TECHNICAL MANUAL

ORGANIZATIONAL MAINTENANCE MANUAL
DATA COMMUNICATIONS EQUIPMENT MAINTENANCE

EXPANDED TROUBLESHOOTING
(LOGIC DIAGRAMS)

GUIDED MISSILE AIR DEFENSE SYSTEM
AN/TSQ-73

HEADQUARTERS, DEPARTMENT OF THE ARMY
18 NOVEMBER 1982

CHANGE

No. 1

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, D.C.,28 May 1986

Organizational Maintenance Manual: Communications Equipment Maintenance

Expanded Troubleshooting (Logic Diagrams)

GUIDED MISSILE AIR DEFENSE SYSTEM AN/TSQ-73

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WARNING

DANGEROUS VOLTAGE

is used in the operation of this equipment

DEATH ON CONTACT

may result if personnel fail to observe safety precautions

Never work on electronic equipment unless there is another person nearby who is familiar with the operation and hazards of the equipment and who is competent in administering first aid. When the technician is aided by operators, he must warn them about dangerous areas.

Whenever possible, the power supply to the equipment must be shut off before beginning work on the equipment. Take particular care to ground every capacitor likely to hold a dangerous potential. When working inside the equipment, after the power has been turned off, always ground every part before touching it.

Be careful not to contact high-voltage connections when installing or operating this equipment.

Whenever the nature of the operation permits, keep one hand away from the equipment to reduce the hazard of current flowing through vital organs of the body.

WARNING

Do not be misled by the term "low voltage." Potentials as low as 50 volts may cause death under adverse conditions.

EXTREMELY DANGEROUS POTENTIALS

greater than 500 volts exist in the following units:

Display console high voltage power supply

Display console CRT

WARNING

For emergencies requiring immediate shutdown of system power, press SYSTEM POWER OFF switch located on power cabinet power transfer unit. Observe that SYSTEM POWER ON indicator light goes off.

LIST OF EFFECTIVE PAGES

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TECHNICAL MANUAL

NO.9-1430-655-20-7-3

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON,D.C., *18 November 1982*

ORGANIZATIONAL MAINTENANCE MANUAL: DATA COMMUNICATIONS EQUIPMENT MAINTENANCE

EXPANDED TROUBLESHOOTING (LOGIC DIAGRAMS)

GUIDED MISSILE AIR DEFENSE SYSTEM AN/TSQ-73

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this publication. If you find any mistakes, or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in back of this manual direct to: Commander, U.S. Army Missile Command, ATTN: AMSMI-LC-ME-PMC, Redstone Arsenal, AL 35898-5238. A reply will be furnished to you.

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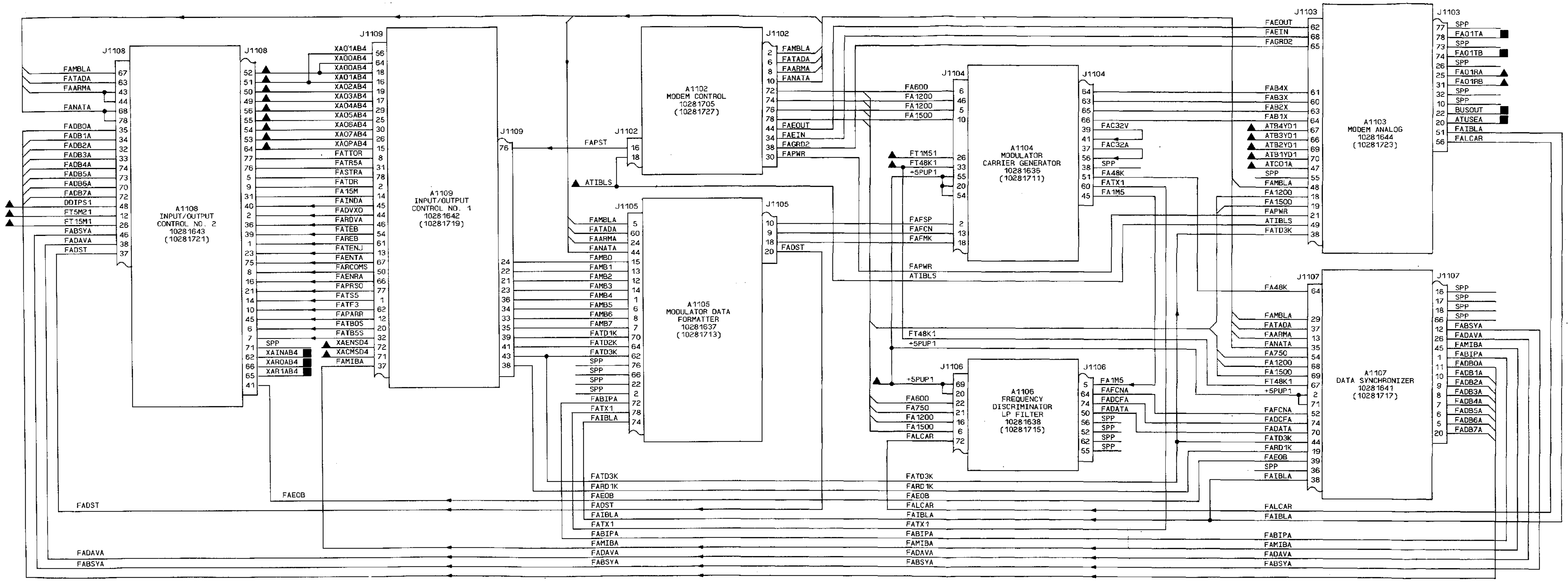
INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A5	J1136-40		8	
ATB2YD1		J1136-41			
ATB3YD1		J1136-42			
ATB4YD1		J1136-43			
ATCD1A		J1136-65			
ATIBLS		J1136-50		8	
DDIPS1		J1-13		12	1
FA01RA		J2-4		10	1
FA01RB		J2-5		10	1
FT1M51		J1134-38	A1134-TP18A	9	
FT15M1		J1134-66	A1134-TP31A		
FT48K1		J1134-22	A1134-TP12A		
FT5M21		J1134-52	A1134-TP24A	9	
XACMSD4		J1135-37		11	1
XAENSD4		J1135-35			
XA0PAB4		J1135-1			
XAC0AB4		J1135-3			
XAC1AB4		J1135-5			
XA02AB4		J1135-7			
XA03AB4		J1135-9			
XA04AB4		J1135-11			
XA05AB4		J1135-13			
XA06AB4		J1135-15			
XA07AB4		J1135-17		11	1
+5PUP1	1A1A2A5	J1101-75		12	2

OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A5	J1136-44		8	
BUSOUT		J1136-25		8	
FA01TA		J2-1		10	1
FA01TB		J2-2		10	1
XAINAB4		J1135-39		11	1
XAR0AB4		J1135-19		11	1
XAR1AB4	1A1A2A5	J1135-21		11	1



NOTES: UNLESS OTHERWISE SPECIFIED

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS. PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATOR.
2. DEFINITIONS FOR SYMBOLS SHOWN ARE AS FOLLOWS:
   - ▲ INPUT FROM ANOTHER FIGURE
   - ■ OUTPUT TO ANOTHER FIGURE
3. REFER TO TABLE 5-3 FOR CIRCUIT CARD LOCATIONS.
4. REFER TO DATA COMMUNICATIONS POWER DISTRIBUTION DIAGRAM FOR DC POWER AND GROUND CIRCUITS.
5. THIS DIAGRAM IS FOR MODEM NO. 1 ONLY; CIRCUIT IS COMMON TO ALL MODEMS. REFER TO MODEM INTERCONNECT FOR CORRESPONDING MODEM MNEMONICS.
6. INTRA-MODEM CONNECTIONS ARE IDENTIFIED; REFER TO MODEM INTERCONNECT FOR INDIVIDUAL MODEM INPUTS AND OUTPUTS.

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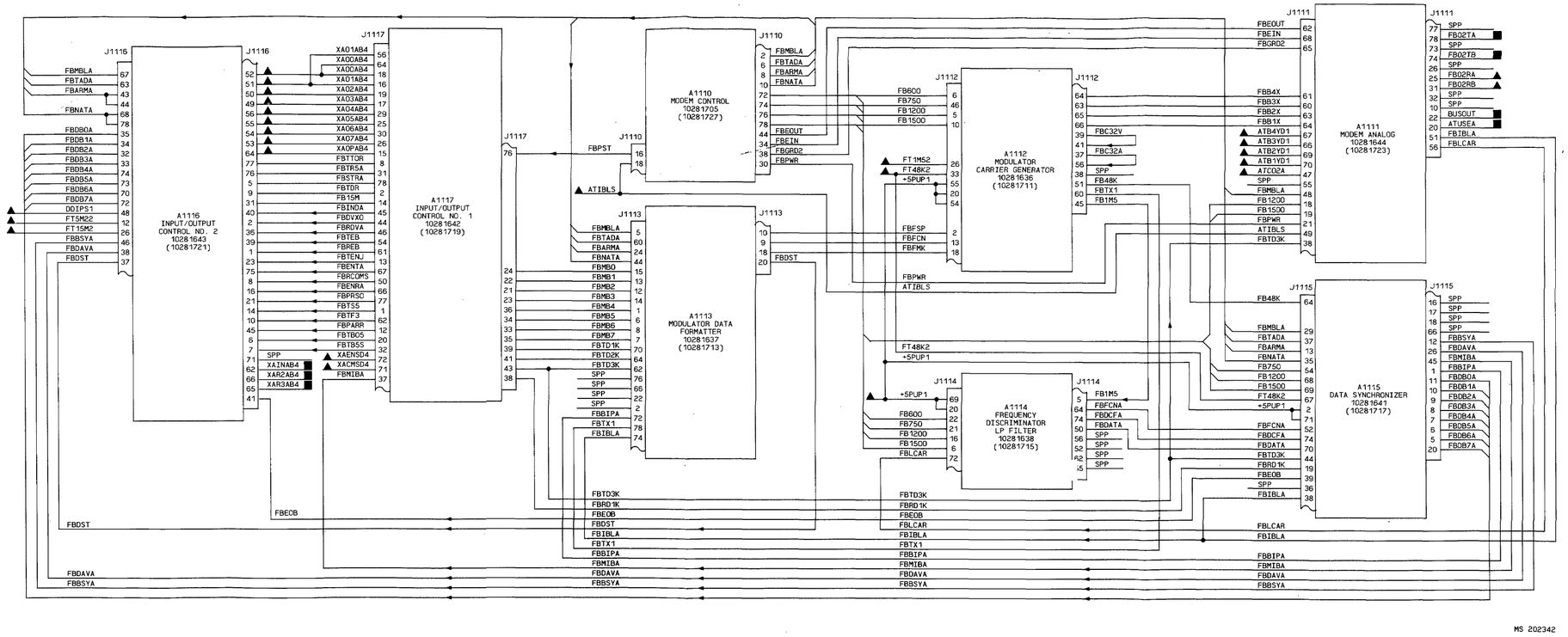
FO-1. Modem Interconnect Diagram (Sheet 1 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A5	J1136-40		8	
ATB2YD1		J1136-41			
ATB3YD1		J1136-42			
ATB4YD1		J1136-43			
ATC02A		J1136-66			
ATIBLS		J1136-50		8	
DDIPS1		J1-13		12	1
FA02RA		J2-10		10	1
FA02RB		J2-11		10	1
FT1M52		J1134-30	A1134-TP15A	9	
FT15M2		J1134-60	A1134-TP28A		
FT48K2		J1134-14	A1134-TP9A		
FTSM22		J1134-46	A1134-TP21A	9	
XACMSD4		J1135-37		11	1
XAENSD4		J1135-35			
XA0PAB4		J1135-1			
XA0DAB4		J1135-3			
XA01AB4		J1135-5			
XA02AB4		J1135-7			
XA03AB4		J1135-9			
XA04AB4		J1135-11			
XA05AB4		J1135-13			
XA06AB4		J1135-15			
XA07AB4		J1135-17		11	1
+5PUP1	1A1A2A5	J1101-75		12	2

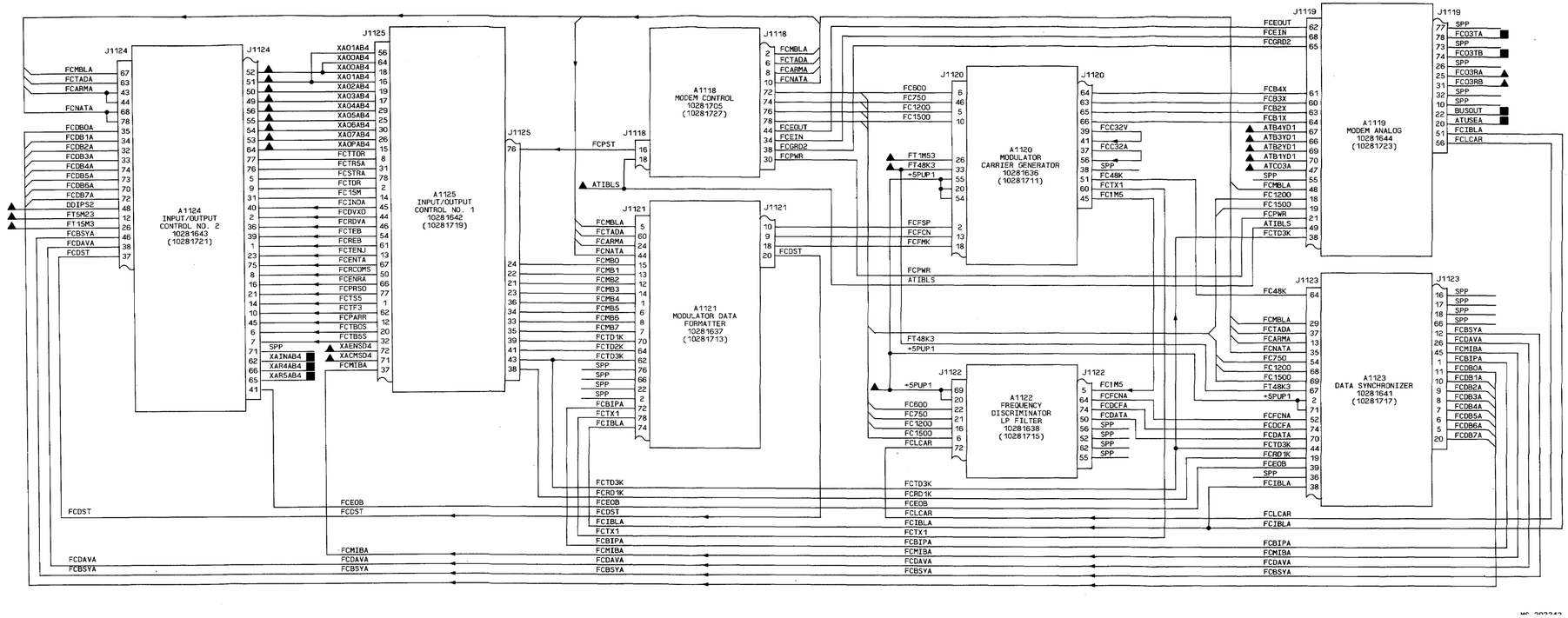
OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A5	J1136-44		8	
BUSOUT		J1136-25		8	
FB02TA		J2-7		10	1
FB02TB		J2-8		10	1
XAINAB4		J1135-39		11	1
XAR2AB4		J1135-23		11	1
XAR3AB4	1A1A2A5	J1135-25		11	1



FO-1. Modem Interconnect Diagram (Sheet 2 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A5	J1136-40		8	
ATB2YD1		J1136-41			
ATB3YD1		J1136-42			
ATB4YD1		J1136-43			
ATC03A		J1136-67			
ATIBLS		J1136-50		8	
DDIPS2		J1-66		12	1
FC03RA		J2-16		10	1
FC03RA		J2-17		10	1
FT1MS3		J1134-33	A1134-TP16B	9	
FT15M3		J1134-57	A1134-TP30B		
FT48K3		J1134-21	A1134-TP10B		
FT5M23		J1134-45	A1134-TP24B	9	
XACMSD4		J1135-37		11	1
XAENSD4		J1135-35			
XAOPAB4		J1135-1			
XAO0AB4		J1135-3			
XAO1AB4		J1135-5			
XAO2AB4		J1135-7			
XAO3AB4		J1135-9			
XAO4AB4		J1135-11			
XAO5AB4		J1135-13			
XAO6AB4		J1135-15		11	1
XAO7AB4		J1135-17		12	2
+5PUP1	1A1A2A5	J1101-75			

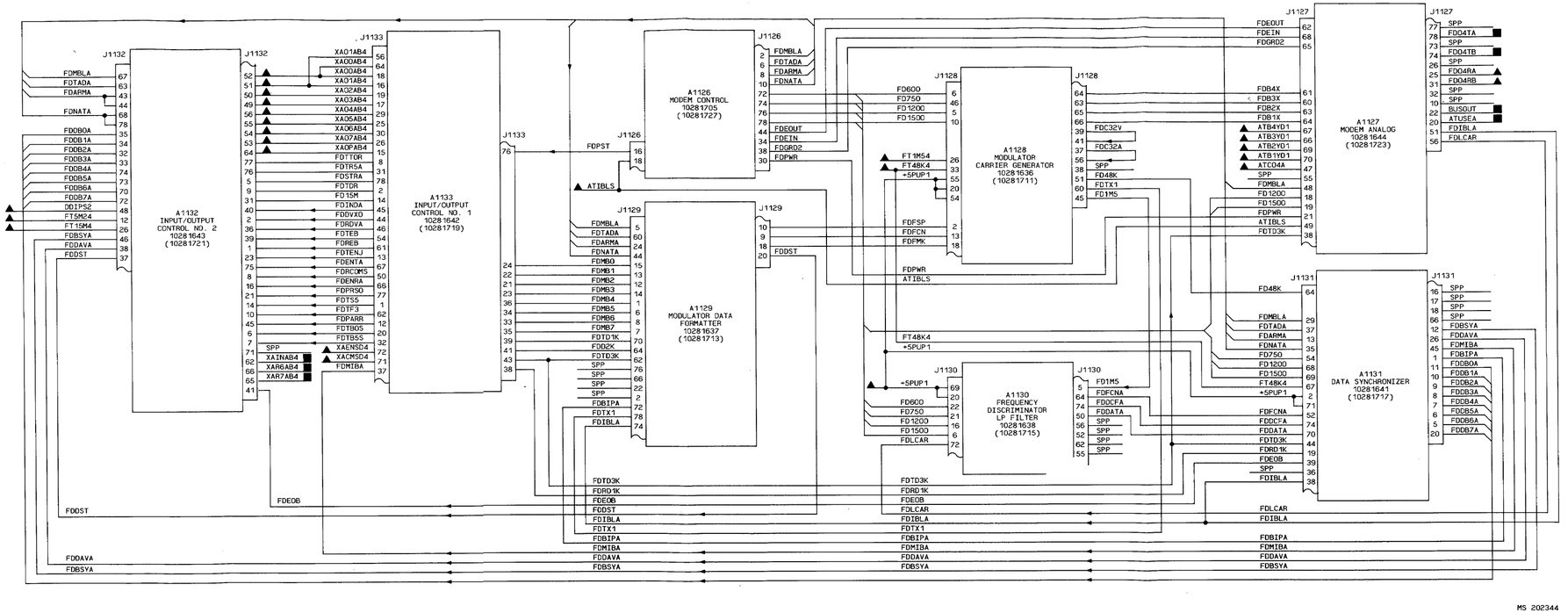
OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A5	J1136-44		8	
BUSOUT		J1136-25		8	
FC03TA		J2-13		10	1
FC03TB		J2-14		10	1
XAINAB4		J1135-39		11	1
XAR4AB4		J1135-27		11	1
XAR5AB4	1A1A2A5	J1135-29		11	1



FO-1. Modem Interconnect Diagram (Sheet 3 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A5	J1136-40		8	
ATB2YD1		J1136-41			
ATB3YD1		J1136-42			
ATB4YD1		J1136-43			
ATC04A		J1136-68			
ATIBLS		J1136-50		8	
DDIPS2		J1-66		12	1
FD04RA		J2-22		10	1
FD04RB		J2-23		10	1
FT1M54		J1134-39	A1134-TP19B	9	
FT15M4		J1134-63	A1134-TP33B		
FT48K4		J1134-27	A1134-TP13B		
FT5M24		J1134-51	A1134-TP27B	9	
XACMSD4		J1135-37		11	1
XAENSD4		J1135-35			
XAOPAB4		J1135-1			
XAO0AB4		J1135-3			
XAO1AB4		J1135-5			
XAO2AB4		J1135-7			
XAO3AB4		J1135-9			
XAO4AB4		J1135-11			
XAO5AB4		J1135-13			
XAO6AB4		J1135-15			
XAO7AB4		J1135-17		11	1
+5PUP1	1A1A2A5	J1101-75		12	2

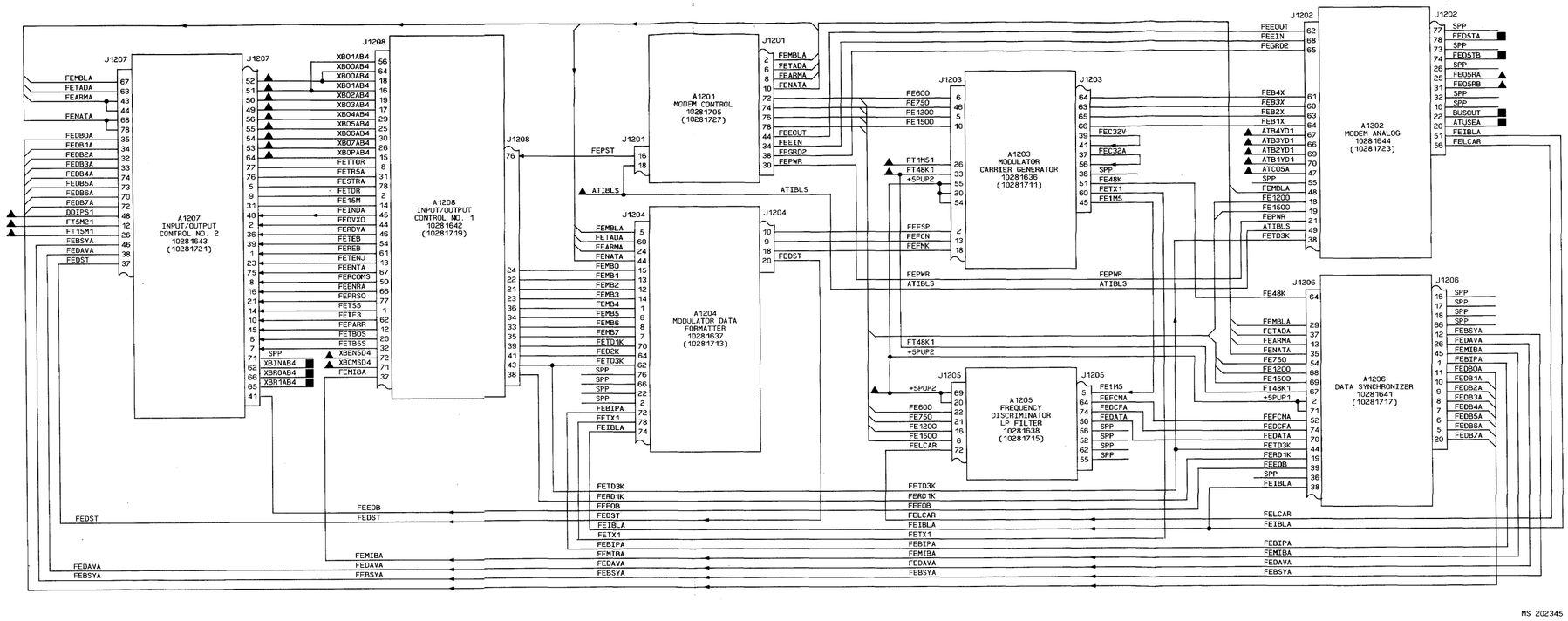
OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A5	J1136-44		8	
BUSOUT		J1136-25		8	
FD04TA		J2-19		10	1
FD04TB		J2-20		10	1
XAINAB4		J1135-39		11	1
XAR6AB4		J1135-31		11	1
XAR7AB4	1A1A2A5	J1135-33		11	1



FO-1. Modem Interconnect Diagram (Sheet 4 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A5	J1136-40		8	
ATB2YD1		J1136-41		|	|
ATB3YD1		J1136-42		|	|
ATB4YD1		J1136-43		|	|
ATC05A		J1136-59		|	|
ATIBLS		J1136-50		8	
DDIPS1		J1-13		12	1
FE05RA		J2-26		10	2
FE05RB		J2-29		10	2
FT1M51		J1134-38	A1134-TP18A	9	
FT15M1		J1134-66	A1134-TP31A	|	|
FT48K1		J1134-22	A1134-TP12A	|	|
FT5M21		J1134-52	A1134-TP24A	9	
XBCMSD4		J1135-77		11	1
XBENSD4		J1135-75		|	|
XBOPAB4		J1135-41		|	|
XB00AB4		J1135-43		|	|
XB01AB4		J1135-45		|	|
XB02AB4		J1135-47		|	|
XB03AB4		J1135-49		|	|
XB04AB4		J1135-51		|	|
XB05AB4		J1135-53		|	|
XB06AB4		J1135-55		|	|
XB07AB4		J1135-57		11	1
+5PUP2	1A1A2A5	J1101-76		12	2

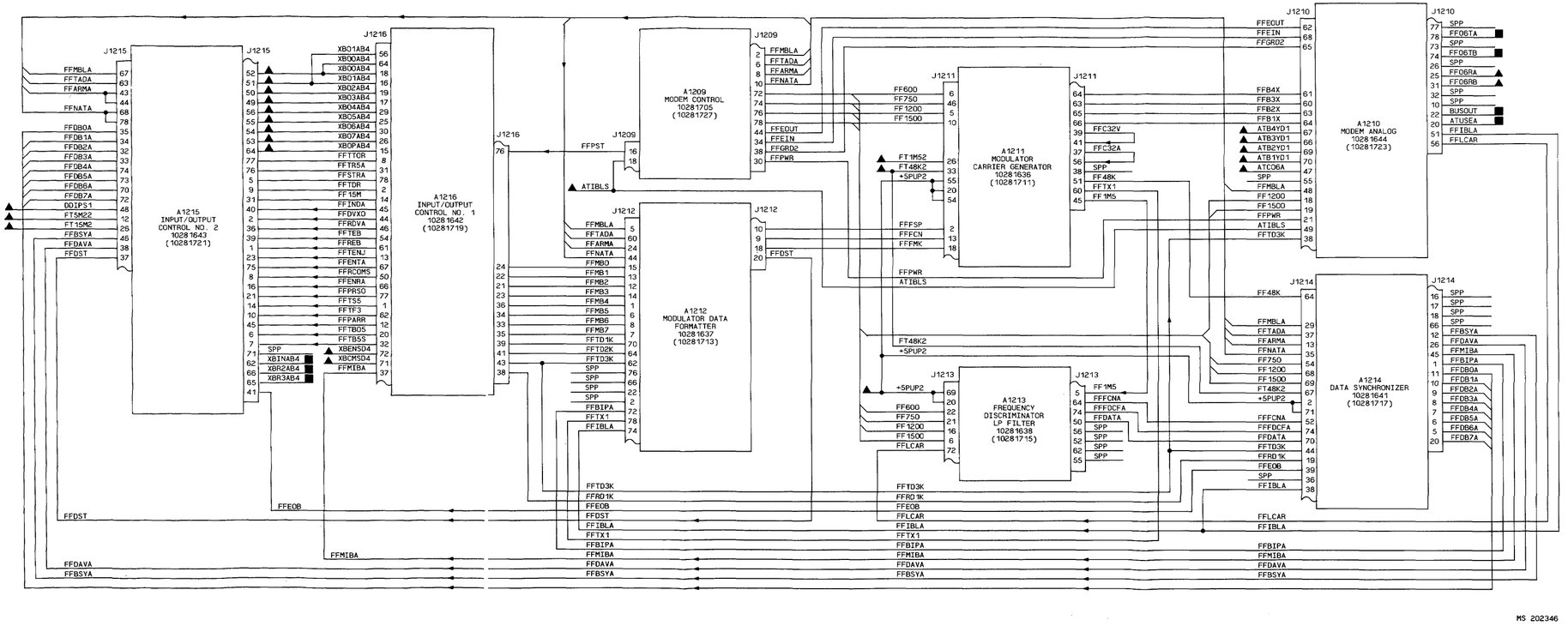
OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A5	J1136-44		8	
BUSOUT		J1136-25		8	
FE05TA		J2-25		10	2
FE05TB		J2-26		10	2
XBINAB4		J1135-79		11	1
XBR0AB4		J1135-59		11	1
XBR1AB4	1A1A2A5	J1135-61		11	1



FO-1. Modem Interconnect Diagram (Sheet 5 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A5	J1136-40		8	
ATB2YD1		J1136-41			
ATB3YD1		J1136-42			
ATB4YD1		J1136-43			
ATC06A		J1136-70			
ATIBLS		J1136-50		8	
DDIPS1		J1-13		12	1
FF06RA		J2-34		10	2
FF06RB		J2-35		10	2
FT1M52		J1134-30	A1134-TP15A	9	
FT15M2		J1134-60	A1134-TP28A		
FT48K2		J1134-14	A1134-TP9A		
FT5M22		J1134-46	A1134-TP21A	9	
XBCMSD4		J1135-77		11	1
XBENSD4		J1135-75			
XBOPAB4		J1135-41			
XBO0AB4		J1135-43			
XBO1AB4		J1135-45			
XBO2AB4		J1135-47			
XBO3AB4		J1135-49			
XBO4AB4		J1135-51			
XBO5AB4		J1135-53			
XBO6AB4		J1135-55		11	1
XBO7AB4		J1135-57		11	1
+5PUP1	1A1A2A5	J1101-76		12	2

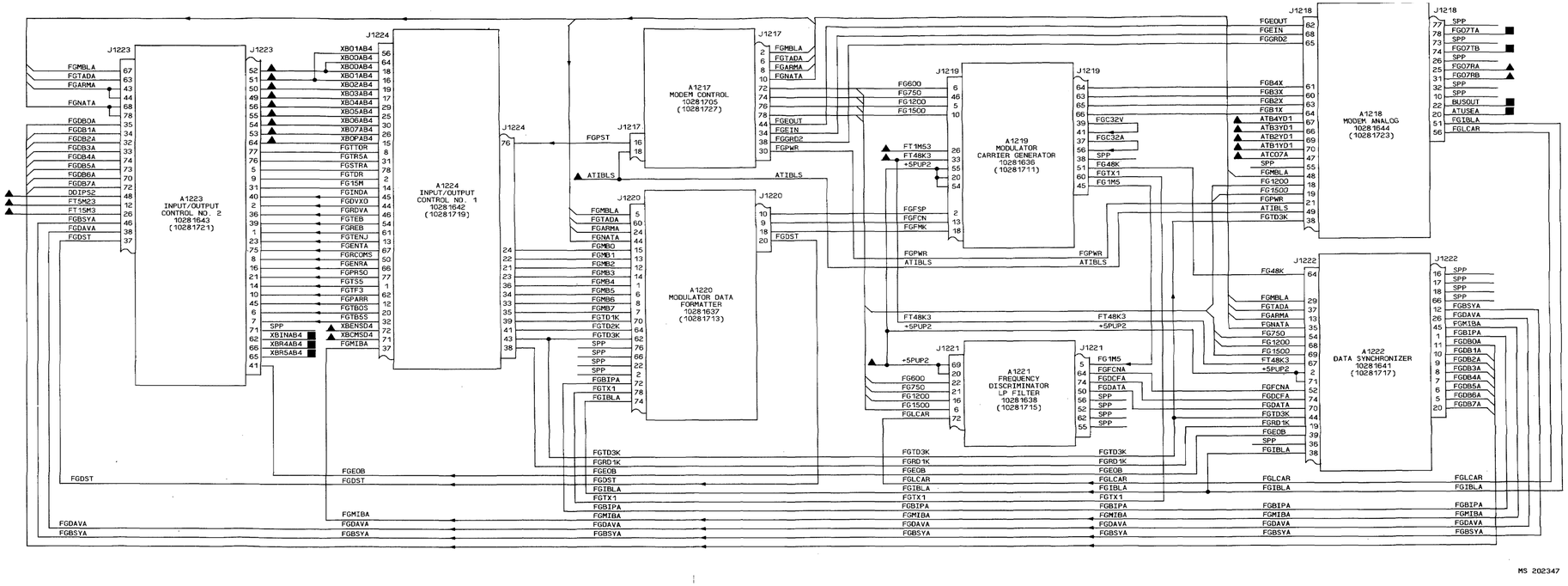
OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A5	J1136-44		8	
BUSOUT		J1136-25		8	
FF06TA		J2-31		10	2
FF06TB		J2-32		10	2
XBINAB4		J1135-79		11	1
XBR2AB4		J1135-63		11	1
XBR3AB4	1A1A2A5	J1135-65		11	1



FO-1. Modem Interconnect Diagram (Sheet 6 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A5	J1136-40		8	
ATB2YD1		J1136-41			
ATB3YD1		J1136-42			
ATB4YD1		J1136-43			
ATC07A		J1136-71			
ATIBLS		J1136-50		8	
DDIPS2		J1-66		12	1
FGD7RA		J2-40		10	2
FGD7RB		J2-41		10	2
FT1M53		J1134-33	A1134-TP16B	9	
FT15M3		J1134-57	A1134-TP30B		
FT48K3		J1134-21	A1134-TP10B		
FT5P23		J1134-45	A1134-TP24B	9	
XBCMSD4		J1135-77		11	1
XBENSD4		J1135-75			
XB0PAB4		J1135-41			
XB0QAB4		J1135-43			
XB01AB4		J1135-45			
XB02AB4		J1135-47			
XB03AB4		J1135-49			
XB04AB4		J1135-51			
XB05AB4		J1135-53			
XB06AB4		J1135-55			
XB07AB4		J1135-57		11	1
+5PUP2	1A1A2A5	J1101-76		12	2

OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A5	J1136-44		8	
BUSOUT		J1136-25		8	
FGQ7TA		J2-37		10	2
FGQ7TB		J2-38		10	2
XB1NAB4		J1135-79		11	1
XBR4AB4		J1135-67		11	1
XBR5AB4	1A1A2A5	J1135-69		11	1



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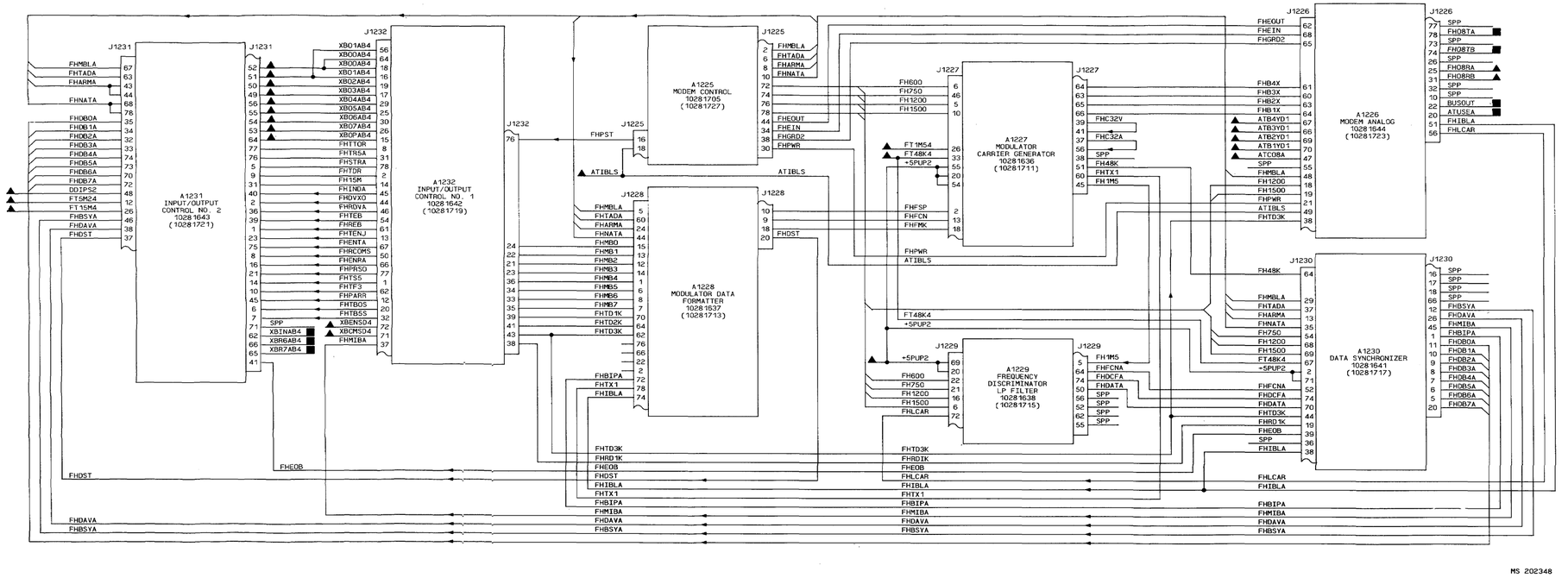
FO-1. Modem Interconnect Diagram (Sheet 7 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A5	J1136-40		8	
ATB2YD1		J1136-41		|	
ATB3YD1		J1136-42		|	
ATB4YD1		J1136-43		|	
ATC08A		J1136-72		|	
ATIBLS		J1136-50		8	
DDIPS2		J1-65		12	1
FH08RA		J2-46		10	2
FH08RB		J2-47		10	2
FT1M54		J1134-39	A1134-TP19B	9	
FT15M4		J1134-63	A1134-TP33B	|	
FT48K4		J1134-27	A1134-TP13B	|	
FT5M24		J1134-51	A1134-TP27B	9	
XBCMSD4		J1135-77		11	1
XBENSD4		J1135-75		|	|
XBOPAB4		J1135-41		|	|
XB00AB4		J1135-43		|	|
XB01AB4		J1135-45		|	|
XB02AB4		J1135-47		|	|
XB03AB4		J1135-49		|	|
XB04AB4		J1135-51		|	|
XB05AB4		J1135-53		|	|
XB06AB4		J1135-55		|	|
XB07AB4		J1135-57		11	1
+5PUP2	1A1A2A5	J1101-76		12	2

OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A5	J1136-44		8	
BUSOUT		J1136-25		8	
FH08TA		J2-43		10	2
FH08TB		J2-44		10	2
XB1NAB4		J1135-79		11	1
XBR6AB4		J1135-71		11	1
XBR7AB4	1A1A2A5	J1135-73		11	1



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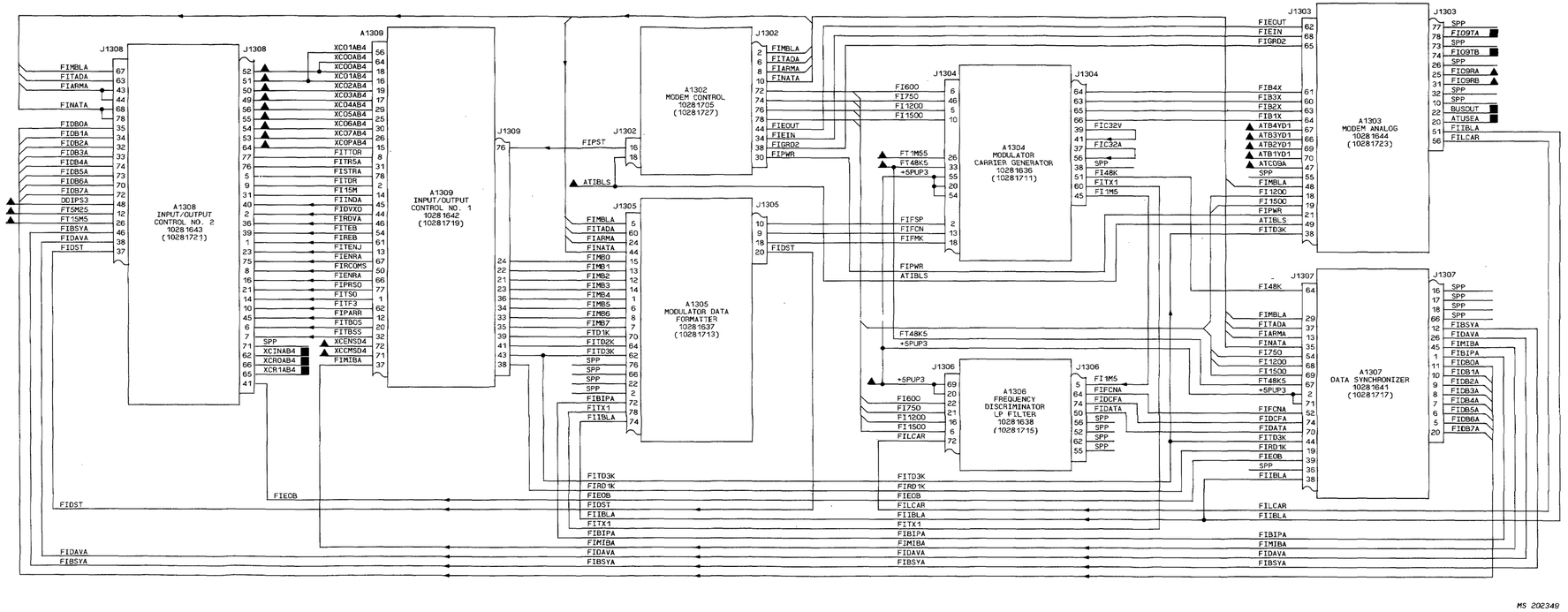
FO-1. Modem Interconnect Diagram (Sheet 8 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A5	J1136-40		8	
ATB2YD1		J1136-41			
ATB3YD1		J1136-42			
ATB4YD1		J1136-43			
ATC09A		J1136-73			
ATIBLS		J1136-50		8	
DDIPS3		J3-13		12	1
FIO9RA		J4-4		10	3
FIO9RB		J4-5		10	3
FT1M55		J1334-38	A1334-TP18A	9	
FT15M5		J1334-66	A1334-TP31A		
FT48K5		J1334-22	A1334-TP12A		
FT5M25		J1334-52	A1334-TP24A	9	
XCCMSD4		J1335-37		11	1
XCENSD4		J1335-35			
XCOPAB4		J1335-1			
XCOOAB4		J1335-3			
XCO1AB4		J1335-5			
XCO2AB4		J1335-7			
XCO3AB4		J1335-9			
XCO4AB4		J1335-11			
XCO5AB4		J1335-13			
XCO6AB4		J1335-15			
XCO7AB4		J1335-17		11	1
+5PUP3	1A1A2A5	J1101-79		12	2

OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A5	J1136-44		8	
BUSOUT		J1136-25		8	
FIO9TA		J4-1		10	3
FIO9TB		J4-2		10	3
XCINAB4		J1335-39		11	1
XCROAB4		J1335-5		11	1
XCR1AB4	1A1A2A5	J1335-21		11	1



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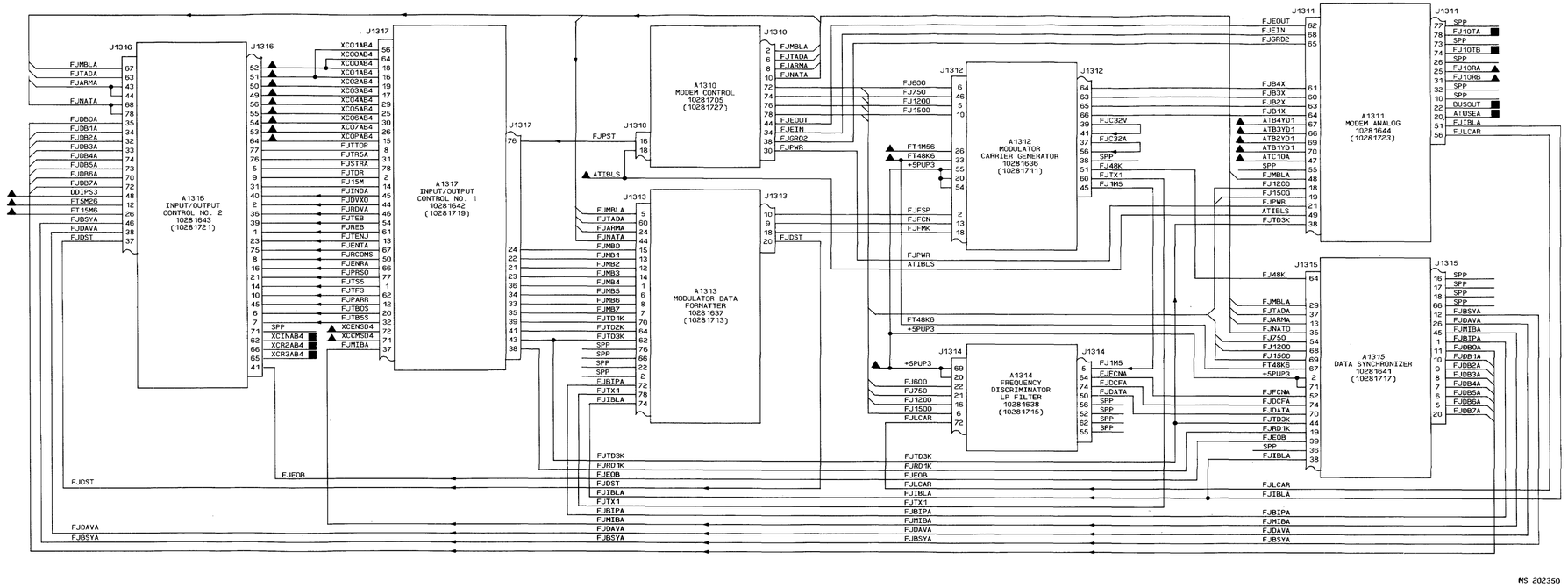
FO-1. Modem Interconnect Diagram (Sheet 9 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A5	J1136-40		8	
ATB2YD1		J1136-41			
ATB3YD1		J1136-42			
ATB4YD1		J1136-43			
ATC10A		J1136-74			
ATIBLS		J1136-50		8	
CDIPS3		J3-13		12	1
FJ10RA		J4-10		10	3
FJ10RB		J4-11		10	3
FT1M56		J1334-30	A1134-TP15A	9	
FT15M6		J1334-60	A1134-TP28A		
FT48K6		J1334-14	A1134-TP9A		
FT5M26		J1334-46	A1134-TP21A	9	
XCCMSD4		J1335-37		11	1
XCENSD4		J1335-35			
XCOPAB4		J1335-1			
XCO0AB4		J1335-3			
XCO1AB4		J1335-5			
XCO2AB4		J1335-7			
XCO3AB4		J1335-9			
XCO4AB4		J1335-11			
XCO5AB4		J1335-13			
XCO6AB4		J1335-15			
XCO7AB4		J1335-17		11	1
+5UP3	1A1A2A5	J1101-79		12	2

OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A5	J1138-44		8	
BUSOUT		J1138-25		8	
FJ10TA		J4-7		10	3
FJ10TB		J4-8		10	3
XCINAB4		J1335-39		11	1
XCR2AB4		J1335-23		11	1
XCR3AB4	1A1A2A5	J1335-25		11	1



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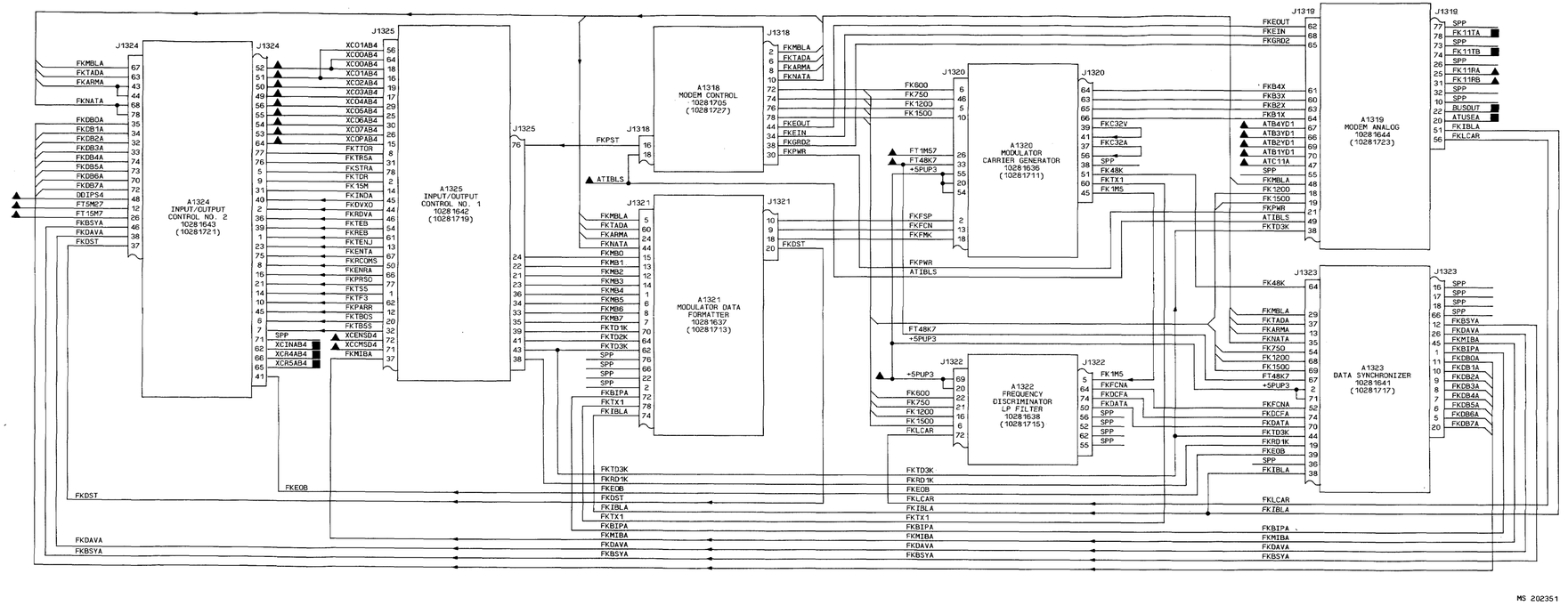
FO-1. Modem Interconnect Diagram (Sheet 10 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A5	J1136-40		8	
ATB2YD1		J1136-41			
ATB3YD1		J1136-42			
ATB4YD1		J1136-43			
ATC11A		J1136-75			
ATIBLS		J1136-50		8	
DDIPS4		J3-66		12	1
FK11RA		J4-16 10			3
FK11RB		J4-17		10	3
FT1M57		J1334-33	A1334-TP16B	9	
FT15M7		J1334-57	A1334-TP30B		
FT48K7		J1334-21	A1334-TP10B		
FT5M27		J1334-45	A1334-TP24B	9	
XCCMSD4		J1335-37		11	1
XCENSD4		J1335-35			
XCOPAB4		J1335-1			
XC00AB4		J1335-3			
XC01AB4		J1335-5			
XC02AB4		J1335-7			
XC03AB4		J1335-9			
XC04AB4		J1335-11			
XC05AB4		J1335-13			
XC06AB4		J1335-15			
XC07AB4		J1335-17		11	1
+5PUP3	1A1A2A5	J1101-79		12	2

OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A5	J1136-44		8	
BUSOUT		J1136-25		8	
FK11TA		J4-13		10	3
FK11TB		J4-14		10	3
XCINAB4		J1335-39		11	1
XCR4AB4		J1335-27		11	1
XCR5AB4	1A1A2A5	J1335-29		11	1



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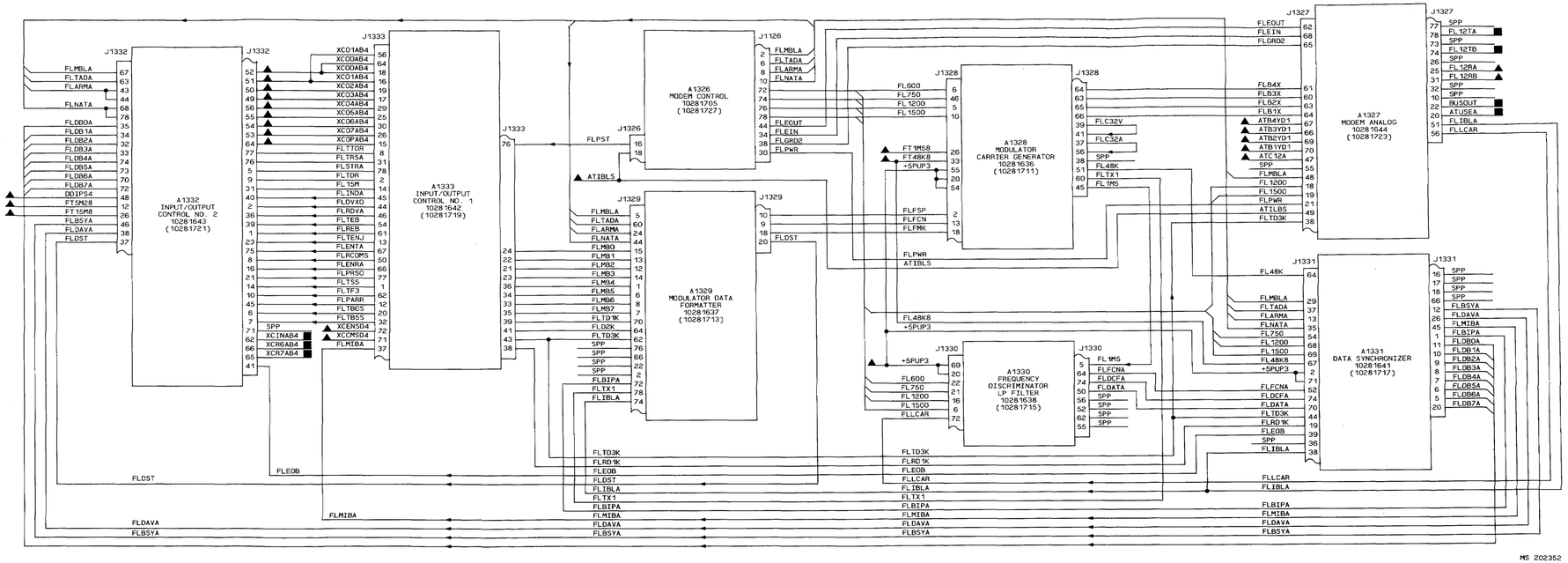
FO-1. Modem Interconnect Diagram (Sheet 11 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A5	J1136-40		8	
ATB2YD1		J1136-41			
ATB3YD1		J1136-42			
ATB4YD1		J1136-43			
ATC12A		J1136-76			
ATIBLS		J1136-50		8	
DDIP54		J3-66		12	1
FL12RA		J4-22		10	3
FL12RB		J4-23		10	3
FT1M58		J1334-39	A1334-TP19B	9	
FT15M8		J1334-63	A1334-TP33B		
FT48K8		J1334-27	A1334-TP13B		
FT5M28		J1334-51	A1334-TP27B	9	
XCCMSD4		J1335-37		11	1
XCENSD4		J1335-35			
XC0PAB4		J1335-1			
XC00AB4		J1335-3			
XC01AB4		J1335-5			
XC02AB4		J1335-7			
XC03AB4		J1335-9			
XC04AB4		J1335-11			
XC05AB4		J1335-13			
XC06AB4		J1335-15			
XC7AB4		J1335-17		11	1
+5PUP3	1A1A2A5	J1101-79		12	2

OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A5	J1136-44		8	
BUSOUT		J1136-25		8	
FL12TA		J4-19		10	3
FL12TB		J4-20		10	3
XCINAB4		J1335-39		11	1
XCR6AB4		J1335-31		11	1
XCR7AB4	1A1A2A5	J1335-33		11	1



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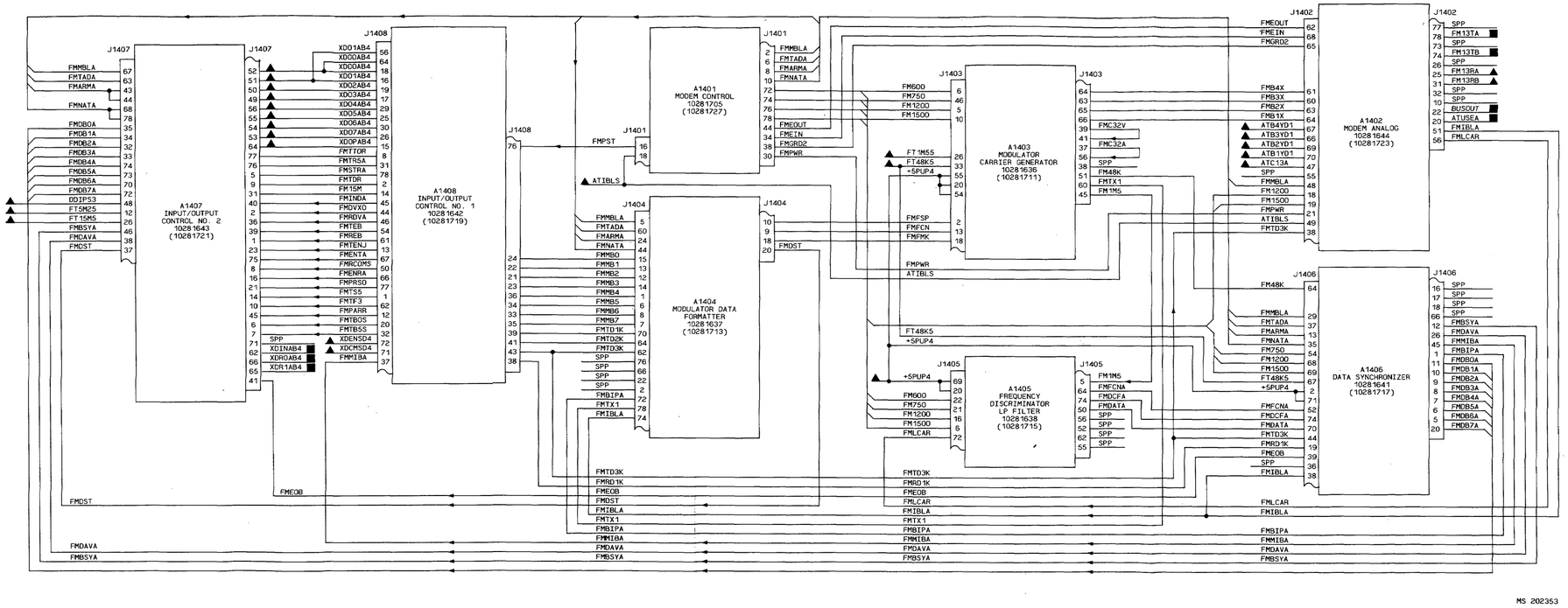
FO-1. Modem Interconnect Diagram (Sheet 12 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
TB1YD1	1A1A2A5	J1136-40		8	
ATB2YD1		J1136-41		|	
ATB3YD1		J1136-42		|	
ATB4YD1		J1136-43		|	
ATC13A		J1136-77		|	
ATIBLS		J1136-50		8	
DDIPS3		J3-13		12	1
FM13RA		J4-28		10	4
FM13RB		J4-29		10	4
FT1M55		J1334-38	A1334-TP18A	9	
FT15M5		J1334-66	A1334-TP31A	|	
FT48K5		J1334-22	A1334-TP12A	|	
FT5M25		J1334-52	A1334-TP24A	9	
XDCMSD4		J1335-77		11	1
XDENSD4		J1335-75		|	|
XDOPAB4		J1335-41		|	|
XDOOAB4		J1335-43		|	|
XDO1AB4		J1335-45		|	|
XDO2AB4		J1335-47		|	|
XDO3AB4		J1335-49		|	|
XDO4AB4		J1335-51		|	|
XDO5AB4		J1335-53		|	|
XDO6AB4		J1335-55		|	|
XDO7AB4		J1335-57		11	1
+5PUP4	1A1A2A5	J1101-80		12	2

OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A5	J1136-44		8	
BUSOUT		J1136-25		8	
FM13TA		J4-25		10	4
FM13TB		J4-26		10	4
XDINAB4		J1335-79		11	1
XDROAB4		J1335-59		11	1
XDR1AB4	1A1A2A5	J1335-61		11	1



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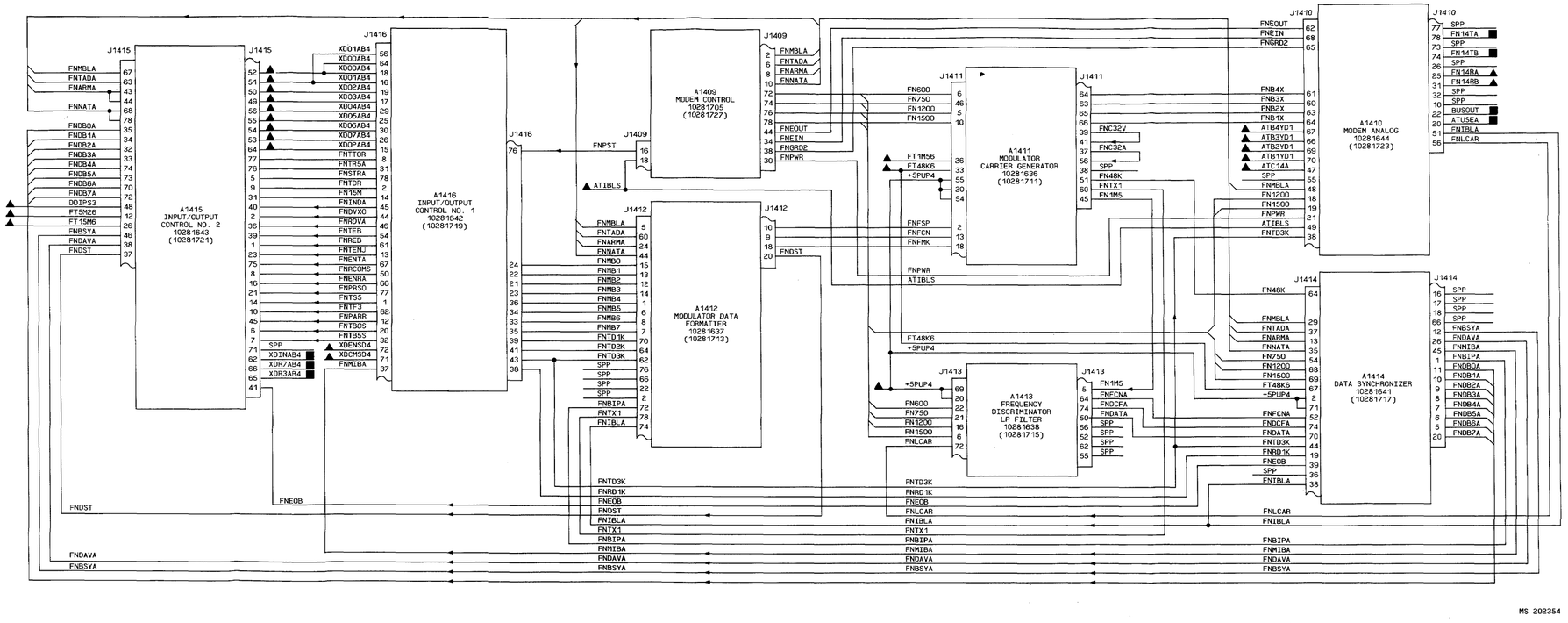
FO-1. Modem Interconnect Diagram (Sheet 13 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A5	J1136-40		8	
ATB2YD1		J1136-41			
ATB3YD1		J1136-42			
ATB4YD1		J1136-43			
ATC14A		J1136-78			
ATIBLS		J1136-50		8	
DDIPS3		J3-13		12	1
FN14RA		J4-34		10	4
FN14RB		J4-35		10	4
FT1M56		J1334-30	A1334-TP15A	9	
FT15M6		J1334-60	A1334-TP28A		
FT48K6		J1334-14	A1334-TP9A		
FT5M26		J1334-46	A1334-TP21A	9	
XDCMSD4		J1335-77		11	1
XDENSD4		J1335-75			
XDOPAB4		J1335-41			
XDO0AB4		J1335-43			
XDO1AB4		J1335-45			
XDO2AB4		J1335-47			
XDO3AB4		J1335-49			
XDO4AB4		J1335-51			
XDO5AB4		J1335-53			
XDO6AB4		J1335-55			
XDO7AB4		J1335-57		11	1
+5PUP4	1A1A2A5	J1101-80		12	2

OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A5	J1136-44		8	
BUSOUT		J1136-25		8	
FN14TA		J4-31		10	4
FN14TB		J4-32		10	4
XDINAB4		J1335-79		11	1
XDR2AB4		J1335-63		11	1
XDR3AB4	1A1A2A5	J1335-65		11	1



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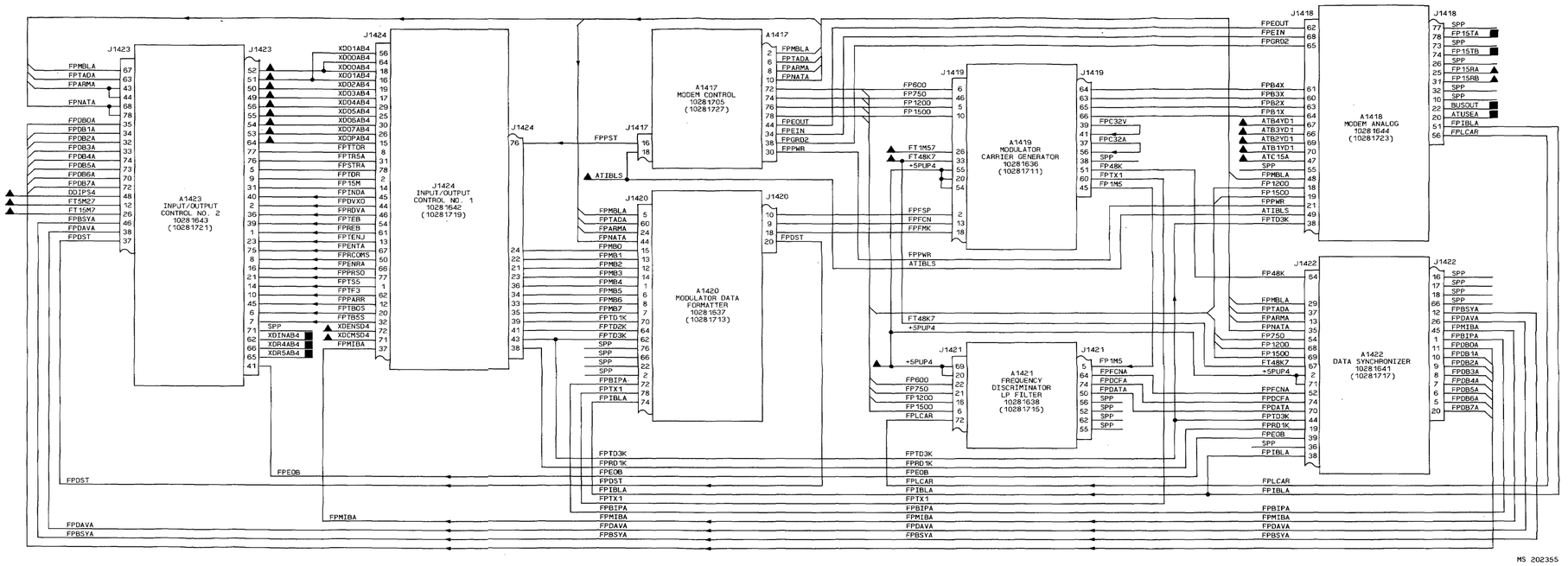
FO-1. Modem Interconnect Diagram (Sheet 14 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH
ATB1YD1	1A1A2A5	J1136-40		8	
ATB2YD1		J1136-41			
ATB3YD1		J1136-42			
ATB4YD1		J1136-43			
ATC15A		J1136-79			
ATIBLS		J1136-50		8	
DDIPS4		J3-66		12	1
FP15RA		J4-40		10	4
FP15RB		J4-41		10	4
FT1M57		J1334-33	A1334-TP16B	9	
FT15M7		J1334-57	A1334-TP30B		
FT48K7		J1334-21	A1334-TP10B		
FT5M27		J1334-45	A1334-TP24B	9	
XDCMSD4		J1335-77		11	1
XDENSD4		J1335-75			
XDOPAB4		J1335-41			
XDO0AB4		J1335-43			
XDO1AB4		J1335-45			
XDO2AB4		J1335-47			
XDO3AB4		J1335-49			
XDO4AB4		J1335-51			
XDO5AB4		J1335-53			
XDO6AB4		J1335-55			
XDO7AB4		J1335-57		11	1
+5PUP4	1A1A2A5	J1335-80		12	2

OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH
ATUSEA	1A1A2A5	J1136-44		8	
BUSOUT		J1136-25		8	
FP15TA		J4-37		10	4
FP15TB		J4-38		10	4
XDINAB4		J1335-39		11	1
XDRAAB4		J1335-67		11	1
XDR5AB4	1A1A2A5	J1335-69		11	1



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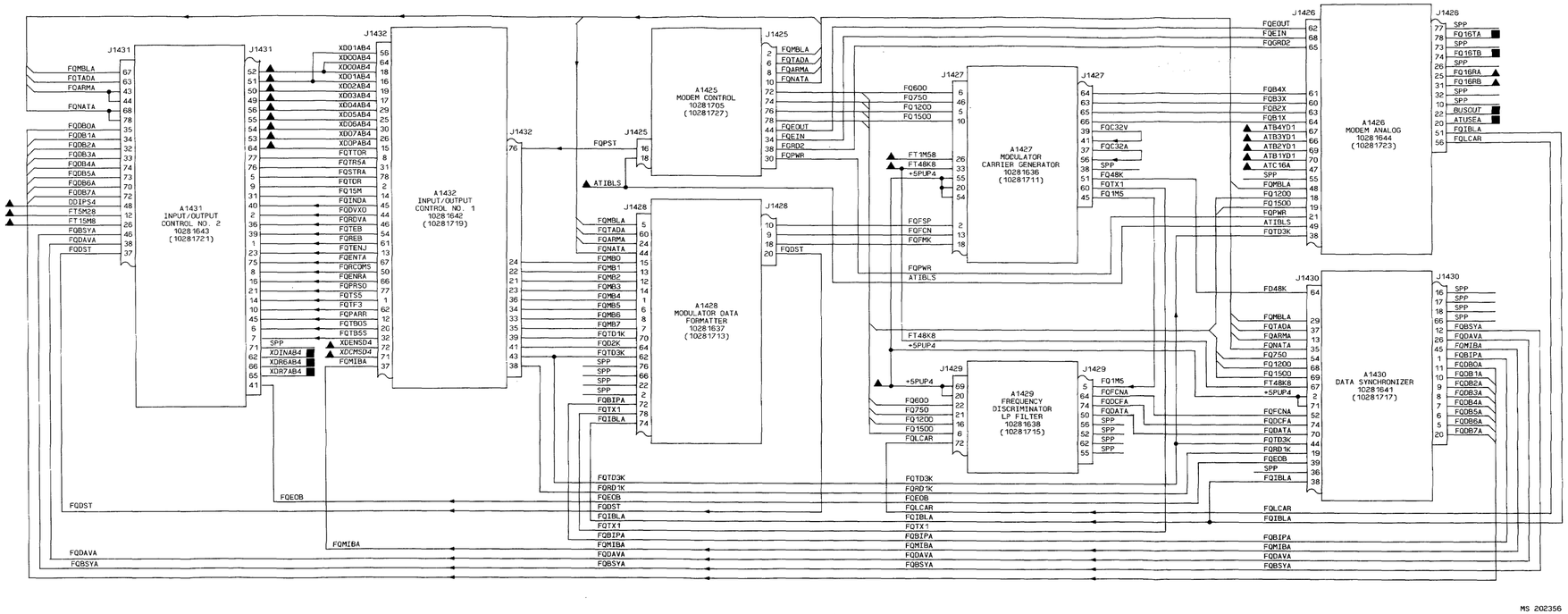
FO-1. Modem Interconnect Diagram (Sheet 15 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A5	J1136-40		8	
ATB2YD1		J1136-41			
ATB3YD1		J1136-42			
ATB4YD1		J1136-43			
ATC16A		J1136-80			
ATIBLS		J1136-50		8	
DDIPS4		J3-66		12	1
FQ16RA		J4-46		10	4
FQ16RB		J4-47		10	4
FT1M58		J1334-39	A1334-TP19B	9	
FT1M58		J1334-63	A1334-TP33B		
FT48K8		J1334-27	A1334-TP13B		
FT5M28		J1334-51	A1334-TP27B	9	
XDCMSD4		J1335-77		11	1
XDENSD4		J1335-75			
XDOPAB4		J1335-41			
XDO0AB4		J1335-43			
XDO1AB4		J1335-45			
XDO2AB4		J1335-47			
XDO3AB4		J1335-49			
XDO4AB4		J1335-51			
XDO5AB4		J1335-53			
XDO6AB4		J1335-55			
XDO7AB4		J1335-57		11	1
+5PUP4	1A1A2A5	J1101-80		12	2

OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A5	J1136-44		8	
BUSOUT		J1136-25		8	
FQ16TA		J4-43		10	4
FQ16TB		J4-44		10	4
XDINAB4		J1335-79		11	1
XDR6AB4		J1335-71		11	1
XDR7AB4	1A1A2A5	J1335-73		11	1

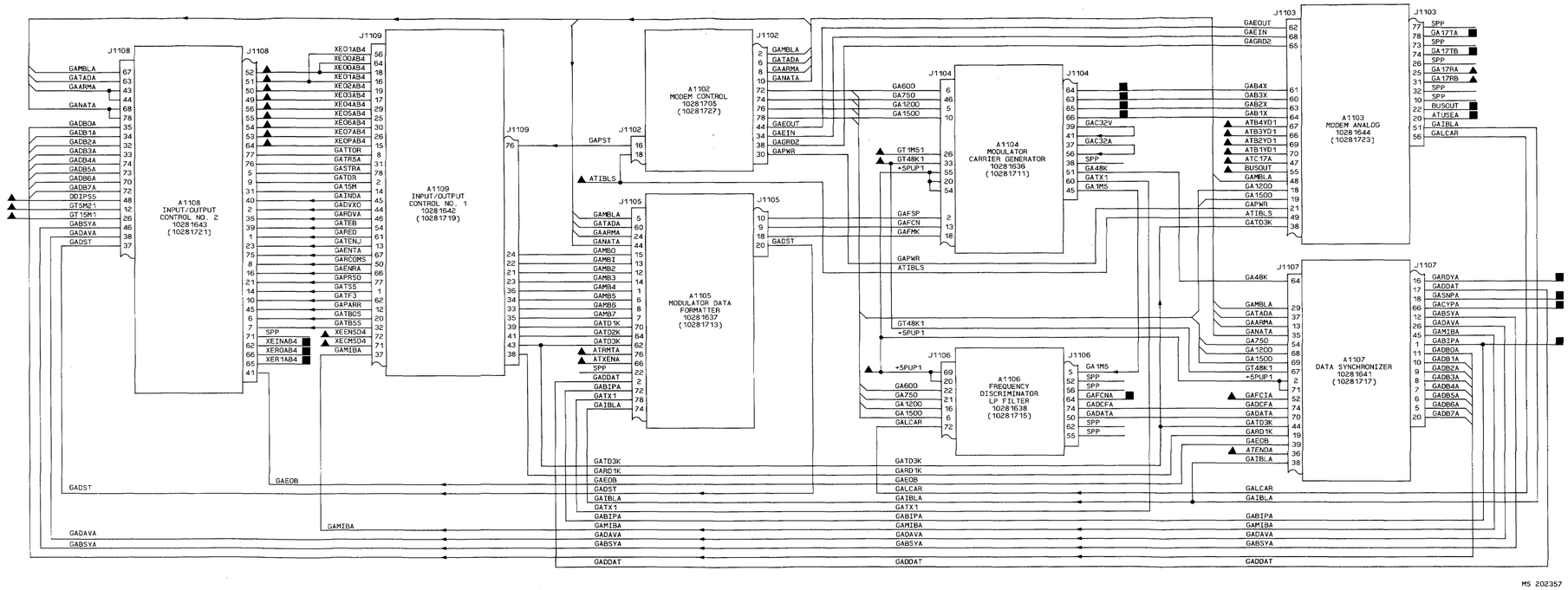


MS 202356

FO-1. Modem Interconnect Diagram (Sheet 16 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A7	J1136-8		8	
ATB2YD1		J1136-7			
ATB3YD1		J1136-6			
ATB4YD1		J1136-5			
ATC17A		J1136-65			
ATIBLS		J1136-37			
ATENDA		J1136-10			
ATRMTA		J1136-15			
ATXENA		J1136-25			
BUSOUT		J1136-17		8	
DDTP55		J1-13		12	1
GAFCIA		J1134-17		8	
GA17RA		J2-4		10	5
GA17RB		J2-5		10	5
GT1M51		J1134-38	A1134-TP18A	9	
GT15M1		J1134-66	A1134-TP31A		
GT48K1		J1134-22	A1134-TP12A		
GT5M21		J1134-52	A1134-TP24A	9	
XECMSD4		J1135-37		11	2
XEENSD4		J1135-35			
XE0PAB4		J1135-1			
XE00AB4		J1135-3			
XE01AB4		J1135-5			
XE02AB4		J1135-7			
XE03AB4		J1135-9			
XE04AB4		J1135-11			
XE05AB4		J1135-13			
XE06AB4		J1135-15			
XE07AB4		J1135-17		11	2
+5PUP1	1A1A2A7	J1101-75		12	2

OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A7	J1136-9		8	
BUSOUT		J1136-25			
GABIPA		J1136-11			
GAB1X		J1136-42			
GAB2X		J1136-41			
GAB3X		J1136-40			
GAB4X		J1136-39			
GACYPA		J1136-13			
GAFCNA		J1136-18			
GARDYA		J1136-12			
GASNPA		J1136-14		8	
GA17TA		J2-1		10	5
GA17TB		J2-2		10	5
XE1NAB4		J1135-39		11	2
XE1OAB4		J1135-19		11	2
XER1AB4	1A1A2A7	J1135-21		11	2



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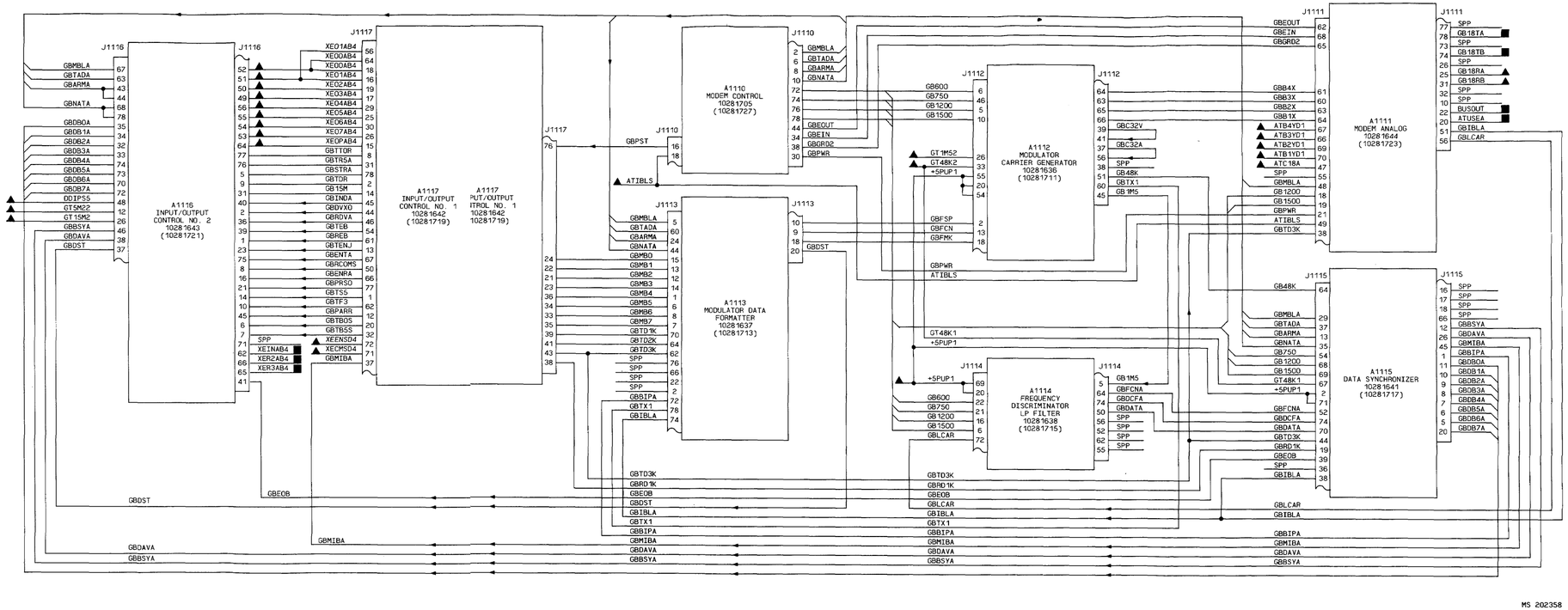
FO-1. Modem Interconnect Diagram (Sheet 17 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A7	J1136-8		8	
ATB2YD1		J1136-7			
ATB3YD1		J1136-6			
ATB4YD1		J1136-5			
ATC18A		J1136-66			
ATIBLS		J1136-37		8	
DDIPS5		J1-13		12	1
GB18RA		J2-10		10	5
GB18RB		J2-11		10	5
GT1MS2		J1134-30	A1134-TP15A	9	
GT15M2		J1134-60	A1134-TP28A		
GT48K2		J1134-14	A1134-TP9A		
GT5M22		J1134-46	A1134-TP21A	9	
XECMSD4		J1135-37		11	2
XEENSD4		J1135-35			
XEOFAB4		J1135-1			
XE00AB4		J1135-3			
XE01AB4		J1135-5			
XE02AB4		J1135-7			
XE03AB4		J1135-9			
XE04AB4		J1135-11			
XE05AB4		J1135-13			
XE06AB4		J1135-15			
XE07AB4		J1135-17		11	2
+5PUP1	1A1A2A7	J1101-75		12	2

OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A7	J1136-9		8	
BUSOUT		J1136-25		8	
GB18TA		J2-7		10	5
GB18TB		J2-8		10	5
XEINAB4		J1135-39		11	2
XER2AB4		J1135-23		11	2
XER3AB4	1A1A2A7	J1135-25		11	2



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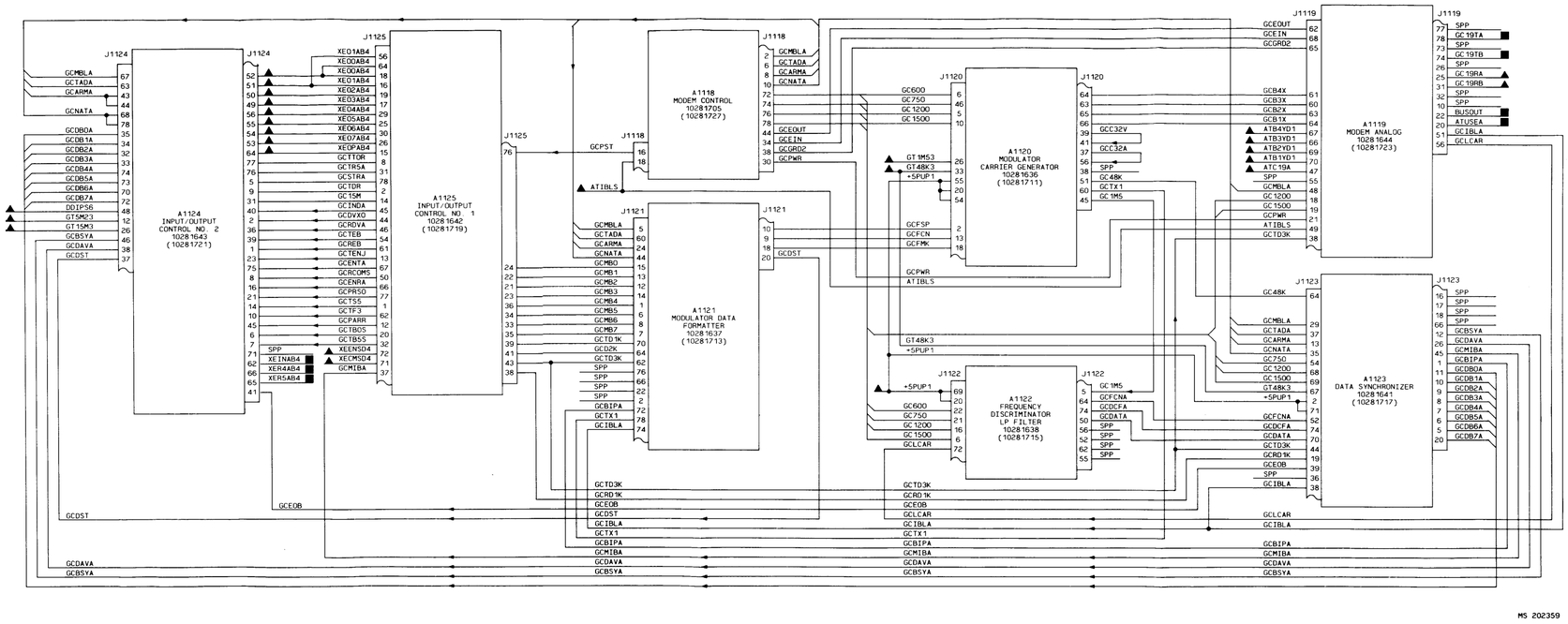
FO-1. Modem Interconnect Diagram (Sheet 18 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A7	J1136-8		8	
ATB2YD1		J1136-7			
ATB3YD1		J1136-6			
ATB4YD1		J1136-5			
ATC19A		J1136-67			
ATIBLS		J1136-37		8	
DDIPS6		J1-66		12	1
GC19RA		J2-16		10	5
GC19RB		J2-17		10	5
GT1M53		J1134-33	A1134-TP16B	9	
GT15M3		J1134-57	A1134-TP30B		
GT48K3		J1134-21	A1134-TP10B		
GTSM23		J1134-45	A1134-TP24B	9	
XECMSD4		J1135-37		11	2
XEENSD4		J1135-35			
XEOPAB4		J1135-1			
XEO0AB4		J1135-3			
XEO1AB4		J1135-5			
XEO2AB4		J1135-7			
XEO3AB4		J1135-9			
XEO4AB4		J1135-11			
XEO5AB4		J1135-13			
XEO6AB4		J1135-15			
XEO7AB4		J1135-17		11	2
+5PUP1	1A1A2A7	J1101-75		12	2

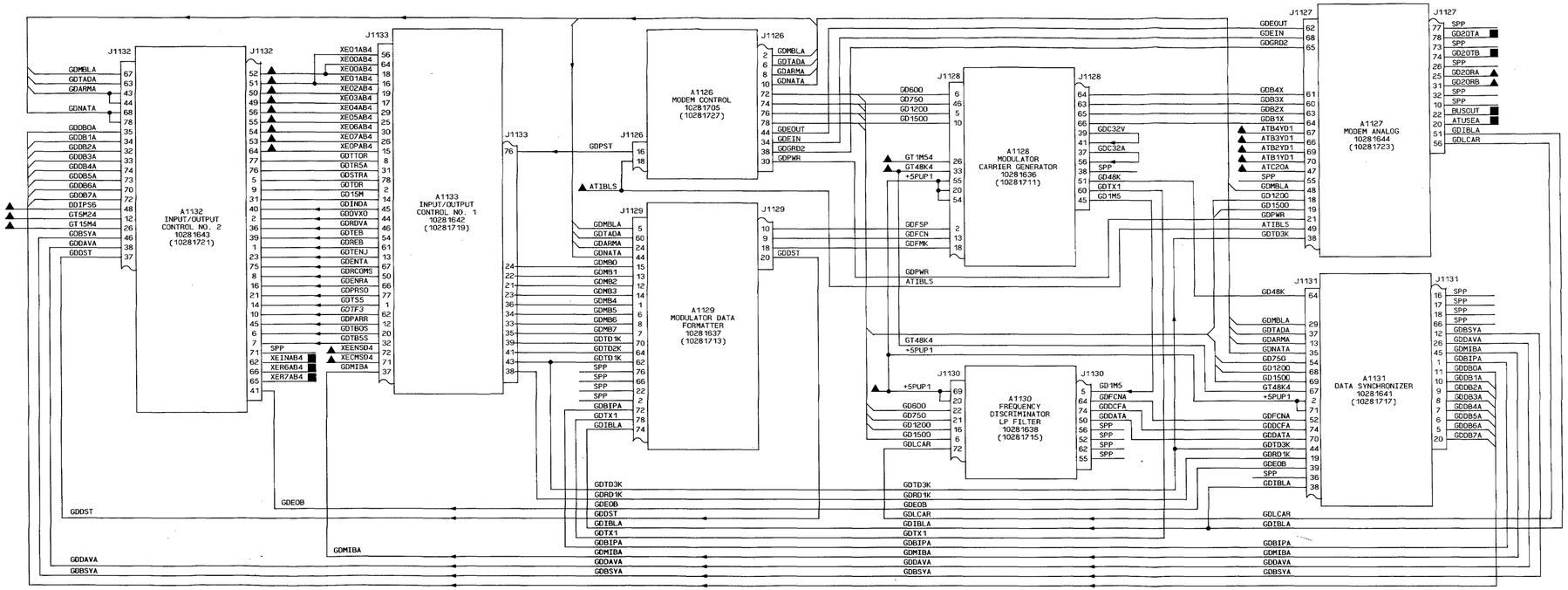
OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A7	J1136-9		8	
BUSOUT		J1136-25		8	
GC19TA		J2-13		10	5
GC19TB		J2-14		10	5
XEINAB4		J1135-39		11	2
XER4AB4		J1135-27		11	2
XER5AB4	1A1A2A7	J1135-29		11	2



FO-1. Modem Interconnect Diagram (Sheet 19 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A7	J1136-8		8	
ATB2YD1		J1136-7			
ATB3YD1		J1136-6			
ATB4YD1		J1136-5			
ATC20A		J1136-68			
ATIBLS		J1136-37		8	
DDIPS6		J1-66		12	1
GD20RA		J2-22		10	5
GD20RB		J2-23		10	5
GT1M54		J1134-39	A1134-TP19B	9	
GT15M4		J1134-63	A1134-TP33B		
GT48K4		J1134-27	A1134-TP13B		
GTSM24		J1134-51	A1134-TP27B	9	
XECMSD4		J1135-37		11	2
XEENSD4		J1135-35			
XEOPAB4		J1135-1			
XEO0AB4		J1135-3			
XE01AB4		J1135-5			
XE02AB4		J1135-7			
XE03AB4		J1135-9			
XE04AB4		J1135-11			
XE05AB4		J1135-13			
XE06AB4		J1135-15			
XE07AB4		J1135-17		11	2
+5PUP1	1A1A2A7	J1101-75		12	2

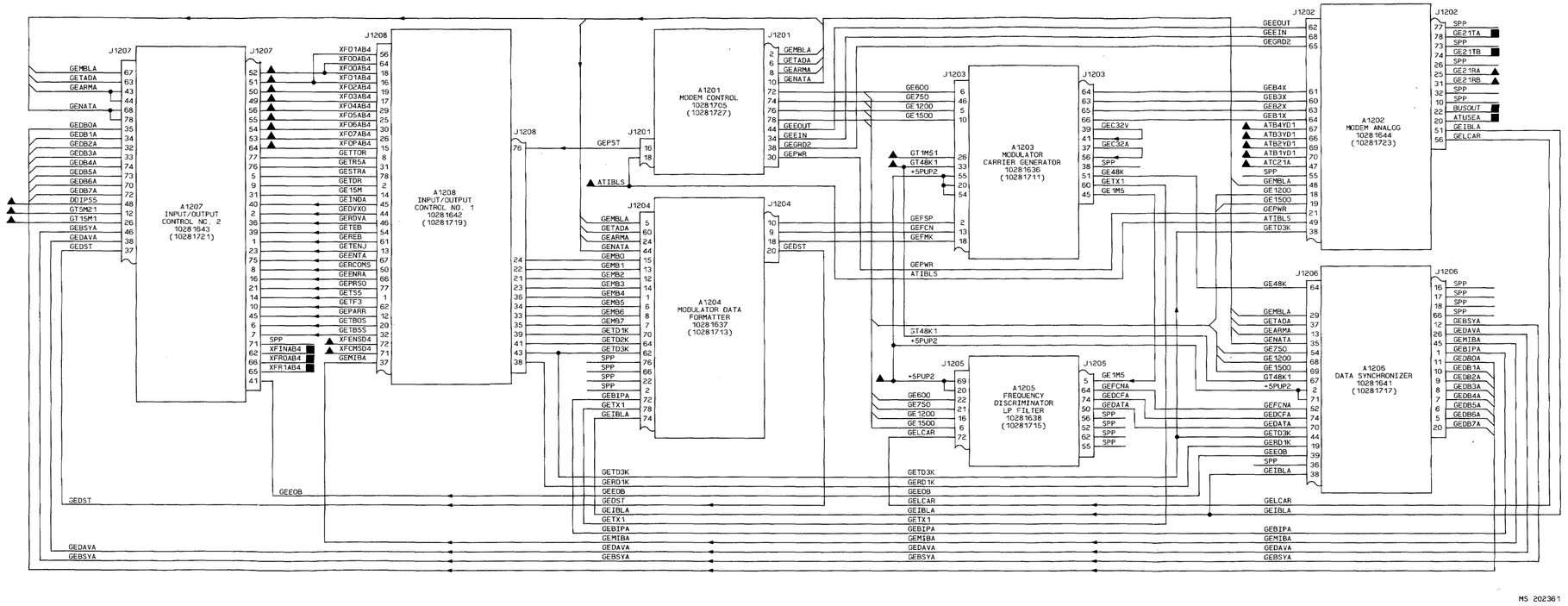
OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A7	J1136-9		8	
BUSOUT		J1136-25		8	
GD20TA		J2-19		10	5
GD20TB		J2-20		10	5
XEINAB4		J1135-39		11	2
XER6AB4		J1135-31		11	2
XAR7AB4	1A1A2A7	J1135-33		11	2



FO-1. Modem Interconnect Diagram (Sheet 20 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A7	J1136-8		8	
ATB2YD1		J1136-7			
ATB3YD1		J1136-6			
ATB4YD1		J1136-5			
ATC21A		J1136-69			
ATIBLS		J1136-37		8	
DDIPSS		J1-13		12	1
GE21RA		J2-28		10	6
GE21RB		J2-29		10	6
GT1MS1		J1134-38	A1134-TP18A	9	
GT15M1		J1134-66	A1134-TP31A		
GT48K1		J1134-22	A1134-TP12A		
GT5M21		J1134-52	A1134-TP24A	9	
XFCMSD4		J1135-77		11	2
XFENSD4		J1135-75			
XFJPAB4		J1135-41			
XF00AB4		J1135-43			
XF01AB4		J1135-45			
XF02AB4		J1135-47			
XF03AB4		J1135-49			
XF04AB4		J1135-51			
XF05AB4		J1135-53			
XF06AB4		J1135-55			
XF07AB4		J1135-57		11	2
+5PUP2	1A1A2A7	J1101-76		12	2

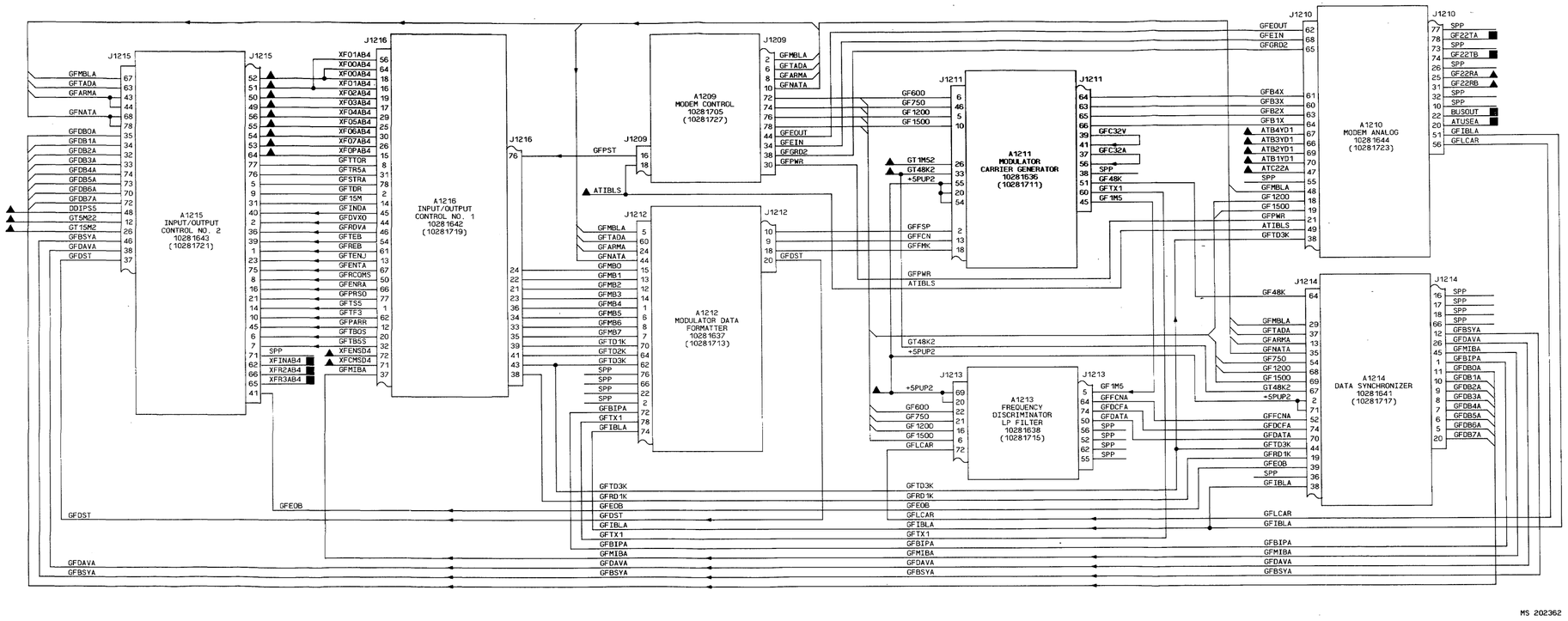
OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A7	J1136-9		8	
BUSOUT		J1136-25		8	
GE21TA		J2-25		10	6
GE21TB		J2-26		10	6
XFINAB4		J1135-79		11	2
XFROAB4		J1135-43		11	2
XFR1AB4	1A1A2A7	J1135-45		11	2



FO-1. Modem Interconnect Diagram (Sheet 21 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A7	J1136-8		8	
ATB2YD1		J1136-7			
ATB3YD1		J1136-6			
ATB4YD1		J1136-5			
ATC22A		J1136-70			
ATIBLS		J1136-37		8	
DDIPSS		J1-13		12	1
GF22RA		J2-34		10	6
GF22RB		J2-35		10	6
GT1MS2		J1134-30	A1134-TP15A	9	
GT15M2		J1134-60	A1134-TP28A		
GT48K2		J1134-14	A1134-TP9A		
GT5MS2		J1134-46	A1134-TP21A	9	
XFCMSD4		J1135-77		11	2
XFENSD4		J1135-75			
XFOPAB4		J1135-41			
XFOOAB4		J1135-43			
XFO1AB4		J1135-45			
XFO2AB4		J1135-47			
XFO3AB4		J1135-49			
XFO4AB4		J1135-51			
XFO5AB4		J1135-53			
XFO6AB4		J1135-55			
XFO7AB4		J1135-57		11	2
+5PUP2	1A1A2A7	J1101-76		12	2

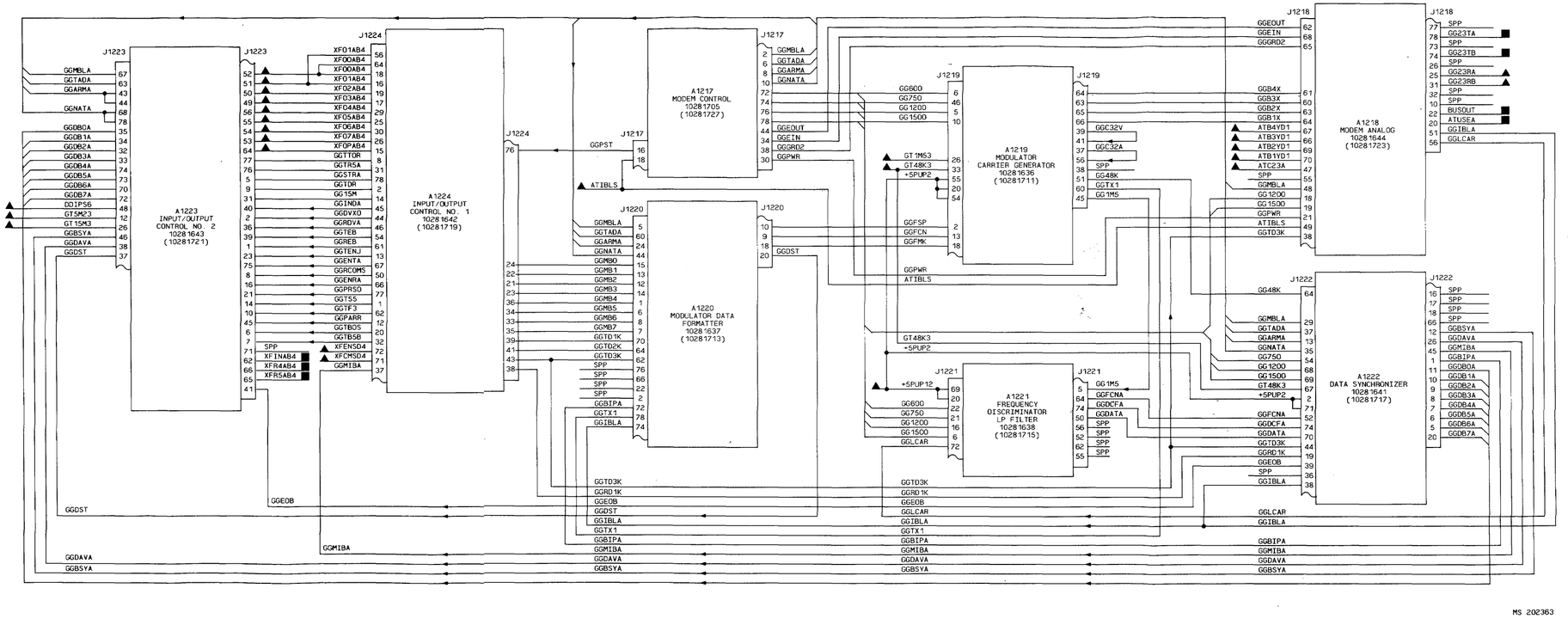
OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A7	J1136-9		8	
BUSOUT		J1136-25		8	
GF22TA		J2-31		10	6
GF22TB		J2-32		10	6
XFINAB4		J1135-79		11	2
XFR2AB4		J1135-63		11	2
XFR3AB4	1A1A2A7	J1135-65		11	2



FO-1. Modem Interconnect Diagram (Sheet 22 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A7	J1135-8		8	
ATB2YD1		J1135-7			
ATB3YD1		J1135-6			
ATB4YD1		J1135-5			
ATC23A		J1135-71			
ATIBLS		J1135-37		8	
DDIPS5		J1-13		12	1
GG23RA		J2-40		10	6
GG23RB		J2-41		10	6
GT1M53		J1134-33	A1134-TP16B	9	
GT1SM3		J1134-57	A1134-TP20B		
GT48K3		J1134-21	A1134-TP10B		
GT5M23		J1134-45	A1134-TP24B	9	
XFCMSD4		J1135-77		11	2
XFENSD4		J1135-75			
XFOPAB4		J1135-41			
XFOOAB4		J1135-43			
XFO1AB4		J1135-45			
XFO2AB4		J1135-47			
XFO3AB4		J1135-49			
XFO4AB4		J1135-51			
XFO5AB4		J1135-53			
XFO6AB4		J1135-55			
XFO7AB4		J1135-57		11	2
+5PUP2	1A1A2A7	J1101-P6		12	2

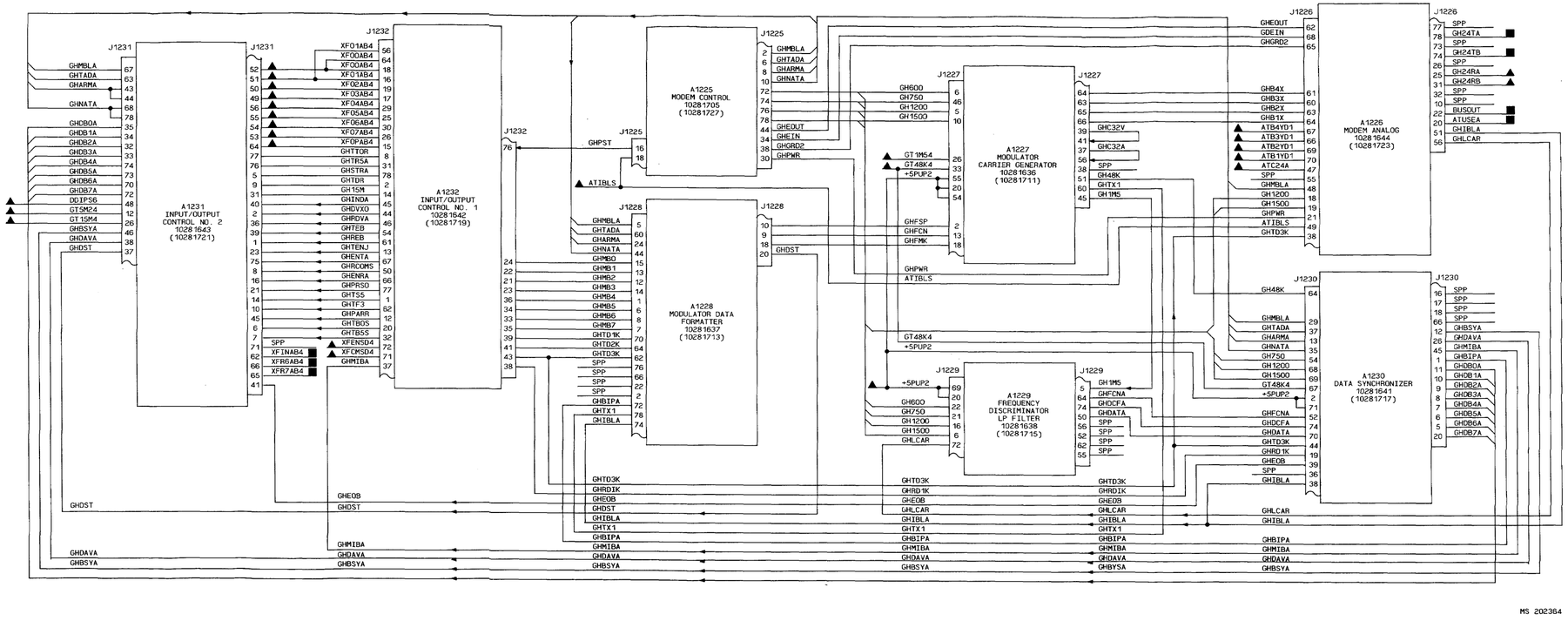
OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A7	J1136-9		8	
BUSOUT		J1136-25		8	
GG23TA		J2-37		10	6
GG23TB		J2-38		10	6
XFINAB4		J1135-79		11	2
XFR4AB4		J1135-67		11	2
XFR5AB4	1A1A2A7	J1135-69		11	2



FO-1. Modem Interconnect Diagram (Sheet 23 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A7	J1136-8		8	
ATB2YD1		J1136-7			
ATB3YD1		J1136-6			
ATB4YD1		J1136-5			
ATC24A		J1136-72			
ATIBLS		J1136-37		8	
DDIPS6		J1-66		12	1
GH24RA		J2-46		10	6
GT24RB		J2-47		10	6
GT1M54		J1134-39	A1134-TP19B	9	
GT15M4		J1134-63	A1134-TP33B		
GT48K4		J1134-27	A1134-TP13B		
GTSM24		J1134-51	A1134-TP27B	9	
XFCMSD4		J1135-77		11	2
XFENSD4		J1135-75			
XFOPAB4		J1135-41			
XFO0AB4		J1135-43			
XFO1AB4		J1135-45			
XFO2AB4		J1135-47			
XFO3AB4		J1135-49			
XFO4AB4		J1135-51			
XFO5AB4		J1135-53			
XFO6AB4		J1135-55			
XFO7AB4		J1135-57		11	2
+5PUP2	1A1A2A7	J1101-76		12	2

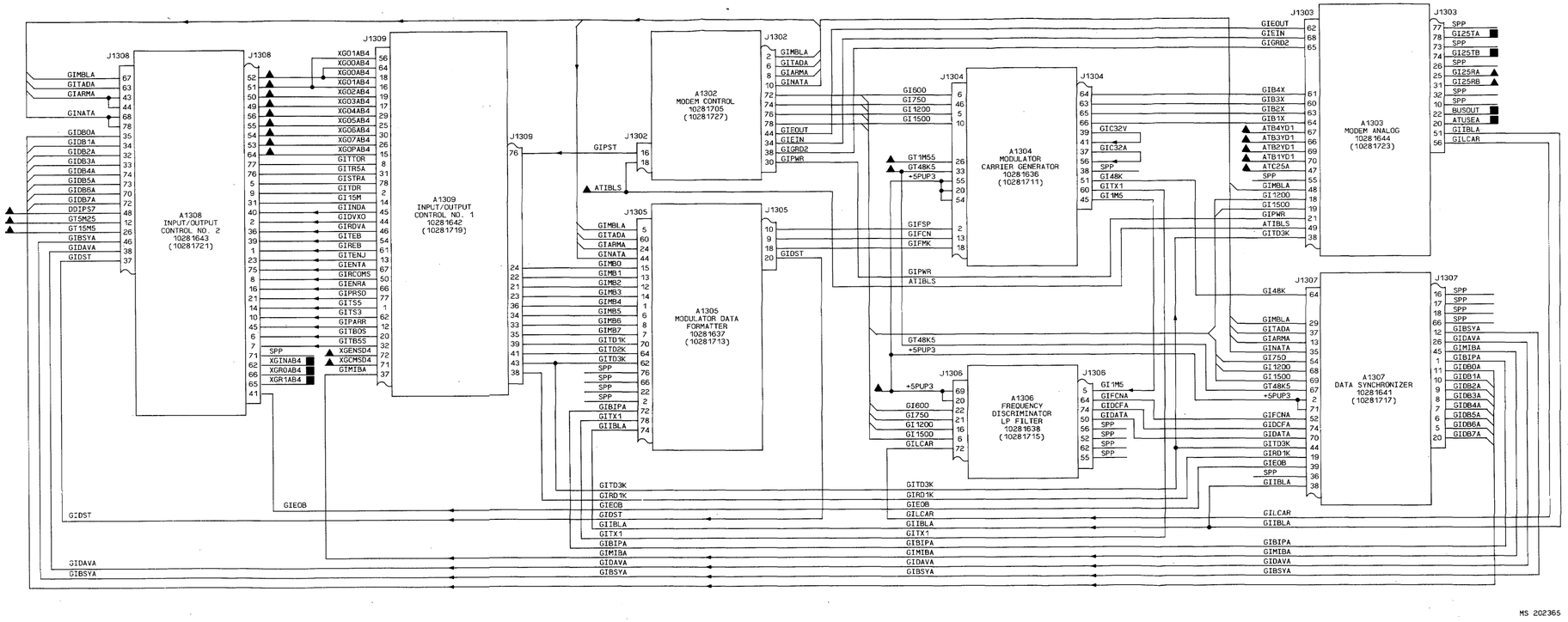
OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A7	J1136-9		8	
BUSOUT		J1136-25		8	
GH28TA		J2-43		10	6
GH28TB		J2-44		10	6
XFINAB4		J1135-79		11	2
XFR6AB4		J1135-71		11	2
XFR7AB4	1A1A2A7	J1135-73		11	2



FO-1. Modem Interconnect Diagram (Sheet 24 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A7	J1136-8		8	
ATB2YD1		J1136-7			
ATB3YD1		J1136-6			
ATB4YD1		J1136-5			
ATC25A		J1136-73		8	
ATIBLS		J1136-37		12	1
DDIPS7		J3-13		10	7
GI25RA		J4-4		10	7
GI25RB		J4-5		9	
GT1M55		J1334-38	A1334-TP18A		
GT15M5		J1334-66	A1334-TP31A	9	
GT48K5		J1334-22	A1334-TP32A		
GTSM25		J1334-52	A1334-TP24A	11	2
XGCMSD4		J1335-37			
XGENSD4		J1335-35			
XGOPAB4		J1335-1			
XGO0AB4		J1335-3			
XGO1AB4		J1335-5			
XGO2AB4		J1335-7			
XGO3AB4		J1335-9			
XGO4AB4		J1335-11			
XGO5AB4		J1335-13			
XGO6AB4		J1335-15			
XGO7AB4		J1335-17		11	2
+5PUP3	1A1A2A7	J1101-79		12	2

OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A7	J1136-9		8	
BUSOUT		J1136-25		8	
GI25TA		J4-1		10	7
GI25TB		J4-2		10	7
XGINAB4		J1335-39		11	2
XGROAB4		J1335-19		11	2
XGR1AB4	1A1A2A7	J1335-21		11	2



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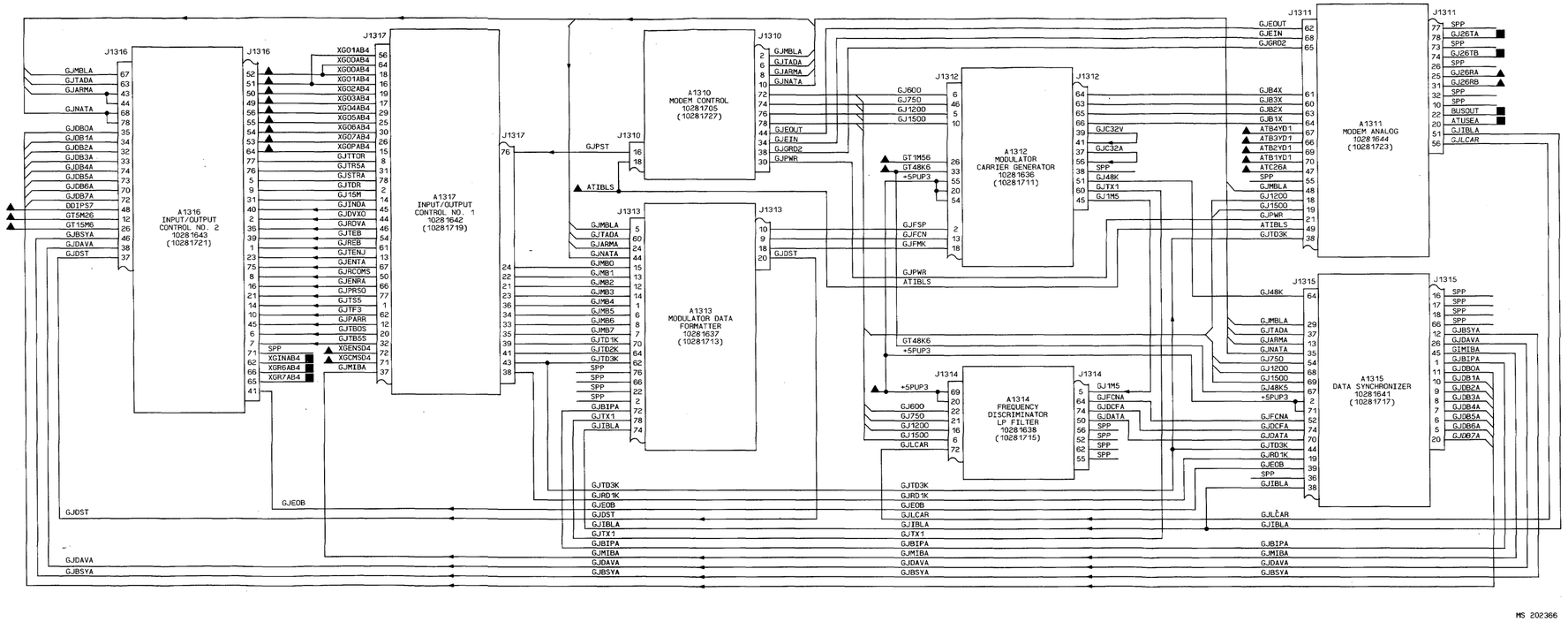
FO-1. Modem Interconnect Diagram (Sheet 25 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A7	J1136-8		8	
ATB2YD1		J1136-7			
ATB3YD1		J1136-6			
ATB4YD1		J1136-5			
ATC26A		J1136-74			
ATIBLS		J1136-37		8	
DDIPS7		J3-13		12	1
GJ26RA		J4-10		10	7
GJ26RB		J4-11		10	7
GT1M56		J1334-30	A1334-TP15A	9	
GT15M6		J1334-60	A1334-TP28A		
GT48K6		J1334-14	A1334-TP9A		
GT5M26		J1334-46	A1334-TP21A	9	
XGCMSD4		J1335-37		11	2
XGENSD4		J1335-35			
XG0PAB4		J1335-1			
XG00AB4		J1335-3			
XG01AB4		J1335-5			
XG02AB4		J1335-7			
XG03AB4		J1335-9			
XG04AB4		J1335-11			
XG05AB4		J1335-13			
XG06AB4		J1335-15			
XG07AB4		J1335-17		11	2
+5PUP3	1A1A2A7	J1101-79		12	2

OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A7	J1136-9		8	
BUSOUT		J1136-25		8	
GJ26TA		J4-7		10	7
GJ26TB		J4-8		10	7
XGINAB4		J1335-39		11	2
XGR2AB4		J1335-23		11	2
XGR3AB4	1A1A2A7	J1335-25		11	2



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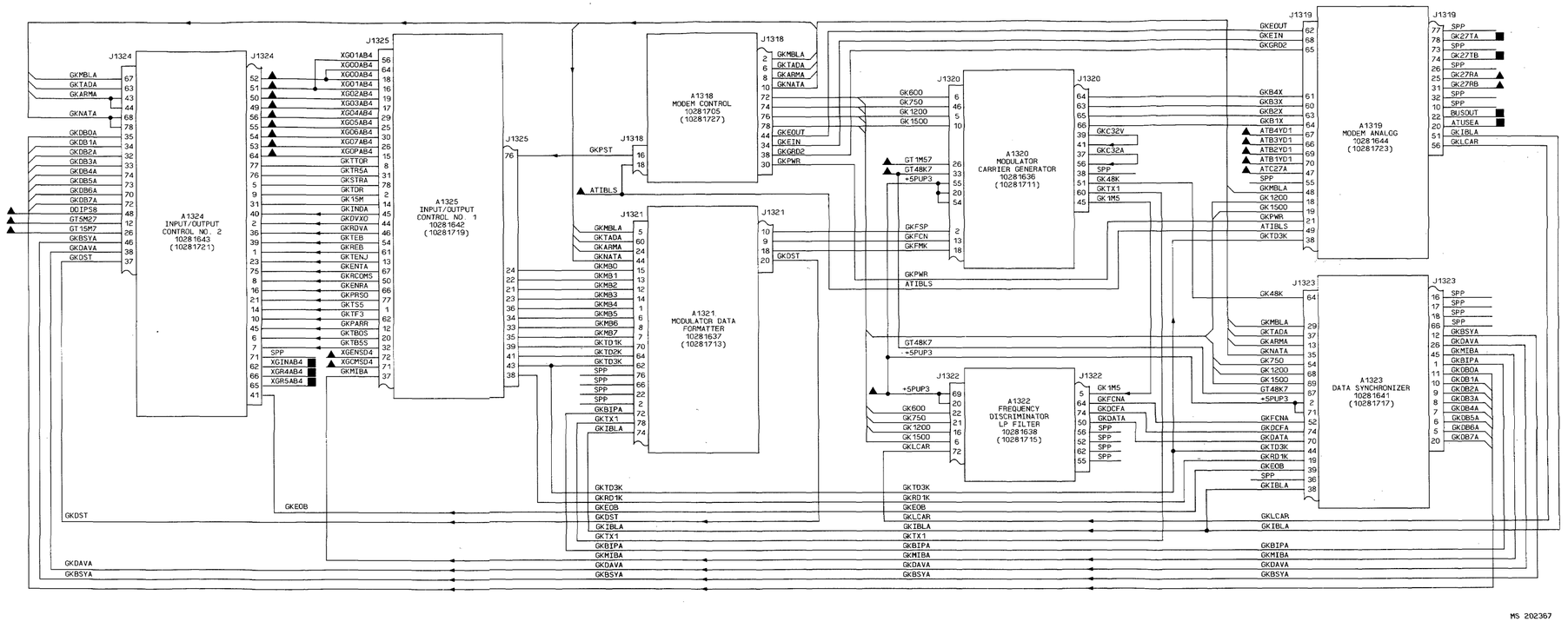
FO-1. Modem Interconnect Diagram (Sheet 26 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A7	J1136-8		8	
ATB2YD1		J1136-7			
ATB3YD1		J1136-6			
ATB4YD1		J1136-5			
ATC27A		J1136-75			
ATIBLS		J1136-37		8	
DDIPS8		J3-66		12	1
GK27RA		J4-16		10	7
GK27RB		J4-17		10	7
GT1M57		J1334-33	A1334-TP16B	9	
GT15M7		J1334-57	A1334-TP30B		
GT48K7		J1334-21	A1334-TP10B		
GT5M27		J1334-45	A1334-TP24B	9	
XGCMSD4		J1335-37		11	2
XGENSD4		J1335-35			
XGOPAB4		J1335-1			
XG00AB4		J1335-3			
XG01AB4		J1335-5			
XG02AB4		J1335-7			
XG03AB4		J1335-9			
XG04AB4		J1335-11			
XG05AB4		J1335-13			
XG06AB4		J1335-15			
XG07AB4		J1335-17		11	2
+5PUP3	1A1A2A7	J1101-79		12	2

OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A7	J1136-9		8	
BUSOUT		J1136-25		8	
GK27TA		J4-13		10	7
GK27TB		J4-14		10	7
XGINAB4		J1335-39		11	2
XGR4AB4		J1335-27		11	2
XGR5AB4	1A1A2A7	J1335-29		11	2



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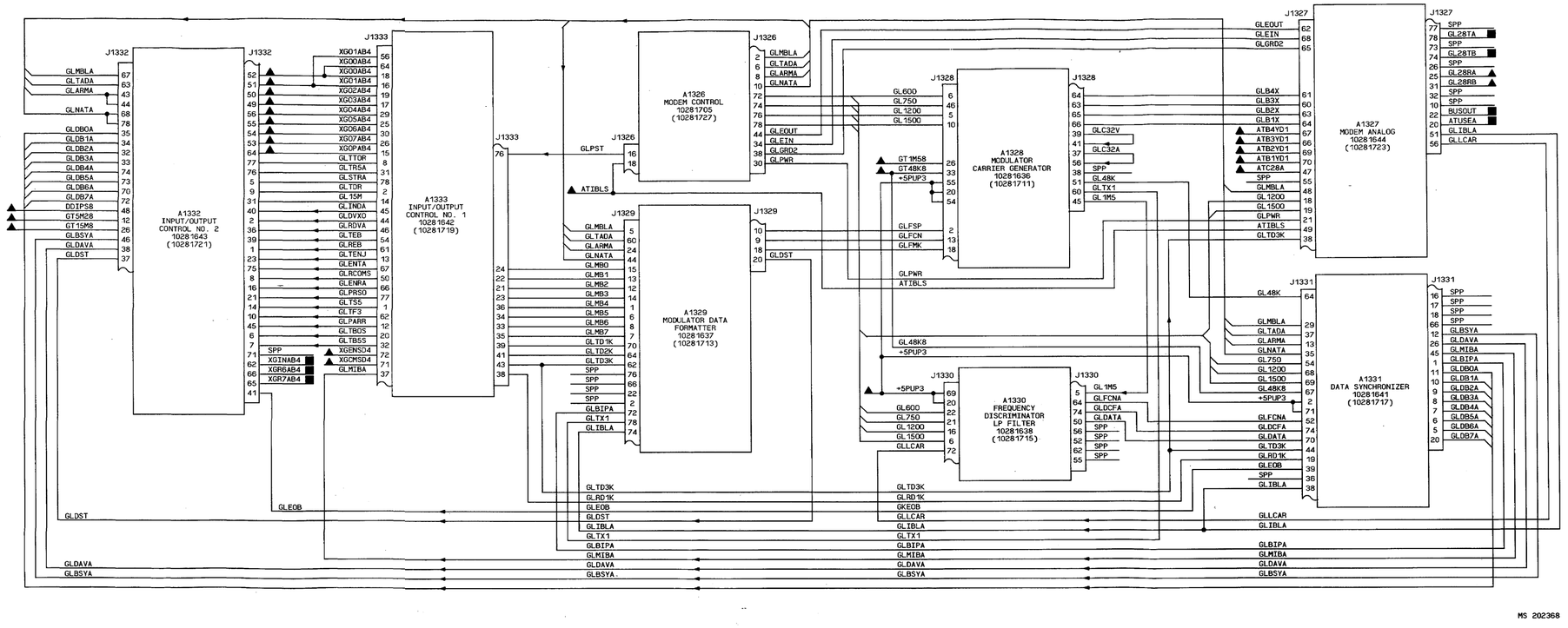
FO-1. Modem Interconnect Diagram (Sheet 27 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A7	J1136-8		8	
ATB2YD1		J1136-7			
ATB3YD1		J1136-6			
ATB4YD1		J1136-5			
ATC28A		J1136-76			
ATIBLS		J1136-37		8	
DDIPS8		J3-66		12	1
GL28RA		J4-22		10	7
GL28RB		J4-23		10	7
GT1M58		J1334-39	A1334-TP19B	9	
GT15M8		J1334-63	A1334-TP33B		
GT48K8		J1334-27	A1334-TP13B		
GT5M28		J1334-51	A1334-TP27B	9	
XGCMSD4		J1335-37		11	2
XGENSD4		J1335-35			
XGOPAB4		J1335-1			
XG00AB4		J1335-3			
XG01AB4		J1335-5			
XG02AB4		J1335-7			
XG03AB4		J1335-9			
XG04AB4		J1335-11			
XG05AB4		J1335-13			
XG06AB4		J1335-15			
XG07AB4		J1335-17		11	2
+5PUP3	1A1A2A7	J1101-79		12	2

OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A7	J1136-9		8	
BUSOUT		J1136-25		8	
GL28TA		J4-19		10	7
GL28TB		J4-20		10	7
XGINAB4		J1335-39		11	2
XGR6AB4		J1335-31		11	2
XGR7AB4	1A1A2A7	J1335-33		11	2



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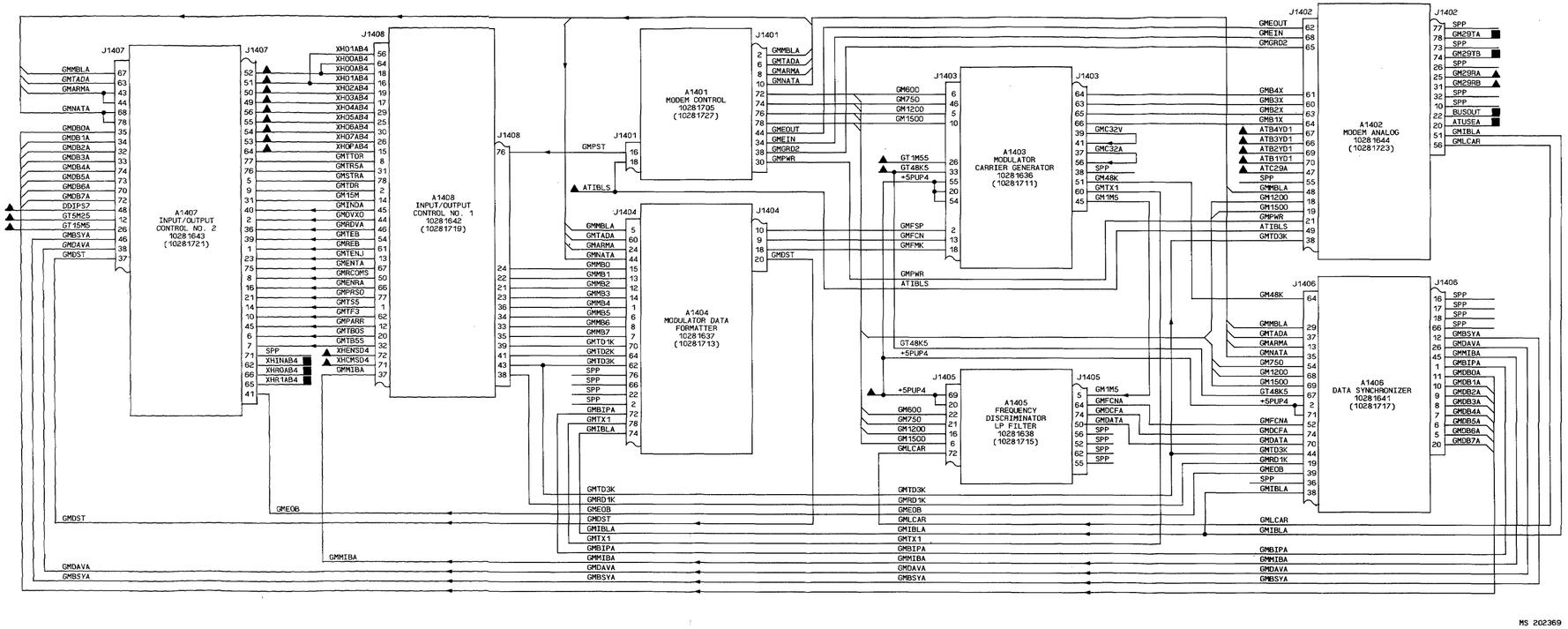
FO-1. Modem Interconnect Diagram (Sheet 28 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A7	J1136-8		8	
ATB2YD1		J1136-7			
ATB3YD1		J1136-6			
ATB4YD1		J1136-5			
ATC29A		J1136-77			
ATIBLS		J1136-37		8	
DDIPS7		J3-13		12	1
GM29RA		J4-28		10	8
GM29RB		J4-29		10	8
GT1M55		J1334-38	A1334-TP18A	9	
GT15M5		J1334-66	A1334-TP31A		
GT48K5		J1334-22	A1334-TP12A		
GT5M25		J1334-52	A1334-TP24A	9	
XHCMSD4		J1335-77		11	2
XHENSD4		J1335-75			
XHOPAB4		J1335-41			
XHO0AB4		J1335-43			
XHO1AB4		J1335-45			
XHO2AB4		J1335-47			
XHO3AB4		J1335-49			
XHO4AB4		J1335-51			
XHO5AB4		J1335-53			
XHO6AB4		J1335-55			
XHO7AB4		J1335-57		11	2
+5PUP4	1A1A2A7	J1101-80		12	2

OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A7	J1136-9		8	
BUSOUT		J1136-25		8	
GM29TA		J4-25		10	8
GM29TB		J4-26		10	8
XHINAB4		J1335-79		11	2
XHROAB4		J1335-43		11	2
XHR1AB4	1A1A2A7	J1335-45		11	2



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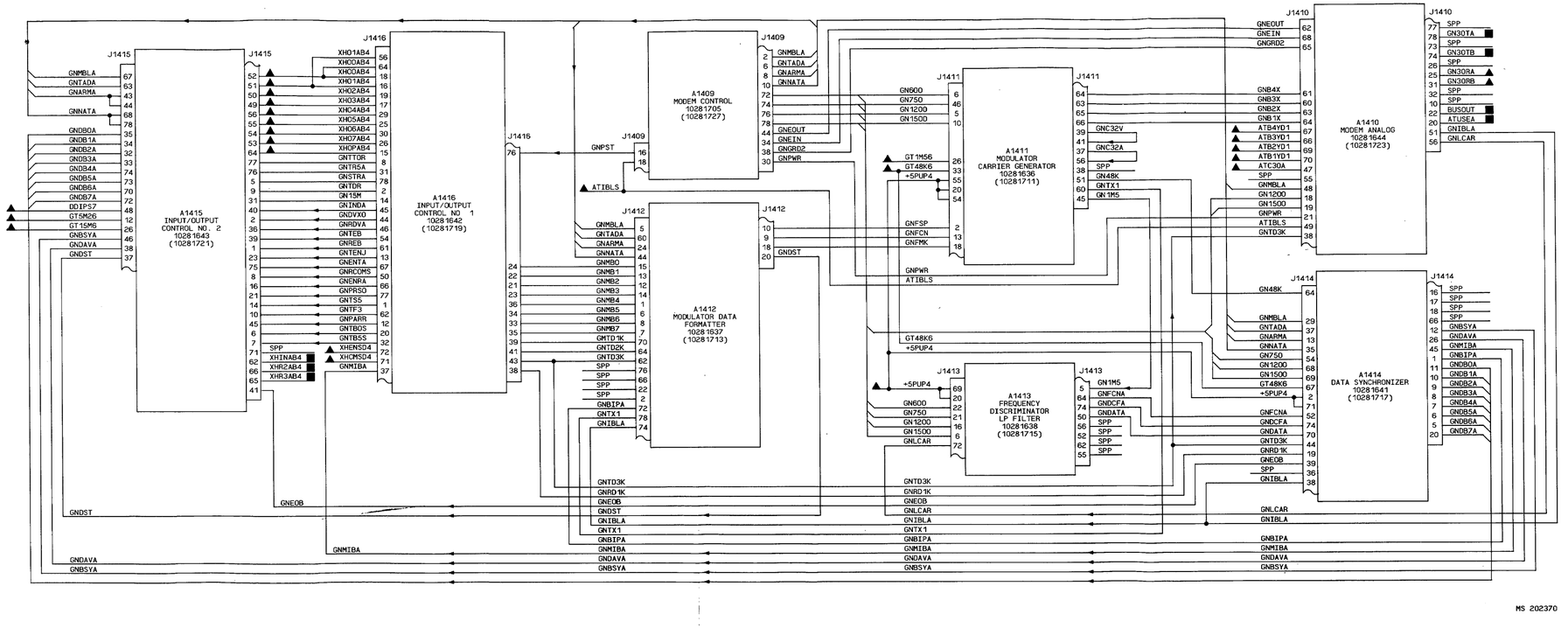
FO-1. Modem Interconnect Diagram (Sheet 29 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A7	J1136-8		8	
ATB2YD1		J1136-7			
ATB3YD1		J1136-6			
ATB4YD1		J1136-5			
ATC30A		J1136-78			
ATIBLS		J1136-37		8	
DDIPS7		J3-13		12	1
GN30RA		J4-34		10	8
GN30RB		J4-35		10	8
GT1M56		J1334-30	A1334-TP15A	9	
GT15M6		J1334-60	A1334-TP28A		
GT48K6		J1334-14	A1334-TP9A		
GT5M26		J1334-46	A1334-TP21A	9	
XHCMSD4		J1335-77		11	2
XHENSD4		J1335-75			
XHOPAB4		J1335-41			
XHOOAB4		J1335-43			
XHO1AB4		J1335-45			
XHO2AB4		J1335-47			
XHO3AB4		J1335-49			
XHO4AB4		J1335-51			
XHO5AB4		J1335-53			
XHO6AB4		J1335-55			
XHO7AB4		J1335-57		11	2
+5PUP4	1A1A2A7	J1101-80		12	2

OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A7	J1136-9		8	
BUSOUT		J1136-25		8	
GN30TA		J4-31		10	8
GN30TB		J4-32		10	8
XHINAB4		J1335-39		11	2
XHR2AB4		J1335-47		11	2
XHR3AB4	1A1A2A7	J1335-49		11	2



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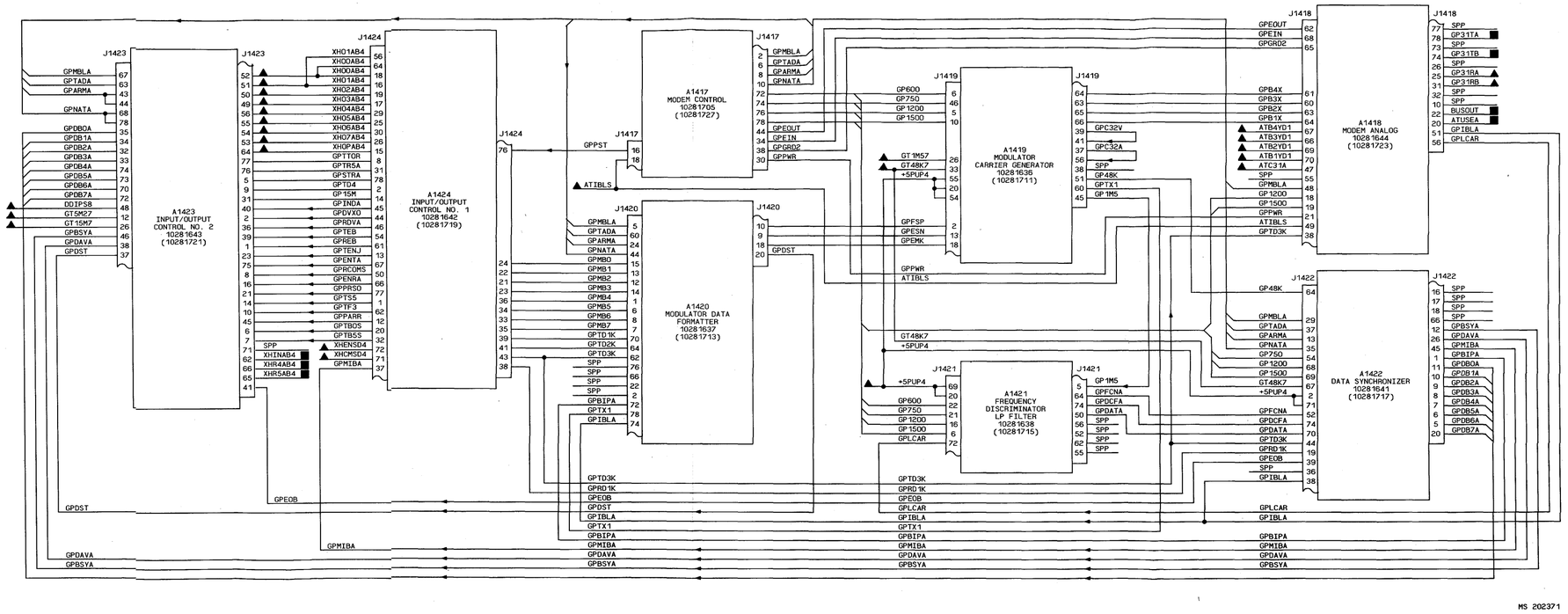
FO-1. Modem Interconnect Diagram (Sheet 30 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A7	J1136-8		8	
ATB2YD1		J1136-7			
ATB3YD1		J1136-6			
ATB4YD1		J1136-5			
ATC31A		J1136-79			
ATIBLS		J1136-37		8	
DDIPS8		J3-66		12	1
GP31RA		J4-40		10	8
GP31RB		J4-41		10	8
GT1M57		J1334-33	A1334-TP16B	9	
GT15M7		J1334-57	A1334-TP30B		
GT48K7		J1334-21	A1334-TP10B		
GT5M27		J1334-45	A1334-TP24B	9	
XHCMSD4		J1335-77		11	2
XHENSD4		J1335-75			
XHOPAB4		J1335-41			
XHO0AB4		J1335-43			
XHO1AB4		J1335-45			
XHO2AB4		J1335-47			
XHO3AB4		J1335-49			
XHO4AB4		J1335-51			
XHO5AB4		J1335-53			
XHO6AB4		J1335-55			
XHO7AB4		J1335-57		11	2
+5PUP4	1A1A2A7	J1101-80		12	2

OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A7	J1136-9		8	
BUSOUT		J1136-25		8	
GP31TA		J4-37		10	8
GP31TB		J4-38		10	8
XHINAB4		J1335-79		11	2
XHR4AB4		J1335-67		11	2
XHR5AB4	1A1A2A7	J1335-69		11	2



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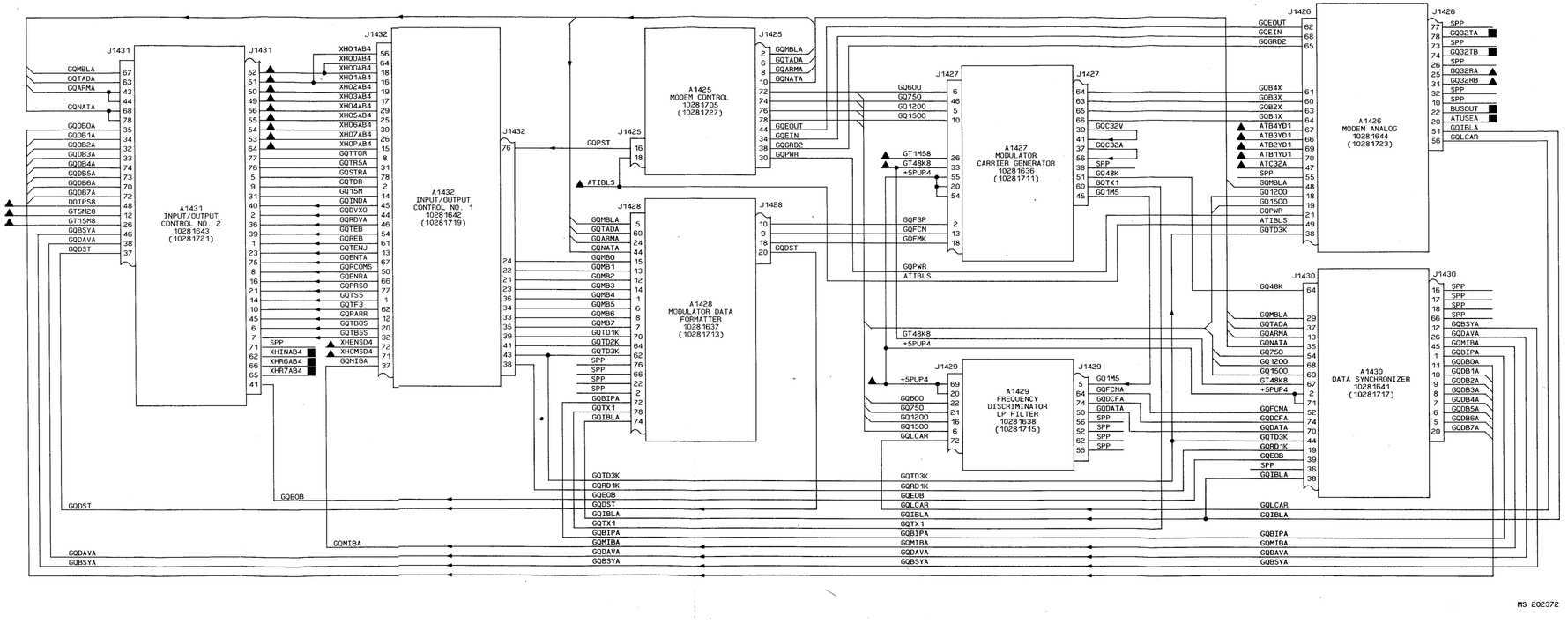
FO-1. Modem Interconnect Diagram (Sheet 31 of 32)

INPUT	LOCATION	SOURCE	TESTPOINT	FO	SH.
ATB1YD1	1A1A2A7	J1136-8		8	
ATB2YD1		J1136-7			
ATB3YD1		J1136-6			
ATB4YD1		J1136-5			
ATC32A		J1136-80			
ATIBLS		J1136-37		8	
DDIPS8		J3-66		12	1
GQ32RA		J4-46		10	8
GQ32RB		J4-47		10	8
GT1M58		J1334-39	A1334-TP19B	9	
GT15M8		J1334-63	A1334-TP33B		
GT48K8		J1334-27	A1334-TP13B		
GT5M28		J1334-51	A1334-TP27B	9	
XHCMS04		J1335-77		11	2
XHENSD4		J1335-75			
XHOPAB4		J1335-41			
XHO0AB4		J1335-43			
XHO1AB4		J1335-45			
XHO2AB4		J1335-47			
XHO3AB4		J1335-49			
XHO4AB4		J1335-51			
XHO5AB4		J1335-53			
XHO6AB4		J1335-55			
XHO7AB4		J1335-57		11	2
+5PUP4	1A1A2A7	J1101-80		12	2

OUTPUT	LOCATION	DESTINATION	TESTPOINT	FO	SH.
ATUSEA	1A1A2A7	J1136-9		8	
BUSOUT		J1136-25		8	
GQ32TA		J4-43		10	8
GQ32TB		J4-44		10	8
XHINAB4		J1335-79		11	2
XHR6AB4		J1335-71		11	2
XHR7AB4	1A1A2A7	J1335-73		11	2



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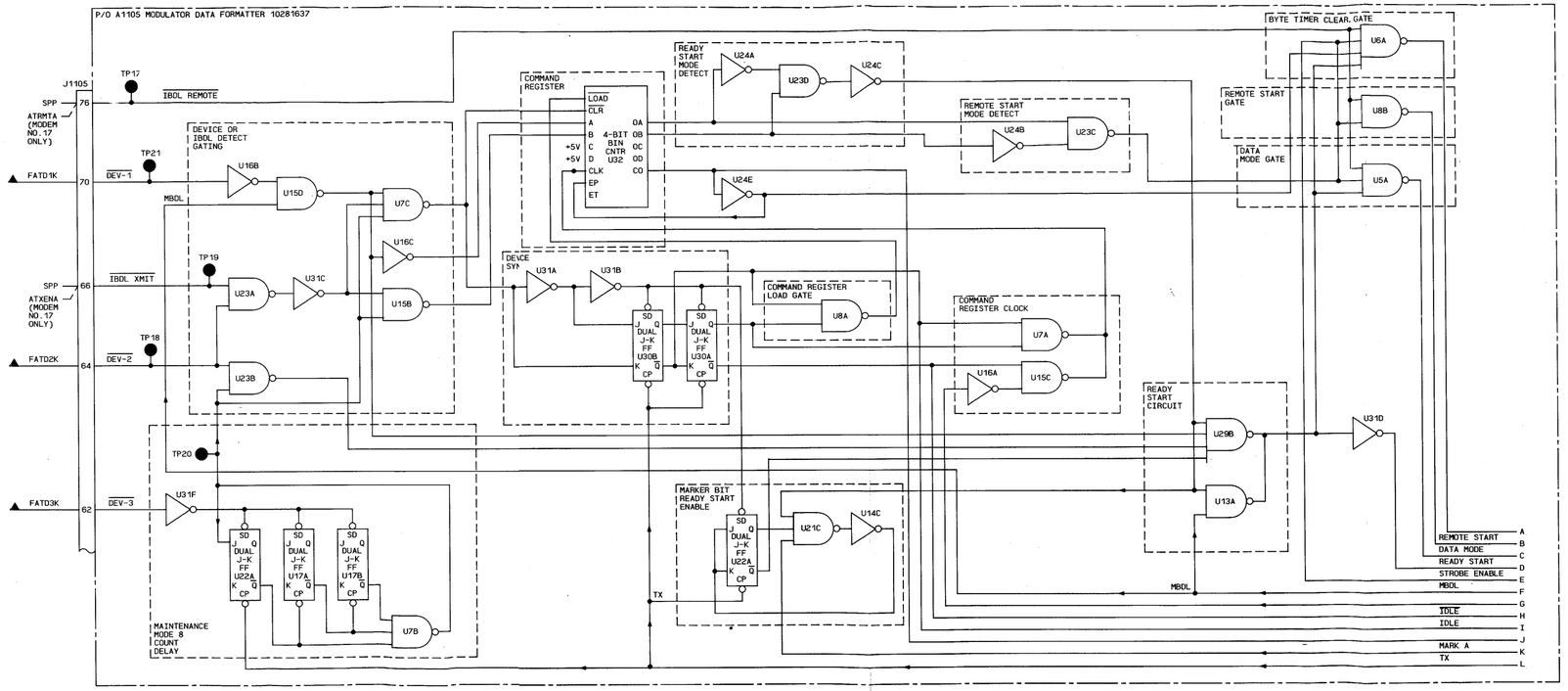
FO-1. Modem Interconnect Diagram (Sheet 32 of 32)

INPUTS	FO
FAARMA	3
FABIPA	5
FAIBLA	3
FAMBLA	3
FANATA	3
FAMB0	6
FAMB1	6
FAMB2	6
FAMB3	6
FAMB4	6
FAMB5	6
FAMB6	6
FAMB7	6
FATADA	3
FATD1K	6
FATD2K	6
FATD3K	6
FATX1	3

OUTPUTS	FO
FADST	7
FAFCN	3
FAFMK	3
FAFSP	3



NOTES: UNLESS OTHERWISE SPECIFIED

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS. PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATOR.
2. DEFINITIONS FOR SYMBOLS SHOWN ARE AS FOLLOWS:
   - ▲ INPUT FROM ANOTHER FIGURE
   - ■ OUTPUT TO ANOTHER FIGURE
3. REFER TO TABLE 5-3 FOR CIRCUIT CARD LOCATIONS.
4. REFER TO DATA COMMUNICATIONS POWER DISTRIBUTION DIAGRAM FOR DC POWER AND GROUND CIRCUITS.
5. THIS DIAGRAM IS FOR MODEM NO. 1 ONLY; CIRCUIT IS COMMON TO ALL MODEMS. REFER TO MODEM INTERCONNECT FOR CORRESPONDING MODEM MNEMONICS.
6. INTRA-MODEM CONNECTIONS ARE IDENTIFIED; REFER TO MODEM INTERCONNECT FOR INDIVIDUAL MODEM INPUTS AND OUTPUTS.

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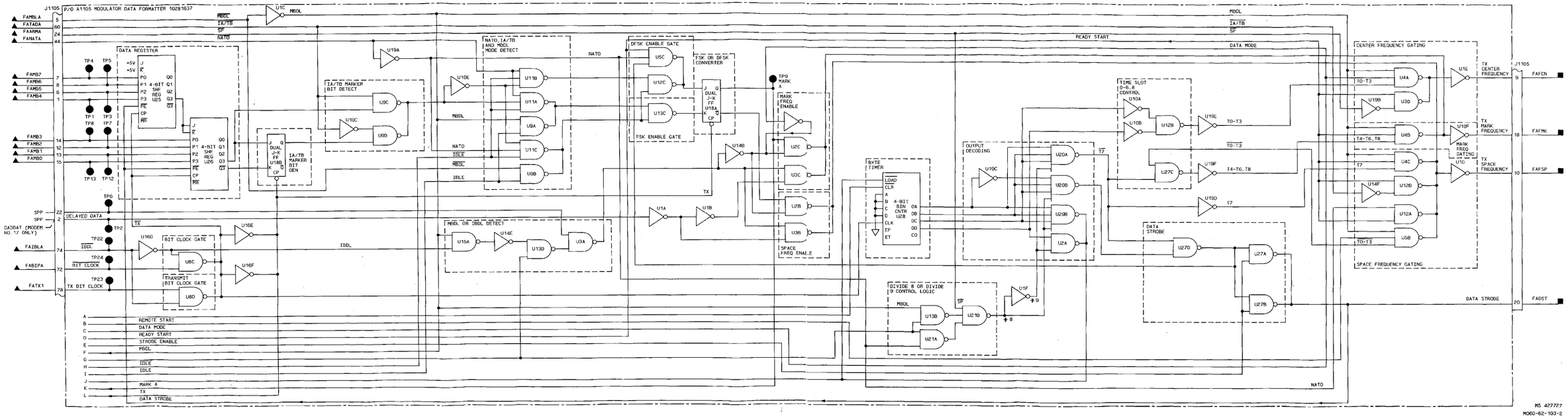
FO-2. MODEM No. 1, Typical Data Formatter Logic Diagram (Sheet 1 of 2)



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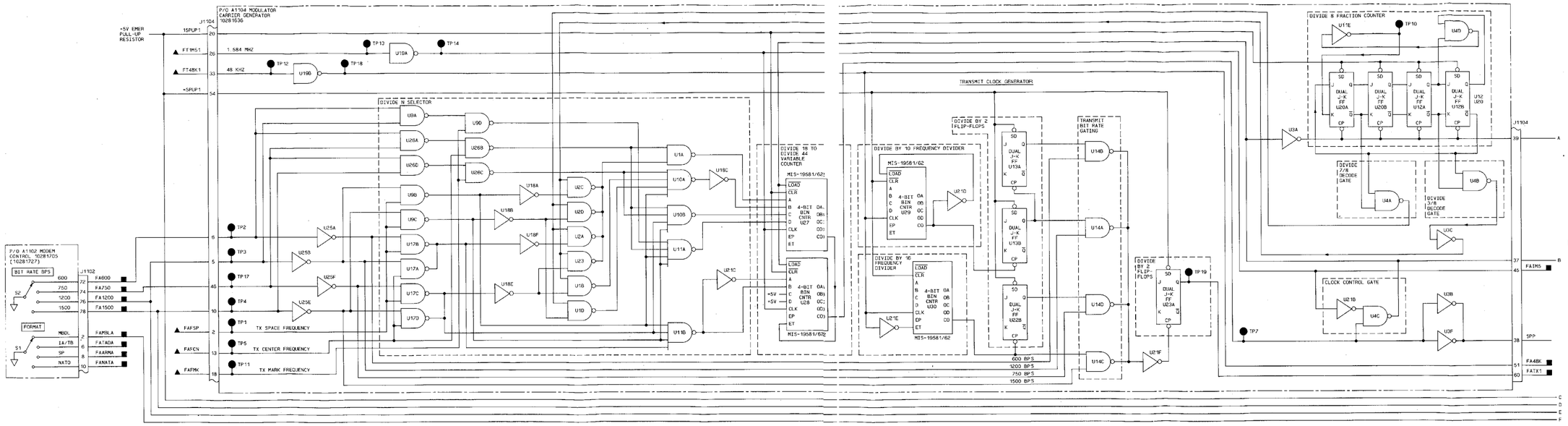
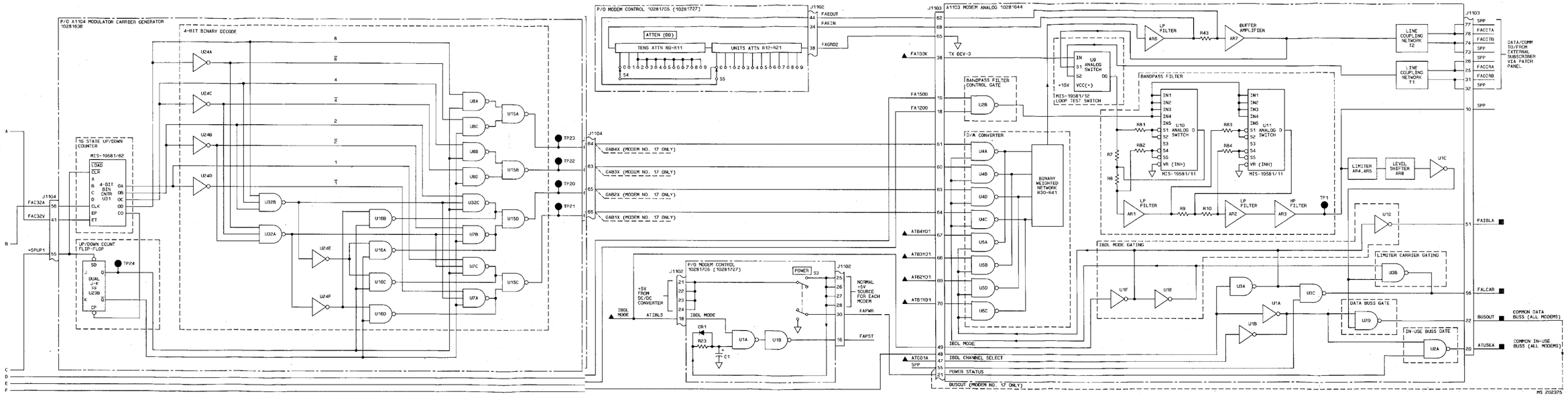
FO-2. MODEM No. 1, Typical Data Formatter Logic Diagram (Sheet 2 of 2)



NOTES: UNLESS OTHERWISE SPECIFIED

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS. PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATOR.
2. DEFINITIONS FOR SYMBOLS SHOWN ARE AS FOLLOWS:
   - ▲ INPUT FROM ANOTHER FIGURE
   - ■ OUTPUT TO ANOTHER FIGURE
3. REFER TO TABLE 5-3 FOR CIRCUIT CARD LOCATIONS.
4. REFER TO DATA COMMUNICATIONS POWER DISTRIBUTION DIAGRAM FOR DC POWER AND GROUND CIRCUITS.
5. THIS DIAGRAM IS FOR MODEM NO. 1 ONLY; CIRCUIT IS COMMON TO ALL MODEMS. REFER TO MODEM INTERCONNECT FOR

FO-3. MODEM No. 1, Typical MODEM Carrier Generator and MODEM Analog Logic Diagram (Sheet 1 of 2)



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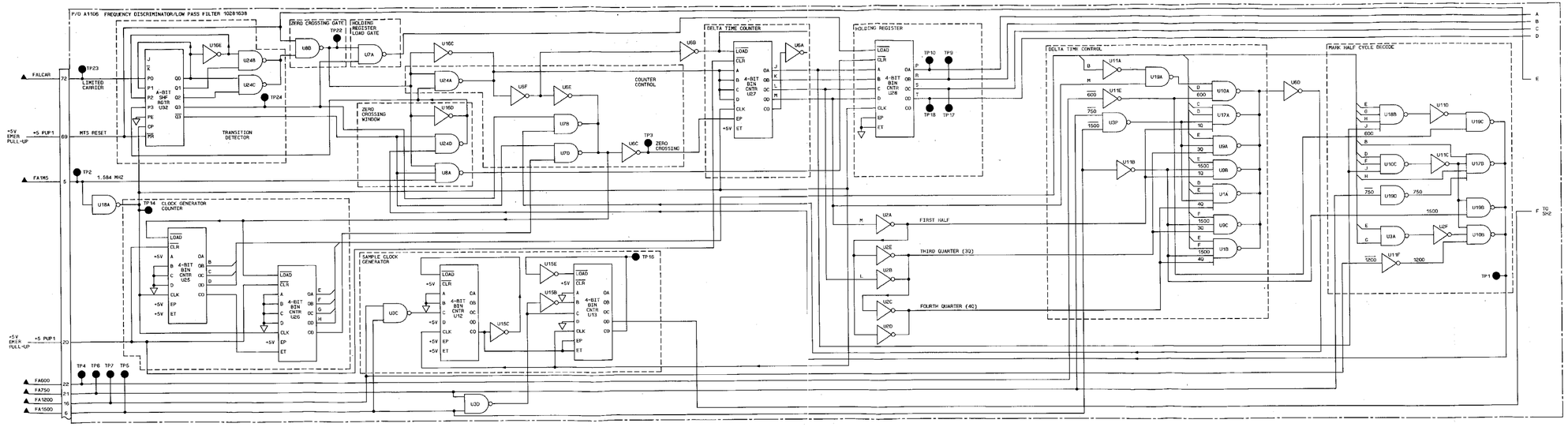
FO-3. MODEM No. 1, Typical MODEM Carrier Generator and MODEM Analog Logic Diagram (Sheet 2 of 2)



INPUTS	FQ	OUTPUTS	FQ
FA1MS	3	FADATA	5
FALCAR	3	FADCFA	5
FA600	3	FAFCNA	5
FA750	3		
FA1200	3		
FA1500	3		

NOTES: UNLESS OTHERWISE SPECIFIED

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS. PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATOR.
2. DEFINITIONS FOR SYMBOLS SHOWN ARE AS FOLLOWS:
   - ▲ INPUT FROM ANOTHER FIGURE
   - ■ OUTPUT TO ANOTHER FIGURE
3. REFER TO TABLE 5-3 FOR CIRCUIT CARD LOCATIONS.
4. REFER TO DATA COMMUNICATIONS POWER DISTRIBUTION DIAGRAM FOR DC POWER AND GROUND CIRCUITS.
5. THIS DIAGRAM IS FOR MODEM NO. 1 ONLY; CIRCUIT IS COMMON TO ALL MODEMS. REFER TO MODEM INTERCONNECT FOR CORRESPONDING MODEM MNEMONICS.
6. INTRA-MODEM CONNECTIONS ARE IDENTIFIED; REFER TO MODEM INTERCONNECT FOR INDIVIDUAL MODEM INPUTS AND OUTPUTS.

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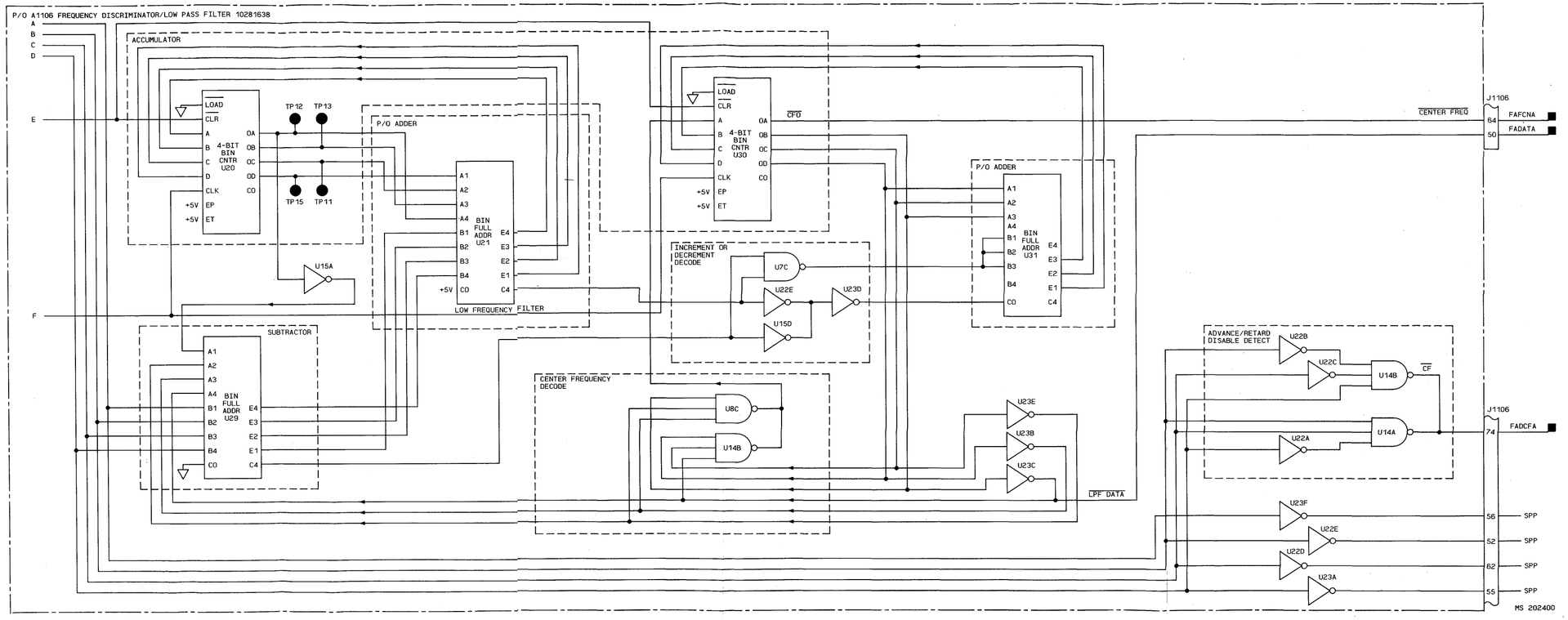
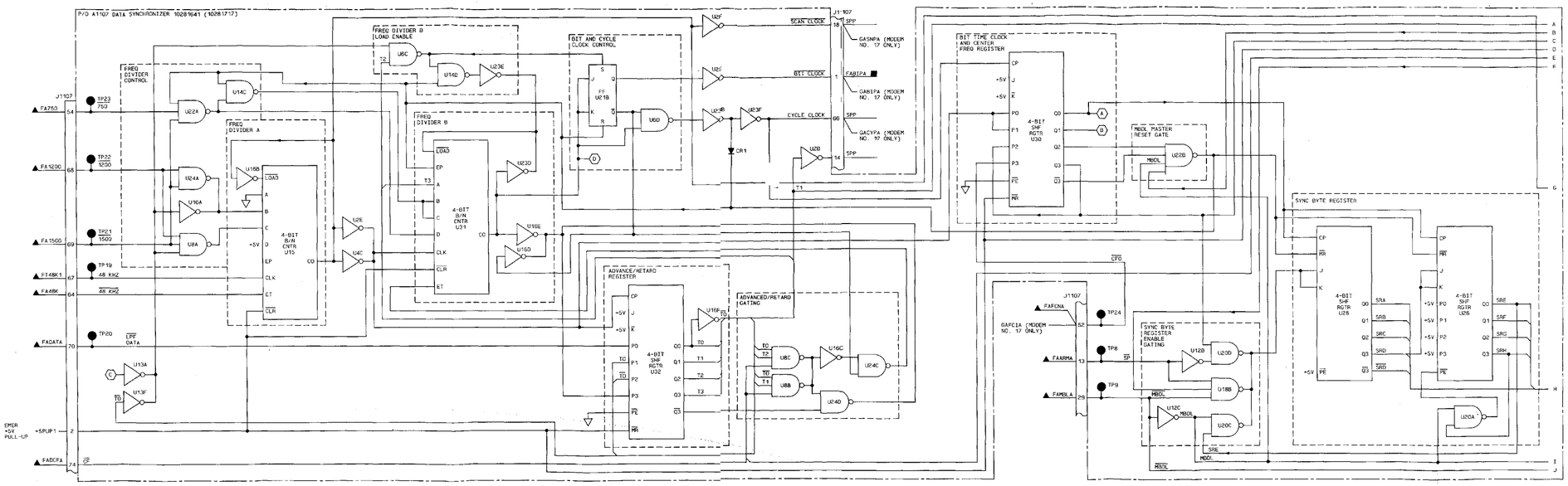
FO-4. MODEM No. 1, Typical MODEM Frequency Discriminator/LP Filter Block Diagram (Sheet 1 of 2)



FO-4. MODEM No. 1, Typical MODEM Frequency Discriminator/LP Filter Block Diagram (Sheet 2 of 2)

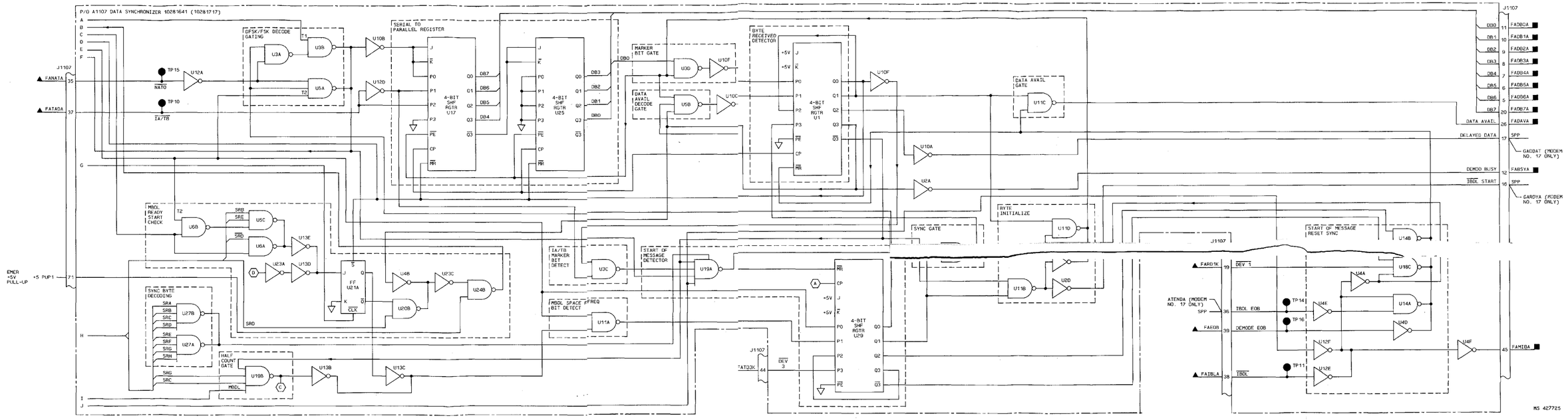


INPUTS	FO	OUTPUTS	FO
FAARMA	3	FABIPA	2
FADATA	4	FABSYA	7
FADCFA	4	FADAVA	7
FAFCNA	4	FADB0A	7
FAIBLA	3	FADB1A	7
FAMBLA	3	FADB2A	7
FANATA	3	FADB3A	7
FATADA	3	FADB4A	7
FAND7K	6	FADB5A	7
FAIDOK	6	FADB6A	7
FA48K	3	FADB7A	7
F750	3	FAMIBA	6
FA1200	3		
FA1500	3		
FT48K1	8		

NOTES: UNLESS OTHERWISE SPECIFIED

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS. PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATOR.
2. DEFINITIONS FOR SYMBOLS SHOWN ARE AS FOLLOWS:
   - ▲ INPUT FROM ANOTHER FIGURE
   - ■ OUTPUT TO ANOTHER FIGURE
3. REFER TO TABLE 5-3 FOR CIRCUIT CARD LOCATIONS.
4. REFER TO DATA COMMUNICATIONS POWER DISTRIBUTION DIAGRAM FOR DC POWER AND GROUND CIRCUITS.
5. THIS DIAGRAM IS FOR MODEM NO. 1 ONLY; CIRCUIT IS COMMON TO ALL MODEMS. REFER TO MODEM INTERCONNECT FOR CORRESPONDING MODEM MNEMONICS.
6. INTRA-MODEM CONNECTIONS ARE IDENTIFIED; REFER TO MODEM INTERCONNECT FOR INDIVIDUAL MODEM INPUTS AND OUTPUTS.

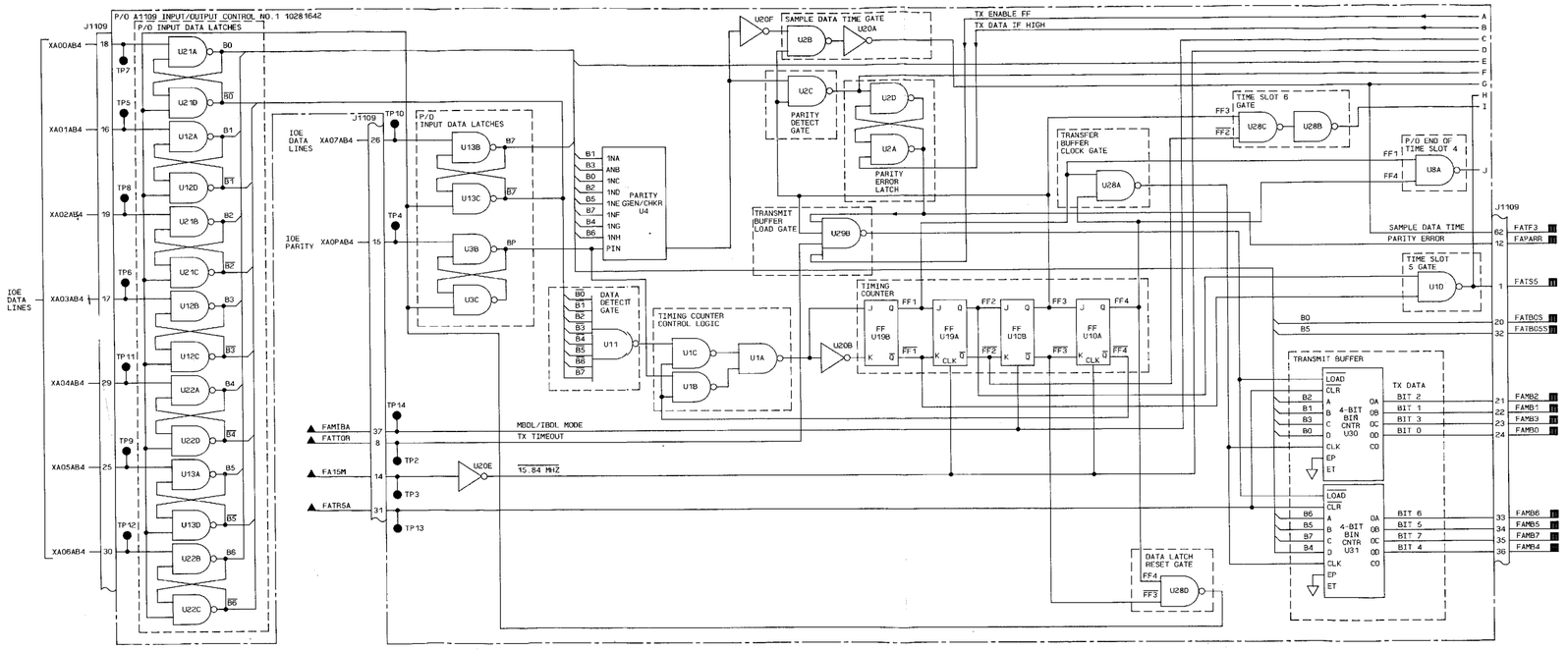
FO-5. MODEM No. 1, Typical MODEM Data Synchronizer Logic Diagram (Sheet 1 of 2)



FO-5. MODEM No. 1, Typical MODEM Data Synchronizer Logic Diagram (Sheet 2 of 2)

INPUTS	FO
FA15M	7
FAMIBA	5
FAPST	3
FASTRA	7
FATDR	7
FATRSA	7
FATTOR	7
FA15M	9

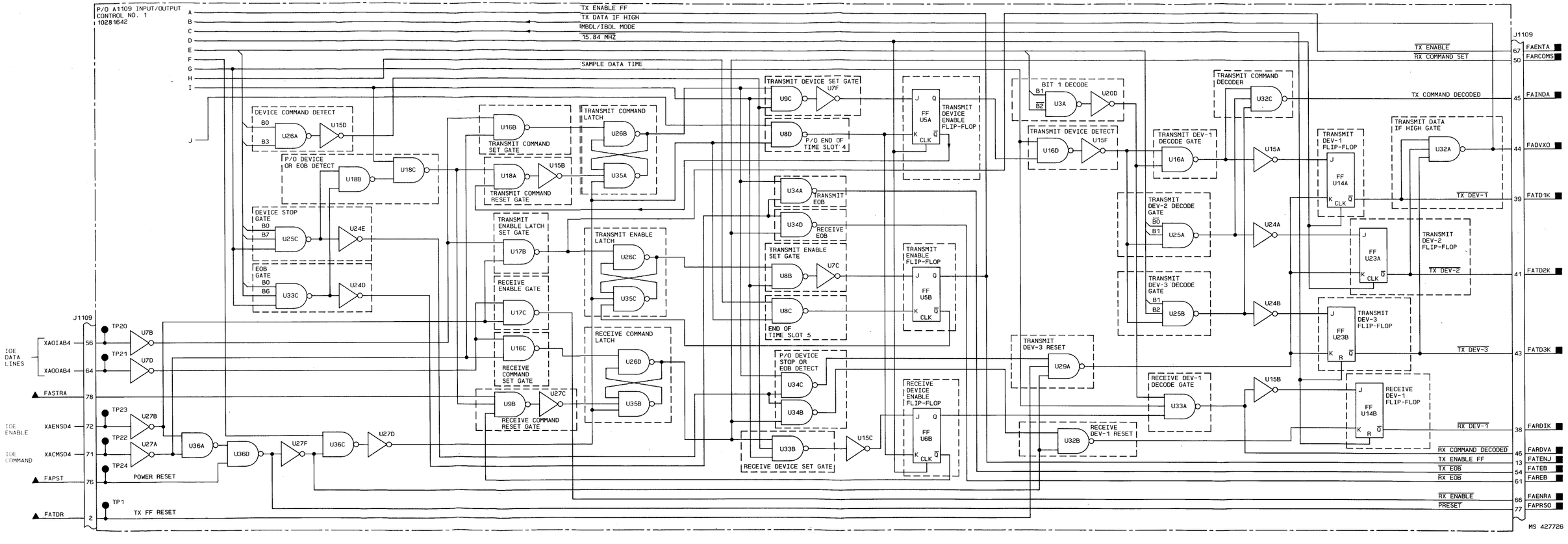
OUTPUTS	FO
FADVXO	7
FAENRA	7
FAENTA	7
FAINDA	7
FAMB0	2
FAMB1	2
FAMB2	2
FAMB3	2
FAMB4	2
FAMB5	2
FAMB6	2
FAMB7	2
FAPARR	7
FAPRSO	7
FARCOMS	7
FARDVA	7
FAREB	7
FARD1K	5
FATBOS	7
FATBSS	7
FATD1K	5
FATD2K	5
FATD3K	5
FATEB	7
FATENJ	7
FATF3	7
FATSS	7



NOTES: UNLESS OTHERWISE SPECIFIED

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS. PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATOR.
2. DEFINITIONS FOR SYMBOLS SHOWN ARE AS FOLLOWS:
   - ▲ INPUT FROM ANOTHER FIGURE
   - ■ OUTPUT TO ANOTHER FIGURE
3. REFER TO TABLE 5-3 FOR CIRCUIT CARD LOCATIONS.
4. REFER TO DATA COMMUNICATIONS POWER DISTRIBUTION DIAGRAM FOR DC POWER AND GROUND CIRCUITS.
5. THIS DIAGRAM IS FOR MODEM NO. 1 ONLY; CIRCUIT IS COMMON TO ALL MODEMS. REFER TO MODEM INTERCONNECT FOR CORRESPONDING MODEM MNEMONICS.
6. INTRA-MODEM CONNECTIONS ARE IDENTIFIED; REFER TO MODEM INTERCONNECT FOR INDIVIDUAL MODEM INPUTS AND OUTPUTS.

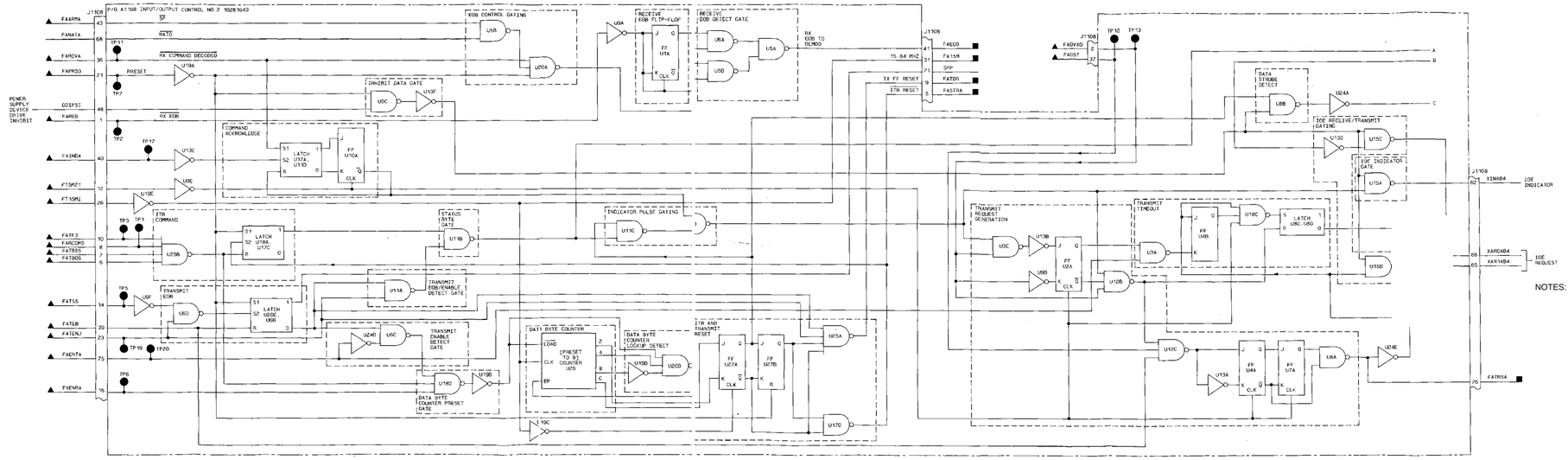
FO-6. MODEM No. 1, Typical MODEM Input/Output No. 1 Logic Diagram (Sheet 1 of 2)



FO-6. MODEM No. 1, Typical MODEM Input/Output No. 1 Logic Diagram (Sheet 2 of 2)

INPUTS	FO
FAARMA	3
FABSYA	5
FADAYA	5
FADST	2
FADXVO	6
FADB0A	5
FADB1A	5
FADB2A	5
FADB3A	5
FADB4A	5
FADB5A	5
FADB6A	5
FADB7A	5
FADNRA	6
FAENTA	6
FAINDA	6
FAMSLA	3
FANAKA	7
FANATA	7
FAPARR	6
FAPRSO	6
FARCOMS	6
FARDVA	6
FARDB	6
FATADA	3
FATBDS	6
FATBDXS	6
FATENJ	6
FATFSS	6
FATF3	6
FT15M2	9
FT15M1	9

OUTPUTS	FO
FAEOB	5
FASTRA	6
FATBPA	6
FATRSA	6
FATTOR	6
FA15M	6

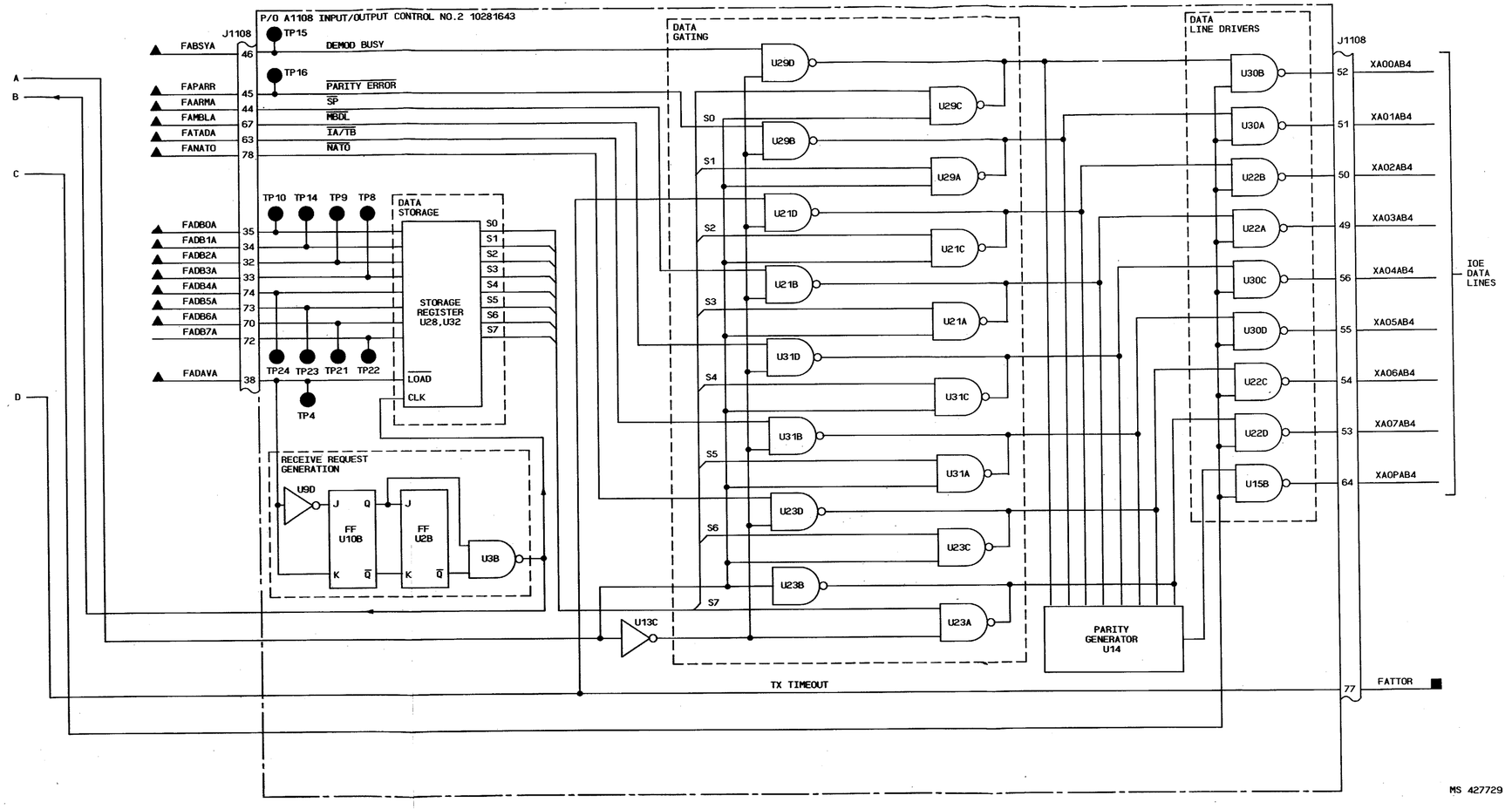


FO-7. MODEM No. 1, Typical MODEM Input/Output No. 2 Logic Diagram (Sheet 1 of 2)

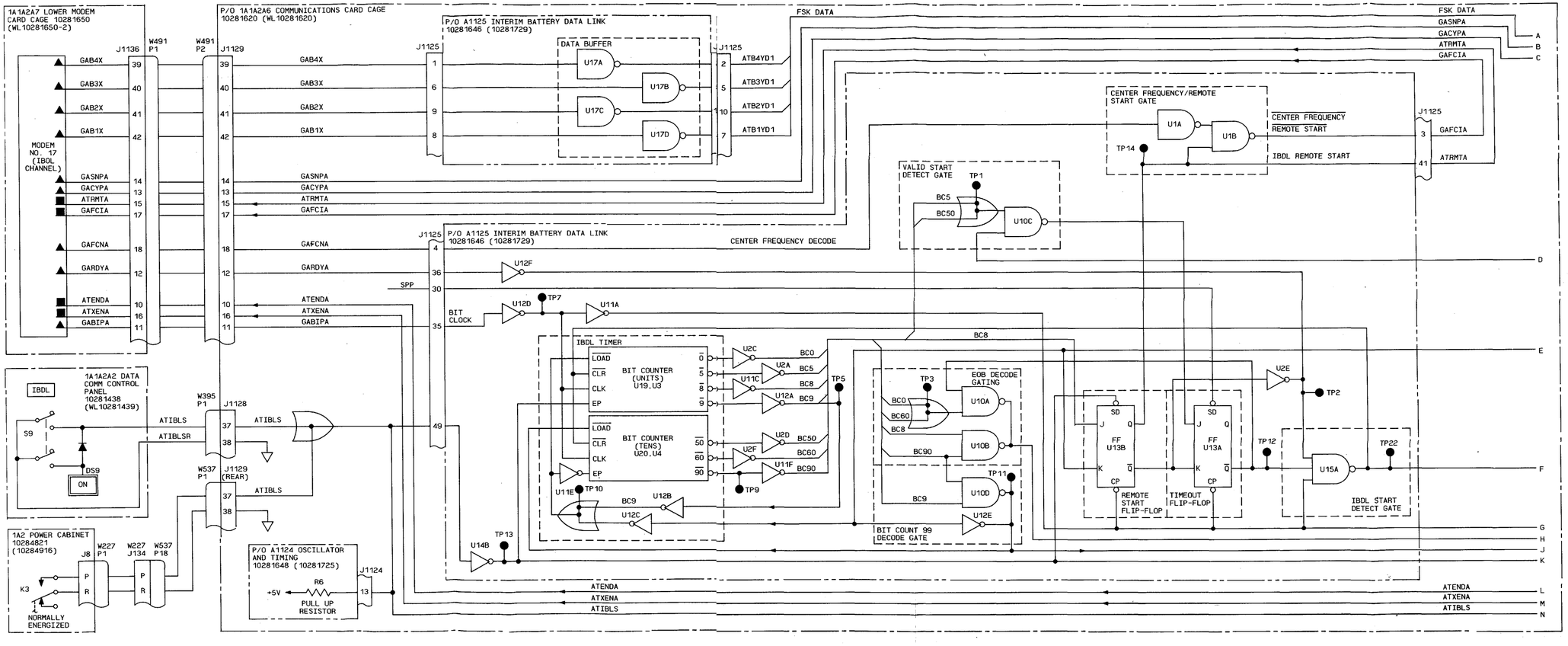
NOTES:

UNLESS OTHERWISE SPECIFIED

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS. PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATOR.
2. DEFINITIONS FOR SYMBOLS SHOWN ARE AS FOLLOWS:
   - ▲ INPUT FROM ANOTHER FIGURE
   - ■ OUTPUT TO ANOTHER FIGURE
3. REFER TO TABLE 5-3 FOR CIRCUIT CARD LOCATIONS.
4. REFER TO DATA COMMUNICATIONS POWER DISTRIBUTION DIAGRAM FOR DC POWER AND GROUND CIRCUITS.
5. THIS DIAGRAM IS FOR MODEM NO. 1 ONLY; CIRCUIT IS COMMON TO ALL MODEMS. REFER TO MODEM INTERCONNECT FOR CORRESPONDING MODEM MNEMONICS.
6. INTRA-MODEM CONNECTIONS ARE IDENTIFIED; REFER TO MODEM INTERCONNECT FOR INDIVIDUAL MODEM INPUTS AND OUTPUTS.



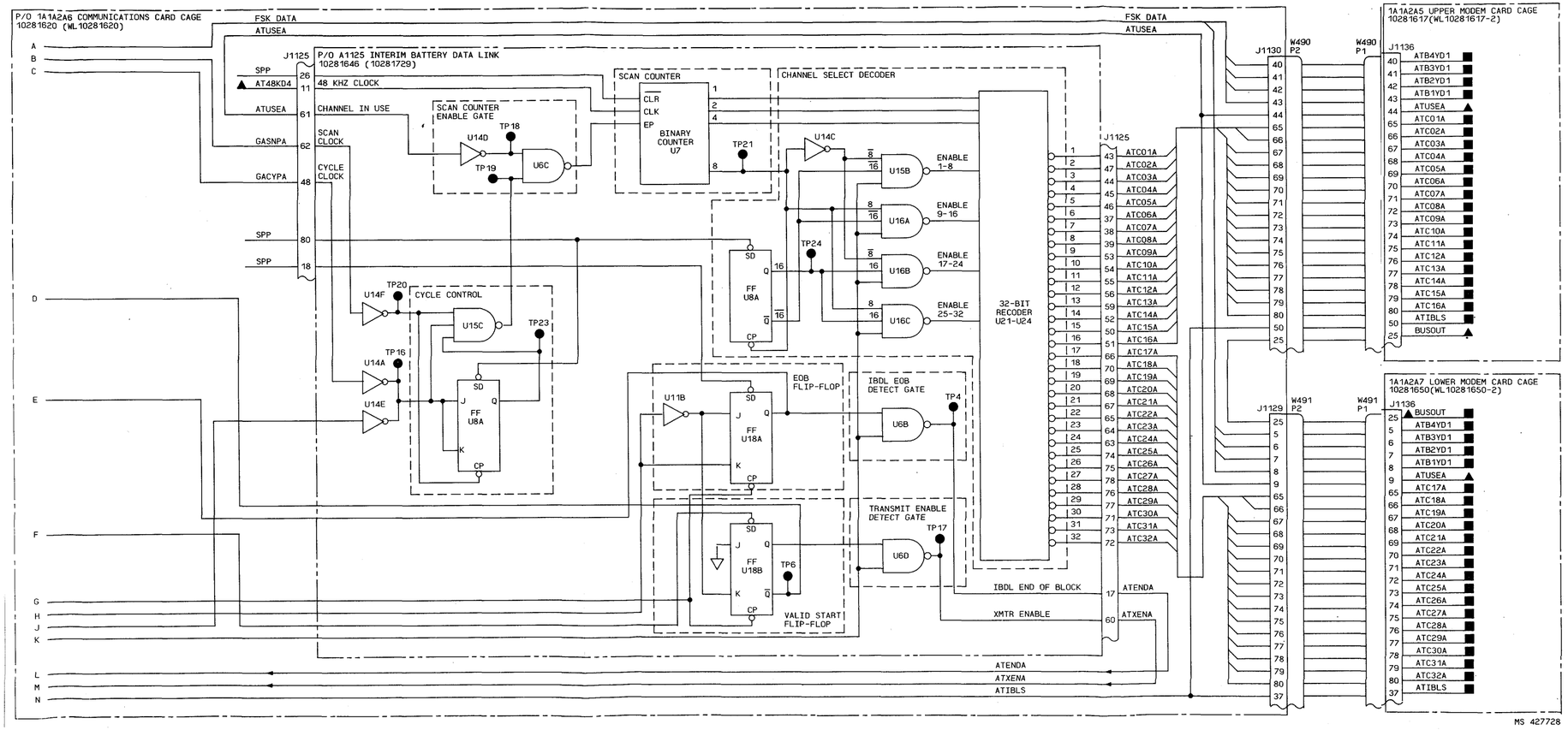
FO-7. MODEM No. 1, Typical MODEM Input/Output No. 2 Logic Diagram (Sheet 2 of 2)



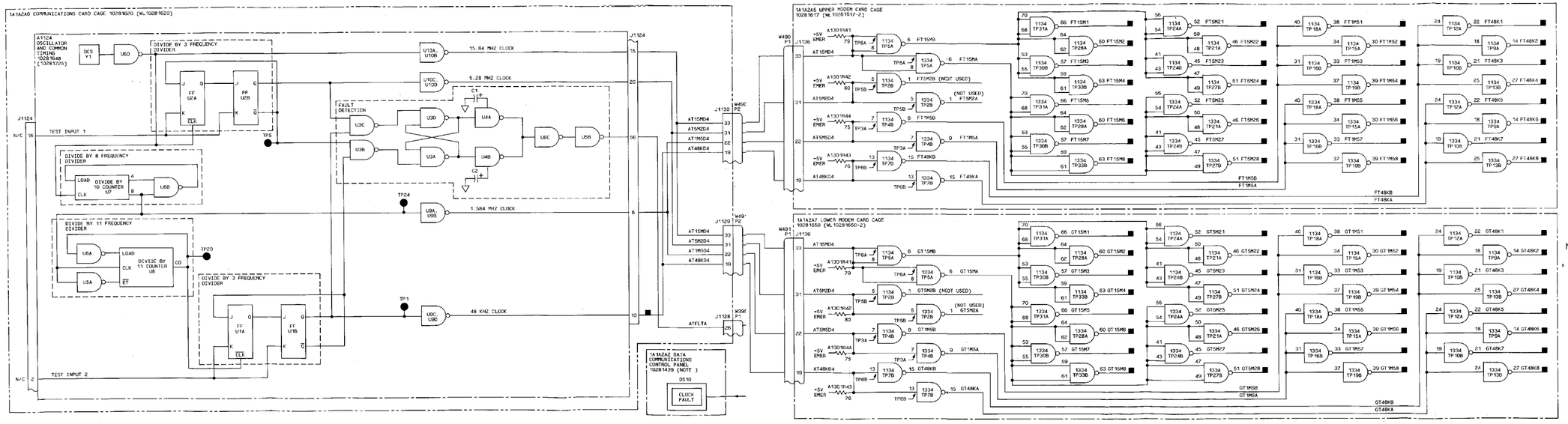
FO-8. IBDL Mode Control Logic Diagram (Sheet 1 of 2)

NOTES: UNLESS OTHERWISE SPECIFIED

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS. PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATOR.
2. DEFINITIONS FOR SYMBOLS SHOWN ARE AS FOLLOWS:
   - ▲ INPUT FROM ANOTHER FIGURE
   - ■ OUTPUT TO ANOTHER FIGURE
3. REFER TO TABLE 5-3 FOR CIRCUIT CARD LOCATIONS.
4. REFER TO DATA COMMUNICATIONS POWER DISTRIBUTION DIAGRAM FOR DC POWER AND GROUND CIRCUITS.
5. THIS DIAGRAM IS CONNECTS TO ALL MODEMS. REFER TO MODEM INTERCONNECTS FOR CORRESPONDING MODEM INPUT AND OUTPUT MNEUMONIC DESTINATIONS.
6. ☐ INDICATES EQUIPMENT MARKINGS.



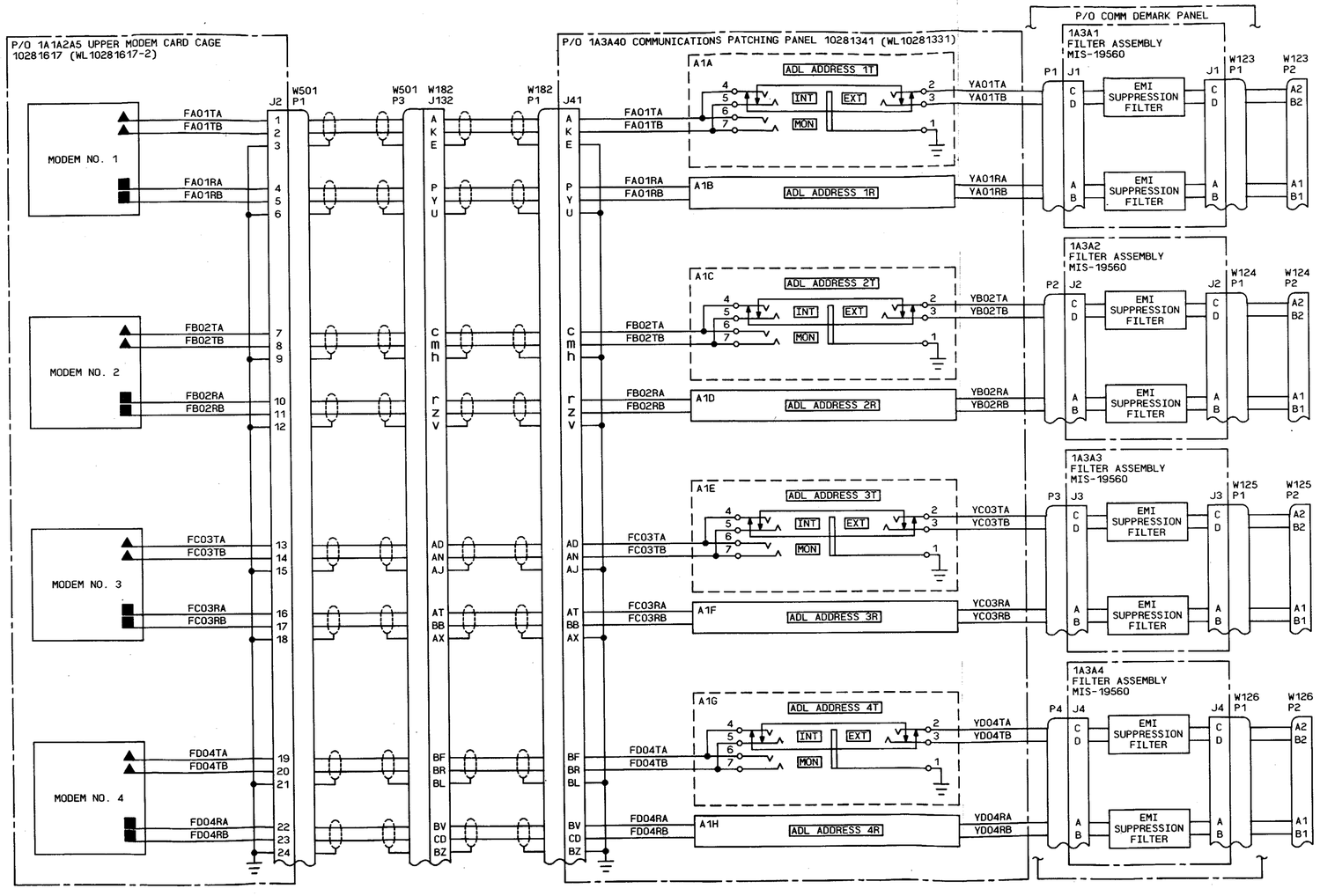
FO-8. IBDL Mode Control Logic Diagram (Sheet 2 of 2)



FO-9. Data Communications Timing Logic Diagram

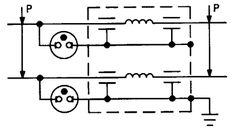
NOTES: UNLESS OTHERWISE SPECIFIED

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS. PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATOR.
2. DEFINITIONS FOR SYMBOLS SHOWN ARE AS FOLLOWS:
   - ▲ INPUT FROM ANOTHER FIGURE
   - ■ OUTPUT TO ANOTHER FIGURE
3. REFER TO TABLE 5-3 FOR CIRCUIT CARD LOCATIONS.
4. REFER TO DATA COMMUNICATIONS POWER DISTRIBUTION DIAGRAM FOR DC POWER AND GROUND CIRCUITS.
5. THIS DIAGRAM IS CONNECTS TO ALL MODEMS. REFER TO MODEM INTERCONNECTS FOR CORRESPONDING MODEM INPUT AND OUTPUT MNEUMONIC DESTINATIONS.
6. ▭ INDICATES EQUIPMENT MARKINGS.



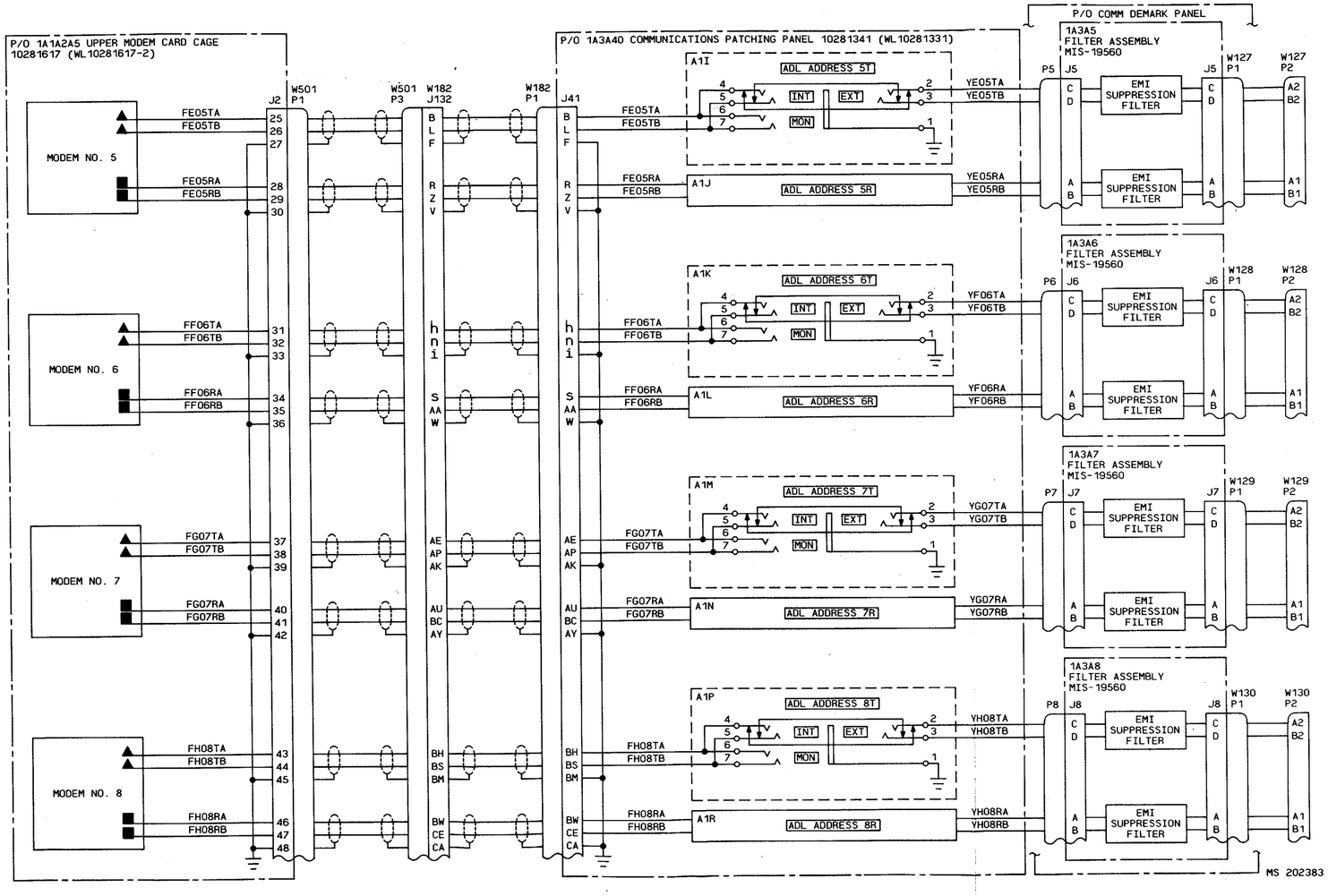
NOTES: UNLESS OTHERWISE SPECIFIED

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS. PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATOR.
2. TYPICAL EMI SUPRESSION FILTER:

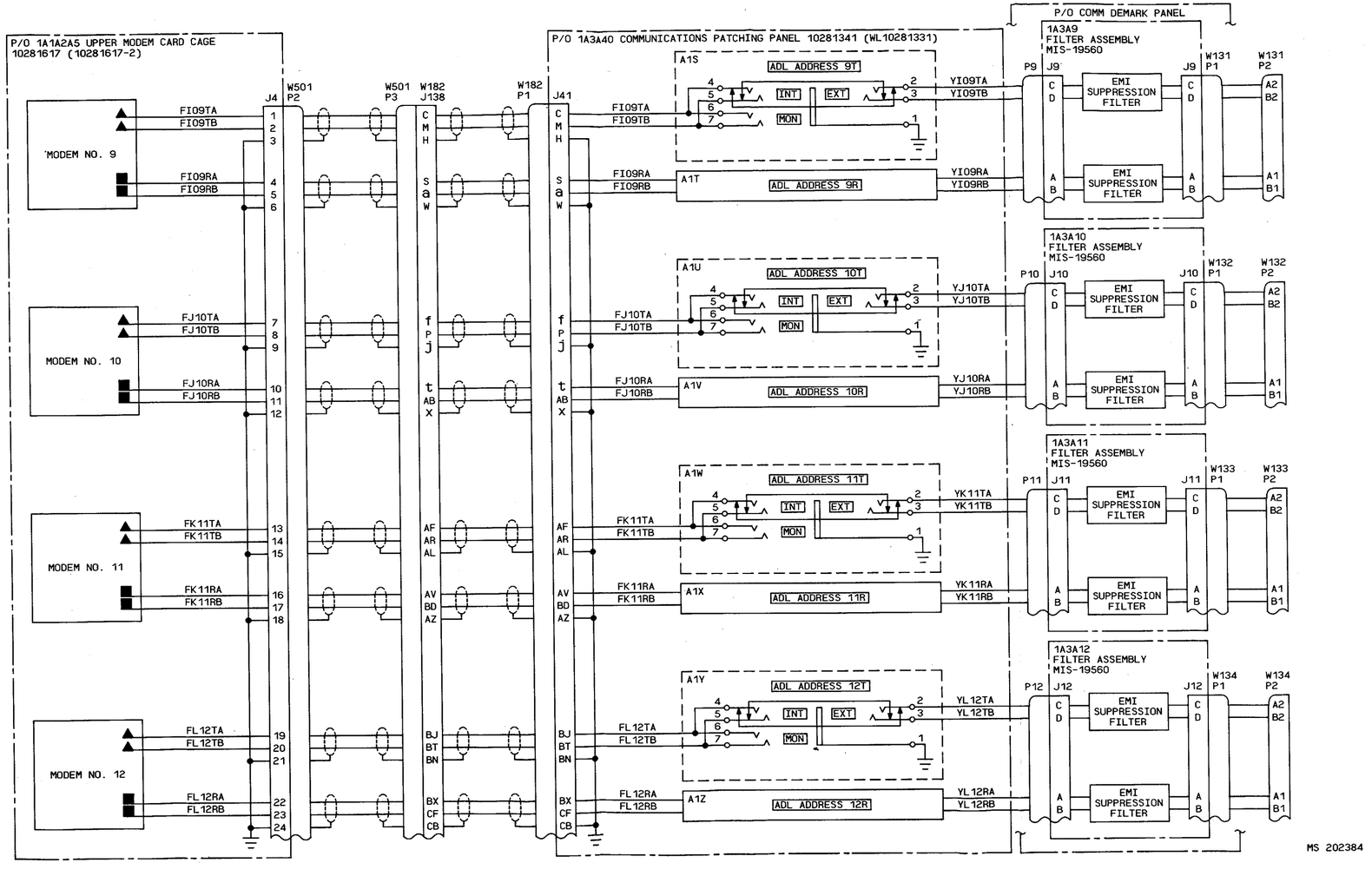


3. DEFINITIONS FOR SYMBOLS SHOWN ARE AS FOLLOWS:
   - ▲ INPUT FROM ANOTHER FIGURE
   - ■ OUTPUT TO ANOTHER FIGURE
   - . REFER TO TABLE 5-3 FOR CIRCUIT CARD LOCATIONS.
4. REFER TO INTERCONNECTION DIAGRAMS FOR MODEM INPUT AND OUTPUT CONNECTIONS..
5. ▭ INDICATES EQUIPMENT MARKING.

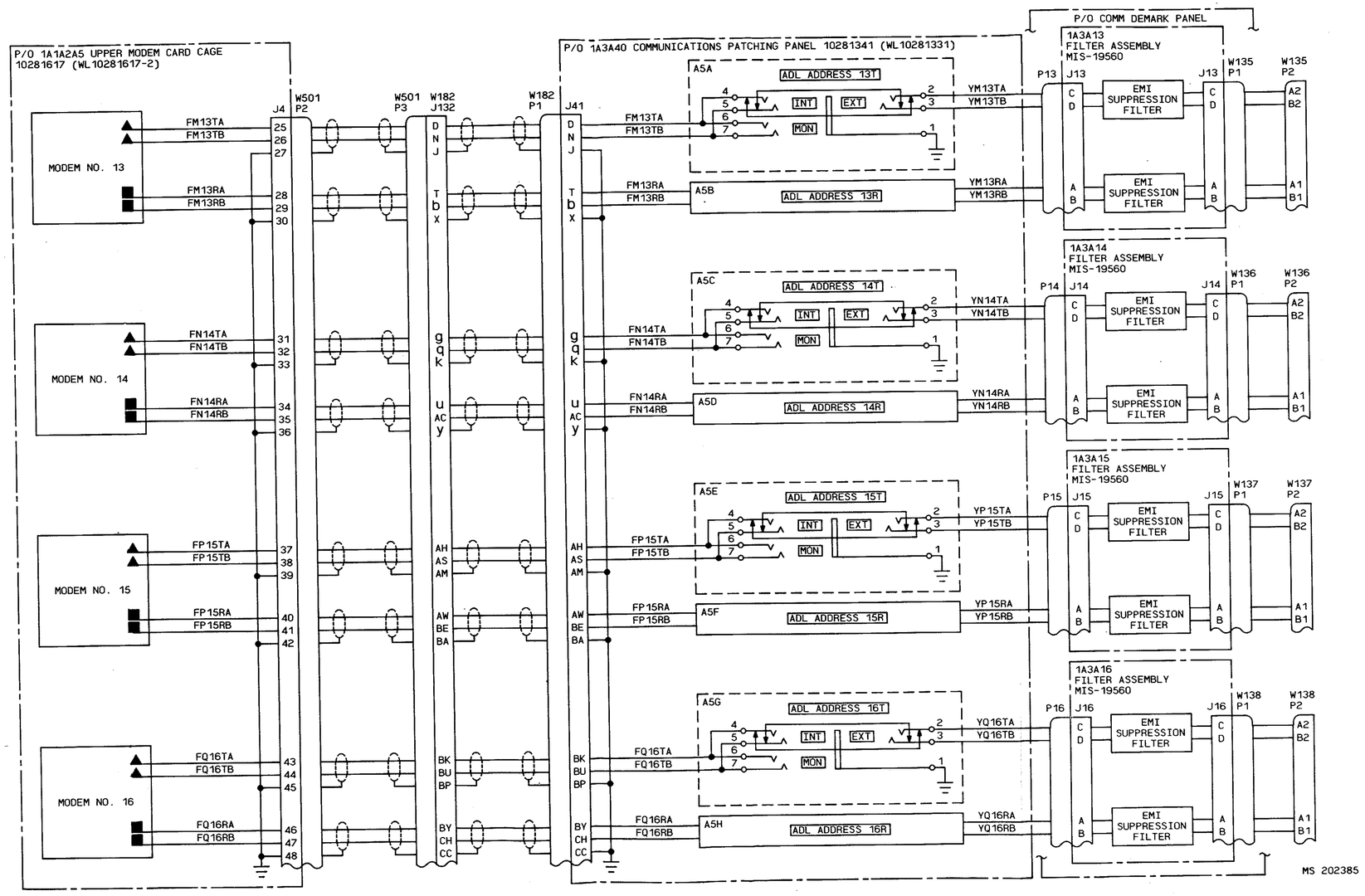
FO-10. External Subscriber Parch Interface Diagram
(Sheet 1 of 8)



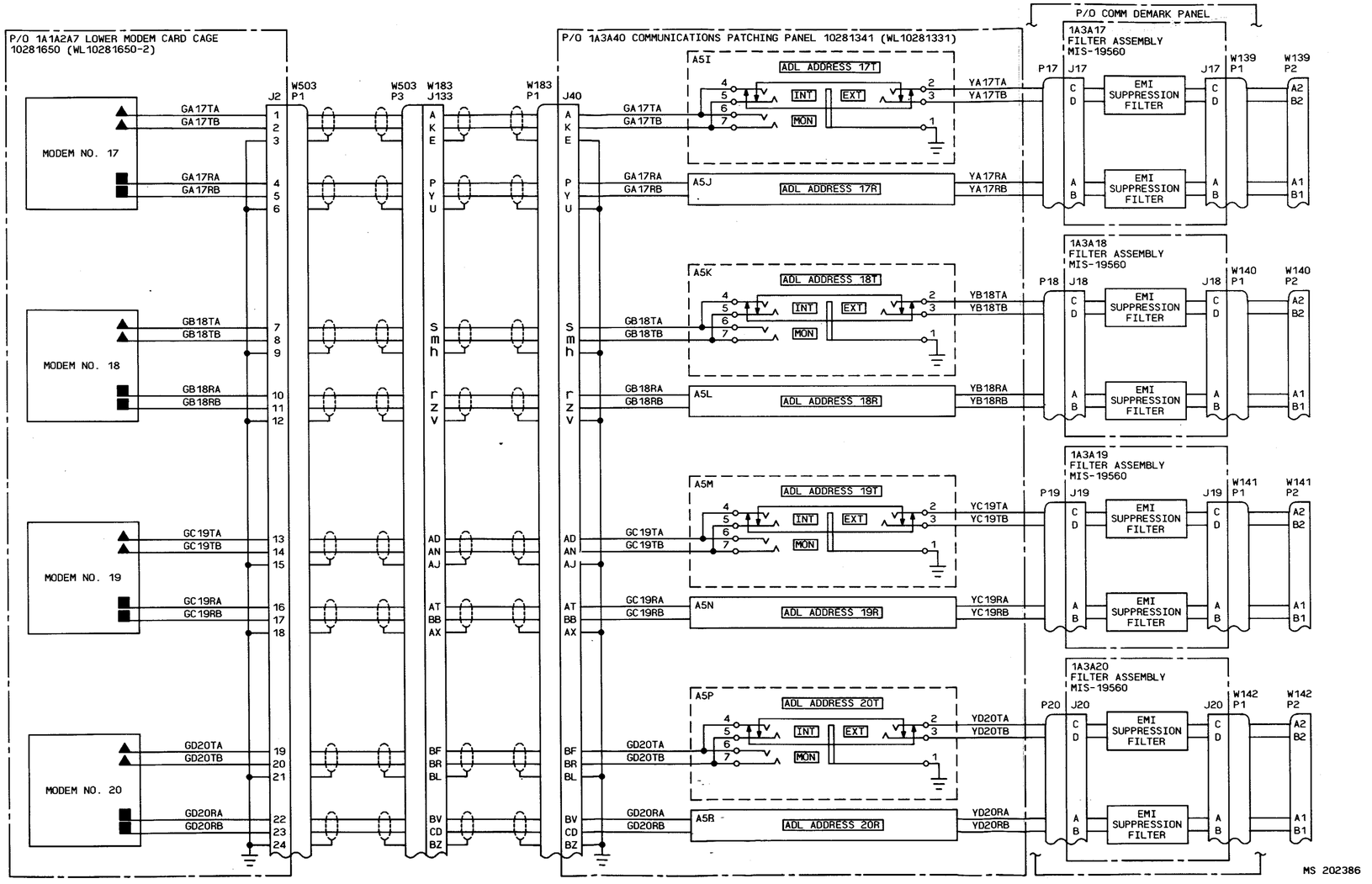
FO-10. External Subscriber Patch Interface Diagram
(Sheet 2 of 8)



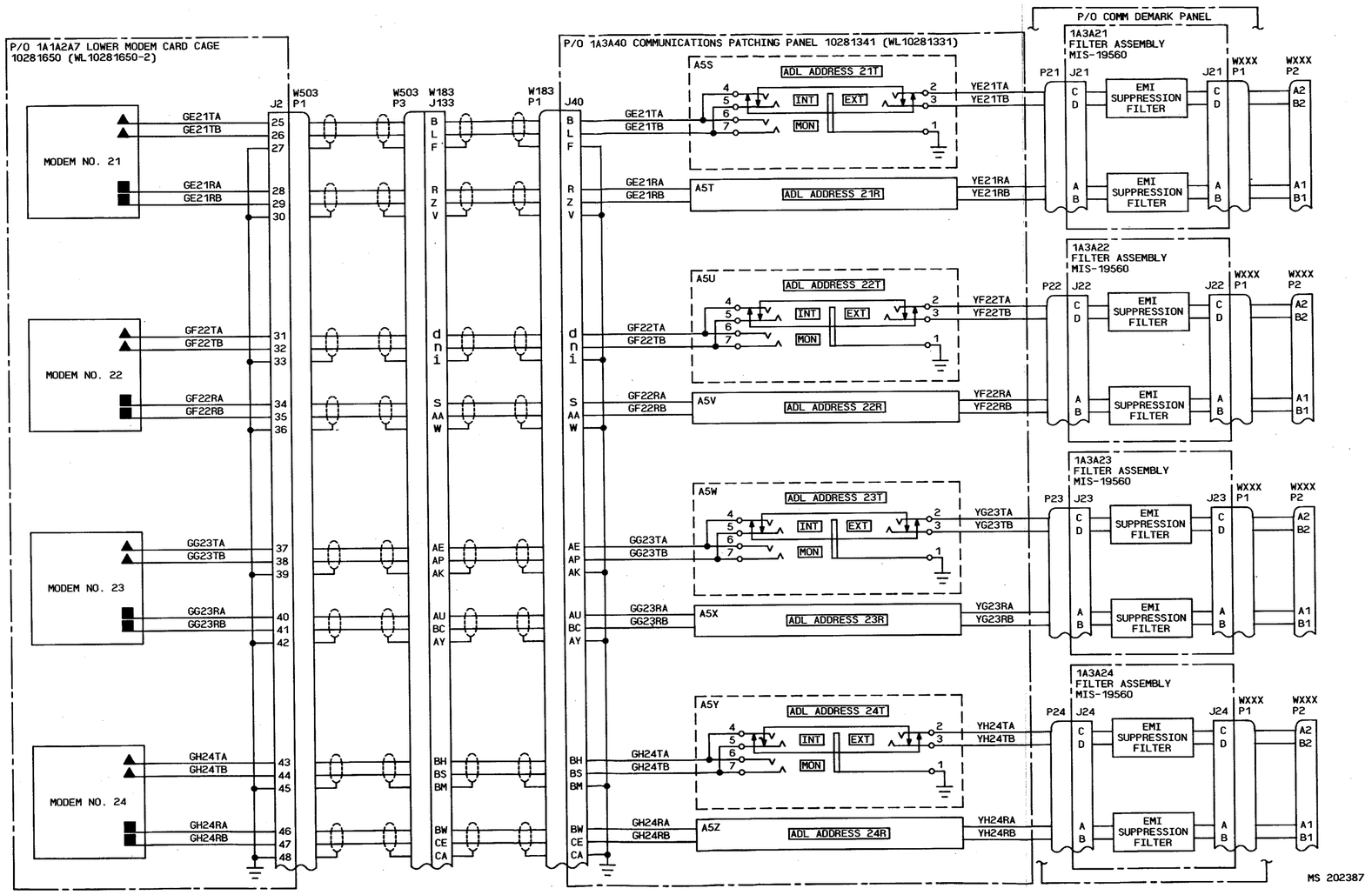
FO-10. External Subscriber Patch Interface Diagram
(Sheet 3 of 8)



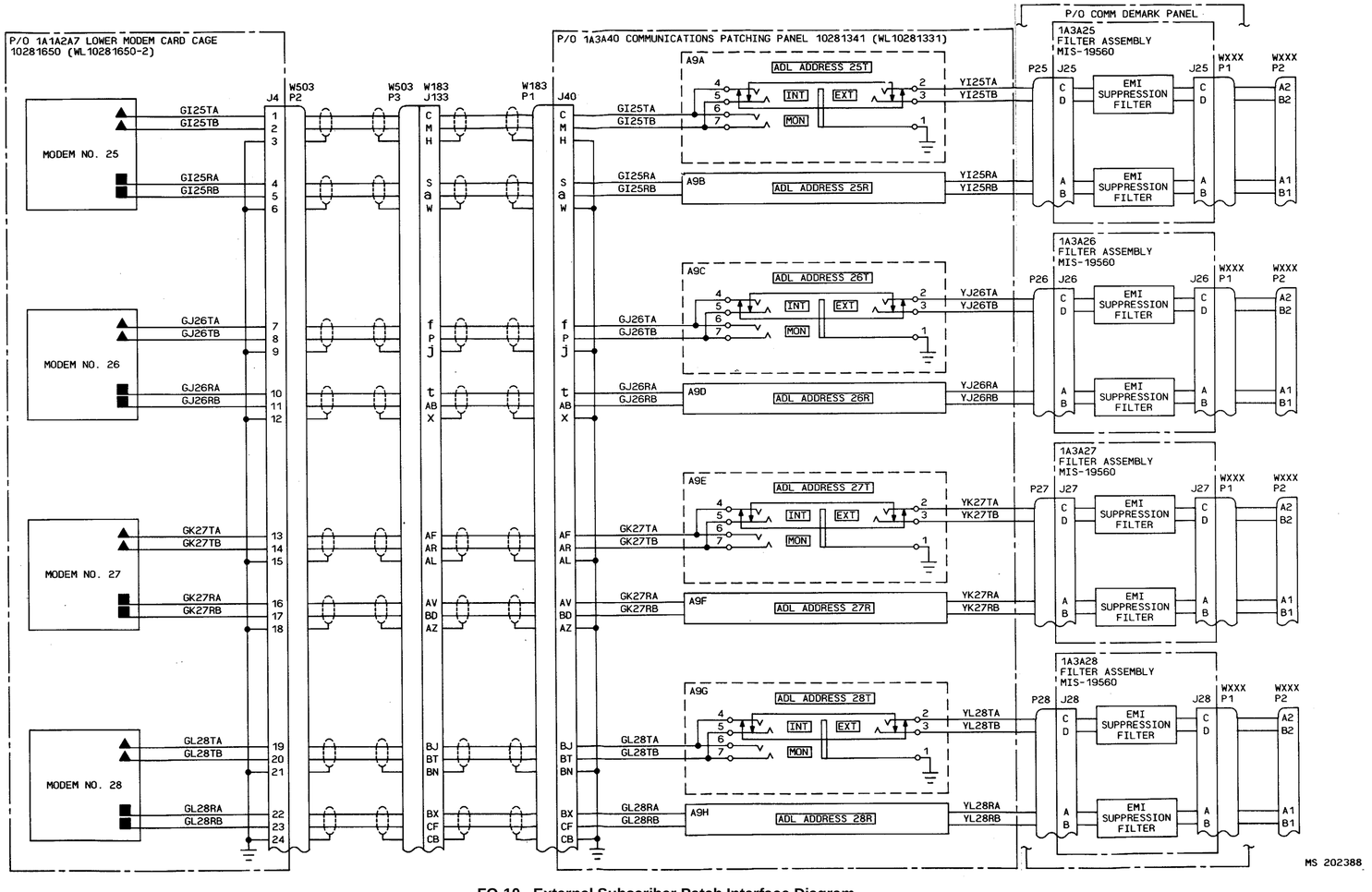
FO-10. External Subscriber Patch Interface Diagram
(Sheet 4 of 8)



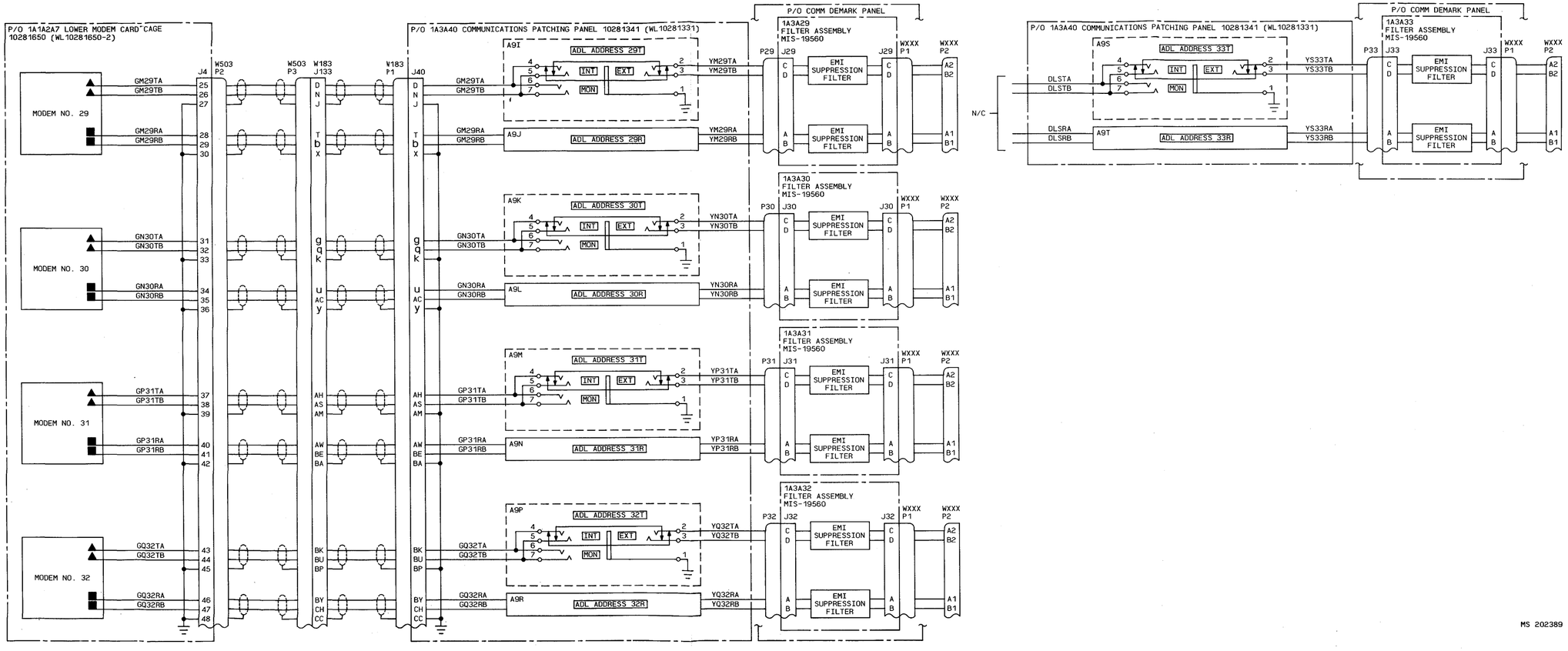
FO-10. External Subscriber Patch Interface Diagram
(Sheet 5 of 8)



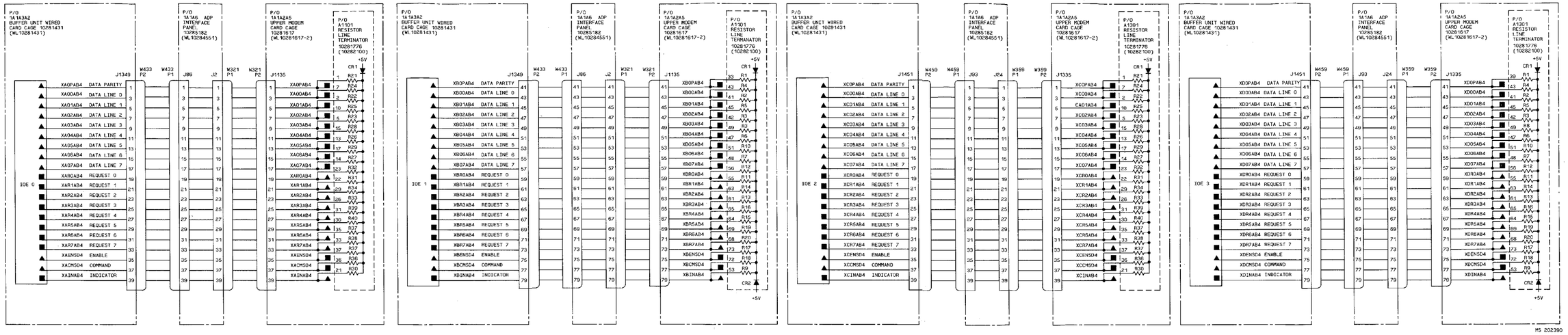
FO-10. External Subscriber Patch Interface Diagram
(Sheet 6 of 8)



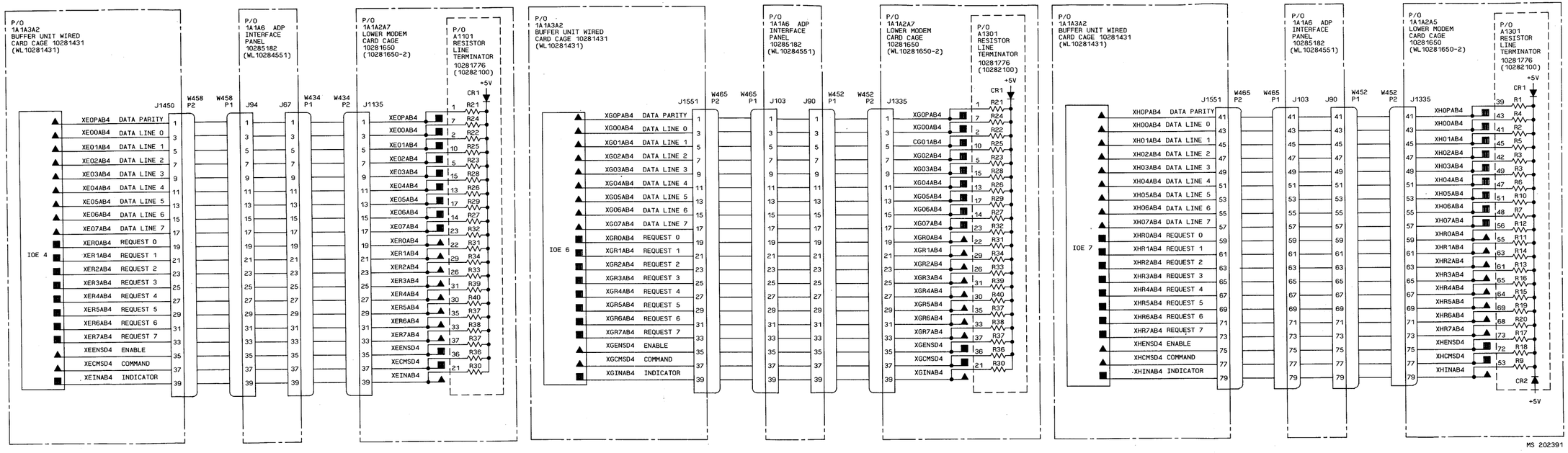
FO-10. External Subscriber Patch Interface Diagram
(Sheet 7 of 8)



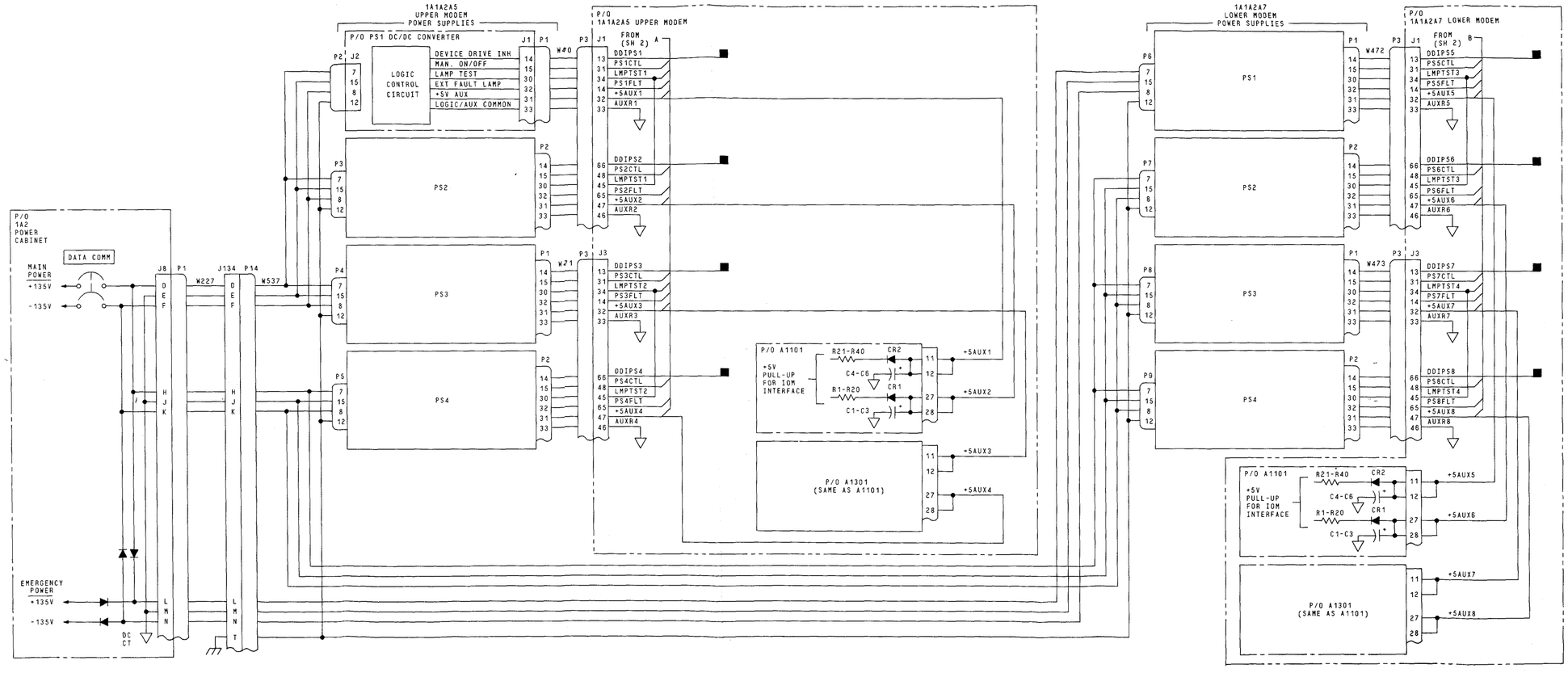
FO-10. External Subscriber Patch Interface Diagram (Sheet 8 of 8)



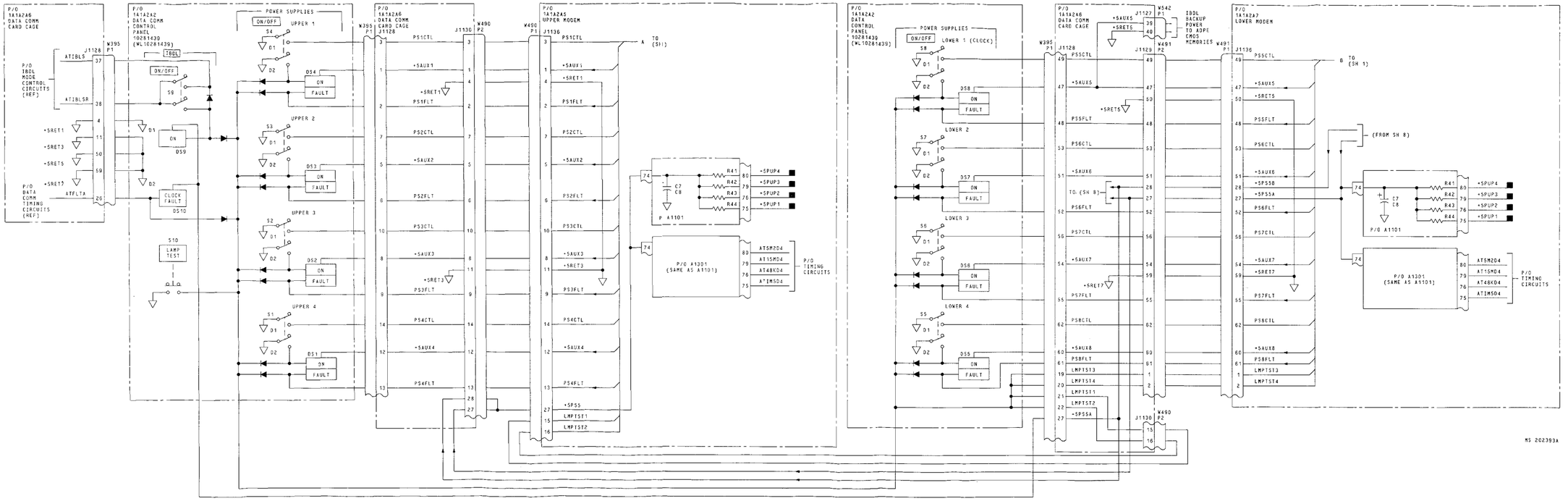
FO-11. Modem to 10M Interface (sheet 1 of 2)



FO-11. Modem to 10M Interface (Sheet 2 of 2)

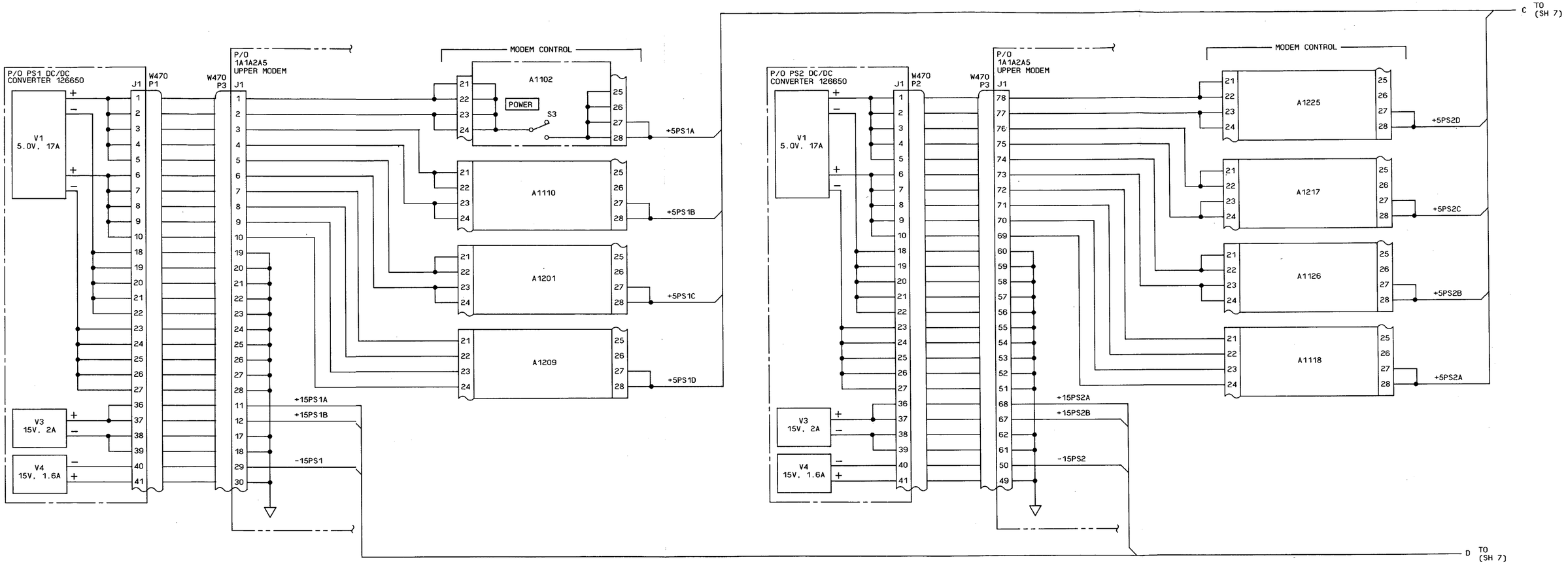


FO-12. Data Communications Power Distribution Diagram
(Sheet 1 of 8)

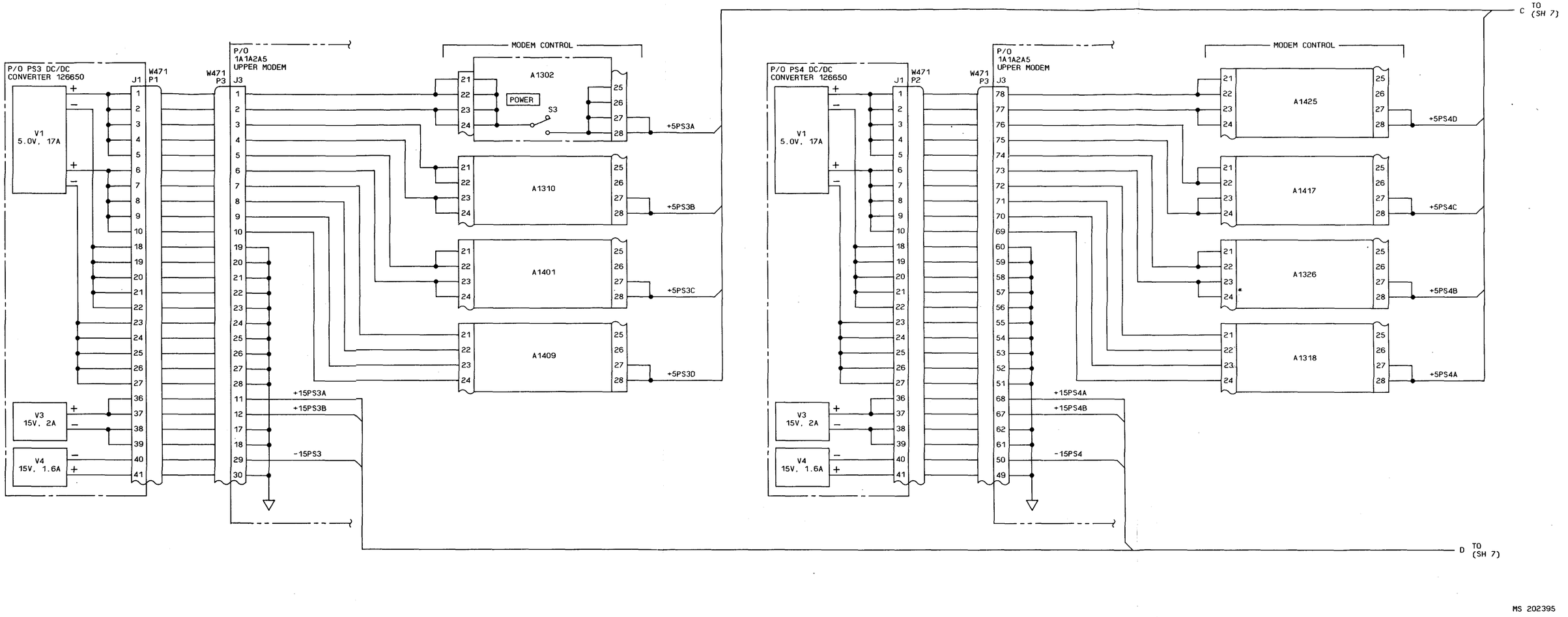


FO-12. Data Communications Power Distribution Diagram (Sheet 2 of 8)

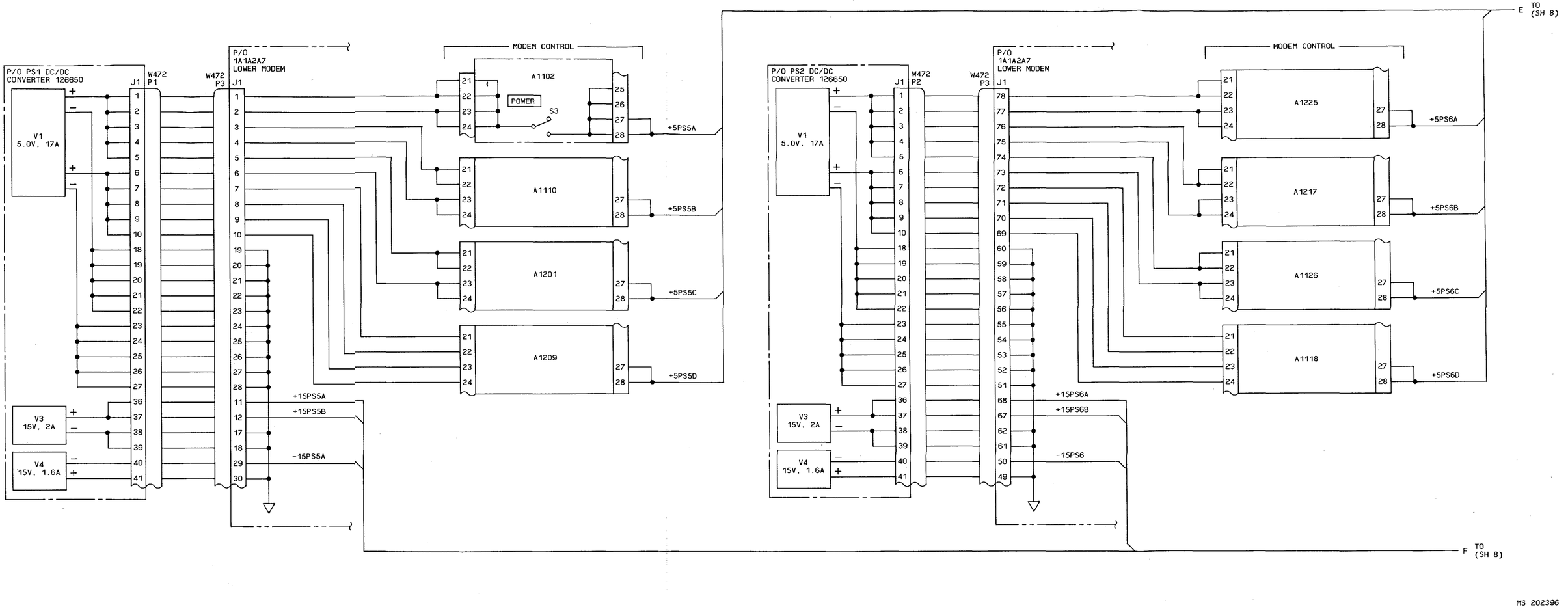
Change 1



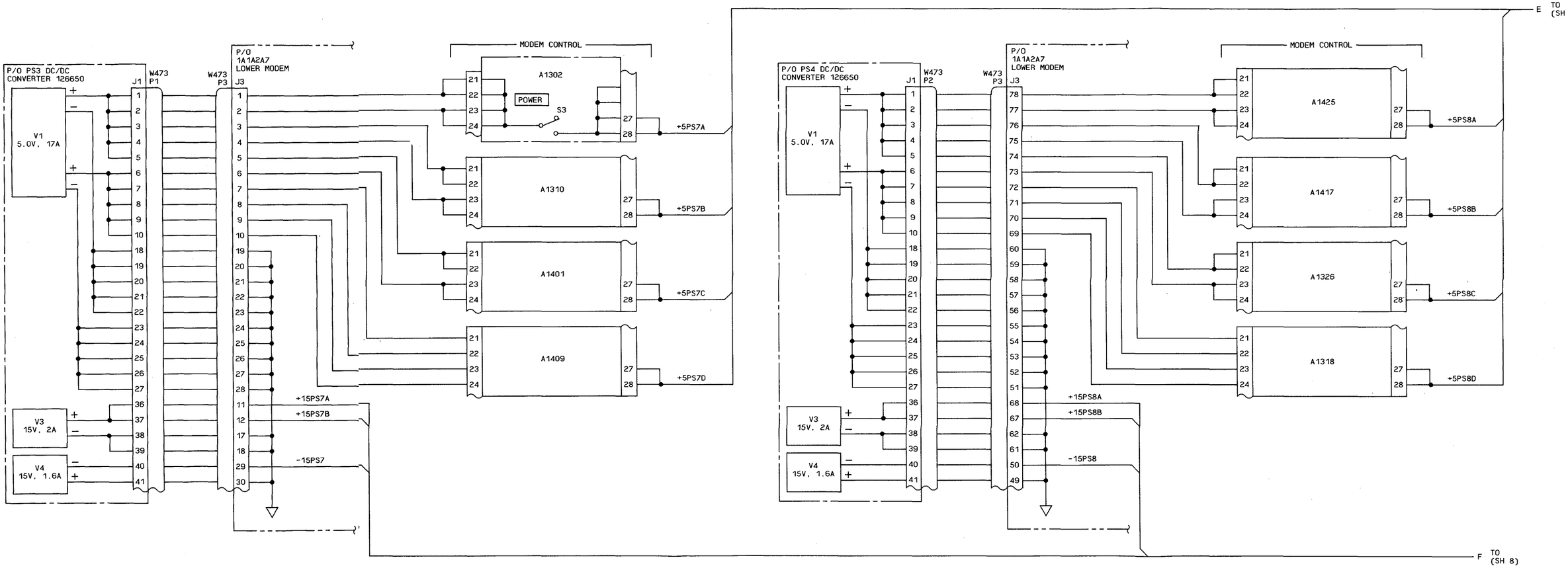
FO-12. Data Communications Power Distribution Diagram
(Sheet 3 of 8)



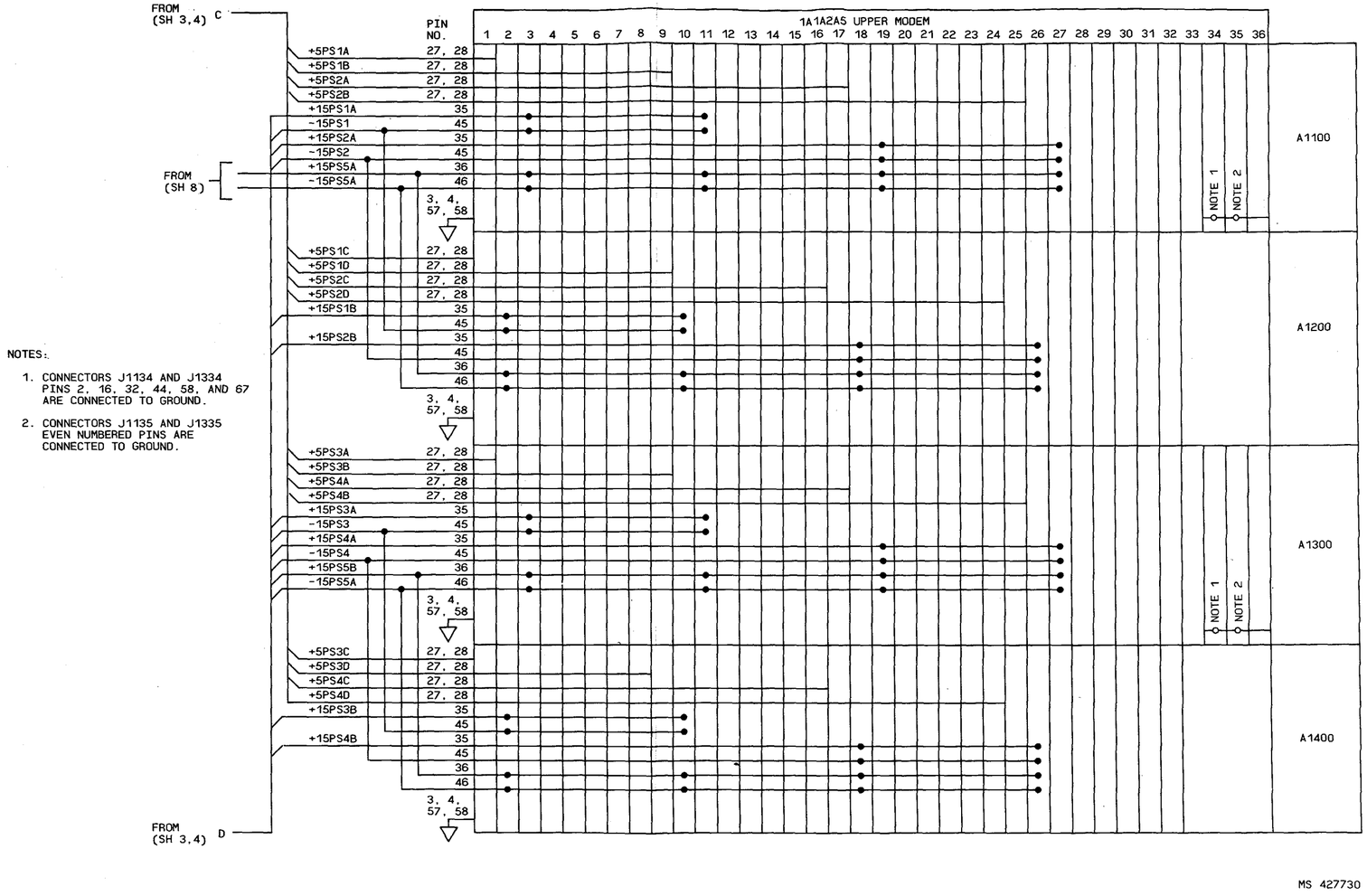
FO-12. Data Communications Power Distribution Diagram
(Sheet 4 of 8)



FO-12. Data Communications Power Distribution Diagram
(Sheet 5 of 8)



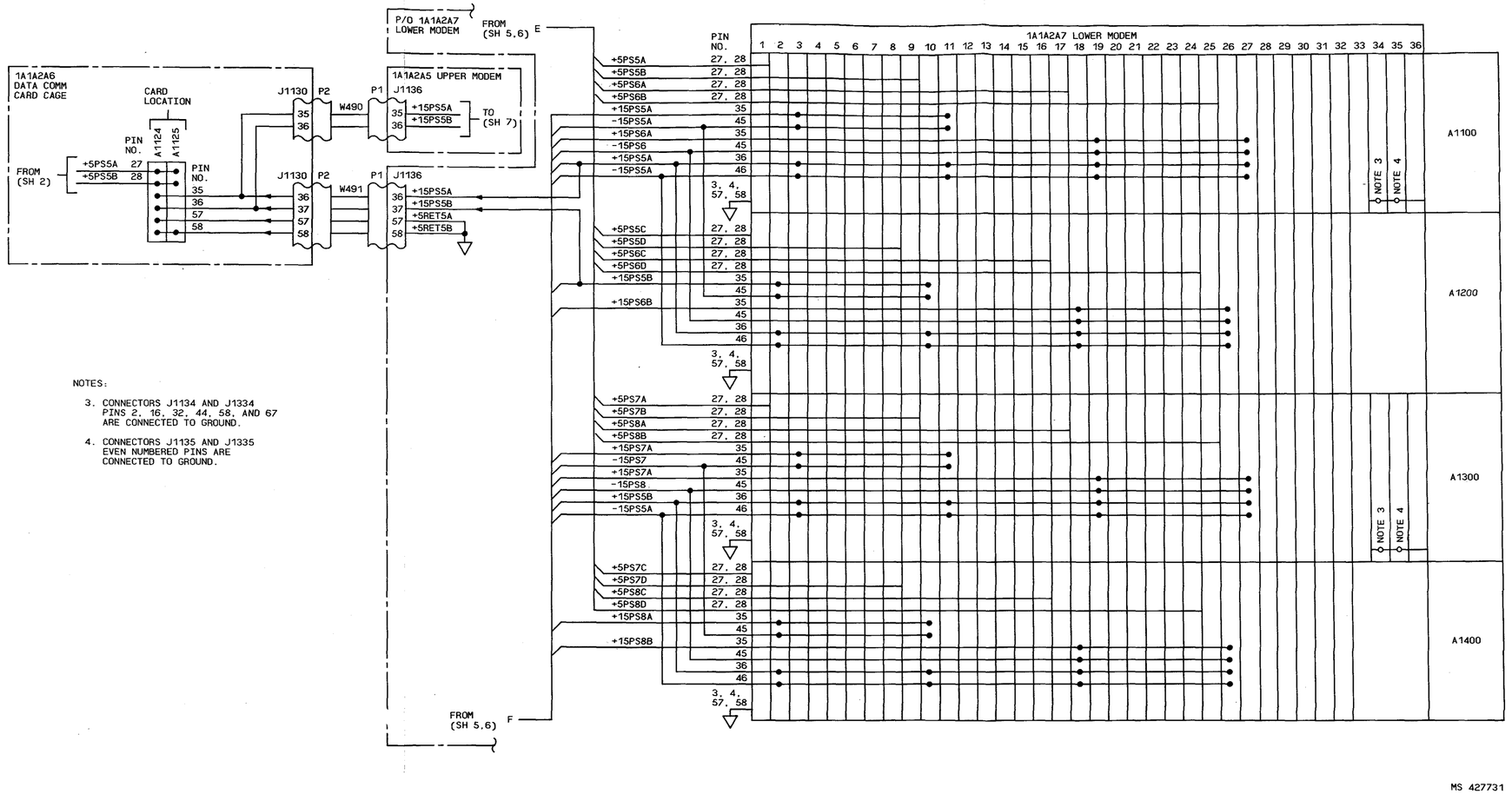
FO-12. Data Communications Power Distribution Diagram.
(Sheet 6 of 8)



NOTES:

1. CONNECTORS J1134 AND J1334 PINS 2, 16, 32, 44, 58, AND 67 ARE CONNECTED TO GROUND.
2. CONNECTORS J1135 AND J1335 EVEN NUMBERED PINS ARE CONNECTED TO GROUND.

FO-12. Data Communications Power Distribution Diagram (Sheet 7 of 8)



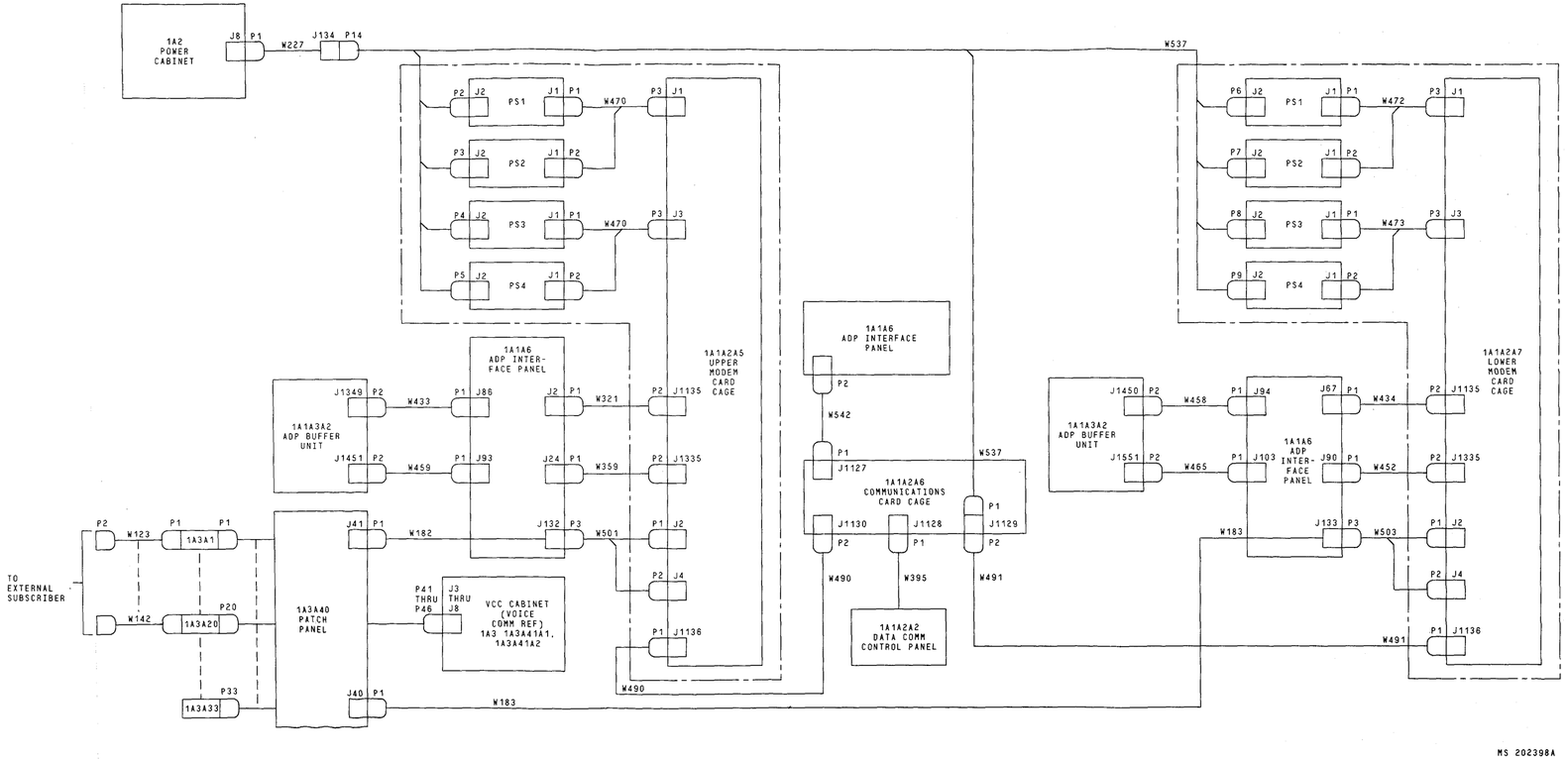
FO-12. Data Communications Power Distribution Diagram (Sheet 8 of 8)

DATA COMM ASSEMBLY AND CABLE CROSS REFERENCE

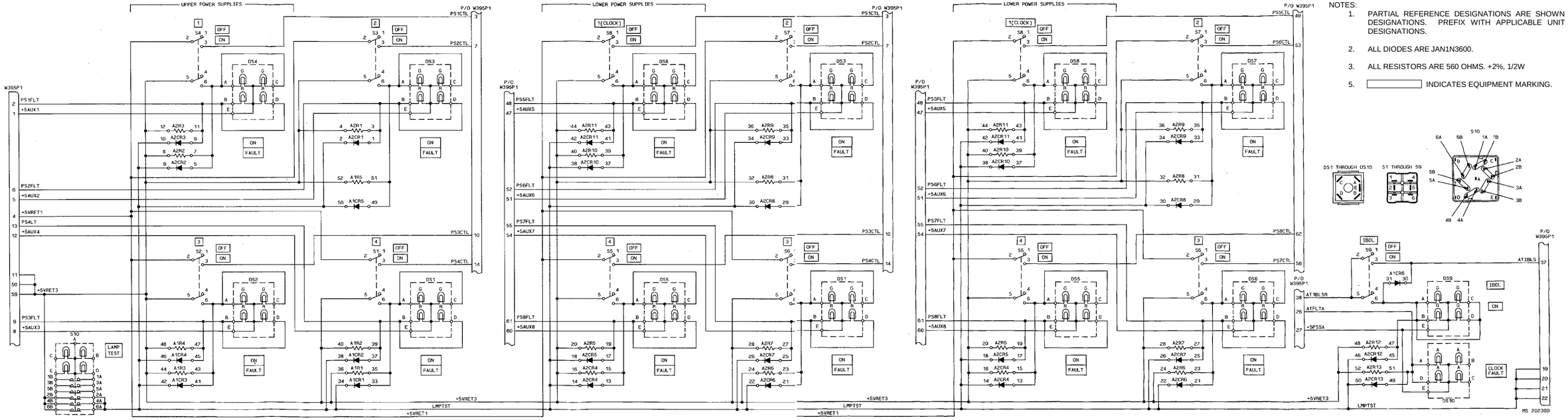
REF DES	ASSEMBLY	PART NO.	WIRE LIST	SCHEMATIC
1A1A2A5	16/16 UPPER MODEM	10281616		
	10/16 UPPER MODEM	10284971		
	UPPER MODEM CARD CAGE	10281617	WL10281617-2	
1A1A2A6	COMM CARD CAGE ASSEMBLY	13143920		
	COMM WIRED CARD CAGE	13143921	WL13143921	
1A1A2A7	4/16 LOWER MODEM	10281618		
	2/16 LOWER MODEM	10284830		
	LOWER MODEM CARD CAGE	10281650	WL10281650-2	
1A1A3A2	ADP BUFFER UNIT	13143771		
	BUFFER UNIT CARD CAGE	13143792	WL13143792	
1A1A6	ADP INTERFACE PANEL	13143917	WL13143917	
1A2	POWER CABINET	10285434	WL10285257	
1A3	VCC CABINET ASSEMBLY	10285435		
1A3A1-A32	FILTER ASSEMBLY	MIS-19560		(SEE SPEC)
1A3A40	COMM PATCHING PANEL	10281341	WL10281331	
1A3A41A1	VCC CONTROL PANEL	10281623	WL10281889	
1A3A41A2	VCC CARD CAGE	10281334-2	WL10281334-2	
W123	EXTERNAL COMM CABLES	10281480-1		FIG. 7-30*
W182		10282182		FIG. 7-41*
W183		10282183		FIG. 7-41*
W227		10282696-1		FIG. 7-51*
W321,W359	80 PIN RIBBON CABLE (PIN TO PIN)	10284709-n		FIG. 7-59*
W433				
W434,W452				
W458,W459				
W465				
W395		10282608	WL10281439	
W470-W473	MODEM POWER CABLES	10282609-n	WL10282609	
W501		10282640		FIG. 7-63*
W503		10282642		FIG. 7-63*
W537		13143813	WL13143813	
W542	CMOS MEM BACKUP POWER	13143919	WL13143919	FIG. 7-68.2*

*FIGURE REFERENCES ARE TO CABLE WIRING DIAGRAMS CONTAINED IN TM 9-1430-655-20-1.

(-n) INDICATES SAME TOP ASSEMBLY PART NO. BUT DIFFERENT MECHANICAL ASSEMBLY; THESE ASSEMBLIES ARE ELECTRICALLY IDENTICAL



FO-13. Data Communications Cabling Diagram



NOTES:

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN FOR COMPLETE DESIGNATIONS. PREFIX WITH APPLICABLE UNIT AND ASSEMBLY DESIGNATIONS.
2. ALL DIODES ARE JAN1N3600.
3. ALL RESISTORS ARE 560 OHMS. +2%, 1/2W
5. ▭ INDICATES EQUIPMENT MARKING.

FO-14. Data Communications Control Panel, Schematic Diagram

By Order of the Secretary of the Army:

E. C. MEYER
General, United States Army
Chief of Staff

Official:

ROBERT M. JOYCE
Major General, United States Army
The Adjutant General

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THE METRIC SYSTEM AND EQUIVALENTS

'NEAR MEASURE

. Centimeter = 10 Millimeters = 0.01 Meters = 0.3937 Inches
1 Meter = 100 Centimeters = 1000 Millimeters = 39.37 Inches
1 Kilometer = 1000 Meters = 0.621 Miles

'VEIGHTS

Gram = 0.001 Kilograms = 1000 Milligrams = 0.035 Ounces
1 Kilogram = 1000 Grams = 2.2 lb.
1 Metric Ton = 1000 Kilograms = 1 Megagram = 1.1 Short Tons

LIQUID MEASURE

1 Milliliter = 0.001 Liters = 0.0338 Fluid Ounces
1 Liter = 1000 Milliliters = 33.82 Fluid Ounces

SQUARE MEASURE

1 Sq. Centimeter = 100 Sq. Millimeters = 0.155 Sq. Inches
1 Sq. Meter = 10,000 Sq. Centimeters = 10.76 Sq. Feet
1 Sq. Kilometer = 1,000,000 Sq. Meters = 0.386 Sq. Miles

CUBIC MEASURE

1 Cu. Centimeter = 1000 Cu. Millimeters = 0.06 Cu. Inches
1 Cu. Meter = 1,000,000 Cu. Centimeters = 35.31 Cu. Feet

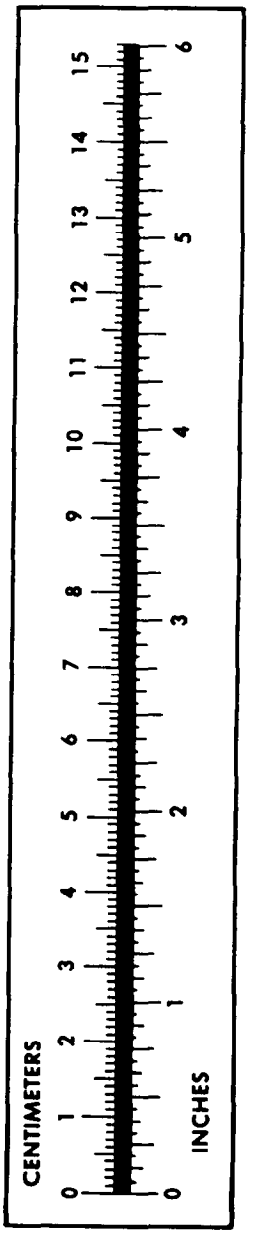
TEMPERATURE

5/9(°F - 32) = °C
212° Fahrenheit is evuivalent to 100° Celsius
90° Fahrenheit is equivalent to 32.2° Celsius
32° Fahrenheit is equivalent to 0° Celsius
9/5C° + 32 =°F

APPROXIMATE CONVERSION FACTORS

TO CHANGE	TO	MULTIPLY BY
Inches	Centimeters	2.540
Feet	Meters	0.305
Yards	Meters	0.914
Miles	Kilometers	1.609
Square Inches	Square Centimeters	6.451
Square Feet	Square Meters	0.093
Square Yards	Square Meters	0.836
Square Miles	Square Kilometers	2.590
Acres	Square Hectometers	0.405
Cubic Feet	Cubic Meters	0.028
Cubic Yards	Cubic Meters	0.765
Fluid Ounces	Milliliters	29.573
ıts	Liters	0.473
arts	Liters	0.946
allons	Liters	3.785
Ounces	Grams	28.349
Pounds	Kilograms	0.454
Short Tons	Metric Tons	0.907
Pound-Feet	Newton-Meters	1.356
Pounds per Square Inch	Kilopascals	6.895
Miles per Gallon	Kilometers per Liter	0.425
Miles per Hour	Kilometers per Hour	1.609

TO CHANGE	TO	MULTIPLY BY
Centimeters	Inches	0.394
Meters	Feet	3.280
Meters	Yards	1.094
Kilometers	Miles	0.621
Square Centimeters	Square Inches	0.155
Square Meters	Square Feet	10.764
Square Meters	Square Yards	1.196
Square Kilometers	Square Miles	0.386
Square Hectometers	Acres	2.471
Cubic Meters	Cubic Feet	35.315
Cubic Meters	Cubic Yards	1.308
Milliliters	Fluid Ounces	0.034
Liters	Pints	2.113
Liters	Quarts	1.057
ers	Gallons	0.264
ms	Ounces	0.035
ograms	Pounds	2.205
Metric Tons	Short Tons	1.102
Newton-Meters	Pounds-Feet	0.738
Kilopascals	Pounds per Square Inch	0.145
lometers per Liter	Miles per Gallon	2.354
meters per Hour	Miles per Hour	0.621



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