Maintenance Manual

Universal
Synchronizer
Shelf Assembly
19D902541G1

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ERICSSON

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SPECIFICATIONS*

Dimensions (H x W)	130 mm x 426 mm
Input Power Voltage	+5 Vdc
Number of Card Slots	13
Connectors:	
J1 - J13	64 Pins
P1 - P12	50 Pin Header Type
P13 - P27	
TB1	12 Pin Terminal Strip

NOTICE!

Repairs to this equipment should be made only by an authorized service technician or facility designated by the supplier. Any repairs, alterations or substitution of recommended parts made by the user to this equipment not approved by the manufacturer could void the user's authority to operate the equipment in addition to the manufacturer's warranty.

NOTICE!

DESCRIPTION

Universal Synchronizer Shelf assembly 19D902541G1 provides a backplane with jacks and printed wire patterns to interface modules used on the Simulcast Enhanced Digital Access Communication System (EDACS®) as follows:

- Alarm 19D902334G1 (J1, P1, P2)
- Digital Selector #1 19D902519G1 (J2, P3)
- FSK Modem 19D902518G1 (J3, P4)
- Tone Interface 188D5885G1 (J4)
- Universal Sync #1 19D902517G1 (J5, P5)
- Universal Sync #2 19D902517G1 (J6, P6)
- Universal Sync #3 19D902517G1 (J7, P7)
- Universal Sync #4 19D902517G1 (J8, P8)
- Universal Sync #5 19D902517G1 (J9, P9)
- Universal Sync #6 19D902517G1 (J10, P10)
- Universal Sync #7 19D902517G1 (J11, P11)
- Digital Selector #2 19D902519G1 (J12, P12)

Connector J13 and associated plugs, P13 through P27, are provided for future expansion. Each jack, where a module plugs, is a 64 pin connector. The output plugs are 50 pin header type connectors. Terminal Block TB1, for connecting power, is a 12 pin terminal strip. A fuse protected +5 Vdc is provided for the shelf through fuse G1 and zener diode D1.

CIRCUIT FUNCTIONAL DESCRIPTION

ALARM MODULE

The Subsystem Alarm Module plugs into slot 1 (J1) of the Universal Synchronizer Assembly and provides alarm monitoring for the various units that are part of the EDACS Simulcast System. The Alarm module monitors alarms for the FSK Modem Module, the Digital Selector #1 Module and the Digital Selector #2 module (Refer to Maintenance Manual LBI-38485).

DIGITAL SELECTOR #1

Digital Selector #1 plugs into slot 2 (J2) of the Universal Synchronizer Assembly. This module is a low speed (150 baud) selector used to automatically select a data stream and manually advance to the next source containing a valid data steram. The source is displayed on the front of the module by a two digit LED display. Digital Selector #1 is used only at the control site and is used to select a low speed data serial steram from one of twenty-five EDACS Simulcast stations (Refer to Mantenance Manual LBI-38472).

FSK MODEM

The FSK Modem Module plugs into slot 3 (J3) of the Universal Synchronizer Assembly. This module provides the EDACS Simulcast System a low speed data (150 bps) detection and transmission. This is accomplished by a phase coherent Bell 202 Frequency Shift Keyed (FSK) signaling and corresponding TTL conversion. This module is used at the control point to encode the selected 150 baud low speed data and send it to the transmit sites. It is used at the transmit site(s) to decode the selected 150 baud data from the control point (refer to Maintennece Manual LBI-38487).

TONE INTERFACE

The Tone Interface Module plugs into slot 4 (J4) of the Universal Synchronizer Assembly and is used at the transmit sites in the EDACS Simulcast system. This module provides detection and filtering of the 2400 Hz frequency reference tone and the 300 Hz timing tone between the Universal Sync Module and the channel multiplexer (Refer to Maintenenace Manual LBI-39168).

UNIVERSAL SYNC #1 THROUGH #7

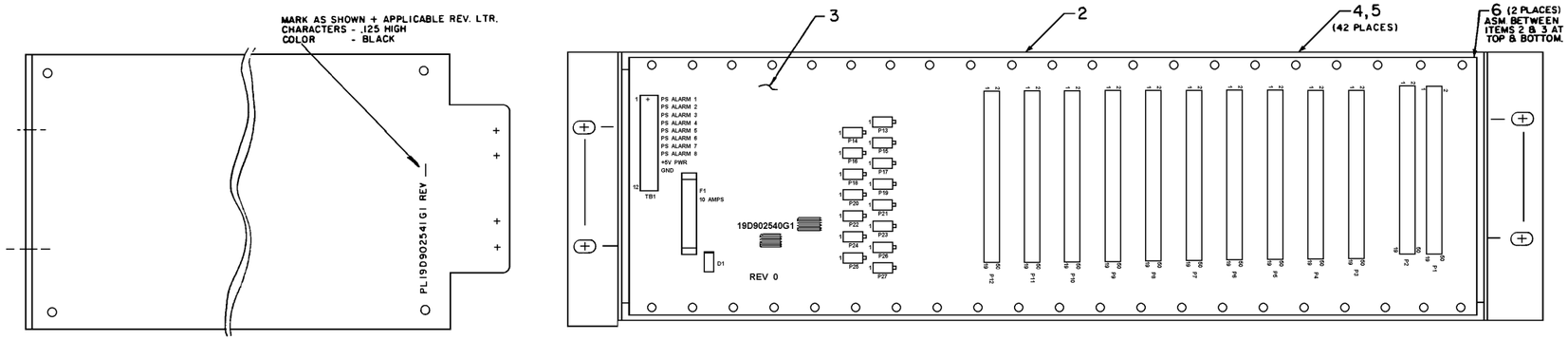
The Universal Sync Module provides sysnchronization of data at the control and transmit sites. Each module is capable of synchronizing data from four channels. Up to seven Universal Sync. Modules can be installed in the Universychronizer Assembly. The seven modules are installed in slots 5 (J5) theough 11 (J11) (Refer to Maintenance Manual LBI-38488).

DIGITAL SELECTOR #2

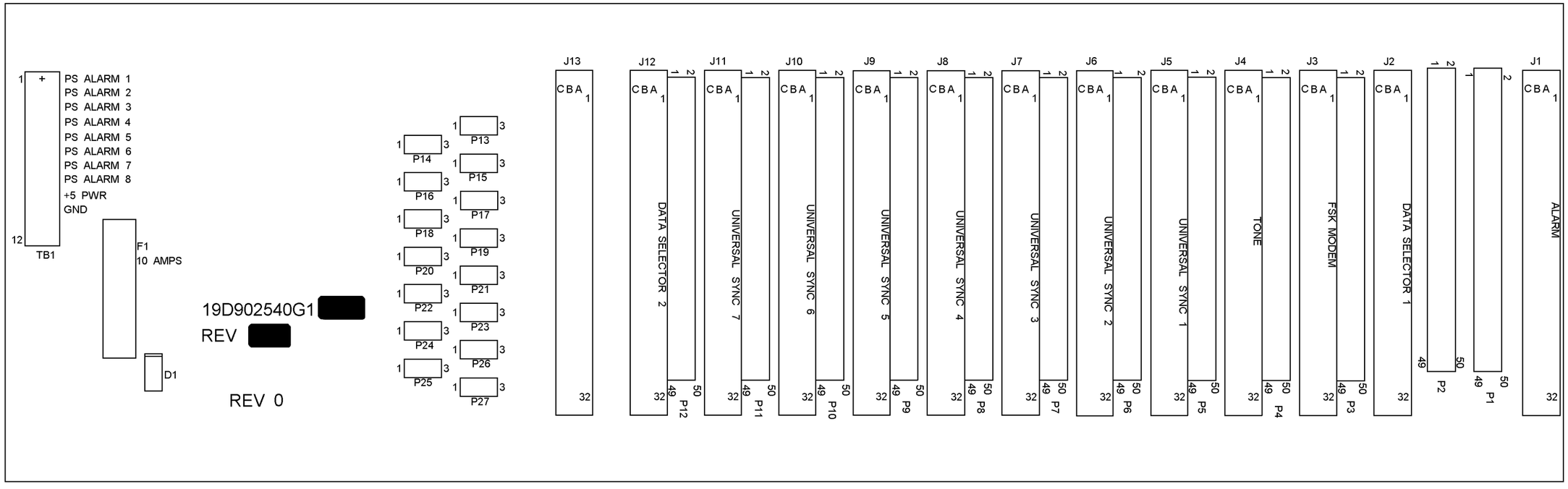
Digital Selector Module #2 plugs into slot 8 (J8) of the Universal Synchronizer Assembly. This module is a high speed (9.6 baud) selector used to automatically select a data strream and manually advanced to the next source containing a valid data stream. The source is displayed on the front of the module by a two digit LED display. Digital Selector #2 is used only at the control site and is used to select the master oscillator that generates the high speed data clock (Refer to Maintenance Manual LBI-38472).

UNIVERSAL SYNCHRONIZER SHELF ASSEMBLY
19D902541G1

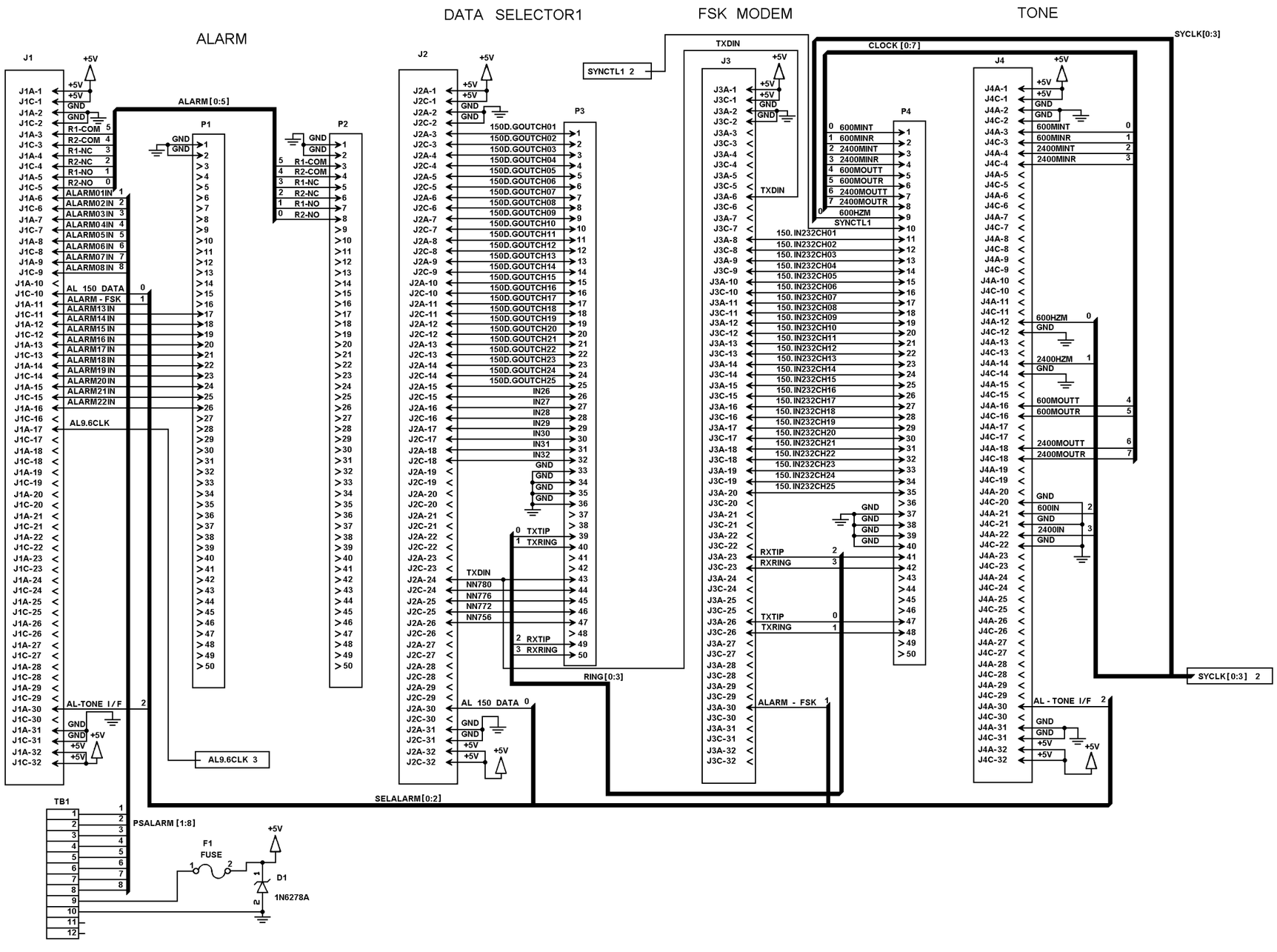
SYMBOL	PART NO.	DESCRIPTION
	19B235208P2	VME Shelf.
	19A700031P306	Screw: M2.5/
	19A700032P3	Lockwasher, tooth, steel, metric: 2.5.
	19B235350P1	Spacer.
		UNIVERSAL SYNCHRONIZER BACKPLANE 19D902540P1
		- - - -DIODE- - - -
D1	19A703588P3	Diode.
		- - - -FUSE- - - -
F1	LTTLF314010	10 Amp, Fast Blow.
		- - - -CONNECTORS- - - -
J1 thru J13	AMP535032-4	Connector, Printed Wire.
P13 thru 27	19A700072P2	Connector, Printed Wire.
		- - - -MISCELLANEOUS- - - -
	1A1119-05	Fuse Clip
	AMP102320-1	Latch



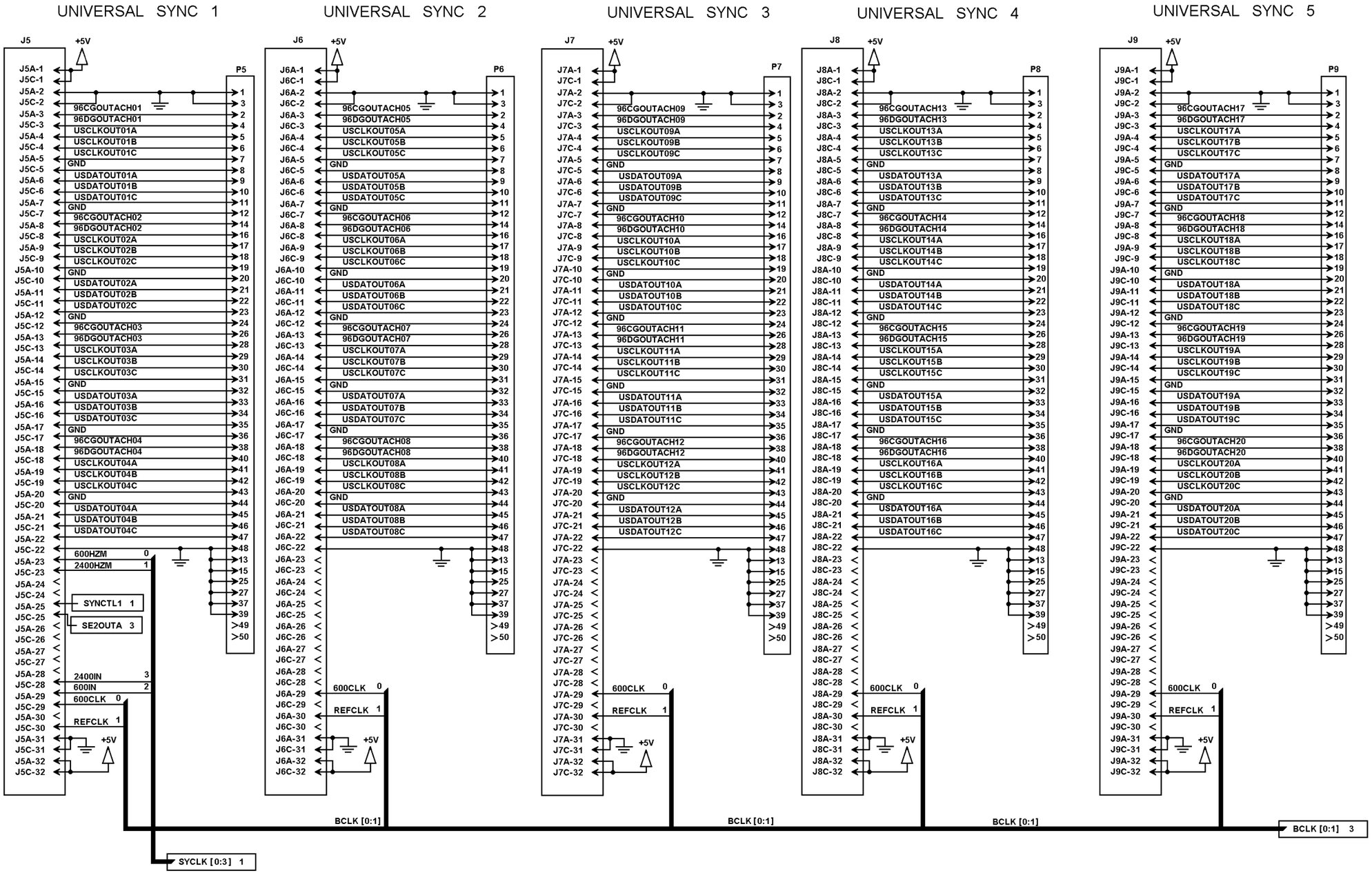
(19D902541, Sh. 1, Rev. 1)



(19D902439, Mark Component Side, Rev. 0)

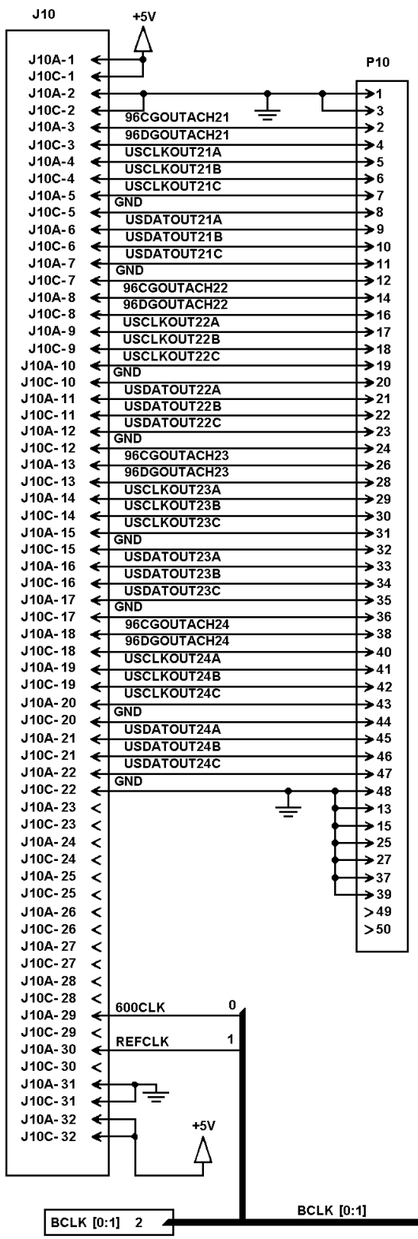


(19C851932, Sh. 1, Rev. 1)



(19C851932, Sh. 2, Rev. 1)

UNIVERSAL SYNC 6



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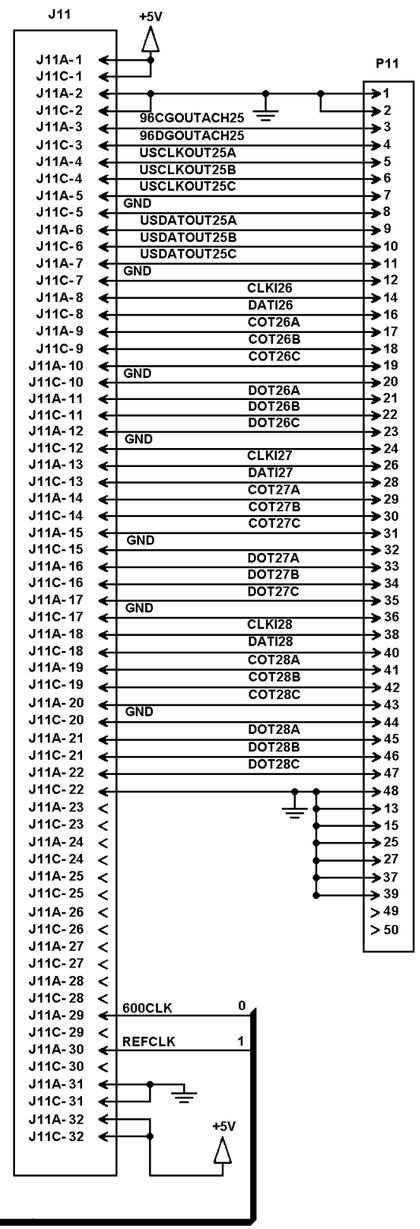
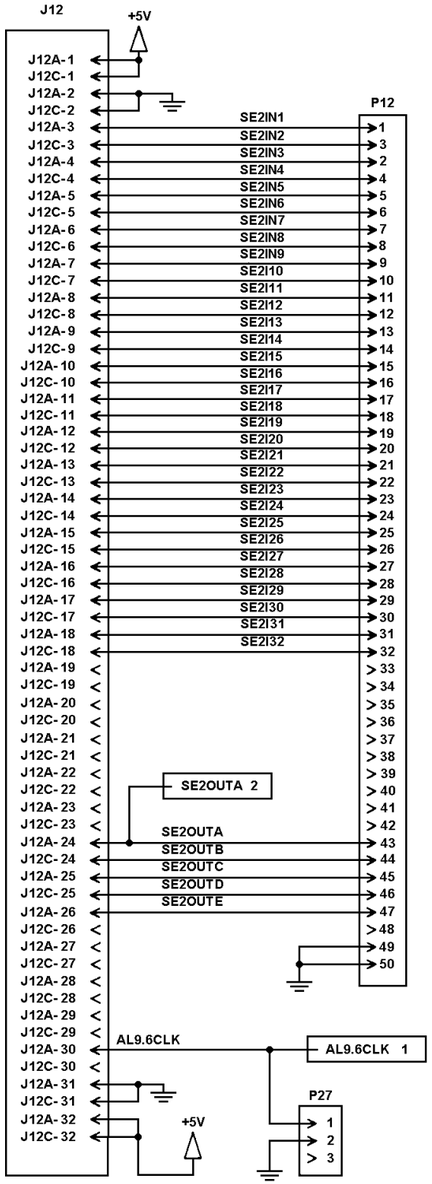
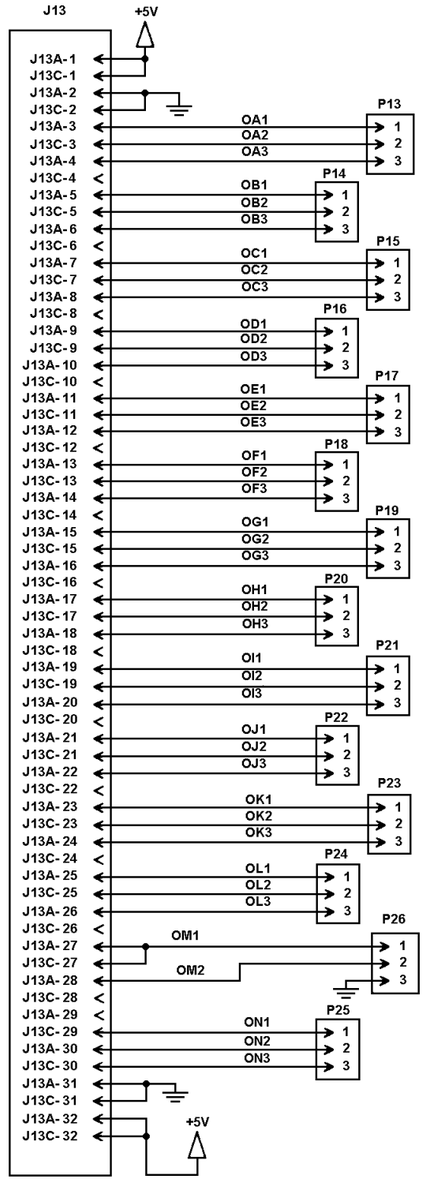


DATA SELECTOR2





(19C851932, Sh. 3, Rev. 1)

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
D01 - 01	#	+5V	
D01 - 02		GND	
F01 - 01	F01 - 02	+5V SUPPLY	
	TB1 - 09		
F01 - 02	F01 - 01	+5V SUPPLY	
	TB1 - 09		
F01 - 03	#	+5V	
F01 - 04	#	+5V	
ALARMS			
J01 - 01A	#	+5V	
J01 - 01C	#	+5V	
J01 - 02A	*	GND	
J01 - 02C	*	GND	
J01 - 03A	P02 - 03	R1-COM	
J01 - 03C	P02 - 04	R2-COM	
J01 - 04A	P02 - 05	R1-NC	
J01 - 04C	P02 - 06	R2-NC	
J01 - 05A	P02 - 07	R1-NO	
J01 - 05C	P02 - 08	R2-NO	
J01 - 06A	TB1 - 01	ALARM 01 INPUT	
J01 - 06C	TB1 - 02	ALARM 02 INPUT	
J01 - 07A	TB1 - 03	ALARM 03 INPUT	
J01 - 07C	TB1 - 04	ALARM 04 INPUT	
J01 - 08A	TB1 - 05	ALARM 05 INPUT	
J01 - 08C	TB1 - 06	ALARM 06 INPUT	
J01 - 09A	TB1 - 07	ALARM 07 INPUT	
J01 - 09C	TB1 - 08	ALARM 08 INPUT	
J01 - 10A		n/c	
J01 - 10C	J02 - 30A	ALARM 09 150 DATA	
J01 - 11A	J03 - 30A	ALARM 12 FSK	
J01 - 11C	P01 - 17	ALARM 13 INPUT	
J01 - 12A	P01 - 18	ALARM 14 INPUT	
J01 - 12C	P01 - 19	ALARM 15 INPUT	
J01 - 13A	P01 - 20	ALARM 16 INPUT	
J01 - 13C	P01 - 21	ALARM 17 INPUT	
J01 - 14A	P01 - 22	ALARM 18 INPUT	
J01 - 14C	P01 - 23	ALARM 19 INPUT	
J01 - 15A	P01 - 24	ALARM 20 INPUT	
J01 - 15C	P01 - 25	ALARM 21 INPUT	
J01 - 16A	P01 - 26	ALARM 22 INPUT	
J01 - 16C		n/c	
J01 - 17A	J12 - 30A	ALARM 10 9.6 CLK	
	P27 - 01		
J01 - 17C		n/c	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
J01 - 18A		n/c	
J01 - 18C		n/c	
J01 - 19A		n/c	
J01 - 19C		n/c	
J01 - 20A		n/c	
J01 - 20C		n/c	
J01 - 21A		n/c	
J01 - 21C		n/c	
J01 - 22A		n/c	
J01 - 22C		n/c	
J01 - 23A		n/c	
J01 - 23C		n/c	
J01 - 24A		n/c	
J01 - 24C		n/c	
J01 - 25A		n/c	
J01 - 25C		n/c	
J01 - 26A		n/c	
J01 - 26C		n/c	
J01 - 27A		n/c	
J01 - 27C		n/c	
J01 - 28A		n/c	
J01 - 28C		n/c	
J01 - 29A		n/c	
J01 - 29C		n/c	
J01 - 30A	J04 - 30A	ALARM 11 TONE I/F	
J01 - 30C		n /c	
J01 - 31A	*	GND	
J01 - 31C	*	GND	
J01 - 32A	#	+5V	
J01 - 32C	#	+5V	
150 SELECTOR			
J02 - 01A	#	+5V	
J02 - 01C	#	+5V	
J02 - 02A	*	GND	
J02 - 02C	*	GND	
J02 - 03A	P03 - 01	150D GOUT CH01	
J02 - 03C	P03 - 02	150D GOUT CH02	
J02 - 04A	P03 - 03	150D GOUT CH03	
J02 - 04C	P03 - 04	150D GOUT CH04	
J02 - 05A	P03 - 05	150D GOUT CH05	
J02 - 05C	P03 - 06	150D GOUT CH06	
J02 - 06A	P03 - 07	150D GOUT CH07	
J02 - 06C	P03 - 08	150D GOUT CH08	
J02 - 07A	P03 - 09	150D GOUT CH09	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
J02 - 07C	P03 - 10	150D GOUT CH10	
J02 - 08A	P03 - 11	150D GOUT CH11	
J02 - 08C	P03 - 12	150D GOUT CH12	
J02 - 09A	P03 - 13	150D GOUT CH13	
J02 - 09C	P03 - 14	150D GOUT CH14	
J02 - 10A	P03 - 15	150D GOUT CH15	
J02 - 10C	P03 - 16	150D GOUT CH16	
J02 - 11A	P03 - 17	150D GOUT CH17	
J02 - 11C	P03 - 18	150D GOUT CH18	
J02 - 12A	P03 - 19	150D GOUT CH19	
J02 - 12C	P03 - 20	150D GOUT CH20	
J02 - 13A	P03 - 21	150D GOUT CH21	
J02 - 13C	P03 - 22	150D GOUT CH22	
J02 - 14A	P03 - 23	150D GOUT CH23	
J02 - 14C	P03 - 24	150D GOUT CH24	
J02 - 15A	P03 - 25	150D GOUT CH25	
J02 - 15C	P03 - 26	IN26	
J02 - 16A	P03 - 27	IN27	
J02 - 16C	P03 - 28	IN28	
J02 - 17A	P03 - 29	IN29	
J02 - 17C	P03 - 30	IN30	
J02 - 18A	P03 - 31	IN31	
J02 - 18C	P03 - 32	IN32	
J02 - 19A		n/c	
J02 - 19C		n/c	
J02 - 20A		n/c	
J02 - 20C		n/c	
J02 - 21A		n/c	
J02 - 21C		n/c	
J02 - 22A		n/c	
J02 - 22C		n/c	
J02 - 23A		n/c	
J02 - 23C		n/c	
J02 - 24A	J03 - 06A P03 - 43	TXDIN	
J02 - 24C	P03 - 44	NN780	
J02 - 25A	P03 - 45	NN776	
J02 - 25C	P03 - 46	NN772	
J02 - 26A	P03 - 47	NN756	
J02 - 26C		n/c	
J02 - 27A		n/c	
J02 - 27C		n/c	
J02 - 28A		n/c	
J02 - 28C		n/c	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
J02 - 29A		n/c	
J02 - 29C		n/c	
J02 - 30A	J01 - 10C	ALARM 09 150 DATA	
J02 - 30C		n/c	
J02 - 31A	*	GND	
J02 - 31C	*	GND	
J02 - 32A	#	+5V	
J02 - 32C	#	+5V	
FSK MODEM			
J03 - 01A	#	+5V	
J03 - 01C	#	+5V	
J03 - 02A	*	GND	
J03 - 02C	*	GND	
J03 - 03A		n/c	
J03 - 03C		n/c	
J03 - 04A		n/c	
J03 - 04C		n/c	
J03 - 05A		n/c	
J03 - 05C		n/c	
J03 - 06A	J02 - 24A P03 - 43	TXDIN	
J03 - 06C		n/c	
J03 - 07A		n/c	
J03 - 07C		n/c	
J03 - 08A	P04 - 11	150 N 232 CH01	
J03 - 08C	P04 - 12	150 IN 232 CH02	
J03 - 09A	P04 - 13	150 IN 232 CH03	
J03 - 09C	P04 - 14	150 IN 232 CH04	
J03 - 10A	P04 - 15	150 IN 232 CH05	
J03 - 10C	P04 - 16	150 IN 232 CH06	
J03 - 11A	P04 - 17	150 IN 232 CH07	
J03 - 11C	P04 - 18	150 IN 232 CH08	
J03 - 12A	P04 - 19	150 IN 232 CH09	
J03 - 12C	P04 - 20	150 IN 232 CH10	
J03 - 13A	P04 - 21	150 IN 232 CH11	
J03 - 13C	P04 - 22	150 IN 232 CH12	
J03 - 14A	P04 - 23	150 IN 232 CH13	
J03 - 14C	P04 - 24	150 IN 232 CH14	
J03 - 15A	P04 - 25	150 IN 232 CH15	
J03 - 15C	P04 - 26	150 IN 232 CH16	
J03 - 16A	P04 - 27	150 IN 232 CH17	
J03 - 16C	P04 - 28	150 IN 232 CH18	
J03 - 17A	P04 - 29	150 IN 232 CH19	
J03 - 17C	P04 - 30	150 IN 232 CH20	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
J03 - 18A	P04 - 31	150 IN 232 CH21	
J03 - 18C	P04 - 32	150 IN 232 CH22	
J03 - 19A	P04 - 33	150 IN 232 CH23	
J03 - 19C	P04 - 34	150 IN 232 CH24	
J03 - 20A	P04 - 35	150 IN 232 CH25	
J03 - 20C		n/c	
J03 - 21A		n/c	
J03 - 21C		n/c	
J03 - 22A		n/c	
J03 - 22C		n/c	
J03 - 23A	P03 - 49	MODEM RX TIP	
	P04 - 41		
J03 - 23C	P03 - 50	MODEM RX RING	
	P04 - 42		
J03 - 24A		n/c	
J03 - 24C		n/c	
J03 - 25A		n/c	
J03 - 25C		n/c	
J03 - 26A	P03 - 39	MODEM TX TIP	
	P04 - 47		
J03 - 26C	P03 - 40	MODEM TX RING	
	P04 - 48		
J03 - 27A		n/c	
J03 - 27C		n/c	
J03 - 28A		n/c	
J03 - 28C		n/c	
J03 - 29A		n/c	
J03 - 29C		n/c	
J03 - 30A	J01 - 11A	ALARM 12 FSK	
J03 - 30C		n/c	
J03 - 31A		n/c	
J03 - 31C		n/c	
J03 - 32A		n/c	
J03 - 32C		n/c	
TONE			
J04 - 01A	#	+5V	
J04 - 01C	#	+5V	
J04 - 02A	*	GND	
J04 - 02C	*	GND	
J04 - 03A	P04 - 01	300 HZ MIN T	
J04 - 03C	P04 - 02	300 HZ MIN R	
J04 - 04A	P04 - 03	2400 HZ MIN T	
J04 - 04C	P04 - 04	2400 HZ MIN R	
J04 - 05A		n/c	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
J04 - 05C		n/c	
J04 - 06A		n/c	
J04 - 06C		n/c	
J04 - 07A		n/c	
J04 - 07C		n/c	
J04 - 08A		n/c	
J04 - 08C		n/c	
J04 - 09A		n/c	
J04 - 09C		n/c	
J04 - 10A		n/c	
J04 - 10C		n/c	
J04 - 11A		n/c	
J04 - 11C		n/c	
J04 - 12A	J05 - 23A	300 HZ M	
	P04 - 09		
J04 - 12C	*	GND	
J04 - 13A		n/c	
J04 - 13C		n/c	
J04 - 14A	J05 - 23C	2400 HZ M	
J04 - 14C	*	GND	
J04 - 15A		n/c	
J04 - 15C		n/c	
J04 - 16A	P04 - 05	300 HZ MOUT T	
J04 - 16C	P04 - 06	300 HZ MOUT R	
J04 - 17A		n/c	
J04 - 17C		n/c	
J04 - 18A	P04 - 07	2400 HZ MOUT T	
J04 - 18C	P04 - 08	2400 HZ MOUT R	
J04 - 19A		n/c	
J04 - 19C		n/c	
J04 - 20A		n/c	
J04 - 20C	*	GND	
J04 - 21A	J05 - 29A	300IN	
J04 - 21C	*	GND	
J04 - 22A	J05 - 28C	2400IN	
J04 - 22C	*	GND	
J04 - 23A		n/c	
J04 - 23C		n/c	
J04 - 24A		n/c	
J04 - 24C		n/c	
J04 - 25A		n/c	
J04 - 25C		n/c	
J04 - 26A		n/c	
J04 - 26C		n/c	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
J04 - 27A		n/c	
J04 - 27C		n/c	
J04 - 28A		n/c	
J04 - 28C		n/c	
J04 - 29A		n/c	
J04 - 29C		n/c	
J04 - 30A	J01 - 30A	ALARM 11 TONE I/F	
J04 - 30C		n/c	
J04 - 31A	*	GND	
J04 - 31C	*	GND	
J04 - 32A	#	+5V	
J04 - 32C	#	+5V	
UNIVERSAL SYNC 1			
J05 - 01A	#	+5V	
J05 - 01C	#	+5V	
J05 - 02A	*	GND	
J05 - 02C	*	GND	
J05 - 03A	P05 - 02	9.6C GOUTA CH01	
J05 - 03C	P05 - 04	9.6D GOUTA CH01	
J05 - 04A	P05 - 05	USCLKOUT01A	
J05 - 04C	P05 - 06	USCLKOUT01B	
J05 - 05A	P05 - 07	USCLKOUT01C	
J05 - 05C	*	GND	
J05 - 06A	P05 - 09	USDATOUT01A	
J05 - 06C	P05 - 10	USDATOUT01B	
J05 - 07A	P05 - 11	USDATOUT01C	
J05 - 07C	*	GND	
J05 - 08A	P05 - 14	9.6C GOUTA CH02	
J05 - 08C	P05 - 16	9.6D GOUTA CH02	
J05 - 09A	P05 - 17	USCLKOUT02A	
J05 - 09C	P05 - 18	USCLKOUT02B	
J05 - 10A	P05 - 19	USCLKOUT02C	
J05 - 10C	*	GND	
J05 - 11A	P05 - 21	USDATOUT02A	
J05 - 11C	P05 - 22	USDATOUT02B	
J05 - 12A	P05 - 23	USDATOUT02C	
J05 - 12C	*	GND	
J05 - 13A	P05 - 26	9.6C GOUTA CH03	
J05 - 13C	P05 - 28	9.6D GOUTA CH03	
J05 - 14A	P05 - 29	USCLKOUT03A	
J05 - 14C	P05 - 30	USCLKOUT03B	
J05 - 15A	P05 - 31	USCLKOUT03C	
J05 - 15C	*	GND	
J05 - 16A	P05 - 33	USDATOUT03A	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
J05 - 16C	P05 - 34	USDATOUT03B	
J05 - 17A	P05 - 35	USDATOUT03C	
J05 - 17C	*	GND	
J05 - 18A	P05 - 38	9.6C GOUTA CH04	
J05 - 18C	P05 - 40	9.6D GOUTA CH04	
J05 - 19A	P05 - 41	USCLKOUT04A	
J05 - 19C	P05 - 42	USCLKOUT04B	
J05 - 20A	P05 - 43	USCLKOUT04C	
J05 - 20C	*	GND	
J05 - 21A	P05 - 45	USDATOUT04A	
J05 - 21C	P05 - 46	USDATOUT04B	
J05 - 22A	P05 - 47	USDATOUT04C	
J05 - 22C	*	GND	
J05 - 23A	J04 - 12A	300 HZ M	
	P04 - 09		
J05 - 23C	J04 - 14A	2400HZM	
J05 - 24A		n/c	
J05 - 24C		n/c	
J05 - 25A	P04 - 10	SYNCCTRL	
J05 - 25C	J12 - 24A	SEL 2 OUT A	
	P12 - 43		
J05 - 26A		n/c	
J05 - 26C		n/c	
J05 - 27A		n/c	
J05 - 27C		n/c	
J05 - 28A		n/c	
J05 - 28C	J04 - 22A	2400IN	
J05 - 29A	J04 - 21A	300IN	
J05 - 29C	J06 - 29A	300CLK	
	J07 - 29A		
	J08 - 29A		
	J09 - 29A		
	J10 - 29A		
	J11 - 29A		
J05 - 30A		n/c	
J05 - 30C	J06 - 30A	REFCLK	
	J07 - 30A		
	J08 - 30A		
	J09 - 30A		
	J10 - 30A		
	J11 - 30A		
J05 - 31A	*	GND	
J05 - 31C	*	GND	
J05 - 32A	#	+5V	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
J05 - 32C	#	+5V	
UNIVERSAL SYNC 2			
J06 - 01A	#	+5V	
J06 - 01C	#	+5V	
J06 - 02A	*	GND	
J06 - 02C	*	GND	
J06 - 03A	P06 - 02	9.6C GOUTA CH05	
J06 - 03C	P06 - 04	9.6D GOUTA CH05	
J06 - 04A	P06 - 05	USCLKOUT05A	
J06 - 04C	P06 - 06	USCLKOUT05B	
J06 - 05A	P06 - 07	USCLKOUT05C	
J06 - 05C	*	GND	
J06 - 06A	P06 - 09	USDATOUT05A	
J06 - 06C	P06 - 10	USDATOUT05B	
J06 - 07A	P06 - 11	USDATOUT05C	
J06 - 07C	*	GND	
J06 - 08A	P06 - 14	9.6C GOUTA CH06	
J06 - 08C	P06 - 16	9.6D GOUTA CH06	
J06 - 09A	P06 - 17	USCLKOUT06A	
J06 - 09C	P06 - 18	USCLKOUT06B	
J06 - 10A	P06 - 19	USCLKOUT06C	
J06 - 10C	*	GND	
J06 - 11A	P06 - 21	USDATOUT06A	
J06 - 11C	P06 - 22	USDATOUT06B	
J06 - 12A	P06 - 23	USDATOUT06C	
J06 - 12C	*	GND	
J06 - 13A	P06 - 26	9.6C GOUTA CH07	
J06 - 13C	P06 - 28	9.6D GOUTA CH07	
J06 - 14A	P06 - 29	USCLKOUT07A	
J06 - 14C	P06 - 30	USCLKOUT07B	
J06 - 15A	P06 - 31	USCLKOUT07C	
J06 - 15C	*	GND	
J06 - 16A	P06 - 33	USDATOUT07A	
J06 - 16C	P06 - 34	USDATOUT07B	
J06 - 17A	P06 - 35	USDATOUT07C	
J06 - 17C	*	GND	
J06 - 18A	P06 - 38	9.6C GOUTA CH08	
J06 - 18C	P06 - 40	9.6D GOUTA CH08	
J06 - 19A	P06 - 41	USCLKOUT08A	
J06 - 19C	P06 - 42	USCLKOUT08B	
J06 - 20A	P06 - 43	USCLKOUT08C	
J06 - 20C	*	GND	
J06 - 21A	P06 - 45	USDATOUT08A	
J06 - 21C	P06 - 46	USDATOUT08B	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
J06 - 22A	P06 - 47	USDATOUT08C	
J06 - 22C	*	GND	
J06 - 23A		n/c	
J06 - 23C		n/c	
J06 - 24A		n/c	
J06 - 24C		n/c	
J06 - 25A		n/c	
J06 - 25C		n/c	
J06 - 26A		n/c	
J06 - 26C		n/c	
J06 - 27A		n/c	
J06 - 27C		n/c	
J06 - 28A		n/c	
J06 - 28C		n/c	
J06 - 29A	J05 - 29C	300CLK	
	J07 - 29A		
	J08 - 29A		
	J09 - 29A		
	J10 - 29A		
	J11 - 29A		
J06 - 29C		n/c	
J06 - 30A	J05 - 30C	REFCLK	
	J07 - 30A		
	J08 - 30A		
	J09 - 30A		
	J10 - 30A		
	J11 - 30A		
J06 - 30C		n/c	
J06 - 31A	*	GND	
J06 - 31C	*	GND	
J06 - 32A	#	+5V	
J06 - 32C	#	+5V	
UNIVERSAL SYNC 3			
J07 - 01A	#	+5V	
J07 - 01C	#	+5V	
J07 - 02A	*	GND	
J07 - 02C	*	GND	
J07 - 03A	P07 - 02	9.6C GOUTA CH09	
J07 - 03C	P07 - 04	9.6D GOUTA CH09	
J07 - 04A	P07 - 05	USCLKOUT09A	
J07 - 04C	P07 - 06	USCLKOUT09B	
J07 - 05A	P07 - 07	USCLKOUT09C	
J07 - 05C	*	GND	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
J07 - 06A	P07 - 09	USDATOUT09A	
J07 - 06C	P07 - 10	USDATOUT09B	
J07 - 07A	P07 - 11	USDATOUT09C	
J07 - 07C	*	GND	
J07 - 08A	P07 - 14	9.6C GOUTA CH10	
J07 - 08C	P07 - 16	9.6D GOUTA CH10	
J07 - 09A	P07 - 17	USCLKOUT10A	
J07 - 09C	P07 - 18	USCLKOUT10B	
J07 - 10A	P07 - 19	USCLKOUT10C	
J07 - 10C	*	GND	
J07 - 11A	P07 - 21	USDATOUT10A	
J07 - 11C	P07 - 22	USDATOUT10B	
J07 - 12A	P07 - 23	USDATOUT10C	
J07 - 12C	*	GND	
J07 - 13A	P07 - 26	9.6C GOUTA CH11	
J07 - 13C	P07 - 28	9.6D GOUTA CH11	
J07 - 14A	P07 - 29	USCLKOUT11A	
J07 - 14C	P07 - 30	USCLKOUT11B	
J07 - 15A	P07 - 31	USCLKOUT11C	
J07 - 15C	*	GND	
J07 - 16A	P07 - 33	USDATOUT11A	
J07 - 16C	P07 - 34	USDATOUT11B	
J07 - 17A	P07 - 35	USDATOUT11C	
J07 - 17C	*	GND	
J07 - 18A	P07 - 38	9.6C GOUTA CH12	
J07 - 18C	P07 - 40	9.6D GOUTA CH12	
J07 - 19A	P07 - 41	USCLKOUT12A	
J07 - 19C	P07 - 42	USCLKOUT12B	
J07 - 20A	P07 - 43	USCLKOUT12C	
J07 - 20C	*	GND	
J07 - 21A	P07 - 45	USDATOUT12A	
J07 - 21C	P07 - 46	USDATOUT12B	
J07 - 22A	P07 - 47	USDATOUT12C	
J07 - 22C	*	GND	
J07 - 23A		n/c	
J07 - 23C		n/c	
J07 - 24A		n/c	
J07 - 24C		n/c	
J07 - 25A		n/c	
J07 - 25C		n/c	
J07 - 26A		n/c	
J07 - 26C		n/c	
J07 - 27A		n/c	
J07 - 27C		n/c	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
J07 - 28A		n/c	
J07 - 28C		n/c	
J07 - 29A	J05 - 29C	300CLK	
	J06 - 29A		
	J08 - 29A		
	J09 - 29A		
	J10 - 29A		
	J11 - 29A		
J07 - 29C		n/c	
J07 - 30A	J05 - 30C	REFCLK	
	J06 - 30A		
	J08 - 30A		
	J09 - 30A		
	J10 - 30A		
	J11 - 30A		
J07 - 30C		n/c	
J07 - 31A	*	GND	
J07 - 31C	*	GND	
J07 - 32A	#	+5V	
J07 - 32C	#	+5V	
UNIVERSAL SYNC 4			
J08 - 01A	#	+5V	
J08 - 01C	#	+5V	
J08 - 02A	*	GND	
J08 - 02C	*	GND	
J08 - 03A	P08 - 02	9.6C GOUTA CH13	
J08 - 03C	P08 - 04	9.6D GOUTA CH13	
J08 - 04A	P08 - 05	USCLKOUT13A	
J08 - 04C	P08 - 06	USCLKOUT13B	
J08 - 05A	P08 - 07	USCLKOUT13C	
J08 - 05C	*	GND	
J08 - 06A	P08 - 09	USDATOUT13A	
J08 - 06C	P08 - 10	USDATOUT13B	
J08 - 07A	P08 - 11	USDATOUT13C	
J08 - 07C	*	GND	
J08 - 08A	P08 - 14	9.6C GOUTA CH14	
J08 - 08C	P08 - 16	9.6D GOUTA CH14	
J08 - 09A	P08 - 17	USCLKOUT14A	
J08 - 09C	P08 - 18	USCLKOUT14B	
J08 - 10A	P08 - 19	USCLKOUT14C	
J08 - 10C	*	GND	
J08 - 11A	P08 - 21	USDATOUT14A	
J08 - 11C	P08 - 22	USDATOUT14B	
J08 - 12A	P08 - 23	USDATOUT14C	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
J08 - 12C	*	GND	
J08 - 13A	P08 - 26	9.6C GOUTA CH15	
J08 - 13C	P08 - 28	9.6D GOUTA CH15	
J08 - 14A	P08 - 29	USCLKOUT15A	
J08 - 14C	P08 - 30	USCLKOUT15B	
J08 - 15A	P08 - 31	USCLKOUT15C	
J08 - 15C	*	GND	
J08 - 16A	P08 - 33	USDATOUT15A	
J08 - 16C	P08 - 34	USDATOUT15B	
J08 - 17A	P08 - 35	USDATOUT15C	
J08 - 17C	*	GND	
J08 - 18A	P08 - 38	9.6C GOUTA CH16	
J08 - 18C	P08 - 40	9.6D GOUTA CH16	
J08 - 19A	P08 - 41	USCLKOUT16A	
J08 - 19C	P08 - 42	USCLKOUT16B	
J08 - 20A	P08 - 43	USCLKOUT16C	
J08 - 20C	*	GND	
J08 - 21A	P08 - 45	USDATOUT16A	
J08 - 21C	P08 - 46	USDATOUT16B	
J08 - 22A	P08 - 47	USDATOUT16C	
J08 - 22C	*	GND	
J08 - 23A		n/c	
J08 - 23C		n/c	
J08 - 24A		n/c	
J08 - 24C		n/c	
J08 - 25A		n/c	
J08 - 25C		n/c	
J08 - 26A		n/c	
J08 - 26C		n/c	
J08 - 27A		n/c	
J08 - 27C		n/c	
J08 - 28A		n/c	
J08 - 28C		n/c	
J08 - 29A	J05 - 29C	300CLK	
	J06 - 29A		
	J07 - 29A		
	J09 - 29A		
	J10 - 29A		
	J11 - 29A		
J08 - 29C		n/c	
J08 - 30A	J05 - 30C	REFCLK	
	J06 - 30A		
	J07 - 30A		
	J09 - 30A		

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
	J10 - 30A		
	J11 - 30A		
J08 - 30C		n/c	
J08 - 31A	*	GND	
J08 - 31C	*	GND	
J08 - 32A	#	+5V	
J08 - 32C	#	+5V	
UNIVERSAL SYNC 5			
J09 - 01A	#	+5V	
J09 - 01C	#	+5V	
J09 - 02A	*	GND	
J09 - 02C	*	GND	
J09 - 03A	P09 - 02	9.6C GOUTA CH17	
J09 - 03C	P09 - 04	9.6D GOUTA CH17	
J09 - 04A	P09 - 05	USCLKOUT17A	
J09 - 04C	P09 - 06	USCLKOUT17B	
J09 - 05A	P09 - 07	USCLKOUT17C	
J09 - 05C	*	GND	
J09 - 06A	P09 - 09	USDATOUT17A	
J09 - 06C	P09 - 10	USDATOUT17B	
J09 - 07A	P09 - 11	USDATOUT17C	
J09 - 07C	*	GND	
J09 - 08A	P09 - 14	9.6C GOUTA CH18	
J09 - 09A	P09 - 17	USCLKOUT18A	
J09 - 09C	P09 - 18	USCLKOUT18B	
J09 - 10A	P09 - 19	USCLKOUT18C	
J09 - 10C	*	GND	
J09 - 11A	P09 - 21	USDATOUT18A	
J09 - 11C	P09 - 22	USDATOUT18B	
J09 - 12A	P09 - 23	USDATOUT18C	
J09 - 12C	*	GND	
J09 - 13A	P09 - 26	9.6C GOUTA CH19	
J09 - 13C	P09 - 28	9.6D GOUTA CH19	
J09 - 14A	P09 - 29	USCLKOUT19A	
J09 - 14C	P09 - 30	USCLKOUT19B	
J09 - 15A	P09 - 31	USCLKOUT19C	
J09 - 15C	*	GND	
J09 - 16A	P09 - 33	USDATOUT19A	
J09 - 16C	P09 - 34	USDATOUT19B	
J09 - 17A	P09 - 35	USDATOUT19C	
J09 - 17C	*	GND	
J09 - 18A	P09 - 38	9.6C GOUTA CH20	
J09 - 18C	P09 - 40	9.6D GOUTA CH20	
J09 - 19A	P09 - 41	USCLKOUT20A	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
J09 - 19C	P09 - 42	USCLKOUT20B	
J09 - 20A	P09 - 43	USCLKOUT20C	
J09 - 20C	*	GND	
J09 - 21A	P09 - 45	USDATOUT20A	
J09 - 21C	P09 - 46	USDATOUT20B	
J09 - 22A	P09 - 47	USDATOUT20C	
J09 - 22C	*	GND	
J09 - 23A		n/c	
J09 - 23C		n/c	
J09 - 24A		n/c	
J09 - 24C		n/c	
J09 - 25A		n/c	
J09 - 25C		n/c	
J09 - 26A		n/c	
J09 - 26C		n/c	
J09 - 27A		n/c	
J09 - 27C		n/c	
J09 - 28A		n/c	
J09 - 28C		n/c	
J09 - 29A	J05 - 29C	300CLK	
	J06 - 29A		
	J07 - 29A		
	J08 - 29A		
	J10 - 29A		
	J11 - 29A		
J09 - 29C		n/c	
J09 - 30A	J05 - 30C	REFCLK	
	J06 - 30A		
	J07 - 30A		
	J08 - 30A		
	J10 - 30A		
	J11 - 30A		
J09 - 30C		n/c	
J09 - 31A	*	GND	
J09 - 31C	*	GND	
J09 - 32A	#	+5V	
J09 - 32C	#	+5V	
UNIVERSAL SYNC 6			
J10 - 01A	#	+5V	
J10 - 01C	#	+5V	
J10 - 02A	*	GND	
J10 - 02C	*	GND	
J10 - 03A	P10 - 02	9.6C GOUTA CH21	
J10 - 03C	P10 - 04	9.6D GOUTA CH21	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
J10 - 04A	P10 - 05	USCLKOUT21A	
J10 - 04C	P10 - 06	USCLKOUT21B	
J10 - 05A	P10 - 07	USCLKOUT21C	
J10 - 05C	*	GND	
J10 - 06A	P10 - 09	USDATOUT21A	
J10 - 06C	P10 - 10	USDATOUT21B	
J10 - 07A	P10 - 11	USDATOUT21C	
J10 - 07C	*	GND	
J10 - 08A	P10 - 14	9.6C GOUTA CH22	
J10 - 08C	P10 - 16	9.6D GOUTA CH22	
J10 - 09A	P10 - 17	USCLKOUT22A	
J10 - 09C	P10 - 18	USCLKOUT22B	
J10 - 10A	P10 - 19	USCLKOUT22C	
J10 - 10C	*	GND	
J10 - 11A	P10 - 21	USDATOUT22A	
J10 - 11C	P10 - 22	USDATOUT22B	
J10 - 12A	P10 - 23	USDATOUT22C	
J10 - 12C	*	GND	
J10 - 13A	P10 - 26	9.6C GOUTA CH23	
J10 - 13C	P10 - 28	9.6D GOUTA CH23	
J10 - 14A	P10 - 29	USCLKOUT23A	
J10 - 14C	P10 - 30	USCLKOUT23B	
J10 - 15A	P10 - 31	USCLKOUT23C	
J10 - 15C	*	GND	
J10 - 16A	P10 - 33	USDATOUT23A	
J10 - 16C	P10 - 34	USDATOUT23B	
J10 - 17A	P10 - 35	USDATOUT23C	
J10 - 17C	*	GND	
J10 - 18A	P10 - 38	9.6C GOUTA CH24	
J10 - 18C	P10 - 40	9.6D GOUTA CH24	
J10 - 19A	P10 - 41	USCLKOUT24A	
J10 - 19C	P10 - 42	USCLKOUT24B	
J10 - 20A	P10 - 43	USCLKOUT24C	
J10 - 20C	*	GND	
J10 - 21A	P10 - 45	USDATOUT24A	
J10 - 21C	P10 - 46	USDATOUT24B	
J10 - 22A	P10 - 47	USDATOUT24C	
J10 - 22C	*	GND	
J10 - 23A		n/c	
J10 - 23C		n/c	
J10 - 24A		n/c	
J10 - 24C		n/c	
J10 - 25A		n/c	
J10 - 25C		n/c	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
J10 - 26A		n/c	
J10 - 26C		n/c	
J10 - 27A		n/c	
J10 - 27C		n/c	
J10 - 28A		n/c	
J10 - 28C		n/c	
J10 - 29A	J05 - 29C	300CLK	
	J06 - 29A		
	J07 - 29A		
	J08 - 29A		
	J09 - 29A		
	J11 - 29A		
J10 - 29C		n/c	
J10 - 30A	J05 - 30C	REFCLK	
	J06 - 30A		
	J07 - 30A		
	J08 - 30A		
	J09 - 30A		
	J11 - 30A		
J10 - 30C		n/c	
J10 - 31A	*	GND	
J10 - 31C	*	GND	
J10 - 32A	#	+5V	
J10 - 32C	#	+5V	
UNIVERSAL SYNC 7			
J11 - 01A	#	+5V	
J11 - 01C	#	+5V	
J11 - 02A	*	GND	
J11 - 02C	*	GND	
J11 - 03A	P11 - 02	9.6C GOUTA CH25	
J11 - 03C	P11 - 04	9.6D GOUTA CH25	
J11 - 04A	P11 - 05	USCLKOUT25A	
J11 - 04C	P11 - 06	USCLKOUT25B	
J11 - 05A	P11 - 07	USCLKOUT25C	
J11 - 05C	*	GND	
J11 - 06A	P11 - 09	USDATOUT25A	
J11 - 06C	P11 - 10	USDATOUT25B	
J11 - 07A	P11 - 11	USDATOUT25C	
J11 - 07C	*	GND	
J11 - 08A	P11 - 14	CLKI26	
J11 - 08C	P11 - 16	DATI26	
J11 - 09A	P11 - 17	COT26A	
J11 - 09C	P11 - 18	COT26B	
J11 - 10A	P11 - 19	COT26C	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
J11 - 10C	*	GND	
J11 - 11A	P11 - 21	DOT26A	
J11 - 11C	P11 - 22	DOT26B	
J11 - 12A	P11 - 23	DOT26C	
J11 - 12C	*	GND	
J11 - 13A	P11 - 26	CLKI27	
J11 - 13C	P11 - 28	DATI27	
J11 - 14A	P11 - 29	COT27A	
J11 - 14C	P11 - 30	COT27B	
J11 - 15A	P11 - 31	COT27C	
J11 - 15C	*	GND	
J11 - 16A	P11 - 33	DOT27A	
J11 - 16C	P11 - 34	DOT27B	
J11 - 17A	P11 - 35	DOT27C	
J11 - 17C	*	GND	
J11 - 18A	P11 - 38	CLKI28	
J11 - 18C	P11 - 40	DATI28	
J11 - 19A	P11 - 41	COT28A	
J11 - 19C	P11 - 42	COT28B	
J11 - 20A	P11 - 43	COT28C	
J11 - 20C	*	GND	
J11 - 21A	P11 - 45	DOT28A	
J11 - 21C	P11 - 46	DOT28B	
J11 - 22A	P11 - 47	DOT28C	
J11 - 22C	*	GND	
J11 - 23A		n/c	
J11 - 23C		n/c	
J11 - 24A		n/c	
J11 - 24C		n/c	
J11 - 25A		n/c	
J11 - 25C		n/c	
J11 - 26A		n/c	
J11 - 26C		n/c	
J11 - 27A		n/c	
J11 - 27C		n/c	
J11 - 28A		n/c	
J11 - 28C		n/c	
J11 - 29A	J05 - 29C	300CLK	
	J06 - 29A		
	J07 - 29A		
	J08 - 29A		
	J09 - 29A		
	J10 - 29A		
J11 - 29C		n/c	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
J11 - 30A	J05 - 30C	REFCLK	
	J06 - 30A		
	J07 - 30A		
	J08 - 30A		
	J09 - 30A		
	J10 - 30A		
J11 - 30C		n/c	
J11 - 31A	*	GND	
J11 - 31C	*	GND	
J11 - 32A	#	+5V	
J11 - 32C	#	+5V	
9.6 CLOCK SELECTOR			
J12 - 01A	#	+5V	
J12 - 01C	#	+5V	
J12 - 02A	*	GND	
J12 - 02C	*	GND	
J12 - 03A	P12 - 01	SE2IN1	
J12 - 03C	P12 - 02	SE2IN2	
J12 - 04A	P12 - 03	SE2IN3	
J12 - 04C	P12 - 04	SE2IN4	
J12 - 05A	P12 - 05	SE2IN5	
J12 - 05C	P12 - 06	SE2IN6	
J12 - 06A	P12 - 07	SE2IN7	
J12 - 06C	P12 - 08	SE2IN8	
J12 - 07A	P12 - 09	SE2IN9	
J12 - 07C	P12 - 10	SE2I10	
J12 - 08A	P12 - 11	SE2I11	
J12 - 08C	P12 - 12	SE2112	
J12 - 09A	P12 - 13	SE2I13	
J12 - 09C	P12 - 14	SE2I14	
J12 - 10A	P12 - 15	SE2I15	
J12 - 10C	P12 - 16	SE2I16	
J12 - 11A	P12 - 17	SE2I17	
J12 - 11C	P12 - 18	SE2I18	
J12 - 12A	P12 - 19	SE2I19	
J12 - 12C	P12 - 20	SE2I20	
J12 - 13A	P12 - 21	SE2I21	
J12 - 13C	P12 - 22	SE2I22	
J12 - 14A	P12 - 23	SE2I23	
J12 - 14C	P12 - 24	SE2I24	
J12 - 15A	P12 - 25	SE2I25	
J12 - 15C	P12 - 26	SE2I26	
J12 - 16A	P12 - 27	SE2I27	
J12 - 16C	P12 - 28	SE2I28	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
J12 - 17A	P12 - 29	SE2I29	
J12 - 17C	P12 - 30	SE2I30	
J12 - 18A	P12 - 31	SE2I31	
J12 - 18C	P12 - 32	SE2I32	
J12 - 19A		n/c	
J12 - 19C		n/c	
J12 - 20A		n/c	
J12 - 20C		n/c	
J12 - 21A		n/c	
J12 - 21C		n/c	
J12 - 22A		n/c	
J12 - 22C		n/c	
J12 - 23A		n/c	
J12 - 23C		n/c	
J12 - 24A	J05 - 25C	SEL 2 OUT A	
	P12 -43		
J12-24C	P12 - 44	SEL 2 OUT B	
J12 - 25A	P12 - 45	SEL 2 OUT C	
9.6 CLOCK SELECTOR			
J12 - 25C	P12 - 46	SEL 2 OUT D	
J12 - 26A	P12 - 47	SEL 2 OUT E	
J12 - 26C		n/c	
J12 - 27A		n/c	
J12 - 27C		n/c	
J12 - 28A		n/c	
J12 - 28C		n/c	
J12 - 29A		n/c	
J12 - 29C		n/c	
J12 - 30A	J01 - 17A	ALARM 10 9.6 CLK	
	P27 - 01		
J12 - 30C		n/c	
J12 - 31A	*	GND	
J12 - 31C	*	GND	
J12 - 32A	#	+5V	
J12 - 32C	#	+5V	
J13 - 01A	#	+5V	
J13 - 01C	#	+5V	
J13 - 02A	*	GND	
J13 - 02C	*	GND	
J13 - 03A	P13 - 01	OA1	
J13 - 03C	P13 - 02	OA2	
J13 - 04A	P13 - 03	OA3	
J13 - 04C		n/c	
J13 - 05A	P14 - 01	OB1	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
J13 - 05C	P14 - 02	OB2	
J13 - 06A	P14 - 03	OB3	
J13 - 06C		n/c	
J13 - 07A	P15 - 01	OC1	
J13 - 07C	P15 - 02	OC2	
J13 - 08A	P15 - 03	OC3	
J13 - 08C		n/c	
J13 - 09A	P16 - 01	OD1	
J13 - 09C	P16 - 02	OD2	
J13 - 10A	P16 - 03	OD3	
J13 - 10C		n/c	
J13 - 11A	P17 - 01	OE1	
J13 - 11C	P17 - 02	OE2	
J13 - 12A	P17 - 03	OE3	
J13 - 12C		n/c	
J13 - 13A	P18 - 01	OF1	
J13 - 13C	P18 - 02	OF2	
J13 - 14A	P18 - 03	OF3	
J13 - 14C		n/c	
J13 - 15A	P19 - 01	OG1	
J13 - 15C	P19 - 02	OG2	
J13 - 16A	P19 - 03	OG3	
J13 - 16C		n/c	
J13 - 17A	P20 - 01	OH1	
J13 - 17C	P20 - 02	OH2	
J13 - 18A	P20 - 03	OH3	
J13 - 18C		n/c	
J13 - 19A	P21 - 01	OI1	
J13 - 19C	P21 - 02	OI2	
13 - 20A	P21 - 03	OI3	
J13 - 20C		n/c	
J13 - 21A	P22 - 01	OJ1	
J13 - 21C	P22 - 02	OJ2	
J13 - 22A	P22 - 03	OJ3	
J13 - 22C		n/c	
J13 - 23A	P23 - 01	OK1	
J13 - 23C	P23 - 02	OK2	
J13 - 24A	P23 - 03	OK3	
J13 - 24C		n/c	
J13 - 25A	P24 - 01	OL1	
J13 - 25C	P24 - 02	OL2	
J13 - 26A	P24 - 03	OL3	
J13 - 26C		n/c	
J13 - 27A	J13 - 27C	OM1	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
	P26 - 01		
J13 - 27C	J13 - 27A	OM1	
	P26 - 01		
J13-28A	J13 - 28C	OM2	
	P26 - 02		
J13 - 28C	J13 - 28A	OM2	
	P26 - 02		
J13 - 29A		n/c	
J13 - 29C	P25 - 01	ON1	
J13 - 30A	P25 - 02	ON2	
J13 - 30C	P25 - 03	ON3	
J13 - 31A	*	GND	
J13 - 31C	*	GND	
J13 - 32A	#	+5V	
J13 - 32C	#	+5V	
P01 TO B400 DIGITAL CROSS CONNECT J67 (Note 1)			
P01 - 01	*	GND	
P01 - 02	*	GND	
P01 - 03		n/c	
P01 - 04		n/c	
P01 - 05		n/c	
P01 - 06		n/c	
P01 - 07		n/c	
P01 - 08		n/c	
P01 - 09		n/c	
P01 - 10		n/c	
P01 - 11		n/c	
P01 - 12		n/c	
P01 - 13		n/c	
P01 - 14		n/c	
P01 - 15		n/c	
P01 - 16		n/c	
P01 - 17	J01 - 11C	ALARM 13 INPUT	
P01 - 18	J01 - 12A	ALARM 14 INPUT	
P01 - 19	J01 - 12C	ALARM 15 INPUT	
P01 - 20	J01 - 13A	ALARM 16 INPUT	
P01 - 21	J01 - 13C	ALARM 17 INPUT	
P01 - 22	J01 - 14A	ALARM 18 INPUT	
P01 - 23	J01 - 14C	ALARM 19 INPUT	
P01 - 24	J01 - 15A	ALARM 20 INPUT	
P01 - 25	J01 - 15C	ALARM 21 INPUT	
P01 - 26	J01 - 16A	ALARM 22 INPUT	
P01 - 27		n/c	
P01 - 28		n/c	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
P01 - 29		n/c	
		n/c	
P01 - 30		n/c	
P01 - 31		n/c	
P01 - 32		n/c	
P01 - 33		n/c	
P01 - 34		n/c	
P01 - 35		n/c	
P01 - 36		n/c	
P01 - 37		n/c	
P01 - 38		n/c	
P01 - 39		n/c	
P01 - 40		n/c	
P01 - 41		n/c	
P01 - 42		n/c	
P01 - 43		n/c	
P01 - 44		n/c	
P01 - 45		n/c	
P01 - 46		n/c	
P01 - 47		n/c	
P01 - 48		n/c	
P01 - 49		n/c	
P01 - 50		n/c	
P02 TO B400 DIGITAL CROSS CONNECT J68 (Note 1)			
P02 - 01	*	GND	
P02 - 02	*	GND	
P02 - 03	J01 - 03A	R1-COM	
P02 - 04	J01 - 03C	R2-COM	
P02 - 05	J01 - 04A	R1-NC	
P02 - 06	J01 - 04C	R2-NC	
P02 - 07	J01 - 05A	R1-NO	
P02 - 08	J01 - 05C	R2-NO	
P02 - 09		n/c	
P02 - 10		n/c	
P02 - 11		n/c	
P02 - 12		n/c	
P02 - 13		n/c	
P02 - 14		n/c	
P02 - 15		n/c	
P02 - 16		n/c	
P02 - 17		n/c	
P02 - 18		n/c	
P02 - 19		n/c	
P02 - 20		n/c	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
P02 - 21		n/c	
P02 - 22		n/c	
P02 - 23		n/c	
P02 - 24		n/c	
P02 - 25		n/c	
P02 - 26		n/c	
P02 - 27		n/c	
P02 - 28		n/c	
P02 - 29		n/c	
P02 - 30		n/c	
P02 - 31		n/c	
P02 - 32		n/c	
P02 - 33		n/c	
P02 - 34		n/c	
P02 - 35		n/c	
P02 - 36		n/c	
P02 - 37		n/c	
P02 - 38		n/c	
P02 - 39		n/c	
P02 - 40		n/c	
P02 - 41		n/c	
P02 - 42		n/c	
P02 - 43		n/c	
P02 - 44		n/c	
P02 - 45		n/c	
P02 - 46		n/c	
P02 - 47		n/c	
P02 - 48		n/c	
P02 - 49		n/c	
P02 - 50		n/c	
P03 TO B400 DIGITAL CROSS CONNECT J69			
P03 - 01	J02 - 03A	150D GOUT CH01	
P03 - 02	J02 - 03C	150D GOUT CH02	
P03 - 03	J02 - 04A	150D GOUT CH03	
P03 - 04	J02 - 04C	150D GOUT CH04	
P03 - 05	J02 - 05A	150D GOUT CH05	
P03 - 06	J02 - 05C	150D GOUT CH06	
P03 - 07	J02 - 06A	150D GOUT CH07	
P03 - 08	J02 - 06C	150D GOUT CH08	
P03 - 09	J02 - 07A	150D GOUT CH09	
P03 - 10	J02 - 07C	150D GOUT CH10	
P03 - 11	J02 - 08A	150D GOUT CH11	
P03 - 12	J02 - 08C	150D GOUT CH12	
P03 - 13	J02 - 09A	150D GOUT CH13	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
P03 - 14	J02 - 09C	150D GOUT CH14	
P03 - 15	J02 - 10A	150D GOUT CH15	
P03 - 16	J02 - 10C	150D GOUT CH16	
P03 - 17	J02 - 11A	150D GOUT CH17	
P03 - 18	J02 - 11C	150D GOUT CH18	
P03 - 19	J02 - 12A	150D GOUT CH19	
P03 - 20	J02 - 12C	150D GOUT CH20	
P03 - 21	J02 - 13A	150D GOUT CH21	
P03 - 22	J02 - 13C	150D GOUT CH22	
P03 - 23	J02 - 14A	150D GOUT CH23	
P03 - 24	J02 - 14C	150D GOUT CH24	
P03 - 25	J02 - 15A	150D GOUT CH25	
P03 - 26	J02 - 15C	IN26	
P03 - 27	J02 - 16A	IN27	
P03 - 28	J02 - 16C	IN28	
P03 - 29	J02 - 17A	IN29	
P03 - 30	J02 - 17C	IN30	
P03 - 31	J02 - 18A	IN31	
P03 - 32	J02 - 18C	IN32	
P03 - 33	*	GND	
P03 - 34	*	GND	
P03 - 35	*	GND	
P03 - 36	*	GND	
P03 - 37		n/c	
P03 - 38		n/c	
P03 - 39	J03 - 26A P04 - 47	MODEM TX TIP	
P03 - 40	J03 - 26C P04 - 48	MODEM TX RING	
P03 - 41		n/c	
P03 - 42		n/c	
P03 - 43	J02 - 24A J03 - 06A	TXDIN	
P03 - 44	J02 - 24C	NN780	
P03 - 45	J02 - 25A	NN776	
P03 - 46	J02 - 25C	NN772	
P03 - 47	J02 - 26A	NN756	
P03 - 48		n/c	
P03 - 49	J03 - 23A P04 - 41	MODEM RX TIP	
P03 - 50	J03 - 23C P04 - 42	MODEM RX RING	
P04 TO B400 DIGITAL CROSS CONNECT J70			
P04 - 01	J04 - 03A	300 HZ MIN T	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
P04 - 02	J04 - 03C	300 HZ MIN R	
P04 - 03	J04 - 04A	2400 HZ MIN T	
P04 - 04	J04 - 04C	2400 HZ MIN R	
P04 - 05	J04 - 16A	300 HZ MOUT T	
P04 - 06	J04 - 16C	300 HZ MOUT R	
P04 - 07	J04 - 18A	2400 HZ MOUT T	
P04 - 08	J04 - 18C	2400 HZ MOUT R	
P04 - 09	J04 - 12A J05 - 23A	300 HZ M	
P04 - 10	J05 - 25A	SYNCCTRL	
P04 - 11	J03 - 08A	150 IN 232 CH01	
P04 - 12	J03 - 08C	150 IN 232 CH02	
P04 - 13	J03 - 09A	150 IN 232 CH03	
P04 - 14	J03 - 09C	150 IN 232 CH04	
P04 - 15	J03 - 10A	150 IN 232 CH05	
P04 - 16	J03 - 10C	150 IN 232 CH06	
P04 - 17	J03 - 11A	150 IN 232 CH07	
P04 - 18	J03 - 11C	150 IN 232 CH08	
P04 - 19	J03 - 12A	150 IN 232 CH09	
P04 - 20	J03 - 12C	150 IN 232 CH10	
P04 - 21	J03 - 13A	150 IN 232 CH11	
P04 - 22	J03 - 13C	150 IN 232 CH12	
P04 - 23	J03 - 14A	150 IN 232 CH13	
P04 - 24	J03 - 14C	150 IN 232 CH14	
P04 - 25	J03 - 15A	150 IN 232 CH15	
P04 - 26	J03 - 15C	150 IN 232 CH16	
P04 - 27	J03 - 16A	150 IN 232 CH17	
P04 - 28	J03 - 16C	150 IN 232 CH18	
P04 - 29	J03 - 17A	150 IN 232 CH19	
P04 - 30	J03 - 17C	150 IN 232 CH20	
P04 - 31	J03 - 18A	150 IN 232 CH21	
P04 - 32	J03 - 18C	150 IN 232 CH22	
P04 - 33	J03 - 19A	150 IN 232 CH23	
P04 - 34	J03 - 19C	150 IN 232 CH24	
P04 - 35	J03 - 20A	150 IN 232 CH25	
P04 - 36		n/c	
P04 - 37	*	GND	
P04 - 38	*	GND	
P04 - 39	*	GND	
P04 - 40	*	GND	
P04 - 41	J03 - 23A P03 - 49	MODEM RX TIP	
P04 - 42	J03 - 23C P03 - 50	MODEM RX RING	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
P04 - 43		n/c	
P04 - 44		n/c	
P04 - 45		n/c	
P04 - 46		n/c	
P04 - 47	J03 - 26A	MODEM TX TIP	
	P03 - 39		
P04 - 48	J03 - 26C	MODEM TX RING	
	P03 - 40		
P04 - 49		n/c	
P05 TO B400 DIGITAL CROSS CONNECT J71			
P05 - 01	*	GND	
P05 - 02	J05 - 03A	9.6C GOUTA CH01	
P05 - 03	*	GND	
P05 - 04	J05 - 03C	9.6D GOUTA CH01	
P05 - 05	J05 - 04A	USCLKOUT01A	
P05 - 06	J05 - 04C	USCLKOUT01B	
P05 - 07	J05 - 05A	USCLKOUT01C	
P05 - 08	*	GND	
P05 - 09	J05 - 06A	USDATOUT01A	
P05 - 10	J05 - 06C	USDATOUT01B	
P05 - 11	J05 - 07A	USDATOUT01C	
P05 - 12	*	GND	
P05 - 13	*	GND	
P05 - 14	J05 - 08A	9.6C GOUTA CH02	
P05 - 15	*	GND	
P05 - 16	J05 - 08C	9.6D GOUTA CH02	
P05 - 17	J05 - 09A	USCLKOUT02A	
P05 - 18	J05 - 09C	USCLKOUT02B	
P05 - 19	J05 - 10A	USCLKOUT02C	
P05 - 20	*	GND	
P05 - 21	J05 - 11A	USDATOUT02A	
P05 - 22	J05 - 11C	USDATOUT02B	
P05 - 23	J05 - 12A	USDATOUT02C	
P05 - 24	*	GND	
P05 - 25	*	GND	
P05 - 26	J05 - 13A	9.6C GOUTA CH03	
P05 - 27	*	GND	
P05 - 28	J05 - 13C	9.6D GOUTA CH03	
P05 - 29	J05 - 14A	USCLKOUT03A	
P05 - 30	J05 - 14C	USCLKOUT03B	
P05 - 31	J05 - 15A	USCLKOUT03C	
P05 - 32	*	GND	
P05 - 33	J05 - 16A	USDATOUT03A	
P05 - 34	J05 - 16C	USDATOUT03B	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
P05 - 35	J05 - 17A	USDATOUT03C	
P05 - 36	*	GND	
P05 - 37	*	GND	
P05 - 38	J05 - 18A	9.6C GOUTA CH04	
P05 - 39	*	GND	
P05 - 40	J05 - 18C	9.6D GOUTA CH04	
P05 - 41	J05 - 19A	USCLKOUT04A	
P05 - 42	J05 - 19C	USCLKOUT04B	
P05 - 43	J05 - 20A	USCLKOUT04C	
P05 - 44	*	GND	
P05 - 45	J05 - 21A	USDATOUT04A	
P05 - 46	J05 - 21C	USDATOUT04B	
P05 - 47	J05 - 22A	USDATOUT04C	
P05 - 48	*	GND	
P05 - 49		n/c	
P05 - 50		n/c	
P06 TO B400 DIGITAL CROSS CONNECT J72			
P06 - 01	*	GND	
P06 - 02	J06 - 03A	9.6C GOUTA CH05	
P06 - 03	*	GND	
P06 - 04	J06 - 03C	9.6D GOUTA CH05	
P06 - 05	J06 - 04A	USCLKOUT05A	
P06 - 06	J06 - 04C	USCLKOUT05B	
P06 - 07	J06 - 05A	USCLKOUT05C	
P06 - 08	*	GND	
P06 - 09	J06 - 06A	USDATOUT05A	
P06 - 10	J06 - 06C	USDATOUT05B	
P06 - 11	J06 - 07A	USDATOUT05C	
P06 - 12	*	GND	
P06 - 13	*	GND	
P06 - 14	J06 - 08A	9.6C GOUTA CH06	
P06 - 15	*	GND	
P06 - 16	J06 - 08C	9.6D GOUTA CH06	
P06 - 17	J06 - 09A	USCLKOUT06A	
P06 - 18	J06 - 09C	USCLKOUT06B	
P06 - 19	J06 - 10A	USCLKOUT06C	
P06 - 20	*	GND	
P06 - 21	J06 - 11A	USDATOUT06A	
P06 - 22	J06 - 11C	USDATOUT06B	
P06 - 23	J06 - 12A	USDATOUT06C	
P06 - 24	*	GND	
P06 - 25	*	GND	
P06 - 26	J06 - 13A	9.6C GOUTA CH07	
P06 - 27	*	GND	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
P06 - 28	J06 - 13C	9.6D GOUTA CH07	
P06 - 29	J06 - 14A	USCLKOUT07A	
P06 - 30	J06 - 14C	USCLKOUT07B	
P06 - 31	J06 - 15A	USCLKOUT07C	
P06 - 32	*	GND	
P06 - 33	J06 - 16A	USDATOUT07A	
P06 - 34	J06 - 16C	USDATOUT07B	
P06 - 35	J06 - 17A	USDATOUT07C	
P06 - 36	*	GND	
P06 - 37	*	GND	
P06 - 38	J06 - 18A	9.6C GOUTA CH08	
P06 - 39	*	GND	
P06 - 40	J06 - 18C	9.6D GOUTA CH08	
P06 - 41	J06 - 19A	USCLKOUT08A	
P06 - 42	J06 - 19C	USCLKOUT08B	
P06 - 43	J06 - 20A	USCLKOUT08C	
P06 - 44	*	GND	
P06 - 45	J06 - 21A	USDATOUT08A	
P06 - 46	J06 - 21C	USDATOUT08B	
P06 - 47	J06 - 22A	USDATOUT08C	
P06 - 48	*	GND	
P06 - 49		n/c	
P06 - 50		n/c	
P07 TO B400 DIGITAL CROSS CONNECT J73			
P07 - 01	*	GND	
P07 - 02	J07 - 03A	9.6C GOUTA CH09	
P07 - 03	*	GND	
P07 - 04	J07 - 03C	9.6D GOUTA CH09	
P07 - 05	J07 - 04A	USCLKOUT09A	
P07 - 06	J07 - 04C	USCLKOUT09B	
P07 - 07	J07 - 05A	USCLKOUT09C	
P07 - 08	*	GND	
P07 - 09	J07 - 06A	USDATOUT09A	
P07 - 10	J07 - 06C	USDATOUT09B	
P07 - 11	J07 - 07A	USDATOUT09C	
P07 - 12	*	GND	
P07 - 13	*	GND	
P07 - 14	J07 - 08A	9.6C GOUTA CH10	
P07 - 15	*	GND	
P07 - 16	J07 - 08C	9.6D GOUTA CH10	
P07 - 17	J07 - 09A	USCLKOUT10A	
P07 - 18	J07 - 09C	USCLKOUT10B	
P07 - 19	J07 - 10A	USCLKOUT10C	
P07 - 20	*	GND	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
P07 - 21	J07 - 11A	USDATOUT10A	
P07 - 22	J07 - 11C	USDATOUT10B	
P07 - 23	J07 - 12A	USDATOUT10C	
P07 - 24	*	GND	
P07 - 25	*	GND	
P07 - 26	J07 - 13A	9.6C GOUTA CH11	
P07 - 27	*	GND	
P07 - 28	J07 - 13C	9.6D GOUTA CH11	
P07 - 29	J07 - 14A	USCLKOUT11A	
P07 - 30	J07 - 14C	USCLKOUT11B	
P07 - 31	J07 - 15A	USCLKOUT11C	
P07 - 32	*	GND	
P07 - 33	J07 - 16A	USDATOUT11A	
P07 - 34	J07 - 16C	USDATOUT11B	
P07 - 35	J07 - 17A	USDATOUT11C	
P07 - 36	*	GND	
P07 - 37	*	GND	
P07 - 38	J07 - 18A	9.6C GOUTA CH12	
P07 - 39	*	GND	
P07 - 40	J07 - 18C	9.6D GOUTA CH12	
P07 - 41	J07 - 19A	USCLKOUT12A	
P07 - 42	J07 - 19C	USCLKOUT12B	
P07 - 43	J07 - 20A	USCLKOUT12C	
P07 - 44	*	GND	
P07 - 45	J07 - 21A	USDATOUT12A	
P07 - 46	J07 - 21C	USDATOUT12B	
P07 - 47	J07 - 22A	USDATOUT12C	
P07 - 48	*	GND	
P07 - 49		n/c	
P07 - 50		n/c	
P08 TO B400 DIGITAL CROSS CONNECT J74			
P08 - 01	*	GND	
P08 - 02	J08 - 03A	9.6C GOUTA CH13	
P08 - 03	*	GND	
P08 - 04	J08 - 03C	9.6D GOUTA CH13	
P08 - 05	J08 - 04A	USCLKOUT13A	
P08 - 06	J08 - 04C	USCLKOUT13B	
P08 - 07	J08 - 05A	USCLKOUT13C	
P08 - 08	*	GND	
P08 - 09	J08 - 06A	USDATOUT13A	
P08 - 10	J08 - 06C	USDATOUT13B	
P08 - 11	J08 - 07A	USDATOUT13C	
P08 - 12	*	GND	
P08 - 13	*	GND	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
P08 - 14	J08 - 08A	9.6C GOUTA CH14	
P08 - 15	*	GND	
P08 - 16	J08 - 08C	9.6D GOUTA CH14	
P08 - 17	J08 - 09A	USCLKOUT14A	
P08 - 18	J08 - 09C	USCLKOUT14B	
P08 - 19	J08 - 10A	USCLKOUT14C	
P08 - 20	*	GND	
P08 - 21	J08 - 11A	USDATOUT14A	
P08 - 22	J08 - 11C	USDATOUT14B	
P08 - 23	J08 - 12A	USDATOUT14C	
P08 - 24	*	GND	
P08 - 25	*	GND	
P08 - 26	J08 - 13A	9.6C GOUTA CH15	
P08 - 27	*	GND	
P08 - 28	J08 - 13C	9.6D GOUTA CH15	
P08 - 29	J08 - 14A	USCLKOUT15A	
P08 - 30	J08 - 14C	USCLKOUT15B	
P08 - 31	J08 - 15A	USCLKOUT15C	
P08 - 32	*	GND	
P08 - 33	J08 - 16A	USDATOUT15A	
P08 - 34	J08 - 16C	USDATOUT15B	
P08 - 35	J08 - 17A	USDATOUT15C	
P08 - 36	*	GND	
P08 - 37	*	GND	
P08 - 38	J08 - 18A	9.6C GOUTA CH16	
P08 - 39	*	GND	
P08 - 40	J08 - 18C	9.6D GOUTA CH16	
P08 - 41	J08 - 19A	USCLKOUT16A	
P08 - 42	J08 - 19C	USCLKOUT16B	
P08 - 43	J08 - 20A	USCLKOUT16C	
P08 - 44	*	GND	
P08 - 45	J08 - 21A	USDATOUT16A	
P08 - 46	J08 - 21C	USDATOUT16B	
P08 - 47	J08 - 22A	USDATOUT16C	
P08 - 48	*	GND	
P08 - 49		n/c	
P08 - 50		n/c	
P09 TO B400 DIGITAL CROSS CONNECT J75			
P09 - 01	*	GND	
P09 - 02	J09 - 03A	9.6C GOUTA CH17	
P09 - 03	*	GND	
P09 - 04	J09 - 03C	9.6D GOUTA CH17	
P09 - 05	J09 - 04A	USCLKOUT17A	
P09 - 06	J09 - 04C	USCLKOUT17B	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
P09 - 07	J09 - 05A	USCLKOUT17C	
P09 - 08	*	GND	
P09 - 09	J09 - 06A	USDATOUT17A	
P09 - 10	J09 - 06C	USDATOUT17B	
P09 - 11	J09 - 07A	USDATOUT17C	
P09 - 12	*	GND	
P09 - 13	*	GND	
P09 - 14	J09 - 08A	9.6C GOUTA CH18	
P09 - 15	*	GND	
P09 - 16	J09 - 08C	9.6D GOUTA CH18	
P09 - 17	J09 - 09A	USCLKOUT18A	
P09 - 18	J09 - 09C	USCLKOUT18B	
P09 - 19	J09 - 10A	USCLKOUT18C	
P09 - 20	*	GND	
P09 - 21	J09 - 11A	USDATOUT18A	
P09 - 22	J09 - 11C	USDATOUT18B	
P09 - 23	J09 - 12A	USDATOUT18C	
P09 - 24	*	GND	
P09 - 25	*	GND	
P09 - 26	J09 - 13A	9.6C GOUTA CH19	
P09 - 27	*	GND	
P09 - 28	J09 - 13C	9.6D GOUTA CH19	
P09 - 29	J09 - 14A	USCLKOUT19A	
P09 - 30	J09 - 14C	USCLKOUT19B	
P09 - 31	J09 - 15A	USCLKOUT19C	
P09 - 32	*	GND	
P09 - 33	J09 - 16A	USDATOUT19A	
P09 - 34	J09 - 16C	USDATOUT19B	
P09 - 35	J09 - 17A	USDATOUT19C	
P09 - 36	*	GND	
P09 - 37	*	GND	
P09 - 38	J09 - 18A	9.6C GOUTA CH20	
P09 - 39	*	GND	
P09 - 40	J09 - 18C	9.6D GOUTA CH20	
P09 - 41	J09 - 19A	USCLKOUT20A	
P09 - 42	J09 - 19C	USCLKOUT20B	
P09 - 43	J09 - 20A	USCLKOUT20C	
P09 - 44	*	GND	
P09 - 45	J09 - 21A	USDATOUT20A	
P09 - 46	J09 - 21C	USDATOUT20B	
P09 - 47	J09 - 22A	USDATOUT20C	
P09 - 48	*	GND	
P09 - 49		n/c	
P09 - 50		n/c	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
P10 TO B400 DIGITAL CROSS CONNECT J76			
P10 - 01	*	GND	
P10 - 02	J10 - 03A	9.6C GOUTA CH21	
P10 - 03	*	GND	
P10 - 04	J10 - 03C	9.6D GOUTA CH21	
P10 - 05	J10 - 04A	USCLKOUT21A	
P10 - 06	J10 - 04C	USCLKOUT21B	
P10 - 07	J10 - 05A	USCLKOUT21C	
P10 - 08	*	GND	
P10 - 09	J10 - 06A	USDATOUT21A	
P10 - 10	J10 - 06C	USDATOUT21B	
P10 - 11	J10 - 07A	USDATOUT21C	
P10 - 12		GND	
P10 - 13	*	GND	
P10 - 14	J10 - 08A	9.6C GOUTA CH22	
P10 - 15	*	GND	
P10 - 16	J10 - 08C	9.6D GOUTA CH22	
P10 - 17	J10 - 09A	USCLKOUT22A	
P10 - 18	J10 - 09C	USCLKOUT22B	
P10 - 19	J10 - 10A	USCLKOUT22C	
P10 - 20	*	GND	
P10 - 21	J10 - 11A	USDATOUT22A	
P10 - 22	J10 - 11C	USDATOUT22B	
P10 - 23	J10 - 12A	USDATOUT22C	
P10 - 24	*	GND	
P10 - 25	*	GND	
P10 - 26	J10 - 13A	9.6C GOUTA CH23	
P10 - 27	*	GND	
P10 - 28	J10 - 13C	9.6D GOUTA CH23	
P10 - 29	J10 - 14A	USCLKOUT23A	
P10 - 30	J10 - 14C	USCLKOUT23B	
P10 - 31	J10 - 15A	USCLKOUT23C	
P10 - 32	*	GND	
P10 - 33	J10 - 16A	USDATOUT23A	
P10 - 34	J10 - 16C	USDATOUT23B	
P10 - 35	J10 - 17A	USDATOUT23C	
P10 - 36	*	GND	
P10 - 37	*	GND	
P10 - 38	J10 - 18A	9.6C GOUTA CH24	
P10 - 39	*	GND	
P10 - 40	J10 - 18C	9.6D GOUTA CH24	
P10 - 41	J10 - 19A	USCLKOUT24A	
P10 - 42	J10 - 19C	USCLKOUT24B	
P10 - 43	J10 - 20A	USCLKOUT24C	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
P10 - 44	*	GND	
P10 - 45	J10 - 21A	USDATOUT24A	
P10 - 46	J10 - 21C	USDATOUT24B	
P10 - 47	J10 - 22A	USDATOUT24C	
P10 - 48	*	GND	
P10 - 49		n/c	
P10 - 50		n/c	
P11 TO B400 DIGITAL CROSS CONNECT J77			
P11 - 01	*	GND	
P11 - 02	J11 - 03A	9.6C GOUTA CH25	
P11 - 03	*	GND	
P11 - 04	J11 - 03C	9.6D GOUTA CH25	
P11 - 05	J11 - 04A	USCLKOUT25A	
P11 - 06	J11 - 04C	USCLKOUT25B	
P11 - 07	J11 - 05A	USCLKOUT25C	
P11 - 08	*	GND	
P11 - 09	J11 - 06A	USDATOUT25A	
P11 - 10	J11 - 06C	USDATOUT25B	
P11 - 11	J11 - 07A	USDATOUT25C	
P11 - 12	*	GND	
P11 - 13	*	GND	
P11 - 14	J11 - 08A	CLKI26	
P11 - 15	*	GND	
P11 - 16	J11 - 08C	DATI26	
P11 - 17	J11 - 09A	COT26A	
P11 - 18	J11 - 09C	COT26B	
P11 - 19	J11 - 10A	COT26C	
P11 - 20	*	GND	
P11 - 21	J11 - 11A	DOT26A	
P11 - 22	J11 - 11C	DOT26B	
P11 - 23	J11 - 12A	DOT26C	
P11 - 24	*	GND	
P11 - 25	*	GND	
P11 - 26	J11 - 13A	CLKI27	
P11 - 27	*	GND	
P11 - 28	J11 - 13C	DATI27	
P11 - 29	J11 - 14A	COT27A	
P11 - 30	J11 - 14C	COT27B	
P11 - 31	J11 - 15A	COT27C	
P11 - 32	*	GND	
P11 - 33	J11 - 16A	DOT27A	
P11 - 34	J11 - 16C	DOT27B	
P11 - 35	J11 - 17A	DOT27C	
P11 - 36	*	GND	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
P11 - 37	*	GND	
P11 - 38	J11 - 18A	CLKI28	
P11 - 39	*	GND	
P11 - 40	J11 - 18C	DATI28	
P11 - 41	J11 - 19A	COT28A	
P11 - 42	J11 - 19C	COT28B	
P11 - 43	J11 - 20A	COT28C	
P11 - 44	*	GND	
P11 - 45	J11 - 21A	DOT28A	
P11 - 46	J11 - 21C	DOT28B	
P11 - 47	J11 - 22A	DOT28C	
P11 - 48	*	GND	
P11 - 49		n/c	
P11 - 50		n/c	
P12 TO B400 DIGITAL CROSS CONNECT J78			
P12 - 01	J12 - 03A	SE2IN1	
P12 - 02	J12 - 03C	SE2IN2	
P12 - 03	J12 - 04A	SE2IN3	
P12 - 04	J12 - 04C	SE2IN4	
P12 - 05	J12 - 05A	SE2IN5	
P12 - 06	J12 - 05C	SE2IN6	
P12 - 07	J12 - 06A	SE2IN7	
P12 - 08	J12 - 06C	SE2IN8	
P12 - 09	J12 - 07A	SE2IN9	
P12 - 10	J12 - 07C	SE2I10	
P12 - 11	J12 - 08A	SE2I11	
P12 - 12	J12 - 08C	SE2112	
P12 - 13	J12 - 09A	SE2I13	
P12 - 14	J12 - 09C	SE2I14	
P12 - 15	J12 - 10A	SE2I15	
P12 - 16	J12 - 10C	SE2I16	
P12 - 17	J12 - 11A	SE2I17	
P12 - 18	J12 - 11C	SE2I18	
P12 - 19	J12 - 12A	SE2I19	
P12 - 20	J12 - 12C	SE2I20	
P12 - 21	J12 - 13A	SE2I21	
P12 - 22	J12 - 13C	SE2I22	
P12 - 23	J12 - 14A	SE2I23	
P12 - 24	J12 - 14C	SE2I24	
P12 - 25	J12 - 15A	SE2I25	
P12 - 26	J12 - 15C	SE2I26	
P12 - 27	J12 - 16A	SE2I27	
P12 - 28	J12 - 16C	SE2I28	
P12 - 29	J12 - 17A	SE2I29	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
P12 - 30	J12 - 17C	SE2I30	
P12 - 31	J12 - 18A	SE2I31	
P12 - 32	J12 - 18C	SE2I32	
P12 - 33		n/c	
P12 - 34		n/c	
P12 - 35		n/c	
P12 - 36		n/c	
P12 - 37		n/c	
P12 - 38		n/c	
P12 - 39		n/c	
P12 - 40		n/c	
P12 - 41		n/c	
P12 - 42		n/c	
P12 - 43	J05 - 25C J12 - 24A	SEL 2 OUT A	
P12 - 44	J12 - 24C	SEL 2 OUT B	
P12 - 45	J12 - 25A	SEL 2 OUT C	
P12 - 46	J12 - 25C	SEL 2 OUT D	
P12 - 47	J12 - 26A	SEL 2 OUT E	
P12 - 48		n/c	
P12 TO B400 DIGITAL CROSS CONNECT J78			
P12 - 49	*	GND	
P12 - 50	*	GND	
P13 - 01	J13 - 03A	OA1	
P13 - 02	J13 - 03C	OA2	
P13 - 03	J13 - 04A	OA3	
P14 - 01	J13 - 05A	OB1	
P14 - 02	J13 - 05C	OB2	
P14 - 03	J13 - 06A	OB3	
P15 - 01	J13 - 07A	OC1	
P15 - 02	J13 - 07C	OC2	
P15 - 03	J13 - 08A	OC3	
P16 - 01	J13 - 09A	OD1	
P16 - 02	J13 - 09C	OD2	
P16 - 03	J13 - 10A	OD3	
P17 - 01	J13 - 11A	OE1	
P17 - 02	J13 - 11C	OE2	
P17 - 03	J13 - 12A	OE3	
P18 - 01	J13 - 13A	OF1	
P18 - 02	J13 - 13C	OF2	
P18 - 03	J13 - 14A	OF3	
P19 - 01	J13 - 15A	OG1	
P19 - 02	J13 - 15C	OG2	
P19 - 03	J13 - 16A	OG3	

UNIVERSAL SYNCHRONIZER SHELF

FROM	TO	FUNCTION	PUNCH BLOCK
P20 - 01	J13 - 17A	OH1	
P20 - 02	J13 - 17C	OH2	
P20 - 03	J13 - 18A	OH3	
P21 - 01	J13 - 19A	OI1	
P21 - 02	J13 - 19C	OI2	
P21 - 03	J13 - 20A	OI3	
P22 - 01	J13 - 21A	OJ1	
P22 - 02	J13 - 21C	OJ2	
P22 - 03	J13 - 22A	OJ3	
P23 - 01	J13 - 23A	OK1	
P23 - 02	J13 - 23C	OK2	
P23 - 03	J13 - 24A	OK3	
P24 - 01	J13 - 25A	OL1	
P24 - 02	J13 - 25C	OL2	
P24 - 03	J13 - 26A	OL3	
P25 - 01	J13 - 29C	ON1	
P25 - 02	J13 - 30A	ON2	
P25 - 03	J13 - 30C	ON3	
P26 - 01	J13 - 27A J13 - 27C	OM1	
P26 - 02	J13 - 28A J13 - 28C	OM2	
P26 - 03	*	GND	
P27 - 01	J01 - 17A J12 - 30A	ALARM 10 9.6 CLK	
P27 - 02	*	GND	
TB1 - 01	J01 - 06A	ALARM 01 INPUT	
TB1 - 02	J01 - 06C	ALARM 02 INPUT	
TB1 - 03	J01 - 07A	ALARM 03 INPUT	
TB1 - 04	J01 - 07C	ALARM 04 INPUT	
TB1 - 05	J01 - 08A	ALARM 05 INPUT	
TB1 - 06	J01 - 08C	ALARM 06 INPUT	
TB1 - 07	J01 - 09A	ALARM 07 INPUT	
TB1 - 08	J01 - 09C	ALARM 08 INPUT	
TB1 - 09	F01 - 01 F01 - 02	+5V SUPPLY	
TB1 - 10	*	GND	

UNIVERSAL SYNC SHELF/FUNCTION LIST

DATE: 03/27/90

+5V	D01(01),F01(03),F01(04),J01A(01), J01C(01),J01A(32),J01C(32),J02A(01), J02C(01),J02A(32),J02C(32),J03A(01), J03C(01),J04A(01),J04C(01),J04A(32), J04C(32),J05A(01),J05C(01),J05A(32), J05C(32),J06A(01),J06C(01),J06A(32), J06C(32),J07A(01),J07C(01),J07A(32), J07C(32),J08A(01),J08C(01),J08A(32), J08C(32),J09A(01),J09C(01),J09A(32), J09C(32),J10A(01),J10C(01),J10A(32), J10C(32),J11A(01),J11C(01),J11A(32), J11C(32),J12A(01),J12C(01),J12A(32), J12C(32),J13A(01),J13C(01),J13A(32), J13C(32);
+5V SUPPLY	F01(01),F01(02),TB1(09);
150 IN 232 CH01	J03A(08),P04(11);
150 IN 232 CH02	J03C(08),P04(12);
150 IN 232 CH03	J03A(09),P04(13);
150 IN 232 CH04	J03C(09),P04(14);
150 IN 232 CH05	J03A(10),P04(15);
150 IN 232 CH06	J03C(10),P04(16);
150 IN 232 CH07	J03A(11),P04(17);
150 IN 232 CH08	J03C(11),P04(18);
150 IN 232 CH09	J03A(12),P04(19);
150 IN 232 CH10	J03C(12),P04(20);
150 IN 232 CH11	J03A(13),P04(21);
150 IN 232 CH12	J03C(13),P04(22);
150 IN 232 CH13	J03A(14),P04(23);
150 IN 232 CH14	J03C(14),P04(24);
150 IN 232 CH15	J03A(15),P04(25);
150 IN 232 CH16	J03C(15),P04(26);
150 IN 232 CH17	J03A(16),P04(27);
150 IN 232 CH18	J03C(16),P04(28);
150 IN 232 CH19	J03A(17),P04(29);
150 IN 232 CH20	J03C(17),P04(30);
150 IN 232 CH21	J03A(18),P04(31);
150 IN 232 CH22	J03C(18),P04(32);
150 IN 232 CH23	J03A(19),P04(33);
150 IN 232 CH24	J03C(19),P04(34);
150 IN 232 CH25	J03A(20),P04(35);
150D GOUT CH01	J02A(03),P03(01);
150D GOUT CH02	J02C(03),P03(02);
150D GOUT CH03	J02A(04),P03(03);
150D GOUT CH04	J02C(04),P03(04);
150D GOUT CH05	J02A(05),P03(05);
150D GOUT CH06	J02C(05),P03(06);
150D GOUT CH07	J02A(06),P03(07);

Continued

150D GOUT CH08	J02C(06),P03(08);
150D GOUT CH09	J02A(07),P03(09);
150D GOUT CH10	J02C(07),P03(10);
150D GOUT CH11	J02A(08),P03(11);
150D GOUT CH12	J02C(08),P03(12);
150D GOUT CH13	J02A(09),P03(13);
150D GOUT CH14	J02C(09),P03(14);
150D GOUT CH15	J02A(10),P03(15);
150D GOUT CH16	J02C(10),P03(16);
150D GOUT CH17	J02A(11),P03(17);
150D GOUT CH18	J02C(11),P03(18);
150D GOUT CH19	J02A(12),P03(19);
150D GOUT CH20	J02C(12),P03(20);
150D GOUT CH21	J02A(13),P03(21);
150D GOUT CH22	J02C(13),P03(22);
150D GOUT CH23	J02A(14),P03(23);
150D GOUT CH24	J02C(14),P03(24);
150D GOUT CH25	J02A(15),P03(25);
2400 HZ MIN R	J04C(04),P04(04);
2400 HZ MIN T	J04A(04),P04(03);
2400 HZ MOUT R	J04C(18),P04(08);
2400 HZ MOUT T	J04A(18),P04(07);
2400HZM	J04A(14),J05C(23);
2400IN	J04A(22),J05C(28);
300 HZ M	J04A(12),J05A(23),P04(09);
300 HZ MIN R	J04C(03),P04(02);
300 HZ MIN T	J04A(03),P04(01);
300 HZ MOUT R	J04C(16),P04(06);
300 HZ MOUT T	J04A(16),P04(05);
300CLK	J05C(29),J06A(29),J07A(29),J08A(29), J09A(29),J10A(29),J11A(29);
300IN	J04A(21),J05A(29);
9.6C GOUTA CH01	J05A(03),P05(02);
9.6C GOUTA CH02	J05A(08),P05(14);
9.6C GOUTA CH03	J05A(13),P05(26);
9.6C GOUTA CH04	J05A(18),P05(38);
9.6C GOUTA CH05	J06A(03),P06(02);
9.6C GOUTA CH06	J06A(08),P06(14);
9.6C GOUTA CH07	J06A(13),P06(26);
9.6C GOUTA CH08	J06A(18),P06(38);
9.6C GOUTA CH09	J07A(03),P07(02);
9.6C GOUTA CH10	J07A(08),P07(14);
9.6C GOUTA CH11	J07A(13),P07(26);
9.6C GOUTA CH12	J07A(18),P07(38);
9.6C GOUTA CH13	J08A(03),P08(02);
9.6C GOUTA CH14	J08A(08),P08(14);

Continued

9.6C GOUTA CH15	J08A(13),P08(26);
9.6C GOUTA CH16	J08A(18),P08(38);
9.6C GOUTA CH17	J09A(03),P09(02);
9.6C GOUTA CH18	J09A(08),P09(14);
9.6C GOUTA CH19	J09A(13),P09(26);
9.6C GOUTA CH20	J09A(18),P09(38);
9.6C GOUTA CH21	J10A(03),P10(02);
9.6C GOUTA CH22	J10A(08),P10(14);
9.6C GOUTA CH23	J10A(13),P10(26);
9.6C GOUTA CH24	J10A(18),P10(38);
9.6C GOUTA CH25	J11A(03),P11(02);
9.6D GOUTA CH01	J05C(03),P05(04);
9.6D GOUTA CH02	J05C(08),P05(16);
9.6D GOUTA CH03	J05C(13),P05(28);
9.6D GOUTA CH04	J05C(18),P05(40);
9.6D GOUTA CH05	J06C(03),P06(04);
9.6D GOUTA CH06	J06C(08),P06(16);
9.6D GOUTA CH07	J06C(13),P06(28);
9.6D GOUTA CH08	J06C(18),P06(40);
9.6D GOUTA CH09	J07C(03),P07(04);
9.6D GOUTA CH10	J07C(08),P07(16);
9.6D GOUTA CH11	J07C(13),P07(28);
9.6D GOUTA CH12	J07C(18),P07(40);
9.6D GOUTA CH13	J08C(03),P08(04);
9.6D GOUTA CH14	J08C(08),P08(16);
9.6D GOUTA CH15	J08C(13),P08(28);
9.6D GOUTA CH16	J08C(18),P08(40);
9.6D GOUTA CH17	J09C(03),P09(04);
9.6D GOUTA CH18	J09C(08),P09(16);
9.6D GOUTA CH19	J09C(13),P09(28);
9.6D GOUTA CH20	J09C(18),P09(40);
9.6D GOUTA CH21	J10C(03),P10(04);
9.6D GOUTA CH22	J10C(08),P10(16);
9.6D GOUTA CH23	J10C(13),P10(28);
9.6D GOUTA CH24	J10C(18),P10(40);
9.6D GOUTA CH25	J11C(03),P11(04;
ALARM 01 INPUT	J01A(06),TB1(01);
ALARM 02 INPUT	J01C(06),TB1(02);
ALARM 03 INPUT	J01A(07),TB1(03);
ALARM 04 INPUT	J01C(07),TB1(04);
ALARM 05 INPUT	J01A(08),TB1(05);
ALARM 06 INPUT	J01C(08),TB1(06);
ALARM 07 INPUT	J01A(09),TB1(07);
ALARM 08 INPUT	J01C(09),TB1(08);
ALARM 09 150 DATA	J01C(10),J02A(30);
ALARM 10 9.6 CLK	J01A(17),J12A(30),P27(01);

Continued

ALARM 11 TONE I/F	J01A(30),J04A(30);
ALARM 12 FSK	J01A(11),J03A(30);
ALARM 13 INPUT	J01C(11),P01(17);
ALARM 14 INPUT	J01A(12),P01(18);
ALARM 15 INPUT	J01C(12),P01(19);
ALARM 16 INPUT	J01A(13),P01(20);
ALARM 17 INPUT	J01C(13),P01(21);
ALARM 18 INPUT	J01A(14),P01(22);
ALARM 19 INPUT	J01C(14),P01(23);
ALARM 20 INPUT	J01A(15),P01(24);
ALARM 21 INPUT	J01C(15),P01(25);
ALARM 22 INPUT	J01A(16),P01(26);
CLKI26	J11A(08),P11(14);
CLKI27	J11A(13),P11(26);
CLKI28	J11A(18),P11(38);
COT26A	J11A(09),P11(17);
COT26B	J11C(09),P11(18);
COT26C	J11A(10),P11(19);
COT27A	J11A(14),P11(29);
COT27B	J11C(14),P11(30);
COT27C	J11A(15),P11(31);
COT28A	J11A(19),P11(41);
COT28B	J11C(19),P11(42);
COT28C	J11A(20),P11(43);
DATI26	J11C(08),P11(16);
DATI27	J11C(13),P11(28);
DATI28	J11C(18),P11(40);
DOT26A	J11A(11),P11(21);
DOT26B	J11C(11),P11(22);
DOT26C	J11A(12),P11(23);
DOT27A	J11A(16),P11(33);
DOT27B	J11C(16),P11(34);
DOT27C	J11A(17),P11(35);
DOT28A	J11A(21),P11(45);
DOT28B	J11C(21),P11(46);
DOT28C	J11A(22),P11(47);
GND	D01(02),J01A(02),J01C(02),J01A(31), J01C(31),J02A(02),J02C(02),J02A(31), J02C(31),J03A(02),J03C(02),J04A(02), J04C(02),J04C(12),J04C(14),J04C(20), J04C(21),J04C(22),J04A(31),J04C(31), J05A(02),J05C(02),J05C(05),J05C(07), J05C(10),J05C(12),J05C(15),J05C(17), J05C(20),J05C(22),J05A(31),J05C(31), J06A(02),J06C(02),J06C(05),J06C(07), J06C(10),J06C(12),J06C(15),J06C(17),

Continued

	06C(20),J06C(22),J06A(31),J06C(31), J7A(02),J07C(02),J07C(05),J07C(07), J07C(10),J07C(12),J07C(15),J07C(17), J07C(20),J07C(22),J07A(31),J07C(31), J08A(02),J08C(02),J08C(05),J08C(07), J08C(10),J08C(12),J08C(15),J08C(17), J08C(20),J08C(22),J08A(31),J08C(31), J09A(02),J09C(02),J09C(05),J09C(07), J09C(10),J09C(12),J09C(15),J09C(17), J09C(20),J09C(22),J09A(31),J09C(31), J10A(02),J10C(02),J10C(05),J10C(07), J10C(10),J10C(12),J10C(15),J10C(17), J10C(20),J10C(22),J10A(31),J10C(31), J1A(02),J11C(02),J11C(05),J11C(07), J11C(10),J11C(12),J11C(15),J11C(17), J11C(20),J11C(22),J11A(31),J11C(31), J12A(02),J12C(02),J12A(31),J12C(31), J13A(02),J13C(02),J13A(31),J13C(31), P01(01),P01(02),P02(01),P02(02),P03(33), P03(34),P03(35),P03(36),P04(37),P04(38), P04(39),P04(40),P05(01),P05(03),P05(08), P05(12),P05(13),P05(15),P05(20),P05(24), P05(25),P05(27),P05(32),P05(36),P05(37), P05(39),P05(44),P05(48),P06(01),P06(03), P06(08),P06(12),P06(13),P06(15),P06(20), P06(24),P06(25),P06(27),P06(32),P06(36), P06(37),P06(39),P06(44),P06(48),P07(01), P07(03),P07(08),P07(12),P07(13),P07(15), P07(20),P07(24),P07(25),P07(27),P07(32), P07(36),P07(37),P07(39),P07(44),P07(48), P08(01),P08(03),P08(08),P08(12),P08(13), P08(15),P08(20),P08(24),P08(25),P08(27), P08(32),P08(36),P08(37),P08(39),P08(44), P08(48),P09(01),P09(03),P09(08),P09(12), P09(13),P09(15),P09(20),P09(24),P09(25), P09(27),P09(32),P09(36),P09(37),P09(39), P09(44),P09(48),P10(01),P10(03),P10(08), P10(12),P10(13),P10(15),P10(20),P10(24), P10(25),P10(27),P10(32),P10(36),P10(37), P10(39),P10(44),P10(48),P11(01),P11(03), P11(08),P11(12),P11(13),P11(15),P11(20), P11(24),P11(25),P11(27),P11(32),P11(36), P11(37),P11(39),P11(44),P11(48),P12(49), P12(50),P26(03),P27(02) ,TB1(10);
IN26	J02C(15),P03(26);
IN27	J02A(16),P03(27);
IN28	J02C(16),P03(28);
IN29	J02A(17),P03(29);
IN30	J02C(17),P03(30);
IN31	J02A(18),P03(31);

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IN32	J02C(18),P03(32);
MODEM RX RING	J03C(23),P03(50),P04(42);
MODEM RX TIP	J03A(23),P03(49),P04(41);
MODEM TX RING	J03C(26),P03(40),P04(48);
MODEM TX TIP	J03A(26),P03(39),P04(47);
NN756	J02A(26),P03(47);
NN772	J02C(25),P03(46);
NN776	J02A(25),P03(45);
NN780	J02C(24),P03(44);
OA1	J13A(03),P13(01);
OA2	J13C(03),P13(02);
OA3	J13A(04),P13(03);
OB1	J13A(05),P14(01);
OB2	J13C(05),P14(02);
OB3	J13A(06),P14(03);
OC1	J13A(07),P15(01);
OC2	J13C(07),P15(02);
OC3	J13A(08),P15(03);
OD1	J13A(09),P16(01);
OD2	J13C(09),P16(02);
OD3	J13A(10),P16(03);
OE1	J13A(11),P17(01);
OE2	J13C(11),P17(02);
OE3	J13A(12),P17(03);
OF1	J13A(13),P18(01);
OF2	J13C(13),P18(02);
OF3	J13A(14),P18(03);
OG1	J13A(15),P19(01);
OG2	J13C(15),P19(02);
OG3	J13A(16),P19(03);
OH1	J13A(17),P20(01);
OH2	J13C(17),P20(02);
OH3	J13A(18),P20(03);
OI1	J13A(19),P21(01);
OI2	J13C(19),P21(02);
OI3	J13A(20),P21(03);
OJ1	J13A(21),P22(01);
OJ2	J13C(21),P22(02);
OJ3	J13A(22),P22(03);
OK1	J13A(23),P23(01);
OK2	J13C(23),P23(02);
OK3	J13A(24),P23(03);
OL1	J13A(25),P24(01);
OL2	J13C(25),P24(02);
OL3	J13A(26),P24(03);
OM1	J13A(27),J13C(27),P26(01);

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OM2	J13A(28),J13C(28),P26(02);
ON1	J13C(29),P25(01);
ON2	J13A(30),P25(02);
ON3	J13C(30),P25(03);
R1-COM	J01A(03),P02(03);
R1-NC	J01A(04),P02(05);
R1-NO	J01A(05),P02(07);
R2-COM	J01C(03),P02(04);
R2-NC	J01C(04),P02(06);
R2-NO	J01C(05),P02(08);
REFCLK	J05C(30),J06A(30),J07A(30),J08A(30), J09A(30),J10A(30),J11A(30);
SE2112	J12C(08),P12(12);
SE2I10	J12C(07),P12(10);
SE2I11	J12A(08),P12(11);
SE2I13	J12A(09),P12(13);
SE2I14	J12C(09),P12(14);
SE2I15	J12A(10),P12(15);
SE2I16	J12C(10),P12(16);
SE2I17	J12A(11),P12(17);
SE2I18	J12C(11),P12(18);
SE2I19	J12A(12),P12(19);
SE2I20	J12C(12),P12(20);
SE2I21	J12A(13),P12(21);
SE2I22	J12C(13),P12(22);
SE2I23	J12A(14),P12(23);
SE2I24	J12C(14),P12(24);
SE2I25	J12A(15),P12(25);
SE2I26	J12C(15),P12(26);
SE2I27	J12A(16),P12(27);
SE2I28	J12C(16),P12(28);
SE2I29	J12A(17),P12(29);
SE2I30	J12C(17),P12(30);
SE2I31	J12A(18),P12(31);
SE2I32	J12C(18),P12(32);
SE2IN1	J12A(03),P12(01);
SE2IN2	J12C(03),P12(02);
SE2IN3	J12A(04),P12(03);
SE2IN4	J12C(04),P12(04);
SE2IN5	J12A(05),P12(05);
SE2IN6	J12C(05),P12(06);
SE2IN7	J12A(06),P12(07);
SE2IN8	J12C(06),P12(08);
SE2IN9	J12A(07),P12(09);
SEL 2 OUT A	J05C(25),J12A(24),P12(43);
SEL 2 OUT B	J12C(24),P12(44);

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SEL 2 OUT C	J12A(25),P12(45);
SEL 2 OUT D	J12C(25),P12(46);
SEL 2 OUT E	J12A(26),P12(47);
SYNCCTRL	J05A(25),P04(10);
TXDIN	J02A(24),J03A(06),P03(43);
USCLKOUT01A	J05A(04),P05(05);
USCLKOUT01B	J05C(04),P05(06);
USCLKOUT01C	J05A(05),P05(07);
USCLKOUT02A	J05A(09),P05(17);
USCLKOUT02B	J05C(09),P05(18);
USCLKOUT02C	J05A(10),P05(19);
USCLKOUT03A	J05A(14),P05(29);
USCLKOUT03B	J05C(14),P05(30);
USCLKOUT03C	J05A(15),P05(31);
USCLKOUT04A	J05A(19),P05(41);
USCLKOUT04B	J05C(19),P05(42);
USCLKOUT04C	J05A(20),P05(43);
USCLKOUT05A	J06A(04),P06(05);
USCLKOUT05B	J06C(04),P06(06);
USCLKOUT05C	J06A(05),P06(07);
USCLKOUT06A	J06A(09),P06(17);
USCLKOUT06B	J06C(09),P06(18);
USCLKOUT06C	J06A(10),P06(19);
USCLKOUT07A	J06A(14),P06(29);
USCLKOUT07B	J06C(14),P06(30);
USCLKOUT07C	J06A(15),P06(31);
USCLKOUT08A	J06A(19),P06(41);
USCLKOUT08B	J06C(19),P06(42);
USCLKOUT08C	J06A(20),P06(43);
USCLKOUT09A	J07A(04),P07(05);
USCLKOUT09B	J07C(04),P07(06);
USCLKOUT09C	J07A(05),P07(07);
USCLKOUT10A	J07A(09),P07(17);
USCLKOUT10B	J07C(09),P07(18);
USCLKOUT10C	J07A(10),P07(19);
USCLKOUT11A	J07A(14),P07(29);
USCLKOUT11B	J07C(14),P07(30);
USCLKOUT11C	J07A(15),P07(31);
USCLKOUT12A	J07A(19),P07(41);
USCLKOUT12B	J07C(19),P07(42);
USCLKOUT12C	J07A(20),P07(43);
USCLKOUT13A	J08A(04),P08(05);
USCLKOUT13B	J08C(04),P08(06);
USCLKOUT13C	J08A(05),P08(07);
USCLKOUT14A	J08A(09),P08(17);
USCLKOUT14B	J08C(09),P08(18);

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USCLKOUT14C	J08A(10),P08(19);
USCLKOUT15A	J08A(14),P08(29);
USCLKOUT15B	J08C(14),P08(30);
USCLKOUT15C	J08A(15),P08(31);
USCLKOUT16A	J08A(19),P08(41);
USCLKOUT16B	J08C(19),P08(42);
USCLKOUT16C	J08A(20),P08(43);
USCLKOUT17A	J09A(04),P09(05);
USCLKOUT17B	J09C(04),P09(06);
USCLKOUT17C	J09A(05),P09(07);
USCLKOUT18A	J09A(09),P09(17);
USCLKOUT18B	J09C(09),P09(18);
USCLKOUT18C	J09A(10),P09(19)
USCLKOUT19A	J09A(14),P09(29);
USCLKOUT19B	J09C(14),P09(30);
USCLKOUT19C	J09A(15),P09(31);
USCLKOUT20A	J09A(19),P09(41);
USCLKOUT20B	J09C(19),P09(42);
USCLKOUT20C	J09A(20),P09(43);
USCLKOUT21A	J10A(04),P10(05);
USCLKOUT21B	J10C(04),P10(06);
USCLKOUT21C	J10A(05),P10(07);
USCLKOUT22A	J10A(09),P10(17);
USCLKOUT22B	J10C(09),P10(18);
USCLKOUT22C	J10A(10),P10(19);
USCLKOUT23A	J10A(14),P10(29);
USCLKOUT23B	J10C(14),P10(30);
USCLKOUT23C	J10A(15),P10(31);
USCLKOUT24A	J10A(19),P10(41);
USCLKOUT24B	J10C(19),P10(42);
USCLKOUT24C	J10A(20),P10(43);
USCLKOUT25A	J11A(04),P11(05);
USCLKOUT25B	J11C(04),P11(06);
USCLKOUT25C	J11A(05),P11(07);
USDATOUT01A	J05A(06),P05(09);
USDATOUT01B	J05C(06),P05(10);
USDATOUT01C	J05A(07),P05(11);
USDATOUT02A	J05A(11),P05(21);
USDATOUT02B	J05C(11),P05(22);
USDATOUT02C	J05A(12),P05(23);
USDATOUT03A	J05A(16),P05(33);
USDATOUT03B	J05C(16),P05(34);
USDATOUT03C	J05A(17),P05(35);
USDATOUT04A	J05A(21),P05(45);
USDATOUT04B	J05C(21),P05(46);
USDATOUT04C	J05A(22),P05(47);

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USDATOUT05A	J06A(06),P06(09);
USDATOUT05B	J06C(06),P06(10);
USDATOUT05C	J06A(07),P06(11);
USDATOUT06A	J06A(11),P06(21);
USDATOUT06B	J06C(11),P06(22);
USDATOUT06C	J06A(12),P06(23);
USDATOUT07A	J06A(16),P06(33);
USDATOUT07B	J06C(16),P06(34);
USDATOUT07C	J06A(17),P06(35);
USDATOUT08A	J06A(21),P06(45);
USDATOUT08B	J06C(21),P06(46);
USDATOUT08C	J06A(22),P06(47);
USDATOUT09A	J07A(06),P07(09);
USDATOUT09B	J07C(06),P07(10);
USDATOUT09C	J07A(07),P07(11)
USDATOUT10B	J07C(11),P07(22)
USDATOUT10C	J07A(12),P07(23)
USDATOUT11A	J07A(16),P07(33)
USDATOUT11B	J07C(16),P07(34)
USDATOUT11C	J07A(17),P07(35)
USDATOUT12A	J07A(21),P07(45)
USDATOUT12B	J07C(21),P07(46)
USDATOUT12C	J07A(22),P07(47)
USDATOUT13A	J08A(06),P08(09)
USDATOUT13B	J08C(06),P08(10)
USDATOUT13C	J08A(07),P08(11)
USDATOUT14A	J08A(11),P08(21)
USDATOUT14B	J08C(11),P08(22)
USDATOUT14C	J08A(12),P08(23)
USDATOUT15A	J08A(16),P08(33)
USDATOUT15B	J08C(16),P08(34)
USDATOUT15C	J08A(17),P08(35)
USDATOUT16A	J08A(21),P08(45)
USDATOUT16B	J08C(21),P08(46)
USDATOUT16C	J08A(22),P08(47)
USDATOUT17A	J09A(06),P09(09)
USDATOUT17B	J09C(06),P09(10)
USDATOUT17C	J09A(07),P09(11)
USDATOUT18A	J09A(11),P09(21)
USDATOUT18B	J09C(11),P09(22)
USDATOUT18C	J09A(12),P09(23)
USDATOUT19A	J09A(16),P09(33)
USDATOUT19B	J09C(16),P09(34)
USDATOUT19C	J09A(17),P09(35)
USDATOUT20A	J09A(21),P09(45)
USDATOUT20B	J09C(21),P09(46)

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USDATOUT20C	J09A(22),P09(47)
USDATOUT21A	J10A(06),P10(09)
USDATOUT21B	J10C(06),P10(10)
USDATOUT21C	J10A(07),P10(11)
USDATOUT22A	J10A(11),P10(21)
USDATOUT22B	J10C(11),P10(22)
USDATOUT22C	J10A(12),P10(23)
USDATOUT23A	J10A(16),P10(33)
USDATOUT23B	J10C(16),P10(34)
USDATOUT23C	J10A(17),P10(35)
USDATOUT24A	J10A(21),P10(45)
USDATOUT24B	J10C(21),P10(46)
USDATOUT24C	J10A(22),P10(47)
USDATOUT25A	J11A(06),P11(09)
USDATOUT25B	J11C(06),P11(10)
USDATOUT25C	J11A(07),P11(11)

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