

# **Maintenance Manual**

## **ANALOG DELAY SHELF ASSEMBLY 19D902531G6, 7**

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ANALOG DELAY MODULE . . . . . LBI-38473

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**Analog Delay Shelf Assembly  
19D902531G6,7  
OPTIONS CP5E/CP5G**

OPTION	PART NUMBER	CONFIGURATION
CP5E	19D902531G6	5 Site, 24 channel (one 5-site backplane)
CP5G	19D902531G7	10 Site, 24 Channel (two 5-site backplanes)

**DESCRIPTION**

The Analog Delay Shelf is available in two groups, G6 and G7. Group 6 accommodates a simulcast system with up to 5 sites and 24 channels, while a group 7 shelf accommodates a simulcast system with up to 10 sites and 24 channels. The card cage housing the delay modules is six rack units high and accommodates up to 20 analog delay modules. The analog delay modules provides the delay for up to 12 voice channels and the 150 baud FSK (or 13 voice channels) data from the control point site to the transmit sites to ensure equal time of arrival of the audio signals in the simulcast overlap region. The Analog Delay Shelf is used only at the Control Point Site. The table below identifies the option and group numbers of the shelf configurations.

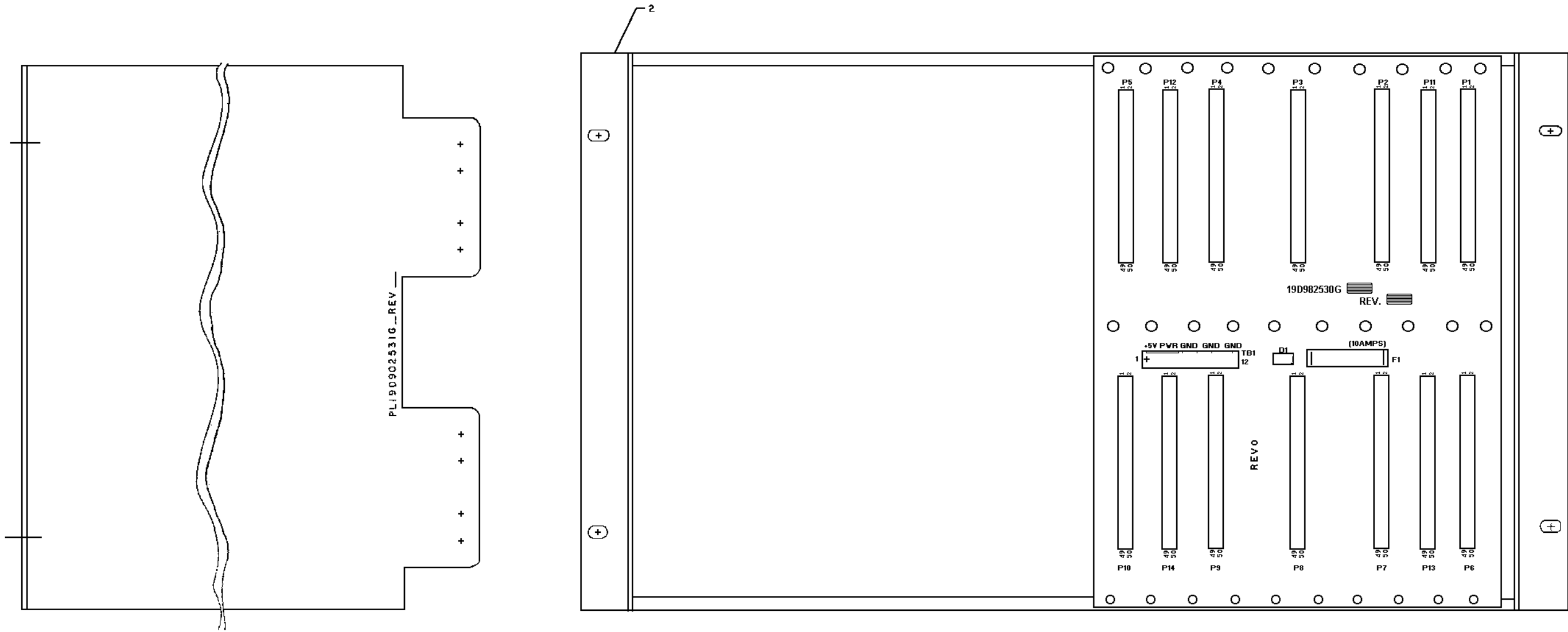
The backplane provides jacks, printed wire patterns, and wire-wrap connectors to interconnect the digital modules used in the EDACS Simulcast System. Each module plugs into a 64-pin jack on the backplane. A 12-pin Molex terminal block is used to provide connections for the power and telephone lines.

The + 5 volt source provided to the analog delay rack assembly is fused with a 10 Ampere fuse. In addition, overvoltage/spike suppression protection is provided by a zener diode.

**SPECIFICATIONS**

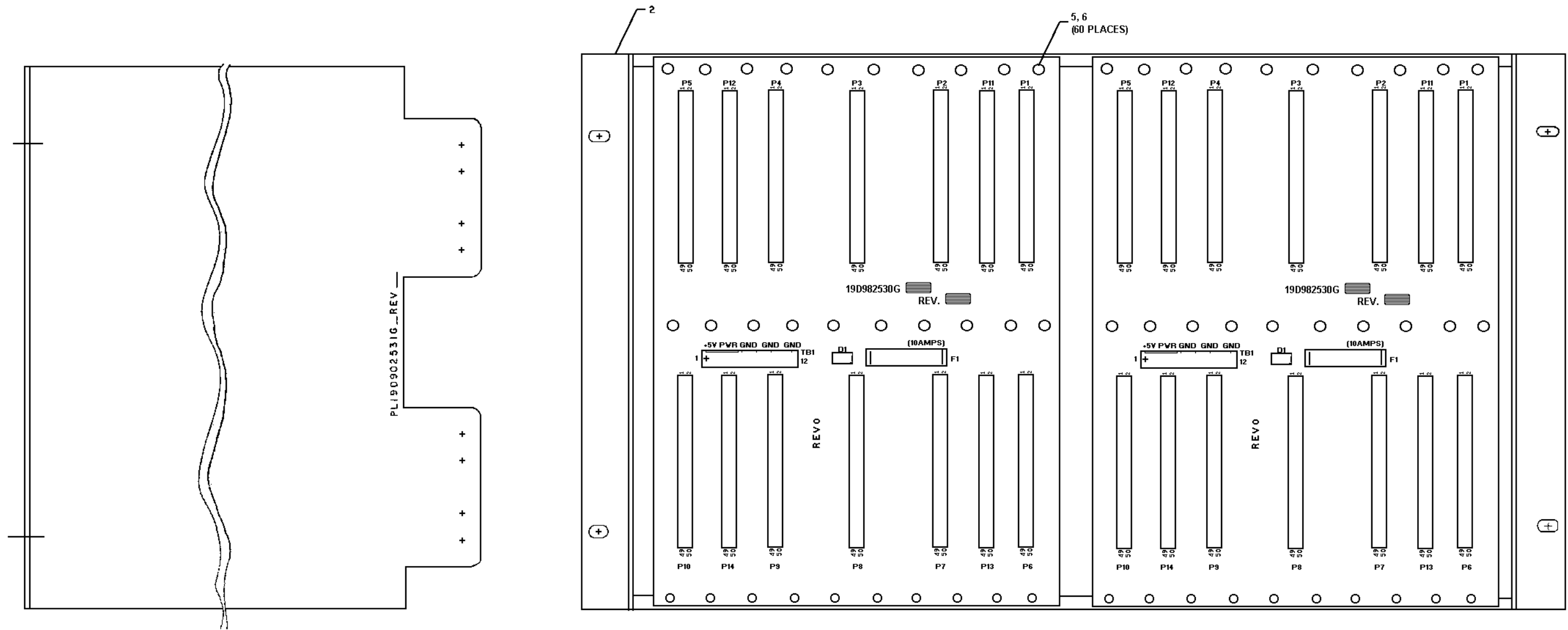
Dimensions	267mm X 426mm
Input Voltage	+5 Vdc
Number of Card Slots Per Shelf	20 (10 per backplane)
Backplane Connectors:	
J1-J20	64 Pins
P1-P14	50-Pin Header Type
TB1	Molex, 12-Pin

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**ANALOG DELAY SHELF, 5 Site, 24 Channel Configuration  
19D902531G6**

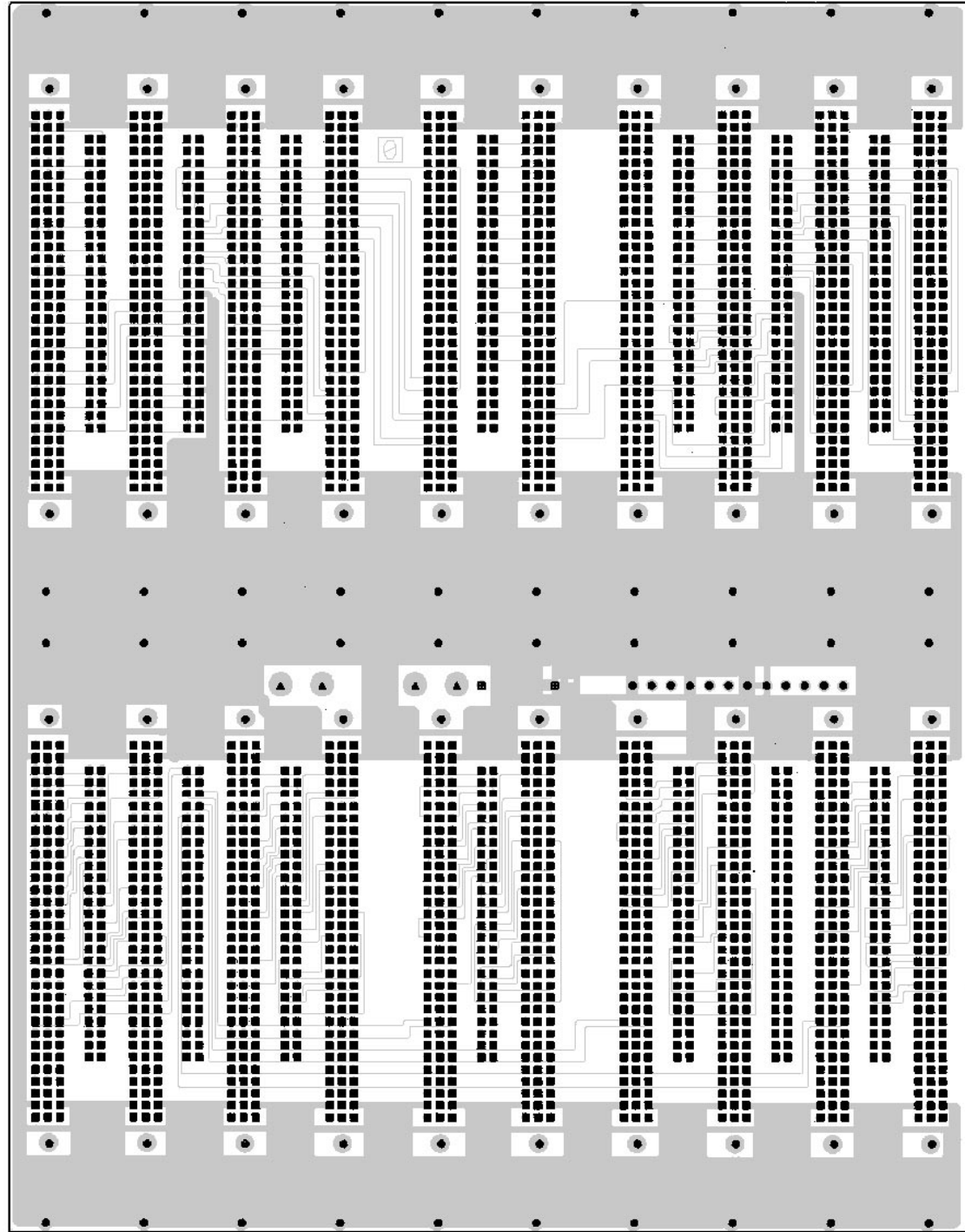
(19D902531 Sh. 3, Rev.4)



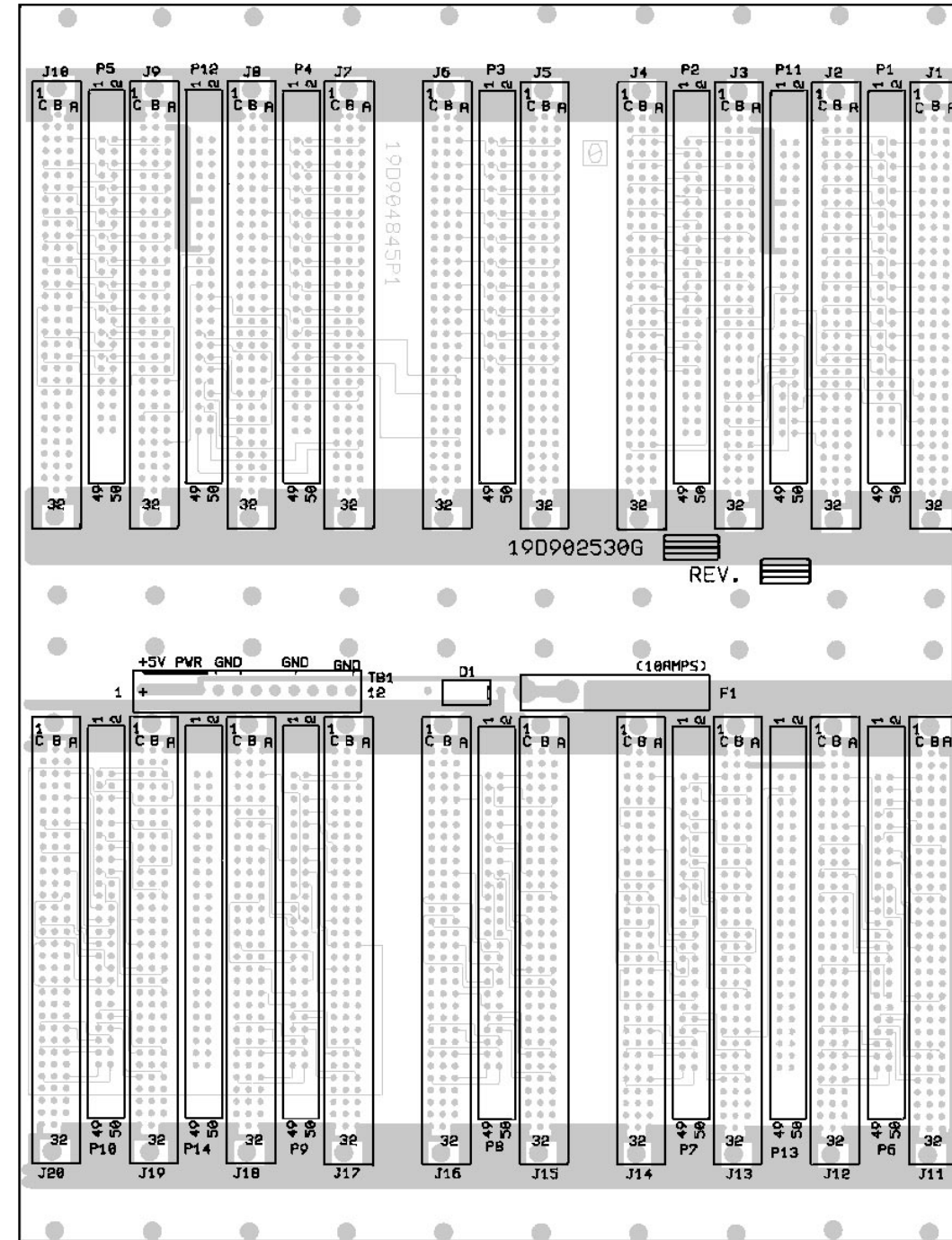
ANALOG DELAY SHELF, 10 Site, 24 Channel Configuration  
19D902531G7

(19D902531 Sh. 4, Rev. 4)

COMPONENT SIDE

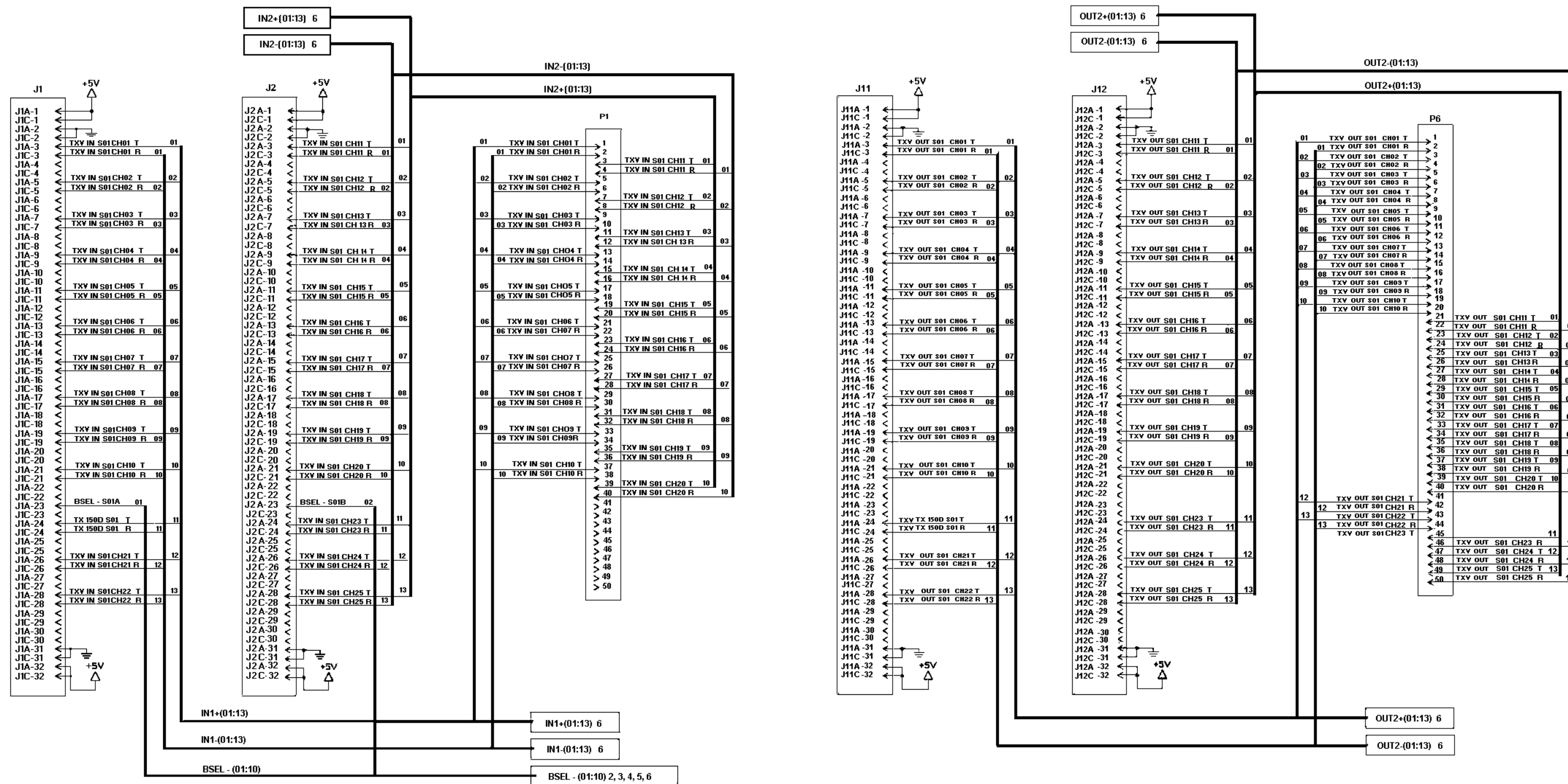


SOLDER SIDE



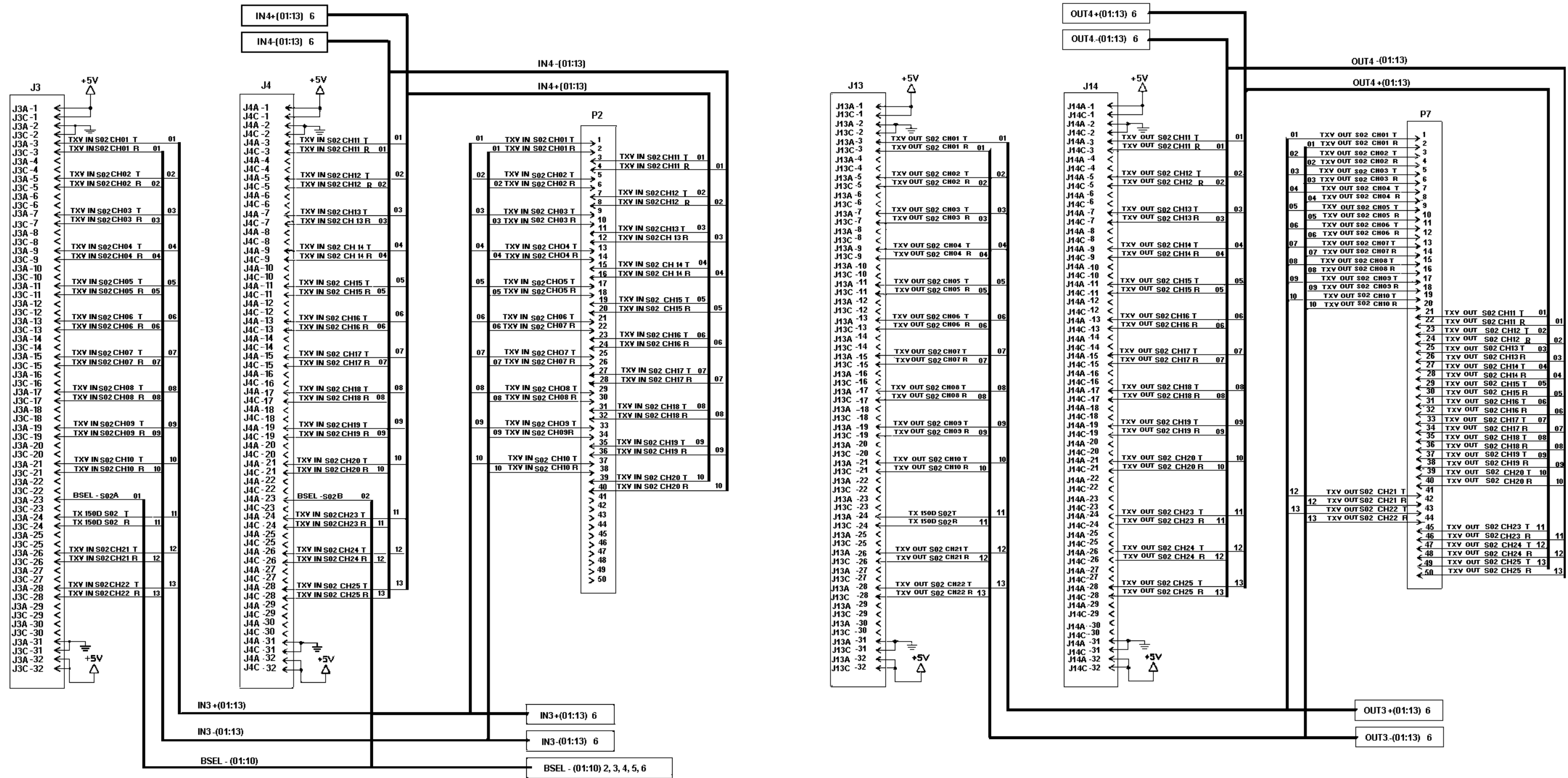
**ANALOG DELAY SHELF BACKPLANE, 5 Site, 24 Channel Configuration  
19D902530G2**

(19D902530, Sh. 2, Rev. 4)



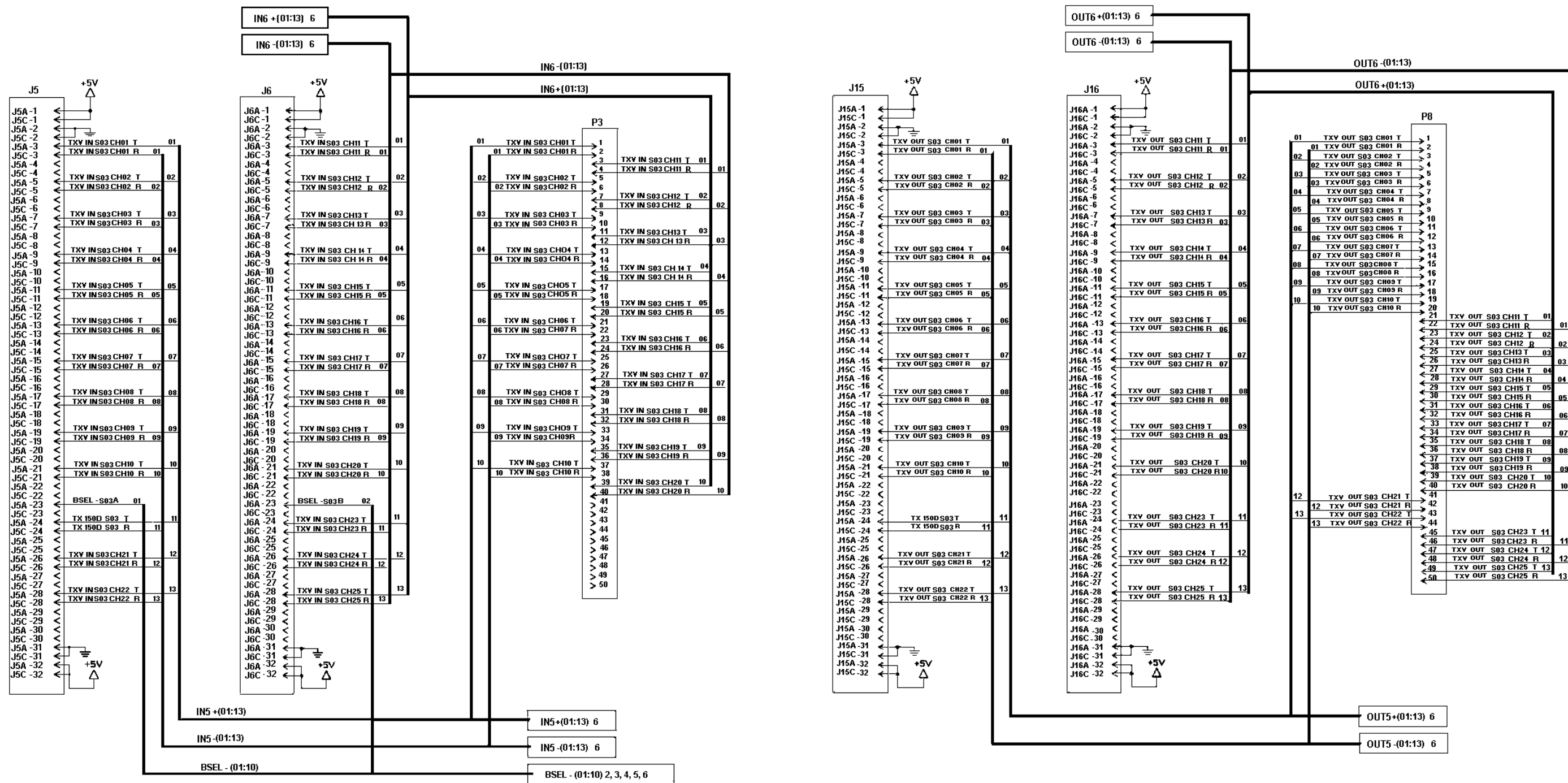
ANALOG DELAY SHELF BACKPLANE, 5 Site, 24 Channel Configuration  
19D902530G2

(19D904929, Sh.1 Rev. 0)



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19D902530G2**

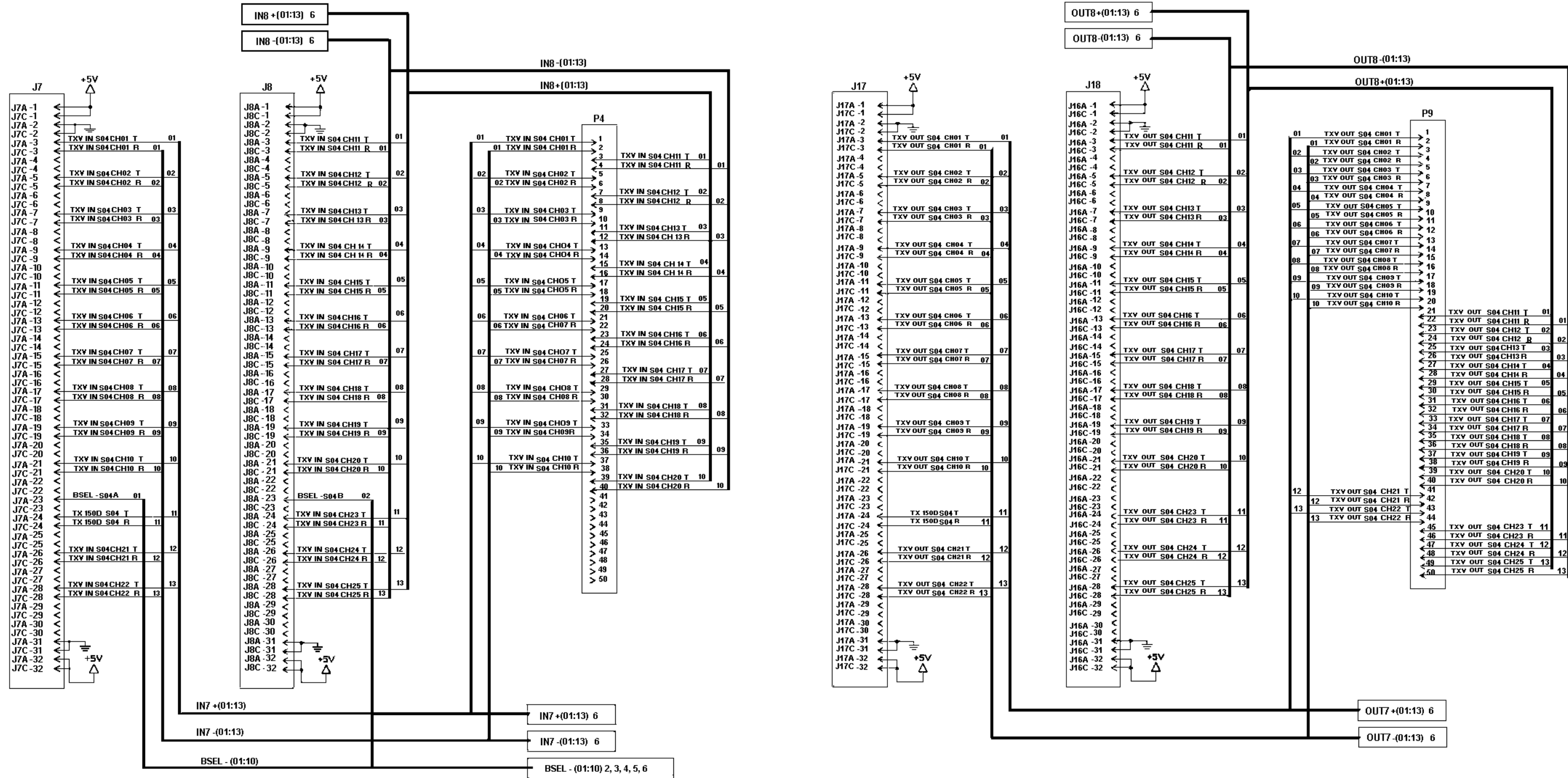
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ANALOG DELAY SHELF BACKPLANE, 5 Site, 24 Channel Configuration  
19D902530G2

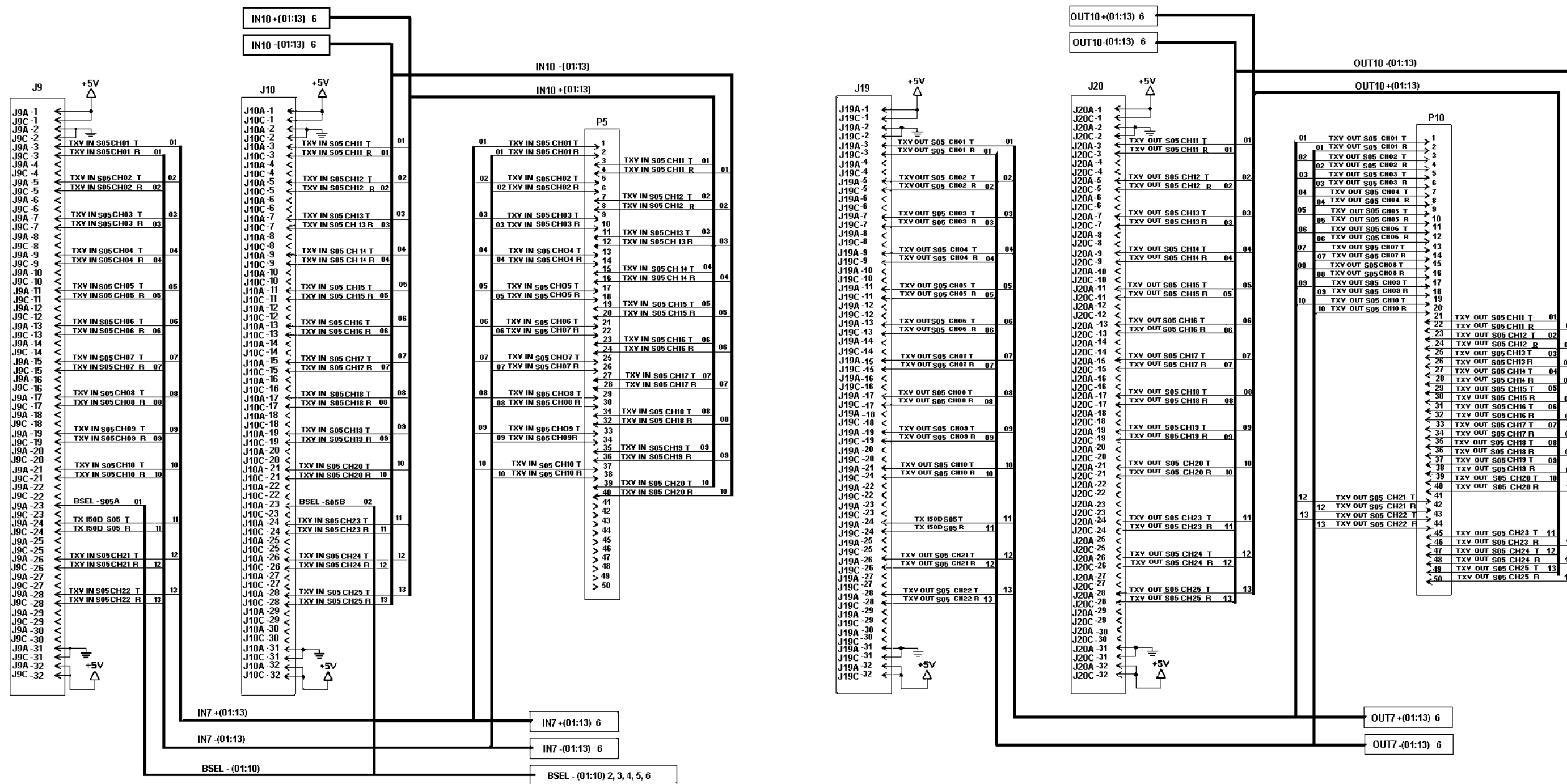
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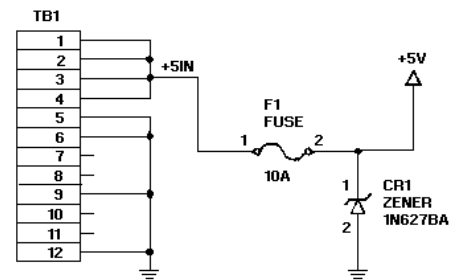
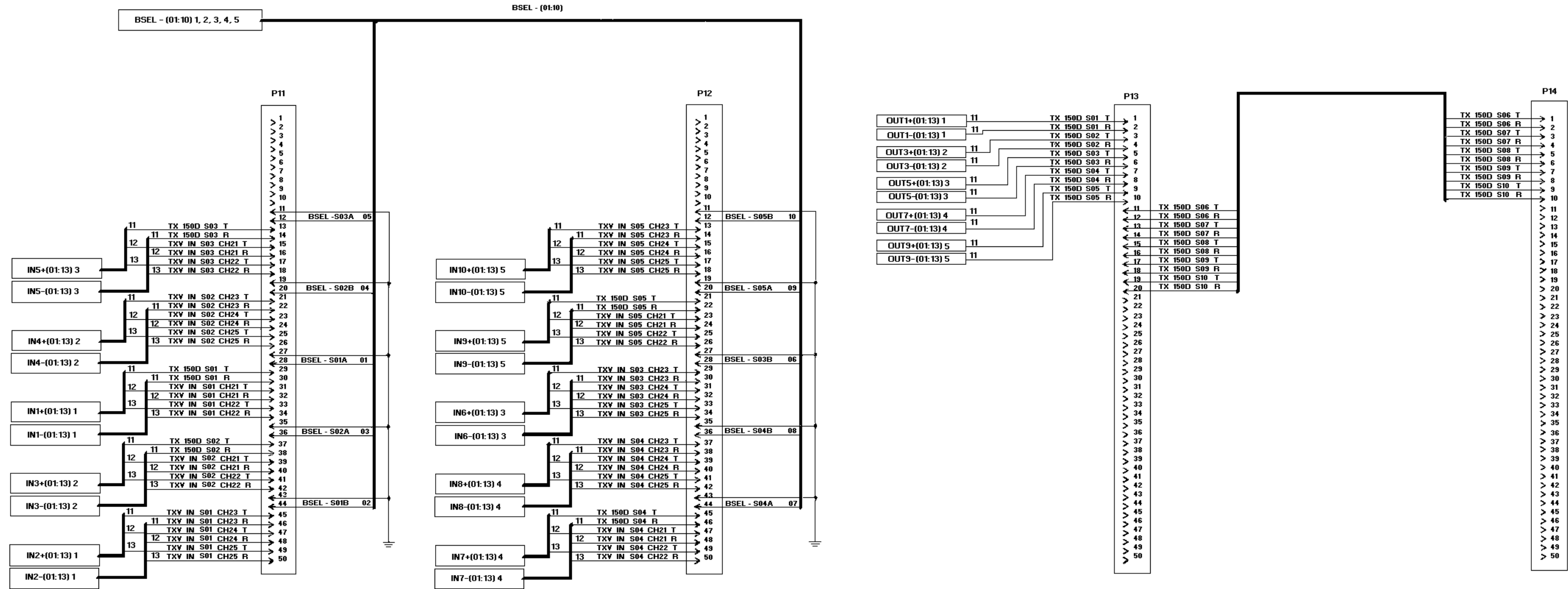
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19D902530G2

(19D904929, Sh. 4 Rev. 0)



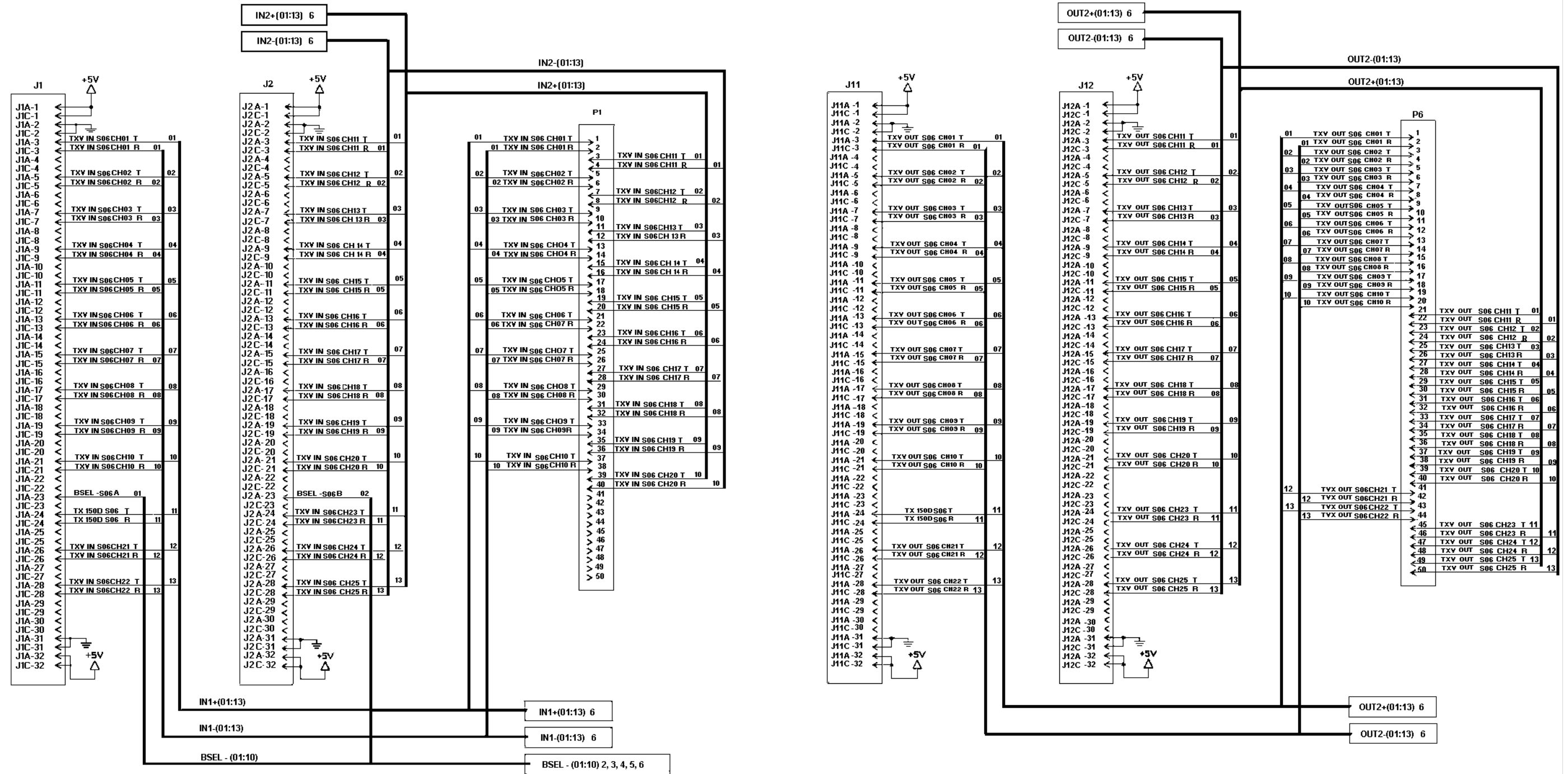
ANALOG DELAY SHELF BACKPLANE, 5 Site, 24 Channel Configuration  
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(19D904929, Sh. 5 Rev. 0)



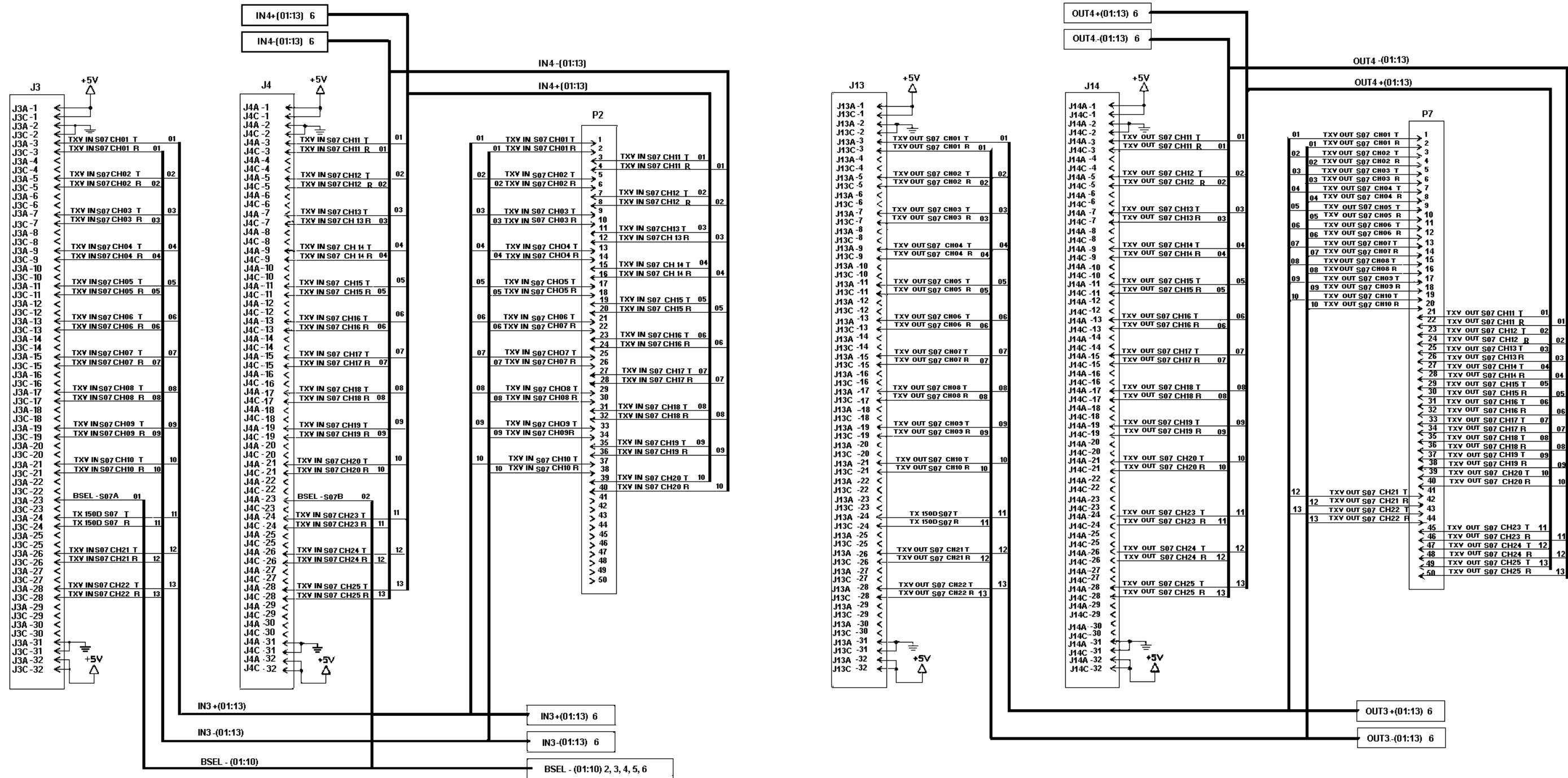
**ANALOG DELAY SHELF BACKPLANE, 5 Site, 24 Channel Configuration  
19D902530G2**

(19D904929, Sh. 6 Rev. 0)



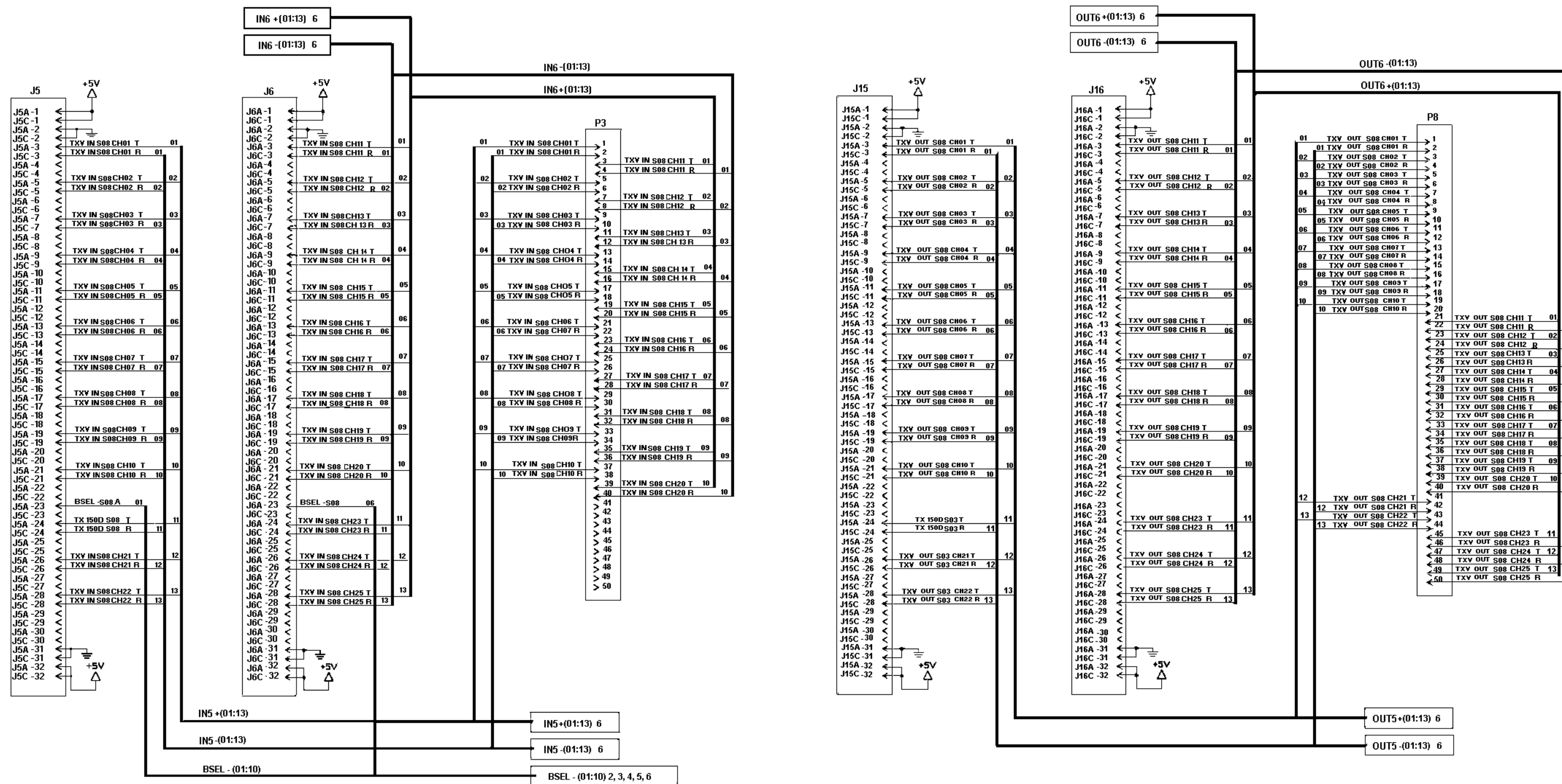
ANALOG DELAY SHELF BACKPLANE, 10 Site, 24 Channel Configuration  
19D902530G2

(19D904930, Sh. 1 Rev. 0)



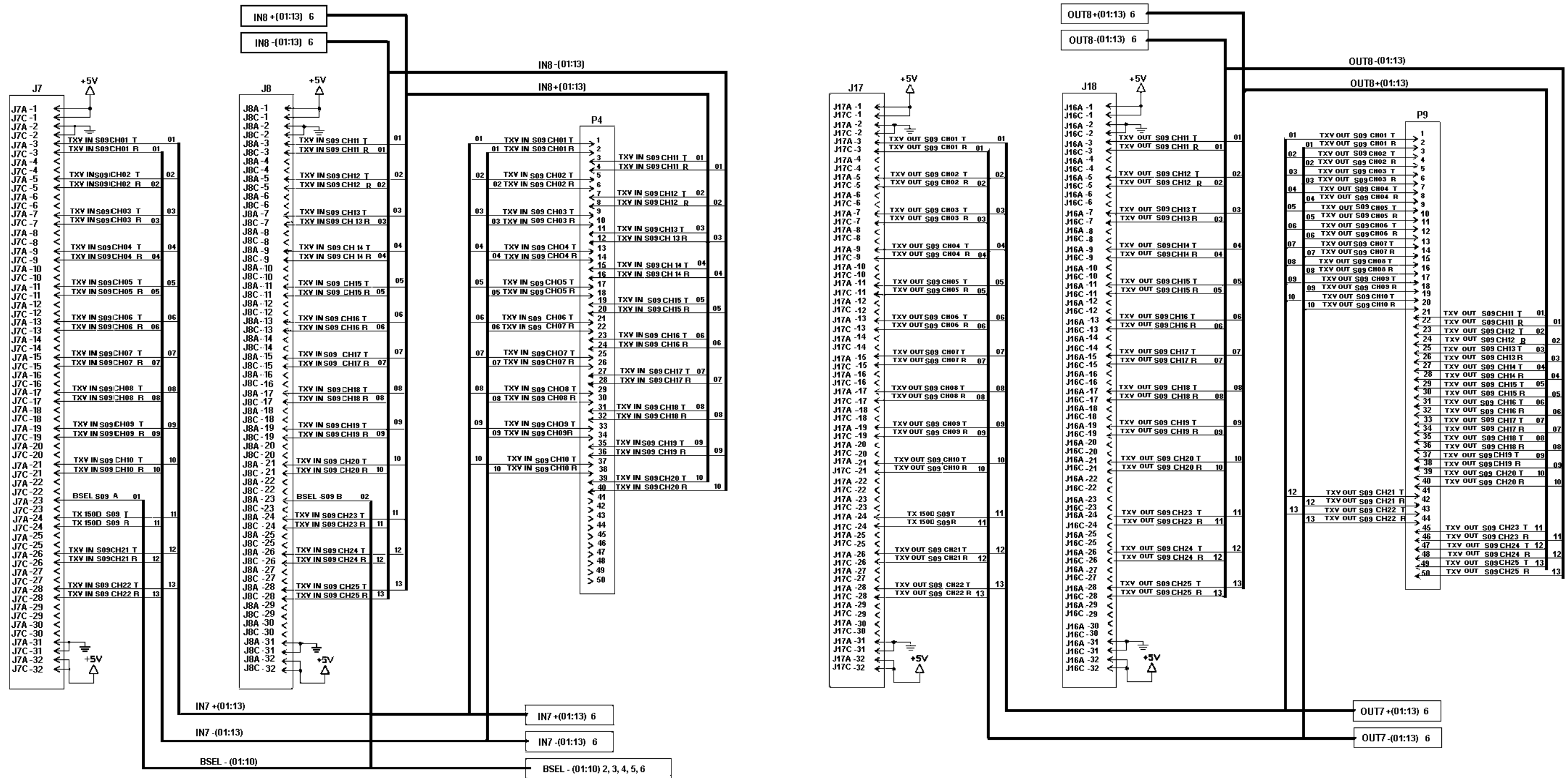
ANALOG DELAY SHELF BACKPLANE, 10 Site, 24 Channel Configuration  
19D902530G2

(19D904930, Sh. 2 Rev. 0)



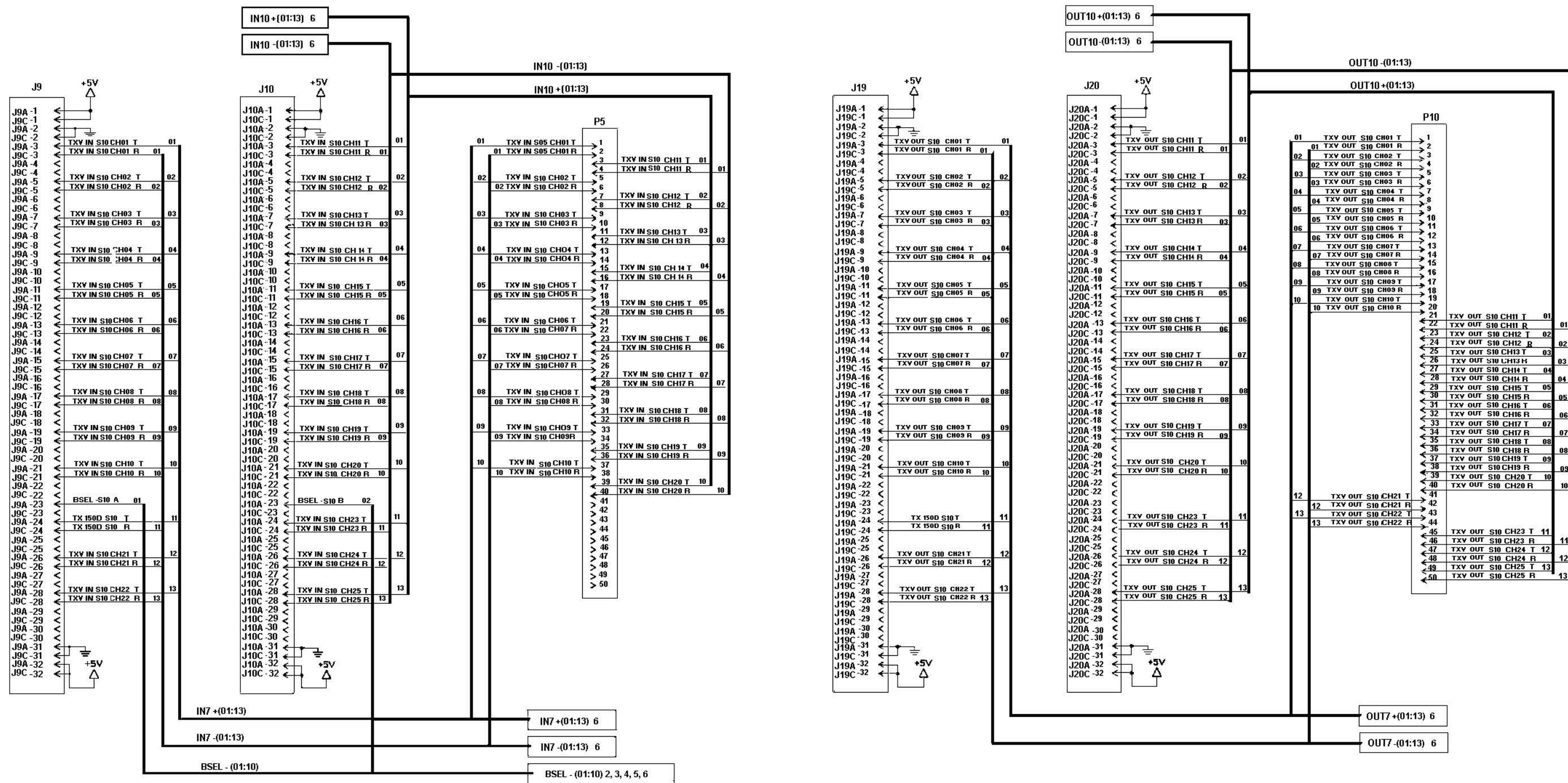
ANALOG DELAY SHELF BACKPLANE, 10 Site, 24 Channel Configuration  
19D902530G2

(19D904930, Sh. 3 Rev. 0)



ANALOG DELAY SHELF BACKPLANE, 10 Site, 24 Channel Configuration  
19D902530G2

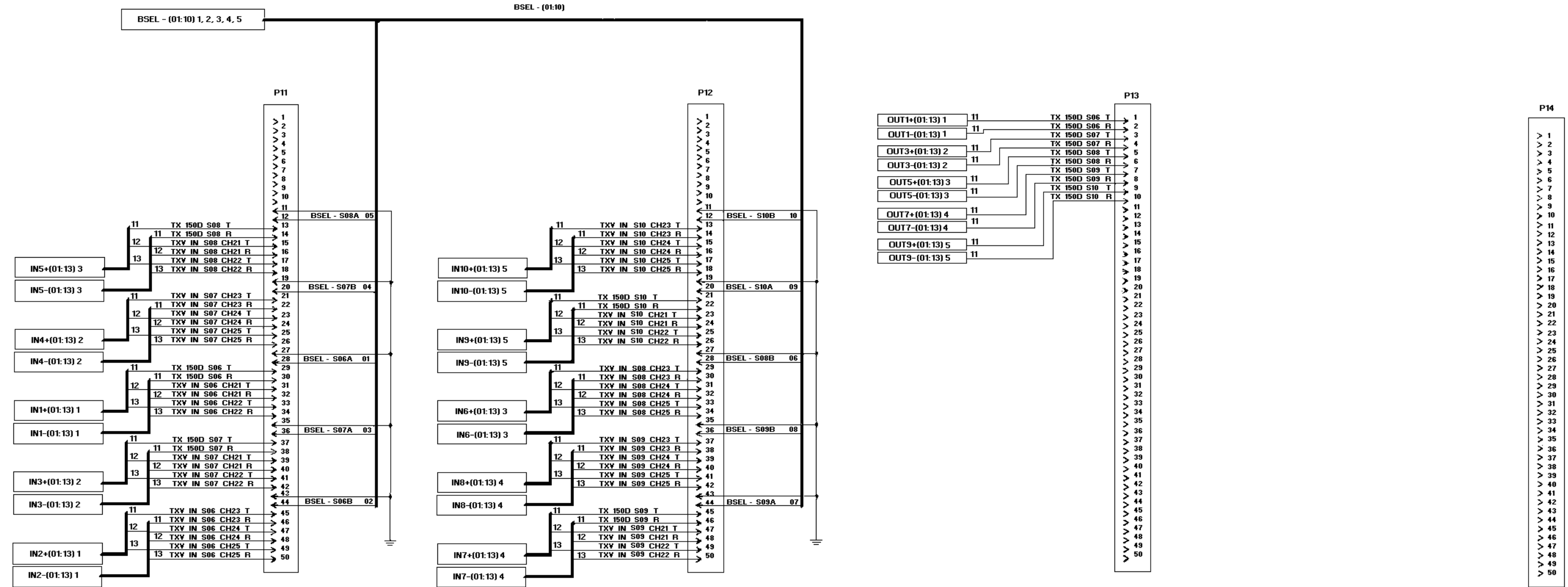
(19D904930, Sh. 4 Rev. 0)



ANALOG DELAY SHELF BACKPLANE, 10 Site, 24 Channel Configuration  
19D902530G2

(19D904930, Sh. 5 Rev. 0)





**ANALOG DELAY SHELF BACKPLANE, 10 Site, 24 Channel Configuration  
19D902530G2**

(19D904930, Sh. 6 Rev. 0)

**ANALOG DELAY SHELF  
19D902531G6,7**

SYMBOL	GE PART NO	DESCRIPTION
2	19C337341P1	VME Shelf (card cage).
5	19A700031P305	Screw: M2.5.
6	19A700032P3	Lockwasher, tooth, steel, metric: 2.5.
		<b>AUDIO DELAY BACKPLANE 19D902531P2</b>
		----- DIODES -----
D1	19A703588P3	Diode, zener: PIV 17.1V, 20A; sim to IN6278A.
F1	LTTLF314010	10 Amp, fast blow.
		-----CONNECTORS-----
J1 thru J20	AMP535032-4	Connector, printed wire.
		----- PLUGS -----
P1 thru P14	AMPL-499582-0	Connector, printed wire.
		----- TERMINALS -----
TB1	19A116659P58	Connector, printed wiring, two part: 12 contacts, brass; sim to MOLEX 09-65-1121.
		----- MISCELLANEOUS -----
	AMP102320-1	Fuse clip, BUSSMAN 1A1119-05. Latch