	29	C-9	50	C-7
9	C-5	30	C-6	51	C-4
10	C-2	31	C-3	52	C-1
11	B-14	32	C-0	53	B-13
12	B-11	33	B-12	54	B-10
13	B-8	34	B-9	55	B-7
14	B-5	35	B-6	56	B-4
15	B-2	36	B-3	57	B-1
16	A-14	37	B-0	58	A-13
17	A-11	38	A-12	59	A-10
18	A-8	39	A-9	60	A-7
19	A-5	40	A-6	61	A-4
20	A-2	41	A-3	62	A1
21	nc	42	A-0	–	–

LED1: Indicates that the board is powered on

LED2: Indicates active communication to the board